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THE NECESSITY OF THE DEVELOPMENT OF TRAFFIC INFRASTRUCTURE FOR FURTHER DEVELOPMENT OF SPA TOURISM IN SERBIA ON THE EXAMPLE OF BUKOVIČKA SPA

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Abstract: *The role of transport infrastructure in the process of tourism development and the development of spa tourism in Serbia is of key importance for the further development of spa tourism in Serbia. The latest tourism trends show that people prefer to take multiple shorter trips throughout the year. Additionally, growing awareness of the importance of healthcare and relaxation as essential for a longer, higher-quality life has contributed to the global rise of spa tourism. Due to its natural and geographical characteristics, Serbia has a great potential for the development and growth of spa tourism. A large number of thermal waters, spas, villages, mountains, national parks and other natural resources make it one of the most appealing destinations for spa tourism.*

In addition to the necessity of investment in tourist facilities, the first prerequisite for the further development of spa tourism in Serbia is investment in traffic infrastructure, especially in the vicinity of places with developed tourist potential for spa tourism. This paper highlights the example of Bukovička Spa, which has significant tourism potential that could be further enhanced through improved and better-maintained transportation infrastructure.

The entire transportation infrastructure in Serbia—including roads of all categories and routes forms a crucial part of the material foundation necessary for tourism development. Investing in the transport infrastructure of Bukovička Spa will enable the full utilization of its rich natural resources, favorable climate, diverse flora and fauna, strategic geographical position, as well as its cultural and historical heritage, both tangible and intangible. Moreover, improved infrastructure will enhance access, promote local gastronomy, and ultimately reduce transport costs due to the spa's advantageous location.

Keywords: *traffic, traffic infrastructure, spa tourism, Bukovička spa*

1. INTRODUCTION

Tourism is one of the leading industries in the global market. Despite the severe crisis that affected the global economy and tourism sector, the strong desire to travel emerged as one of the key drivers behind the industry's faster-than-expected recovery. Also, changes in the needs and desires of people resulted in the changes in the forms of travel. New kinds of tourism have emerged, as a response of tourism industry to the shift in tourists' requirements and preferences. One of the most prominent changes in tourist behaviour is their tendency to travel to destinations with preserved environment and natural heritage, as well as cultural heritage and tradition and diverse and specific ethno-cultural identity. Tourist flows are increasingly shifting toward destinations that were once overlooked by mass tourism but are now gaining significance and attracting more attention. The value of spa tourism has increased because tourists recognize its exceptional merits.

The entire traffic infrastructure in Serbia, roads of all categories and routes, make up an integral element of the material basis of tourism which is vital for tourism development. Traffic infrastructure is one of the most significant aspects of a tourist destination, hence investing in its development and improvement increases domestic and foreign tourist numbers and leads to the development of all other elements of a destination.

This paper emphasizes importance of investing in the transportation infrastructure of the spa, which, in addition to its therapeutic properties, also offers several key features that make it a potentially attractive tourist destination with significant development prospects.

2. ATTRACTIVENESS OF BUKOVIČKA SPA AS A TOURIST DESTINATION IN SERBIA

Investing in traffic infrastructure, especially in the vicinity of destinations with developed tourist potential for spa tourism, is the first prerequisite for the further development of spa tourism in Serbia. It is important to create

a strategic development plan in order to give priority to the investment in the traffic infrastructure relevant for the developed spas with modern hotel and private accommodation capacities. In addition to improving main roads, it is essential to ensure that nearby attractions are accessible by road to enhance their visitor potential and better integrate them into the overall tourist experience.

Serbia is a country with a large number of medical spas with considerable geothermal resources. Serbia currently underutilizes many of its thermal mineral springs, making it crucial to develop them for spa tourism by incorporating them into swimming pools, baths, and therapeutic treatments. Also, geothermal water can be used for heating swimming pools, which represents an important economic and energetic opportunity for long-term development of spa tourism in Serbia.

