NATURAL SEGMENT OF VRANICA MOUNTAIN TOURISM ATTRACTION BASE

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Mountain Vranica includes the central parts of Bosnia and Herzegovina and belongs to the area of the Central Dinarides, and forms central part of Vranički region which includes mountain Bitovnja, Šćit, Pogrelica, Zec-mountain, Dobruška and Krušička mountains. Vranica is a mountain known for the abundant geological, geomorphological, hydrological and biological diversity in a relatively small area. The variety and attractiveness of the geological structure, relief, hydrological phenomena, flora and fauna, and the attractiveness of the landscape are the primary factors for the development of tourism in this area. With favorable geographical position, and abundant naturalgeographical and socialgeographical tourist motives, Vranica has the potential to become a tourist destination. However, despite rich tourist potential, tourism is not sufficiently recognized in this mountainous area.

This paper presents an analysis of the naturalgeographical segment of the mountain Vranica tourist attractiveness, and gives a brief overview of tourism development. Based on the evaluation of natural resources it can be concluded that this mountainous area provides conditions for the satisfaction of mainly recreational and sport needs of tourists. In addition to the efforts for preservation and protection of natural tourist values, this area is threatened by irresponsible and uncontrolled human activity. The largest anthropogenic pressure is present in the area of Prokoško lake that was declared a natural monument in 2005.

Keywords: Vranica mountain, naturalgeographical tourist motives, tourism, tourist attraction base

INTRODUCTION

Variety and attractiveness of geological characteristics, relief, hydrographic objects, flora and fauna, attractive landscape diversity are the basis for the development of tourism in this area. Natural elements with its compelling power and aesthetic values may affect the decision on the tourist trip or excursion, and thus have a positive impact on the growth and development of tourism in a given area. This effect manifests itself in different ways, and among the most important is certainly the recreation. It was determined that in this area are numerous naturalgeographical tourist values. This paper presents an overview and analysis of the identified elements of the natural environment of the Vranica mountain area for tourism development.

Identified elements are analysed on the basis of usefulness, degree of rarity and the possibility of their use for tourism. The utility refers to the fact that resource, in this case a

nature resource can satisfy tourist need. Degree of rarity implies curiosity and uniqueness, and the possibility for tourism usage ie placing this resource in the function of tourism.

GEOGRAPHICAL POSITION

Mountain area of Vranica is located in the central part of Bosnia and Herzegovina, which positionally determins it in the transition zone between the southern parts of the northern climate belt and northern parts of the subtropical belt. Group Vranica (F. Katzer, 1902) is the central Palaeozoic core, with total or partial development of Carbon, Silurian and Devonian geological formations in which, in addition to Vranica belong: Bitovnja, Pogrelica, Zec-planina, Dobruška i Krušićka mountain. Morphostructural core of Vranica



Fig.1. Geographical positon of Vranica and Bosnie and Hercegovine

tectonically belongs to the zone of Mesozoic limestone and dolomite with middlebosnian schistose mountains in the core (Spahic, 2001). F. Kacer (1926) considered Vranica tectonic unit as a complex horst whose boundaries coincide with fault zones around the mountain. In geomorphological terms, Vranica belongs to the zone of central Dinarides, with strong fluvial erosion, fluvial-accumulative landforms and colluvial relief forms.

In the wider area of this morphostructures alternate medium continental in lower and mountain climate towards higher hypsometric levels. The prevailing hydrological aquifers, caused developed surface river network. Vranica formed a complex surface water springs, which is orographically divides into the basin of river Bosna and Vrbas. Of surface flows best known is Jezernica, river that flows out of Prokoško lake and from which arises Fojnička river that ends in Visoko as a left tributary of Bosnia.

From hydrographic objects should to be mentioned Prokoško lake, which is located on the southeast side of Vranica, at an altitude of 1636 meters the under highest peak Nadkrstac, and is among the highest mountain lakes in Bosnia and Herzegovina.

