Gorges as potential geotourism attractions of Serbia - comparative analysis of Ovčarsko – Kablarska Gorge and Grdelička Gorge by using M-GAM Model

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ABSTRACT
Serbia is a country with rich geodiversity in various aspects, it disposes of a great potential for development in terms of geotourism. Serbia is one of the countries with a rich geodiversity in various aspects by means of which it disposes of large potential for the development of geotourism. Gorges represent one of the major factors for the development of this form of tourism. There are several gorges in Serbia, which have huge potential for the development of geotourism such as Ovčar-Kablar Gorge and Grdelica gorge. The basic aim of the research paper is to show, by comparative analysis, the current state tourism potential of these two sites, main obstacles of the geotourism development and, also, the possibilities for improving the stated areas by M-GAM model. Furthermore, to show by comparative analysis, the current state of tourism potential of these two sites, main obstacles of the geotourism development and, also the possibilities for improving the stated areas. M-GAM model provides the expert's assessment of both Main and Additional Values of the sites in accordance to the importance of each sub-indicator in the assessment model given by tourists.

Key words: geotourism, geosite assessment, M-GAM model, comparative analysis, Ovčar-Kablar Gorge, Grdelica gorge, Serbia

INTRODUCTION

The tourism market constantly grows and changes. Mass tourism and large groups of tourists disappear slowly and the offer adjusts to the demands of individual tourists. Numerous forms of tourism appeared by segmentation of tourism market by which geotourism developed. A large number of countries lay the foundation of their tourism offers just by promoting geological heritage. Besides world-known geological sites, tourists want to visit less promoted sites which can offer a similar impression and which are not exploited massively. One of the basic parameters for the development of such destinations, besides natural potential, is an untouched environment without overwhelmingly built touristic facilities, i.e. tourists tend to visit more and more places which are not marked on the world tourist maps. Serbia represents one of those countries which have not yet differentiated themselves on the world tourism map. Its rich geodiversity lies in the fact that it possesses approximately 650 distinctive geosites (Djurović & Mijović, 2006).

Landscapes of geotourism interest include mountain ranges, rift valleys, great escarpments, volcanoes, karst landscapes and arid environments. Within these landscapes, there may be characteristic landforms or an array of landforms. For example, within a particular mountain range, there may be glacial and fluvial geomorphic features. Moreover, a hierarchy of features of geotourism interest may be identified within a landscape; these may range from individual landforms through to

geological materials such as rocks, sediments, and fossils. Geotourism is tourism that sustains or enhances the geographical character of a place, including its environment, culture, aesthetics, heritage, and the well-being of its residents (Boley et al., 2011).

Serbia is a country with rich geodiversity in various forms. It largely values and places great importance on geosites, and is acknowledged by the Institute for the Environment Protection of Serbia which has protected about 80% of geological heritage so far, mainly those of speleological nature (Djurović & Mijović, 2006).

The idea is to determine the list of geologically and geomorphologically important markers in Serbia by geoconservation to represent them in the best possible way for scientific purposes, but also to determine their potential for the development of tourism. The development of geotourism represents one of the potentials of the faster economic development of a rural environment in Serbia. Although it has not been significantly positioned so far as a tourist destination in the world, Serbia has included geotourism as an important component of its offer besides urban and river tourism. Although there are plans to valorize touristic geomorphological sites, everything is still without a concrete solution. There are no brochures, maps, written tourist guide books, adequately trained guides, visitor centres, and built tourism infrastructure. Besides several large tourism attractions where it is possible to organize the reception of tourists, tourists are most often left on their own at other sites.

STUDY AREA

Serbia is a country situated in south-east of Europe. It has a large number of gorges; the most known ones are: Grdelica, Ovčar-Kablar, Sićevac and Đerdap gorges. The first two mentioned gorges will be analyzed as places with a large potential for the development of tourism.