There are 160 natural thermal springs on the territory of Serbia and Kosovo and Metohia, with water temperature of above 15°C. Geothermal water is a limited but renewable resource, with thermal properties stemming from the transfer of heat from lower layers of hot stone masses. The advantage of geothermal water lies in its local availability, low investment required for direct use, reduction in reliance on environmentally harmful imported energy sources like oil, gas, and coal, and its wide range of uses. Like any strategic resource, geothermal energy needs to be supported by the government in the form of strategy and action plans for its execution, which should encourage the use of renewable resources, mostly those available in Serbia, such as geothermal energy.¹

Bukovička spa is a very attractive tourist destination. A tourist destination is a place with features well known to a sufficient number of potential visitors, which should justify its conceptualization as an entity attractive for traveling to, regardless of the attractiveness of other locations. Natural and man-made attractions, infrastructure, structure of economic activities

¹ Nj. Dragović, M. Vuković, N. Štrbac, Upravljanje resursima niskotemperaturnih geotermalnih voda na jugu Srbije, International May Conference on Strategic Management - IMKSM2014, 23-25. May 2014, Bor, Serbia

and local community characteristics are of great importance for a tourist destination.² Popesku³ states that there are other categorizations which comprise elements such as attractiveness (natural and social), accessibility (geographical and economic) and prerequisites for a stay (accommodation, food, entertainment). Bakić⁴ provided the following classification of tourist destination elements:

- attractiveness – includes a mixture of various elements of natural attractiveness (climate, flora, fauna, geographical location) and socio-cultural attractiveness (cultural heritage, anthropogenic factors such as folklore, melos, gastronomy);
- accessibility – includes geographic and economic distance. The former implies distance/proximity to the emissive market measured by kilometres or travel time, and latter the cost of travel to the destination. Accessibility thus represents the stage of development of traffic infrastructure between the emissive market and the destination, as well as the quantity and quality of traffic in the destination;
- prerequisites for a stay – all elements that include tourist supply and are not above mentioned (accommodation, food, entertainment, recreation).

Bukovička spa, according to these classifications, belongs to the category of exceptionally attractive tourist destinations with various elements of natural and cultural attractions. Accessibility in terms of geographical and economic distance is exceptional, as it is located near big cities and the airport. However, the overall development of transportation infrastructure remains at an unsatisfactory level. For this reason, the paper emphasizes the urgent need for its improvement in order to enhance this crucial component of the spa's appeal as a tourist destination. Other conditions for a stay are good, but with the improvement of the quality of traffic infrastructure and the arrival of a

larger number of tourists, they can be additionally enhanced.

In addition, Bukovička Spa offers a variety of both natural and man-made attractions, along with other essential components of a tourist destination, including tourism products, services, and facilities designed to accommodate and attract visitors.

Understanding the essence of the concept of a tourist destination, as well as the analysis, planning, management and control of its development require a systematic and interdisciplinary approach.⁵

Bukovička spa is situated in Šumadija at the foot of mountain Bukulja, in the town of Arandelovac. On the slopes of Bukulja there are two lakes: Garaško Lake and Bukuljsko Lake (Red pond). The town of Arandelovac, home to Bukovička Spa, is located in the heart of Šumadija, in central Serbia. It ranks as the third-largest town in the region and is situated at the source of the Kubršnica River. Arandelovac has a population of 46,225 residents.

Bukovička spa, apart from its medical properties, can boast other attractions in the vicinity, which is an important precondition that can attract a large number of domestic and foreign tourists. Bukovička Spa boasts an exceptional location and outstanding natural features that are highly appealing to tourists. It is surrounded by numerous sites with significant tourist potential. Situated in the very center of the town of Arandelovac, Bukovička Spa is just 76 kilometers from Belgrade. After World War Two, mineral water from Bukovačka spa has been exploited. The greatest concentration of mineral water is found in the Bukulja Mountain massif, particularly in its higher elevations. There are various accommodation options in the spa, with over 200 accommodation units which can accommodate 700 guests. Hotel Izvor, located within the Bukovička Spa complex, offers a wide range of accommodations, including single rooms, double rooms, superior rooms, and private apartments. It also features a congress center

² Mathieson Alister, Wall Geoffrey (1990): *Tourism: Economic, Physical and Social Impact*, Longman, Harlow, 12.