Pedogeographical position is determined by the presence of different types of soil within hydromorph section of the river valleys, and automorphic soils, brown acid and podzolic in the mountainous area. In these naturalgeographical conditions in the lowest altitudes forest communities of hornbeam and oak, sometimes with spruce to 1000 m above sea level are found. Above this zone, dominates beech-fir forest, followed by a degraded beech forests and dwarf pine.

In this high-altitude area a large number of endemic plant species is defined, such as mountain rose (Rhododendron hirsutum) or Vranica rockbell (Edraianthus niveus). This area is also a habitat for various species of wildlife such as bears, wolves, foxes, rabbits, grouse and others.

In the administrative and political terms Vranica mountain area encompasses parts of several municipalities in Central Bosnia Canton, including: Fojnica, Travnik and Gornji

Vakuf. Regionalgeographicaly, this area belongs to the region of mountainous or central Bosnia. Traffic-geographical position is determined by the presence of two main roads that follow the river valleys of the Vrbas and Bosnia.

EVALUATION OF NATURAL SEGMENT TOURISM ATTRACTION BASE

Evaluation of Vranica natural attractiveness is based on attractive geocomplexes and geocomponents that form the basis for the development of tourism. In the evaluation of indicative naturalgeographical tourist elements, the greatest importance is given to the geological, geomorphological, climatic, hydrographic and biogeographic sights of the natural environment. After the valuation of these natural resources it has been confirmed that space Vranica provides conditions for the development of tourist and recreational activities.

Geological elements

In geological terms, mountain Vranica is a unique place that abounds in a variety of rock types. Since it belongs to the largest silicate complex in Bosnia and Herzegovina makes it attractive for scientists and researchers, but also for potential tourists. As already pointed out, Vranica is one of the mountains of Central Bosnian Schist Mountains, built of crystalline schists of great age. The authors, starting with Katzer state that the oldest formations of Dinarides of Bosnia and Herzegovina are pre-Devonian formations in this region: shale, limestone, dolomite, quartzite, metasandstones, Metharyolites, diorite and spilit.

Geological characteristics and richness is also confirmed with the remains of the mining industry, which in the past was intense in this area. According to historical data, mining of iron, gold, mercury, silver and copper in this area has been known since the Phoenicians.

Based on the analysis of geological potential of this area, it was determined that the mountain Vranica can develop and affirm as a geological park, which would have a scientific-educational, but also a tourist function. Characteristic rock formations, crystals and minerals can be used in the education of tourists and visitors, but also used as a basis for the development of activities such as finding and extracting minerals and crystals on the ground, cleaning and storage of them etc.

Geomorphological elements

For the development of winter ski tourism, it is necessary to analyze multiple criteria relating to the characteristics of the relief such as relief slopes of 20 to 40%, slope length of at least 500 m and a continuous decline on sloped profile. In the analysis of atributive morphological elements slope orientation should be also considered. Sunny southern exposure are intensly heated than the northern. This morphological modifier affects shortening, on the southern exposures of snowy winters and its extension on to the northern exposures. Based on analysis of the expository morphostructures it is noted that Vranica ski tourism has suitable relief zones; mostly northern and north-eastern. The most prevalent slope classes are in the scale from $12\,^{\circ}$ - $32\,^{\circ}$.

The mountain area of Vranica has many attractive mountain ranges that are worth visiting. Characteristic terrain, diverse relief, sharp peaks and ridges and deep rivers and

streams valleys is good basis for the development of sports and recreational tourism. This whole region is marked with old cattle and caravan routes that lead through Vranica, Zecmountain, Bitovnja, Kalina and others.