Ovčar-Kablar Gorge is a part of a composite valley of the Zapadna Morava river. The gorge is 20 km long and 50-100 m wide. It links Čačak basin with Požega basin. Carved between the Ovčar and Kablar mountains composed from schists. Two dams were also built producing artificial lakes and preventing the fast flow of the Zapadna Morava river. The gorge starts with an immediate closeness to the Tucakova village and finishes upstream from the confluence of the Kamenica river. It is the deepest in the central parts, where is reaches approximately 710 m. The main morphological characteristic of the Ovčar-Kablar Gorge is steep, craggy hillsides of mountains and meander, which represent exceptional esthetical importance. The spectacular fluvial landscape can be viewed as the main geomorphological tourism attraction.On the sides of the gorge there are numerous viewpoints. The most attractive one is at the Kablar Mountain top (885 m). There are also some geological forms interesting for tourists who are engaged in the collection of rocks and fossils. On the left side of the Zapadna Morava River, opposite the Kađenica Cave, is the bend that has been built from pure calcite - a crystalline form. Slightly upstream, in a small limestone quarry, interesting fossils of marine organisms can be found. There are also several remains of debris cones, slumps, and rockslides throughout the gorge. In the Rapajlovača village, on the left bank, in the area of the curving meanders, there is an open profile which should be an essential point for all professional tours (Božić & Tomić, 2015).

Ovčar-Kablar gorge has a complex natural and cultural offer. The touristic value of the gorge is fulfilled by ten monasteries. Therefore, Ovčar-Kablar Gorge is also known as Serbian Holy Mountain. More than 130 kinds of birds have been recorded in the protected area of Ovčar-Kablar Gorge. Thanks to this, the

birdwatching is held in this place. Ovčar spa is situated in the gorge as well, as one of the potential pillars of tourism of this part of Serbia. It is situated in the very centre of the Ovčar-Kablar gorge at sea-level of 279 metres (Discover Čačak, 2016). The government of the Republic of Serbia has protected Ovčar-Kablar gorge by a decree as the area of exceptional forms and natural good of exceptional importance and it is included in the "Ist category" (Institute for Nature Conservation of Serbia, 2016).

Grdelica gorge is situated in the valley of the South Morava river, in the south-east of Serbia and it stretches in the direction of the north-south. It is 34 km long and it is 550 m deep. Grdelica gorge links Vranje and Leskovac basins. The gorge starts with the narrowing near Mala Kopušnica where the hillsides of the mountains Čemernik and Kukavica almost touch each other. The river basin of the South Morava rivers the area of Serbia with the most evident erosion. The causes are a mountainous relief, steep sides of Grdelica gorge, but also uncontrolled forest cutting in this area. The narrowing of the gorge near Prosečenica, the widening and elbow of the South Morava river near Predejane, the Repiški canyon, the widening near the confluence of the Džepska river into Morava, then the narrowing and tunnels on the highway and railway near the villages Manajla and Kalimanca. The interesting landscape which does not leave lovers of nature indifferent. The towns of Vladičin Han, Predejane and Grdelica is situated in the gorge. The Sarajevo bridge and Moma stone is enlisted as a touristic attraction site. A large potential is also insufficiently explored archeological sites from times of ancient Rome (MAEP, 2016; Center for the Development of Jablanica and Pcinja Districts, 2016).

METHODOLOGY

The M-GAM represents a modification of GAM model created by Vujičić et al., (2011). To present day, several approaches on how to determine the value of a specific geosite have been introduced (Hose, 1997; Pralong, 2005; Serrano & González-Trueba, 2005; Bruschi & Cendrero, 2005; Coratza & Giusti, 2005; Hose, 2007; Pereira et al., 2007; Zouros 2007; Reynard et al., 2007; Hose, 2007; Reynard, 2008; Tomić, 2011; White & Wakelin-King, 2014; Tomić et al., 2015; Boškov et al., 2015a; Boškov et al., 2015b; Bruno et al., in press). GAM consists of two key indicators: Main Values and Additional Values, which are further divided into 12 and 15 indicators respectively, each individually marked from 0 to 1. This division is made due to two general kinds of values: main - that are mostly generated by geosite's natural characteristics; and additional - that are mostly human-induced and generated by modifications for its use by visitors. The Main Values comprise three groups of indicators: scientific/educational, scenic/aesthetical values and protection while the Additional Values are divided into two groups of indicators, functional and touristic values. The Main and Additional Values are more detailed presented in Table 1. In total sum, there are 12 subindicators of Main Values, and 15 subindicators of Additional Values which are graded from 0 to 1 that define GAM as a simple equation: GAM = Main Values (VSE+VSA+VPr) + Additional Values (VFn+VTr) (Tab. 3). While in GAM all grades for each subindicator are given by experts M-GAM, focuses not only on the expert's opinion but also on the opinion of visitors and tourists regarding the importance of each indicator in the assessment process. The importance of the subindicators in the model should be strongly related to the specific need of a specific segment of geotourists. The structure and size of tourist segments is changeable over time. It may be that in certain periods of time visitors of a geosite are mostly interested in the scientific value of a geosite, but later on, a large part of visitors can belong to a segment of tourists