³ Popesku J., *Menadžment turističke destinacije*, Univerzitet Singidunum, Beograd 2011, p 34, 35

⁴ Bakić, O., (2009), 21, p 117

⁵ P. Ubavić, (2016), *Pozicioniranje Srbije kao turističke destinacije na međunarodnom turističkom tržištu*, Megatrend revija - Megatrend Review, Vol. 13, № 2, 2016: 97-118.

with five conference halls capable of hosting up to 820 guests. The spa continues to enhance its offerings by introducing new programs such as spa and wellness treatments, a waterpark, and various animation and entertainment programs for visitors (gymnastics, hiking, jogging paths, bowling, table tennis, billiards, tennis, cycling, horseback riding, babysitting). In addition, it offers particular specific services such as rental of sports facilities (sports grounds, bowling alleys, saunas) and tours of cultural heritage sites.

Bukovička spa became one of the best spa centres in 1870s during the reign of Prince Mihajlo Obrenović. It was renowned as the best Serbian spa until World War One. The oldest preserved building, which belongs to Serbian Romanticism, dates back to 1865 and served as the summer residence of the Obrenović dynasty rulers and as the parliament building.

Bukovička spa has a park in its very center, which is a green oasis of 22 hectares, with a variety of rare flowers and trees. This park represents an important cultural heritage site. Since 1966 the park has been a home to the largest outdoor collection of stone sculptures which can be compared to a few famous parks of sculptures in the world. The symposium „White Venčac“ has been categorized as one of the most important attractions in the area of visual arts in the world according to UNESCO. Since 1974, an international festival „The World of Ceramics“ has been held in the spa. It is widely known and gathers a great number of domestic and international ceramic artists.

The vicinity of Bukovička Spa is rich in natural and cultural heritage sites such as Risovača cave, The National Museum in Arandjelovac, Orašac, Oplenac, mountain Bukulja, Garaši Lake.

In immediate surroundings of the spa there is Risovača cave, a significant archeological, paleontological, natural and cultural heritage site under state protection, categorized as exceptionally significant monument of nature. It has been open for visitors since 1987. Risovača cave boasts fossil remains of numerous animals from Ice Age, tools made of stone or bones dating back to Paleolithic, a cave system which

is 187.5 m long and takes up the space of 703 m². The cave can be reached by a major road. Today, Risovača Cave features all the elements of a modern visitor attraction and welcomes thousands of domestic and international visitors each year.

The National Museum in Arandjelovac is a notable tourist attraction, featuring a permanent exhibition that showcases the history of the town and its surroundings, spanning from the Stone Age to the 20th century. The museum houses numerous artefacts from the fields of paleontology, archaeology, ethnology, history and history of art, as well as other remains of material and cultural heritage.

Close to Bukovička Spa lies the village of Orašac, the site of the First Serbian Uprising and proclamation of Karađorđe Petrović Grand Vožd of Serbia. The monumental complex in Orašac consists of a church dedicated to Ascension, with exceptional artistic value, a historical school and fountain as well as a museum and sculpture of Karađorđe. It is located 6km from the spa by regional road.

One of the tourist attractions near the spa is also Oplenac, with St George's church adorned by valuable mosaics of Serbian saints and rulers, as well as Royal winery.

Mountain Bukulja, rising above the spa, is 696 m tall and contains a visitor look-out at 660 m. It stands 19 meters tall, featuring 4 terraces and 2 landings. However, tourists must navigate a narrow, winding mountain road to reach the lookout.

Garaši Lake, 6 km far from the spa, is a beautiful accumulation lake, suitable for fishing, with futsal and beach volleyball facilities, swimming pool and restaurant. It can be reached by asphalt road.

In the vicinity, there is Topola, a town 14km far from the spa which can be reached by 20-minute drive by R – 215a. In Topola there is a permanent exhibition of Vožd's personal belongings and authentic weapons from the First Serbian Uprising, Karađorđe's cannon named „aberdar“ and Karađorđe's church dedicated to Virgin Mary, built between 1811-1813.