Vranica pruža posjetiocima brojne mogućnosti za planinarenje. Neke od najatraktivnijih planinskih ruta su:

Vranica provides many opportunities for hiking. Some of the most attractive mountain routes are:

- Vranica, Prokoško jezero Rosinj (5 peaks of Vranice) total length 12,2 km
- Rise to Nadkrstac from Radovina total length 6,7 km
- Rise to Ločika peak, second highest Vranica peak
- Fojnica Matorac Poljana total length 11,3 km

The main problem is lack of the necessary tourism infrastructure, marked trails, which is the main prerequisite for the development of serious hiking activity.

Among the peaks suitable for recreational hiking and mountain biking are especially attractive climbs to the highest peak Nadkrstac and Ločika, Matorac and Vran-kamen. In this evaluation Zecabbit-mountain, which is part of the mountain group Vranica can also be included. The advantages of these massifs reflected in suitable morphoelements such as exposure, slope angles, altitude, vertical and horizontal diversity, energy relief etc. Such relief diversity reflects to the other naturalgeographical elements, so they are also climatic modifier. Characteristic mountain morphostructures multiply contributes to predominantly snowfalls during the colder periods of the year and their longer retention. Prevailing snowfall and extension of snowy wintersaffects the river network. All this characteristics make this morphostructure a typical mountain area of Bosnia and Herzegovina, which provide ideal opportunities for various purposes of tourist valorization.

As an important element of the geomorphological, features is cave Krupljanka which has aesthetic properties, due to the attractiveness of the cave channels and ornaments of great beauty but also scientific value. In this cave system springs the river Kruščica, at about 700 meters depth. In order to evaluate this cave for tourism purposes, it is important to make limited artificial interventions that are primarily related to the oraganization of cave entrances, interior lighting, tourist signs, information boards etc.

Geomorphological-hydrologic elements

In the area of Vranica, according to the the aesthetic and landscape values that can be evaluated in order to develop vacation and recreational tourism, Ždrimački waterfall and Kozice waterfalls should be mentioned. Falls Kozice are located near Fojnica, at the site Pridoli. In the small length of stream, river Kozica eliminates high altitude, making three waterfalls in height from 10 to 20 m. However, due to poor road infrastructure and steep terrain approach to the waterfalls, waterfalls are inaccessible and poorly attended.

At the site Ždrimački waterfalls, disposed waste additionally negatively impacts on the potential development of tourism and environmental quality. Signposting from Fojnica to the waterfalls, cleaning around the waterfalls, trail construction would significantly contribute to the exploitation of this tourism potential.

Climate elements

Degree of Vranica attractiveness and possibilities of its economic valorisation through tourism significantly contributes climate of the area. Favorable climatic conditions, among others, are important tourism attractive factors. Knowing climatic conditions allows to find the most appropriate type of tourism and recreation for its qualitative economic usage.

Hypsometric position, exposition and exposure to the general global air circulation, caused unequal distribution of rainfall and temperature. Vranica is characterized by zonal and azonal (height-band) distribution of annual and monthly isotherms and isohyets. The values of climatic parameters were obtained based on the interpolation of data from two meteorological monitoring: Fojnica (638 m) and Gornji Vakuf (673 m) for a 30-year period, and calculation of these values with increasing altitude. This data were checked and largely confirmed with data of the monthly and annual isotherms and isohiyets from the Climate Atlas for the period 1931-1960.