Tab. 1 The structure of Geosite Assessment Model (GAM)

Indicators/Subindicators	Description
Main values (MV)	
Scientific/Educational value (*VSE*)	
1. Rarity	Number of closest identical sites
2. Representativeness	Didactic and exemplary characteristics of the site due to its own quality and general configuration
3. Knowledge on geoscientific issues	Number of written papers in acknowledged journals, thesis, presentations and other publications
4. Level of interpretation	Level of interpretive possibilities on geological and geomorphologic processes, phenomena and shapes and level of scientific knowledge
Scenic/Aesthetic (*VSA*)	
5. Viewpoints	A number of viewpoints accessible by a pedestrian pathway. Each must present a particular angle of view and be situated less than 1 km from the site.
6. Surface	The whole surface of the site. Each site is considered in quantitative relation to other sites
7. Surrounding landscape and nature	Panoramic view quality, the presence of water and vegetation, the absence of human-induced deterioration, vicinity of urban area, etc.
8. Environmental fitting of sites	Level of contrast to the nature, the contrast of colors, appearance of shapes, etc.
Protection (VPr)	
9. Current condition	Current state of geosite
10. Protection level	Protection by local or regional groups, national government, international organizations, etc.
11. Vulnerability	Vulnerability level of geosite
12. Suitable number of visitors	Proposed number of visitors on the site at the same time, according to surface area, vulnerability and current state of geosite
Additional values (AV)	
Functional values (*VFn*)	
13. Accessibility	Possibilities of approaching to the site
14. Additional natural values	Number of additional natural values in the radius of 5 km (geosites also included)
15. Additional anthropogenic values	Number of additional anthropogenic values in the radius of 5 km
16. Vicinity of emissive centers	Closeness of emissive centers
17. Vicinity of important road network	Closeness of important road networks in the radius of 20 km
18. Additional functional values	Parking lots, gas stations, mechanics, etc.
Touristic values (*VTr*)	
19. Promotion	Level and number of promotional resources
20. Organized visits	Annual number of organized visits to the geosite
21. Vicinity of visitors centers	Closeness of visitor center to the geosite
22. Interpretative panels	Interpretative characteristics of text and graphics, material quality, size, fitting to surroundings, etc.
23. Number of visitors	Annual number of visitors
24. Tourism infrastructure	Level of additional infrastructure for tourist (pedestrian pathways, resting places, garbage cans, toilets etc.)
25. Tour guide service	If exists, expertise level, knowledge of foreign language(s), interpretative skills, etc.
26. Hostelry service	Hostelry service close to geosite