Strengths	Weaknesses
<ul style="list-style-type: none"> - natural properties of Bukovička spa (fresh air, curative thermo-mineral water, pleasant climate); - vicinity of natural and cultural heritage sites such as Oplenac, Orašac and Risovačka cave; - hospitality of local people; - good geo-strategic location and road infrastructure with good bus connection (the distance from Belgrade is 75km) - sports facilities - professional top management - educated hotel staff - wellness, fitness and spa programs 	<ul style="list-style-type: none"> - limited presence in the media - poor tourist signage to the spa and hotel - lack of alternative means of travel (air travel, railway, boat) - insufficient education and skills of the staff who retained from the pre-privatization period - insufficient occupancy rate - lack of other tourist activities (fishing, hunting) - insufficient finances for marketing, especially abroad
Opportunities	Threats
<ul style="list-style-type: none"> - opening of our country to Europe; - stimulation of tourism on macro-economic level; - building new highways and major roads; - increased mobility of tourists; - newest trends in tourism (more frequent, short vacations); - the increase of one-day excursions - influence of Internet and e- marketing on sales - improvement of employees' skills and education (especially the staff retained over during privatization) 	<ul style="list-style-type: none"> - strong competition in tourism; - Serbia is not an internationally recognized renowned tourist destination; - lack of vision of "Serbia as a tourist destination" - unstable political and economic situation - low disposable income of local people - lack of organization and control in the construction of private accommodation capacities (cottages, private apartments) - investment in other parts of Šumadija

Figure 1: SWOT analysis of Bukovička spa

Source: Riznić D.T., Cvijanović J., Vojnović B., Usklađivanje marketing strategije turističke destinacije sa promenama u okruženju – Studija slučaja Bukovičke banje, Marketing, 2014, vol. 45, no. 4, p. 319-327.

In addition to the tourist attractions mentioned above, there are several monasteries near Bukovička Spa.

The analysis reveals that Bukovička Spa has significant unused potential. Investing in transportation infrastructure would greatly boost tourism development, while an increase in both domestic and foreign visitors would drive the expansion of hospitality facilities at the spa and stimulate overall economic growth in the region.

The above-mentioned SWOT analysis ensures better understanding of the opportunities and directions for further development, which is of paramount importance for the destination and its traffic infrastructure.

Bukovička Spa is an outstanding tourist destination, offering rich natural heritage alongside modern accommodation facilities. Its favorable geographical location ensures excellent connectivity with major cities, roads, and airports across Serbia. It also boasts historical sites related to two royal dynasties, gastronomy, sport facilities. However, the appeal of the spa and its

surroundings is diminished by the lack of essential infrastructure needed to elevate tourism to the next level—such as rest areas, well-maintained roads, cycling paths, parking facilities, sports grounds, beaches, restaurants, and cafes.

Further investment in transportation infrastructure will stimulate tourism growth both in the spa and the surrounding region. Such investment is essential, as it improves the overall tourist experience and increases tourism revenue for the destination.

3. TOURISM IN BUKOVIČKA SPA

Bukovička Spa holds significant potential for tourism development. In addition to its natural heritage, it offers various types of accommodation, including hotels, private lodgings, and rural households. The spa is also rich in cultural heritage and historical landmarks, further enhancing its appeal to visitors. The municipality of Aranđelovac, the town in which the spa is situated, has a Tourist Organisation which is in charge of enhancing and promoting tourism in

the municipality, encouraging programs of traffic infrastructure development and landscaping, coordinating activities and cooperation between business entities in tourism, organization of promotional activities.

Accommodation capacities of the spa are varied. Firstly, there is the Special Hospital for Rehabilitation 'Bukovička Banja', which utilizes advanced therapy methods, making use of the area's exceptional curative mineral water, healing clay, and favorable climate. The hospital also features a recreational wing offering standard hydrotherapy treatments, a swimming pool with jacuzzi and underwater massage, sauna, hydrokinetic showers, shower massage, mud baths and fitness center, which are very attractive for relaxation and entertainment of tourists.

Additionally, the luxurious Hotel 'Izvor' serves as a congress, spa, and wellness resort. It comprises over 32 000 m², with beautiful architecture and high standard of service. It is an important resort as it can receive a large number of tourists and enhances the development of tourism in the spa. The hotel has wellness center with ten swimming pools comprising 1000m² with natural, healing mineral water, filtered by cutting-edge technology. There is also a water park with 3 swimming pools, 12 slides for adults, 3 slides for children and an abundance of attractions. The hotel's conference center features six fully equipped conference halls with a total seating capacity of up to 820 participants.