(m)	I	II	Ш	IV	v	VI	VII	VIII	IX	X	XI	XII
600	-1,8	0,7	4,2	8,5	12,9	15,6	17,1	16,6	13,5	9,1	4,4	-0,2
700	-2,37	0,13	3,63	7,93	12,33	15,03	16,53	16,03	12,93	8,53	3,83	-0,77
800	-2,94	-0,44	3,06	7,36	11,76	14,46	15,96	15,46	12,36	7,96	3,26	-1,34
900	-3,51	-1,01	2,49	6,79	11,19	13,89	15,39	14,89	11,79	7,39	2,69	-1,91
1000	-4,08	-1,58	1,92	6,22	10,62	13,32	14,82	14,32	11,22	6,82	2,12	-2,48
1100	-4,65	-2,15	1,35	5,65	10,05	12,75	14,25	13,75	10,65	6,25	1,55	-3,05
1200	-5,22	-2,72	0,78	5,08	9,48	12,18	13,68	13,18	10,08	5,68	0,98	-3,62
1300	-5,79	-3,29	0,21	4,51	8,91	11,61	13,11	12,61	9,51	5,11	0,41	-4,19
1400	-6,36	-3,86	-0,36	3,94	8,34	11,04	12,54	12,04	8,94	4,54	-0,16	-4,76
1500	-6,93	-4,43	-0,93	3,37	7,77	10,47	11,97	11,47	8,37	3,97	-0,73	-5,33
1600	-7,5	-5	-1,5	2,8	7,2	9,9	11,4	10,9	7,8	3,4	-1,3	-5,9
1700	-8,07	-5,57	-2,07	2,23	6,63	9,33	10,83	10,33	7,23	2,83	-1,87	-6,47
1800	-8,64	-6,14	-2,64	1,66	6,06	8,76	10,26	9,76	6,66	2,26	-2,44	-7,04
1900	-9,21	-6,71	-3,21	1,09	5,49	8,19	9,69	9,19	6,09	1,69	-3,01	-7,61
2000	-9,78	-7,28	-3,78	0,52	4,92	7,62	9,12	8,62	5,52	1,12	-3,58	-8,18
2100	-10,35	-7,85	-4,35	-0,05	4,35	7,05	8,55	8,05	4,95	0,55	-4,15	-8,75

Table 1. Average monthly temperatures at altitude zones on Vranica (° C)

According to calculations of the height of the thermal gradient average annual temperature of the mountain Vranica is 4.1 °C. During theyear four months have negative average temperatures and the average temperature of the summer season is only 12.1 °C, which is in the typology of climate defines only two periods summer and winter, with very short spring and fall. Summers are fresh and winters are long and cold . Average minimum temperatures are regularly recorded in January and amounted to -6.07 °C, with a maximum in July 12.8 °C.

Great height difference in this area, caused a high level of vertical thermal diversity that is represented in Table 1. At the highest hypsometric levels, such as the peak Nadkrstac (2110 m), the average temperature in January is -10.5 $^{\circ}$ C, while in July is only 8.5 $^{\circ}$ C. Highest morphological positions during the period of six months have average temperatures below 0 $^{\circ}$ C, and the annual average temperature is -0.2 $^{\circ}$ C.

The average annual rainfall in Vranica is 1516 mm. Its annual flow is largely influenced by morphographic and morphometric relationships, so the rainfall is unevenly distributed. Maximum rainfall is recorded in November, 167 mm, and the lowest amount of rainfall is recorded in September, an average of 92 mm.

In the absence of the meteorological monitoring at higher altitudes of Vranica, increasing amount of rainfall with increasing altitude is calculated based on isohyet coefficient, which in our region has an average value of 0.23~mm / 100~m. The highest hypsometrically levels, in this case, average annually receive 1545 mm of rainfall.