27. Restaurant service			Restaurant service close to geosite		
Grades (0.00-1.00)					
	0.00	0.25	0.50	0.75	1.00
1.	Common	Regional	National	International	The only occurence
2.	None	Low	Moderate	High	Utmost
3.	None	Local publications	Regional publications	National publications	International publications
4.	None	Moderate level of processes but hard to explain to non experts	Good example of processes but hard to explain to non experts	Moderate level of processes but easy to explain to common visitor	Good example of processes and easy to explain to
5.	None	1	2 to 3	4 to 6	More than 6
6.	Small	-	Medium	-	Large
7.	-	Low	Medium	High	Utmost
8.	Unfitting	-	Neutral	-	Fitting
9.	Totally damaged (as a result of human activities)	Highly damaged (as a result of natural processes)	Medium damaged (with essential geomorphologic features preserved)	Slightly damaged	No damage
10.	None	Local	Regional	National	International
11.	Irreversible (with possibility of total loss)	High (could be easily damaged)	Medium (could be damaged by natural processes or human activities)	Low (could be damaged only by human activities)	None
12.	0	0 to 10	10 to 20	20 to 50	More than 50
13.	Inaccessible	Low (on foot with special equipment and expert guide tours)	Medium (by bicycle and other means of man-powered transport)	High (by car)	Utmost (by bus)
14.	None	1	2 to 3	4 to 6	More than 6
15.	None	1	2 to 3	4 to 6	More than 6
16.	More than 100 km	100 to 50 km	50 to 25 km	25 to 5 km	Less than 5 km
17.	None	Local	Regional	National	International
18.	None	Low	Medium	High	Utmost
19.	None	Local	Regional	National	International
20.	None	Less than 12 per year	12 to 24 per year	24 to 48 per year	More than 48 per year
21.	More than 50 km	50 to 20 km	20 to 5 km	5 to 1 km	Less than 1 km
22.	None	Low quality	Medium quality	High quality	Utmost quality
23.	None	Low (less than 5000)	Medium (5001 to 10 000)	High (10 001 to 100 000)	Utmost (more than 100 000)
24.	None	Low	Medium	High	Utmost
25.	None	Low	Medium	High	Utmost
26.	More than 50 km	25–50 km	10–25 km	5–10 km	Less than 5km
27.	More than 25 km	10–25 km	10–5 km	1–5 km	Less than

Source: adapted from Vujičić et al. (2011)

who are mostly interested in the socio-cultural meaning of a geosite. Hence, the market value of a geosite (estimated by the number of visitors) depends on many variables.

This is why the value of a geosite should be a product of both expert opinion and visitors' opinion also. One way of achieving this is to include the visitors/tourists in the assessment process. Visitors should play an important role in the assessment process and determine how important each subindicator is for them because, after all, they are the ones that will make the final decision to visit or not to visit a certain geosite (Tomić & Božić, 2014). The Im factor was taken from the research paper Božić & Tomić (2015) for the purpose of this research paper. They conducted a survey where each respondent was asked to rate the importance (Im) of all 27 subindicators (from 0.00 to 1.00) in GAM (Tab. 1). The importance factor (Im) gives visitors the opportunity to express their opinion about each subindicator in the model and how important it is for them when choosing and deciding between several geosites that they wish to visit. Afterwards, the value of the importance factor (Im) is multiplied by the value that was given by experts (also from 0.00 to 1.00) who evaluate the current state and value of subindicators (Tab. 1). This was done for each subindicator in the model after which the values were added up according to the already mentioned equation but this time with more objective and accurate final results due to the addition of the importance factor (Im). This parameter is determined by visitors who rate it in the same way as experts rate the subindicators for Main and Additional Values by giving them one of the following numerical values: 0.00, 0.25, 0.50, 0.75 and 1.00, marked as points. The importance factor (Im) is defined, as:

$$Im = \frac{\sum_{k=1}^{K} Iv_k}{K}$$

where Iv_k is the assessment/score of one visitor for each subindicator and K is the total number of visitors. Note that the Im parameter can have any value in the range from 0.00 to 1.00. Finally, the modified GAM equation is defined and presented in the following form:

$$M - GAM = Im(GAM) = (MV + AV).$$

RESULTS AND DISCUSSION

For the purpose of this study, by the analysis of Ovčar-Kablar Gorge (GS1) and Grdelica gorge (GS2) which have been estimated by the stated methodology (M-GAM) from the Tables 2 and 3, as well as from the Figure 1, the results make it possible for someone to notice the differences between two stated sites. From the Table 3 one can see a significant difference in the main value of the geosites. The main values are much greater for Ovčar-Kablar Gorge (6.5) in comparison to Grdelica Gorge (4.71). According to the results, the differences in scientific value between the stated sites is significant, especially that of the Ovčar-Kablar Gorge (1.83) in comparison with Grdelica Gorge (0.78). A large difference is noticed mostly in the fact that Ovčar-Kablar Gorge is known for numerous carved meander, which among other things, implied to protect this area as the natural good and to put it into the first category by which its authenticity is verified as expected. The mass variety of birds that inhabit the gorge has also contributed to the large difference in the results. In all stated categories, the Ovčar-Kablar gorge is better valued than Grdelica gorge. One of the characteristics of Grdelica gorge is richness in various kinds of fish.