There are also several other hotels in the spa area that can accommodate tourists. One notable example is Hotel 'Šumadija', built in 1939, which was once considered one of the most well-appointed hotels in former Yugoslavia. Today it is protected as a cultural monument, and situated in the park of Bukovička spa. It has restaurants and 150 beds in 65 rooms and 8 suites, where 30 rooms and suites have been renovated. In the spa there is also hotel 'Staro zdanje', which is a palace and marvelous hotel. It used to be the summer residence of Obrenović dynasty and is under state protection as a cultural heritage site. It has been privatized and is awaiting renovation which is a great opportunity for the increase in tourist numbers in the spa.

One of the larger hotels in the spa is Hotel 'Kruna', opened in 2008, offering 30 beds across 12 rooms and featuring a restaurant with a seating capacity of 600 guests. In addition, the area is home to several smaller hotels, motels, and private apartments. There are also three ethno-style apartments located on Mount Bukulja.

Another important hotel in the spa is the children's resort 'Bukulja', situated at an elevation of 270 meters. Renovated in 2008, it features three pavilions with 34 rooms and a total of 150 beds, along with sports grounds and playgrounds set within a well-maintained courtyard.

Table 1: Turizm turnover in Bukovička spa in 2023

Bukovička spa	Visits		Overnight stays	
	2023	Index 2023-2022	2023	Index 2023-2022
Total number of tourists	33,279	125.5	91,520	147.5
Domestic	27,356	127.3	75,380	161.1
Foreign	5,923	118.0	16,140	105.9

Source: Statistical Office of the Republic of Serbia

In 2023 in Bukovička spa, a total of 33,279 tourists visited the spa, while 91,520 stayed overnight. Compared to 2022, the total visitor number rose by 25%, and the number of overnight stays increased by 47%. Most of the tourists are domestic, with 27,3% more visits compared to the previous year, with 61.1% increase in overnight stays compared to the previous year. The number of foreign tourists is still not at a satisfactory level, with 5,923 visits and 16,140 overnight stays.

One of the main goals of a country is the development of traffic infrastructure in attractive tourist destinations, especially if it aims at the increase of visitor numbers and overnight stays. Also, extending and enriching tourism supply, introducing new activities and facilities as well as enhancing the quality of service, especially in already established destinations is equally important.⁶ It should be mentioned that the development of a tourist destination

⁶ Čerović, S., Barjaktarović, D., Knežević, M., (2015), Podrška razvoju turizma kao faktor konkurentnosti Srbije kao turističke destinacije, SITCON 2015, 1-8.

requires strategic planning. The development of a tourist destination requires an interdisciplinary approach. In addition to fundamental factors such as location and local population, it also depends on elements like transportation, infrastructure, and suprastructure—essentially, the entire tourism economy.⁷

4. TRAFFIC INFRASTRUCTURE IN BUKOVIČKA SPA

One of the crucial prerequisites for the development of a tourist destination as well as tourism and economy in general is the development of traffic infrastructure and well-organized transport.⁸

Exceptionally favourable geographical location of the spa near the capital city represents an extraordinary opportunity for this spa, hence investment in traffic infrastructure and connection to other means of transport is a key factor for the further development of the spa and its surroundings, as well as other tourist attractions in the vicinity.

The traffic infrastructure in Aranđelovac improved between the two world wars with the

⁷ Vujović, S., Cvijanović, D., Štetić, S., (2012), *Destinacijski koncept razvoja turizma*, monografija, Institut za ekonomiku poljoprivrede Beograd, str.113.