(m)	I	п	Ш	IV	v	VI	VII	VIII	IX	X	XI	XII
600	138	135	117	124	120	123	107	102	91	154	166	127
700	138,23	135,23	117,23	124,23	120,23	123,23	107,23	102,23	91,23	154,23	166,23	127,23
800	138,46	135,46	117,46	124,46	120,46	123,46	107,46	102,46	91,46	154,46	166,46	127,46
900	138,69	135,69	117,69	124,69	120,69	123,69	107,69	102,69	91,69	154,69	166,69	127,69
1000	138,92	135,92	117.92	124.92	120,92	123,92	107,92	102,92	91,92	154,92	166,92	127.92
1100	139.15	136,15	118,15	125,15	121,15	124,15	108.15	103,15	92,15	155,15	167,15	128,15
1200	139,38	136,38	118,38	125,38	121,38	124,38	108,38	103,38	92,38	155,38	167,38	128,38
1300	139,61	136,61	118,61	125,61	121,61	124,61	108,61	103,61	92,61	155,61	167,61	128,61
1400	139,84	136,84	118,84	125,84	121,84	124,84	108,84	103,84	92,84	155,84	167.84	128,84
1500	- /-	/-	- /-		,-	,-			- /-			- /-
	140,07	137,07	119,07	126,07	122,07	125,07	109,07	104,07	93,07	156,07	168,07	129,07
1600	140,3	137,3	119,3	126,3	122,3	125,3	109,3	104,3	93,3	156,3	168,3	129,3
1700	140,53	137,53	119,53	126,53	122,53	125,53	109,53	104,53	93,53	156,53	168,53	129,53
1800	140,76	137,76	119,76	126,76	122,76	125,76	109,76	104,76	93,76	156,76	168,76	129,76
1900	140,99	137,99	119,99	126,99	122,99	125,99	109,99	104,99	93,99	156,99	168,99	129,99
2000	141,22	138,22	120,22	127,22	123,22	126,22	110,22	105,22	94,22	157,22	169,22	130,22
2100	141,45	138,45	120,45	127,45	123,45	126,45	110,45	105,45	94,45	157,45	169,45	130,45

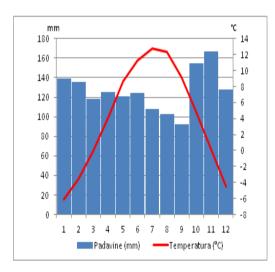
Table 2. Average monthly precipitation at altitude zones on Vranica (mm)

Snow cover occurs in eight months during the year, from September to April, and its maximum height is recorded in November and December. Average height of snow cover is 44 cm. At the same time, it should be noted that the above data relate to the monitoring which is located at the lowest hypsometric levels, and that with increasing altitude increases height and length of snow retention. Creation of snow cover, especially in the higher hypsometric levels have resulted in the low winter temperatures and high rainfall, which results in his presence up to late spring.

The duration of insolation on hypsometric levels of 600-700 m, is an average of 1619 hours. On the mountain Vranica, the average annual number of hours of sunshine ranges between 1550 and 1600 hours. Given that the value of solar radiation are impacted by local morphological specifics, especially slope and exposure, evident increase or decrease in value in relation to the average are presented.

When it comes to climate characteristics, one of the major parameters for the development of tourism, is the index of summer time. ¹ On the basis of this index rating of the area climate tourist value is calculated. Parameters used for the calculation, refer to the resulting average value of the entire area of Vranica, according to the formula:

$$ISM = 36.4^{\circ} C + 606.3 h - 335 mm$$



Sl. 2. Histogram padavina i temperatura na Vranici Fig.2. Histogram of rainfall and temperature on Vranica

According to the results, the index of summer time is 307.7. Given that in the area of the mountain Vranica development of recreational tourism is possible, such as walking and hiking during the summer season, we can conclude that the climatic conditions are favorable for the development of this form of tourism and recreation.

Based on the above data, climate of the mountain Vranica can be defined. Hypsometric levels of up to 900 m above sea level are characterized by Cfb climate ie moderately warm and humid climate with warm summers. Belt from 900 m to 1800 m above sea level, has the characteristics of Df or moderately cold and humid climate. Within this zone, the zone from 900 m to 1200 m have the characteristics of the Dfb, zone between 1300 m 1800 m Dfc climate. Highest

hypsometrically levels, above 1900 m, have the characteristics of ET or the cold, snowy, climate.