When considering a degree of protection of the stated sites, there is an interesting fact that the obtained results are almost identical. Both sites are under the country's protection. Large amounts of money are

invested in Grdelica gorge after the floods in 2014 when the South Morava river flooded and caused great material damage. The erosion problem in this area has been neglected for a long time, and the whole area is degraded, taking into account the fact that the recovery of Grdelica gorge is intensively being worked upon. Additional, values are also to the benefit of Ovčar-Kablar Gorge. Ovčar-Kablar Gorge is known for numerous monasteries, built on the banks of the Zapadna Morava river. Therefore, it is in advantage than Grdelica gorge because tourists are also offered the possibility of visiting anthropogenic sites.

Both sites are easily reachable. Ovčar-Kablar Gorge (GS1) is near larger towns (Čačak, Užice, Kraljevo) while Grdelica gorge has a better connection because the important traffic routes Belgrade-Thessaloniki, and railway Belgrade-Skopje were built through it. The closeness of larger towns of Niš, Vranje and Leskovac, is an additional value of this site. The advantage of a good road connection to Grdelica gorge (GS2) is not adequately used and it has a great potential to valorize itself as the resting place for tourists travelling to some resort at the Ionian or the Aegean Sea.

According to the analysis of touristic values (VTr) produced by the research, the offer of Ovčar-Kablar Gorge is more complex (1.97) while Grdelica gorge has a significantly lower touristic values (1). Neither site has a visitor center which represents a large problem in the development of tourism in the mentioned areas. Tourists do not have the opportunity to inform themselves about the sites which they are visiting. Therefore, there are no tourist guides either, so individual tourists can seek help only from local people while organized groups come with tourist guides. The promotion of Grdelica gorge, as a tourist destination, almost does not exist either in national, or in international tourism.

The number of organized visits is very small. They are mostly school trips. The tourism infrastructure almost does not exist, except built motels and restaurants which are open to the fullest extent with the aim to attract local people. The tables with the maps for giving information to tourists about where they can go have not been set up on either analyzed site, nor can they be bought. There are no marked paths for the movement of tourists. Furthermore, due to a small number of tourists, there are not any souvenir shops. Thanks to the monasteries of the Ovčar-Kablar Gorge, tourists can buy souvenirs; but only those with religious motives. The budget of which the areas of Ovčar-Kablar and Grdelica gorge dispose is not enough to finance marketing which would attract national and international tourists to come. Therefore, the promotion is mainly at local and regional level. Besides their own great potentials, both gorges are not promoted, and it cannot be claimed that there is a huge interest of governing authorities in their advancement.

The final results can be best viewed according to the position in the matrix (Figure 1). The matrix consists of main and additional values represented on the X and Y axes. The matrix (Fig. 1) is divided into nine fields marked by Z (i, j) (i, j = 1, 2, 3) based on the grade they received in the previous evaluation process. When we compare the position of the viewed sites in the matrix, we can see that Ovčar-Kablar Gorge (G_{S1}) is much better positioned than Grdelica gorge (G_{S2}).

Although both sites are currently positioned in the square Z_{21}, it could be put into the square Z_{22} with smaller investments in tourism infrastructure, interpretative panels and the improvement of tour guide service thanks to much higher grades of additional values. Larger investments in the Ovčar-Kablar Gorge (G_{S1}) have resulted in its better position in relation to Grdelica gorge (G_{S2}). Viewed from this perspective, all sustainable investments which do not degrade geosites and the environment are profitable because both scientists and

tourists have noticed that there is a significant difference between stated sites. According to the results, the main values of the Ovčar-Kablar Gorge in relation to Grdelica gorge are more attractive to both scientists and tourists. Therefore, Ovčar-Kablar Gorge (G_{S1}) represents a higher touristic potential.