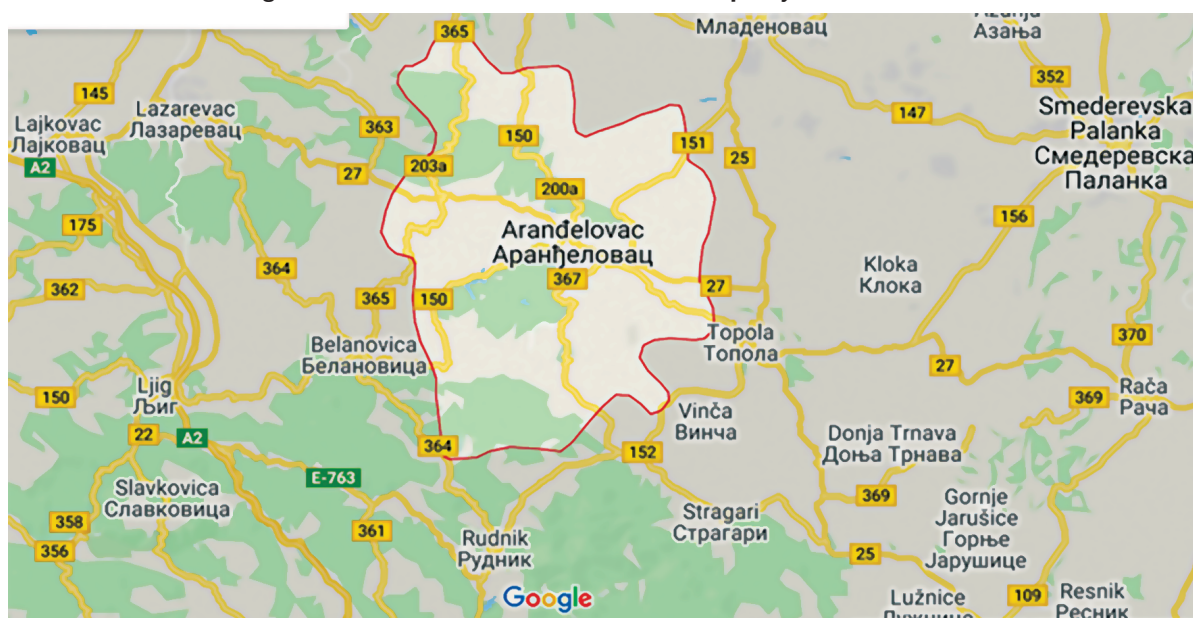
⁸ Stanković, S. (2008), *Turistička geografija*. Beograd: Zavod za udžbenike.

construction of the asphalt road connecting Belgrade, Mladenovac, Topola, and Kragujevac, alongside existing secondary cobblestone roads. In 1904 a narrow-gauge railway was built to connect the towns Mladenovac-Aranđelovac-Lazarevac. The railway is not in use nowadays.

The town of Aranđelovac is located between two major roads: the Ibarska magistrala (Ibar Highway) and the Belgrade–Kragujevac M23 road. There is a highway M14 passing through the municipality which connects Western and Eastern Serbia (Zvornik – Loznica– Valjevo – Aranđelovac–Bor). The highway M14 passes through the center of Aranđelovac, and overlaps with central town streets which leads to traffic congestion, noise, air pollution, issues with parking and pedestrian safety.

Aranđelovac, i.e. Bukovička spa can be reached by road, i.e. by bus or by car. The distance from major cities is as follows: Belgrade 74 km, Kragujevac 55 km, Lazarevac 33 km, Mladenovac 22 km, Topola 14 km. Highway M-4, connecting Ibarska magistrala (Ibar highway) and motorway E-75, in east-west direction, passes through this area. Bukovička spa has an exceptional location as it is situated only one-hour drive from Belgrade and it is close to all major traffic routes in Serbia. Also, the vicinity of two biggest airports is equally important.

Figure 2: Traffic infrastructure in the municipality of Aranđelovac



Source: <https://www.google.com/maps/place/Op%C5%A1tina+Aran%C4%91elovac/>

It is located 80 km from Belgrade's Nikola Tesla Airport, a drive of approximately 1 hour and 15 minutes, and 187 km from Niš's Constantine the Great Airport (Car Konstantin), which takes about 2 hours and 30 minutes by car.

Tourists can arrive in the spa by car, or using regular coaches from most towns in Serbia.

The most important routes in the municipality are as follows:

- Road R-202 (Mladenovac-Arandelovac- Belanovica)
- Road R-215 (Arandelovac - Rudnik)
- Road R-215a (Topola-Arandelovac-Vrh Bukulje)
- Road R-200a (Kosmaj- Arandelovac).

Bukovička spa, i.e. the town of Arandelovac is connected to Belgrade via four roads:

- Partizani – Vreoci – Stepojevac (road M-14 to Kruševica, then road R-201 to Stepojevac) – length 83 km
- Orašac- Markovac- Mladenovac – Ralja (road R-202 to Mladenovac, then road R-200 to Ralja) – length 77km
- The same direction by another road (first by the road M-14 to Krčevac, which joins road M-23 to Mladenovac, and continues to the above-mentioned road) – length 83 km
- Orašac –Mladenovac-Mali Požarevac-Vrčin (at Mali Požarevac it joins motorway E-75) – length 84 km.

Bukovička spa is 49 km far from another regional hub, Kragujevac, connected by road M-23 (Beograd - Kragujevac). The town of Lazarevac is 31 km far from the spa connected by road M-4 via Partizani and Kruševica. The same road leads to Valjevo, which is situated 66 km from the spa.

The town of Arandelovac is connected by the following key roads:

- Exit to motorway E-75 at Mali Požarevac
- Highway M-4 at Markovac
- Highway M-23 (Beograd - Kragujevac)
- Ibarska magistrala (Ibar highway) M-22 via road M-4 (at Lazarevac), via road R-201 (at Stepojevac) and via road R-202 (at Ljig).

Bukovička spa has developed all forms of public transport: innercity, suburban (11 lines) and intercity – to Belgrade, Kragujevac, Lazarevac and other towns.

Bukovička spa is connected to other tourist destinations in the surroundings via following roads:

- Municipality of Topola – road R – 215a
- Vrujci spa– road R-202
- Mountain Rudnik – road R-215
- Smederevo – road R-202
- Knjaževac – road E-75 then R-121
- Additionally, the spa is well connected to Serbia's wine routes.

The spa is well connected to key administrative, economic, and tourism centers in Serbia; however, further improvements to the transportation infrastructure are needed to enhance access and facilitate travel to the spa.

Besides the development and improvement of roads and traffic in order to reach the destination faster and in a safer way, it is equally necessary to work on traffic infrastructure within the spa. Namely, it is vital to develop other elements of traffic and transportation aimed at tourists such as cable car railways, gondolas, parking lots, tourist trails within the spa, in addition to those leading to other tourist attractions in the surroundings.

Also, better access and easier arrival of tourists in the spa and at the attractions in the surrounding area is very important for the further development of tourism, as well as the construction of recreation facilities, the lay-out of the beaches at the lake, the construction of swimming pools, water parks, sports grounds, mini golf courses and other entertainment venues. The other elements of traffic structure targeted at tourists within the spa and in its vicinity are cycling paths, trim trails, swimming and picnic sites, certified beaches.

The quality of tourism supply greatly depends on quality and development of traffic, hence it is important to improve it through defining and realization of infrastructure programs and projects, which should aim at

improving air travel and roads leading from airports to tourist destination.⁹

The major significance of traffic is in the increase of population mobility, but in case of local people and tourists, the increase of the standard of living, arrival and departure of tourists by well-organized traffic infrastructure and the good lay-out of the tourist destination area.

A major challenge for Bukovička Spa as a tourist destination is its traffic and transportation infrastructure. Key issues include narrow streets, a lack of sidewalks, and heavy traffic congestion in the city center.

The total length of roads in the municipality of Arandelovac is 287 km (231 km of modern roads), out of which highways take up 31 km (31 km of modern roads), regional roads 106 km (106 km of modern roads), and local roads 150 km (94 km of modern roads).¹⁰

A significant drawback of the spa is that it is currently accessible only by road. To improve connectivity, it is essential to introduce or establish links with other modes of transport beyond private cars and buses. Strengthening connections with nearby airports and ensuring the development of faster and more efficient roadways are crucial steps for enhancing accessibility to the spa.

Investment in the development of traffic infrastructure in Bukovička spa will facilitate the arrival of domestic and foreign tourists in the destination along with the development and better exploitation of potentials and tourist attractions within the destination and the surrounding area. Development of tourism will ensure the development of tourism supply in the destination.

5. CONCLUSION

An analysis of the existing traffic infrastructure in the spa area—including the condition of roads, their presence, and the network

connecting the spa with nearby attractions—along with an assessment of the surrounding tourist sites and the potential for both domestic and inbound tourism, leads to the conclusion that comprehensive planning and investment in transportation infrastructure and road networks could significantly boost tourism development in the spa. Furthermore, the analysis of tourism resources and attractions, along with the current quality and potential of tourism services, indicates that there is a strong foundation for the continued development of tourism in Bukovička Spa and the municipality of Arandelovac. Therefore, investing in transportation infrastructure is of vital importance and represents a profitable long-term investment.