The M-GAM methodology is currently one of the most comprehensive and objective geosite assessment models. With the addition of the Importance factor, it provides geosite management with the necessary information for the improvement

Tab. 2 Values given by experts and visitors for each subindicators in the M-GAM model

Main Indicators/ Subinidcators	Im		Total		
I Scientific/Educational values (VSE)					
1. Rarity	0.5	0.25	0.89	0.45	0.22
2. Representativeness	0.5	0.25	0.79	0.40	0.20
3. Knowledge on geo-scientific issues	0.75	0.25	0.45	0.34	0.11
4. Level of interpretation	0.75	0.25	0.85	0.64	0.21
II Scenic/Aesthetic values (VSA)					
5. Viewpoints (each must present a particular angle of view and be situated less than 1 km from the site)	0.75	0.25	0.79	0.59	0.20
6. Surface (each considered in quantitative relation to other)	0.75	0.25	0.54	0.40	0.14
7. Surrounding landscape and nature	1	0.75	0.95	0.95	0.71
8. Environmental fitting of sites	1	1	0.68	0.68	0.68
III Protection (VPr)					
9. Current condition	0.75	0.75	0.83	0.62	0.62
10. Protection level	0.75	1	0.76	0.57	0.76
11. Vulnerability	0.75	0.75	0.58	0.44	0.44
12. Suitable number of visitors	1	1	0.42	0.42	0.42
I Functional values (VFn)					
13. Accessibility	1	1	0.75	0.75	0.75
14. Additional natural values	0.75	0	0.71	0.53	0
15. Additional anthropogenic values	0.75	0.25	0.70	0.53	0.18
16. Vicinity of emissive centres	0.5	0.75	0.48	0.24	0.36
17. Vicinity of important road network	0.5	1	0.62	0.31	0.62
18. Additional functional values	0.5	0.75	0.59	0.30	0.44
II Touristic values (VTr)					
19. Promotion	0.75	0	0.85	0.64	0
20. Annual number of organised visits	0.25	0.25	0.56	0.14	0.14
21. Vicinity of visitors centre	0	0	0.87	0	0
22. Interpretative panels (characteristics of text and graphics, material quality, size, fitting to surroundings, etc.)	0.25	0	0.81	0.20	0
23. Annual number of visitors	0.50	0.25	0.43	0.22	0.11
24. Tour guide service (expertise level, knowledge of foreign language(s), interpretative skills, etc)	0.25	0	0.87	0.21	0
25. Hostelry service	0.5	0.5	0.73	0.36	0.36
26. Restaurant service	0.25	0.5	0.78	0.20	0.39
27. Tourism infrastructure (pedestrian pathways, resting places, garbage cans, toilets, wellsprings etc.)	0.75	0	0.73	0.55	0

Tab. 3 Overall ranking of the analyzed geosites by using M-GAM model

Geosite Label			Values		
Main		**Additional**		Field	
	VSE+VSA+VPrΣ		VFn+VTr		Σ
Ovčarsko-Kablarskaklisura – GS1	1.83 + 2.62 + 2.05	6.50	2.66 + 1.97	4.63	Z21
Grdelička – GS2	0.74+ 1.73 + 2.24	4.71	2.35 + 1	3.35	Z 21
Mean	-	5.60	-	3.99	-