In addition to the many factors positively influencing the development of this tourist destination, there are also limiting challenges, including issues with traffic and transportation infrastructure, insufficient accommodation capacity, and a lack of proper care and maintenance investment for the attractions.

Bukovička spa has a great potential for tourism development, primarily because of its proximity to the capital and its natural resources, but its development is hindered by insufficient maintenance of roads and underdeveloped traffic infrastructure systems. Due to the necessity of the development of traffic and traffic infrastructure in order to develop tourism destination and tourism in the destination, it is important to ensure detailed planning and construction of the above mentioned, especially in the domain of efficient connection of the spa with other places of interest for tourists. Besides, it is important to plan the connection of local roads in the spa with regional and national roads in Serbia.

It is essential to point out the urgency of strategic planning and investment in traffic infrastructure of Bukovička spa in order to increase the accessibility of this tourist destination to domestic and foreign tourists as well as to improve the overall economy in the municipality of Arandelovac. The influx of a larger number of tourists will activate a number

⁹ Tornjanski, A., (2023), Menadžment saobraćaja u turizmu – značaj saobraćajne infrastrukture za razvoj turističkih destinacija u Srbiji na primeru grada Kraljeva i Zlatiborskog okruga, *Turističko poslovanje*, no 31, p.19-31

¹⁰ Opštine u Srbiji 2011, Republički zavod za statistiku, Beograd 2011. str. 259

of tourism resources, attractions and cultural identity of the destination.

It is essential to improve the factors that determine the spa's attractiveness, enhance its accessibility—since it is currently reachable

only by road—and advance the development of transportation infrastructure and facilities that support visitors' stays. Additionally, better utilization of the spa's potential as a tourist destination is needed.

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NEOPHODNOST RAZVOJA SAOBRAĆAJNE INFRASTRUKTURE ZA DALJI RAZVOJ BANJSKOG TURIZMA U SRBIJI NA PRIMERU BUKOVIČKE BANJE

Rezime: Značaj i uloga saobraćajne infrastrukture u procesu razvoja turizma i razvoj banjskog turizma u Srbiji je od ključnog značaja za dalji razvoj banjskog turizma u Srbiji. Najnoviji trendovi u turizmu ukazuju da ljudi žele da putuju više puta u toku godine na kraća putovanja. Pored toga, povećanje znanja ljudi o neophodnosti brige o zdravlju i relaksirajućim i opuštajućim trenutima kao preduslov za duži i kvalitetniji život doveo je do razvoja spa turizma u svetu. Srbija svojim prirodnim i geografskim karaktistikama ima ogroman potencijal za razvoj i rast banjskog turizma. Veliki broj termalnih voda, banja, sela, planina, nacionalnih parkova i drugih prirodnih bogastava svrstavaju Srbiju u jednu od izuzetno atraktivnih destinacija za banjski turizam. Pored neophodnosti ulaganja u turističke objekte, prvi preduslov za dalji razvoj banjskog turizma u Srbiji je ulaganje u saobraćajnu infrastrukturu, posebno u blizini mesta koje su sa razvijenim turističkim potencijalom za banjski turizam. U ovom radu na to je ukazano na primeru Bukovičke banje koja svojim izuzetnim turističkim potencijalima može unaprediti svoj turizam, zahvaljujući saobraćajnoj infrastrukturi koja mora biti razvijenija i bolje održavana. Kompletna saobraćajna infrastruktura u Srbiji, saobraćajnice svih nivoa i svih pravaca, čini integrativni element materijalne osnove turizma bez kojeg nije moguće razvijati turizam. Ulaganje u saobraćajnu infrastrukturu Bukovičke banje dovešće do iskorišćenja njenog velikog prirodnog potencijala, klime, flore, faune, geografskog položaja, kulturno-istorijskog nasleđa, materijalne i nematerijalne kulture, gastronomije i na kraju nižih transportnih troškova do banje usled dobrog geografskog položaja.

Ključne reči: saobraćaj, saobraćajna infrastruktura, banjski turizam, Bukovička banja