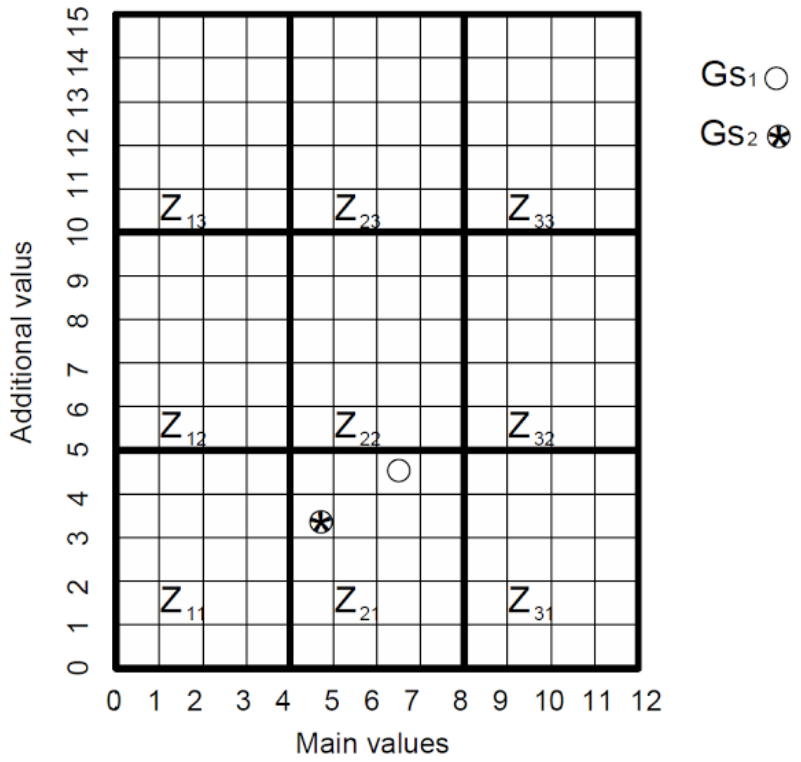

Fig. 1 Position of the assessed geosites in the M-GAM matrix

of the overall geosite tourism offer and it is also a useful tool for indicating potential gaps between what is important for visitors and the current level and quality of those activities and services. This can greatly assist management in planning future tourism activities and improving the tourism offer.

CONCLUSION

The main aim of this research paper was to compare the current state and touristic potential of the two analyzed geosites. From the all mentioned, one can conclude that both sites have a great touristic potential which is founded on their basic values but that both sites are not promoted enough and that enough attention is not paid to their development and valorization. Although Ovčar-Kablar gorge is somewhat valorized touristically due to numerous monasteries, its natural values are not promoted in a larger measure.

According to the results, one can conclude that the considered sites have significantly different values, both basic

and additional, and for that reason, their valorization should be dealt with differently. The basic values are natural, and it is almost impossible to influence on them, but additional values are certainly at the disposal of an individual and the society as a whole. There are numerous instances where tourist destinations of modest natural potentials are valorized due to people's effort and nowadays they occupy a significant place on tourist maps.

In order to be valorized adequately, the effort of local authorities is necessary, as well as the effort of the governing authorities so as to build up a necessary following tourist infrastructure. Hiring the local population in the development of these areas would reduce unemployment which is large in these regions and, therefore, would increase a standard of living of the local population. This would also prevent huge migrations of the population from these regions who are leaving their villages and going to larger towns or moving outside Serbia in pursuit of a better life.

During the strategy formulation of the development of the considered regions, huge attention would have to be paid to the strategy formulation which is in accordance with the sustainable development so as not to ruin natural beauties possessed by the stated sites. Although both sites are under the country's protection, it goes with no notices that no one deals with the problem area of these two gorges. With regard to the fact that there is no built infrastructure, not even travel agencies want to include any of these sites with priority into their offer. If the promotion of the gorges is done with marketing, it would attract a large number of tourists who are lovers of nature. What is a large and unused advantage of Grdelica gorge is certainly its position on the traffic map not only of Serbia but of the whole Balkans as well. (Grdelica gorge serves as a great touristic advantage in terms of its position on the traffic map for not only Serbia but for the entire Balkan region, however, this advantage is not utilized.) It's the advantage of the closeness to the main traffic routes passing through Serbia and connecting Central and Western Europe with Southern and Southeast Europe is a large potential for development, with smaller investments.

Before drawing up the development plan, it would be necessary to define whether it is desired to attract a large number of tourists on the destinations or to carry out the segmentation and the policy of development to be directed only to specific groups. Grdelica gorge (GS1) is, in this case, more suitable for the development of mass tourism due to its closeness to large traffic routes and, therefore, large frequency of passengers passing there while Ovčar-Kablar (GS2) gorge is more suitable for segmentation because of a large number of plant and animal species inhabiting it and which could be endangered by mass tourism.

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