Hydrologic elements

The most important hydrographic elements of the mountain area of Vranica that have tourism potential are rapids and waterfalls, the source of the Vrbas, Jezernica and Dragača, Prokoško lake etc. River Dragača (Fojnička) and Vrbas can be valorized through complementary sports and recreational tourism activities such as fishing. Many springs and

 $^{^1}$ Index of summer time in Climatology introduced English climatologist Polter and according to him, if the index value is greater than 700 climatic conditions are favorable for the development of tourism and particularly of the summer tourism. Calculated using the formula ISM = $\Sigma T_{lm} + S_l - R_l$,, in which ΣTlm - the sum of average monthly air temperature, S_l - the sum of the duration of the insolation and R - the sum of the average amount of precipitation. All these values refer to the summer months.

wells effect on raising the attractiveness of other hydrographic motives. In the tourist evaluation of the motives, their yield, purity of water, environment and natural preservation of the environment are important. Hydrologic elements have recreation (fishing, kayaking, canoeing, etc.), aesthetic value, and as such may be integral parts of the tourist offer.

Mountain Vranica and Prokoško lake were perceived in terms of its natural value from 1954., when endemic species of triton was discovered. The lake and its surroundings have been declared Regional Nature Park and become zones of strict protection in 1982. Within the CARDS program of development of the Emerald Network in South Eastern Europe, Prokoško lake with Vranica is planned as one of the sites. During the year 2005. decision to protect Prokoško lakes through the legal category of natural monuments (III category according to IUCN), was made and established the borders of the area, protection zone, protection measures, activities in the protected area, the use of natural assets, etc. .

The most important hydrological element of Vranica mountain area is certainly Prokoško lake, which is usually the main motive for visiting this mountain. Prokoško lake has great aesthetic value; belongs to the oldest geological core of the Bosnian Dinarides and is the habitat of the Alpine Triton, which is a relict and endemic species.

Although an important element of the environment, which undoubtedly could evaluate in tourism, the largest anthropogenic pressure is present in the sensitive zone of the protected area, Prokoško lake basin. Natural processes of soil erosion leading to the burial of the lake, which are improved by human impact of which most evident are illegal building on the shore of the lake. Most of the facilities were built on the southwest shore of the lake. As this lake shore abounds with tributary waters, through them, the lake reaches waste from the facilities and organic sludge is created. Intake of organic matter in the lake leads to the development of marshy wetland systems, which contribute to the overgrowth of the lake basin (Spahic, 1991). Prokoško lake is threatened by the artificial introduction of trout that threaten to jeopardize Triton in the lake.

It is certainly important to mention the thermal mineral springs of Fojnica spa that are valorized for the development of health-spa tourism.

Biogeographical elements

Bioegeographical elements form an important basis for the development of hunting, fishing, educational, recreational, ecological and other forms of tourism. Vranica is a mountain that is characterized by great wealth and diversity of the plant world, which provides a variety of conditions for tourism development. In terms of tourism development, forest vegetation is significant and has the advantage over the grassy ecosystems.

There are three basic forms of a vegetation influence to human: recreational, aesthetic and ecological. Recreational characteristics, primarily forests increase the overall recreational value of the natural environment, and the presence of vegetation in the areas of recreation is necessary. The second impact of vegetation on tourism results from its aesthetic value. Aesthetic elements of vegetation attractivness are related to the shape and color of plant life. Mountain Vranica is famous for its various medicinal herbs, forrest berries - cranberries, wild raspberries, blackberries and wild strawberries, where cranberries have leading position. The forests and meadows are rich with fungi such as boletus, oyster mushroom etc.

Forest communities of the mountain area of Vranica have multiple functions, through its impact on other elements of the naturalgeographical environment and tourism and

recreation. In order to actively affirm forest as the tourism potential it is necessary to take a series of measures such as the improvement of paths and trails through the forest and grass ecosystems, organize viewpoints, resting places, and set the info table with basic information about the forest types and their significance.

Aesthetic properties of vegetation are connected to the landscape properties and rare relict and endemic species. As one of the most attractive species is certainly Rockbell, which can be found below the peaks Krstaca. Vranica is the habitat of alpine rose, mountain endemic plant that grows only in high mountain areas.

Second element of the biosphere is fauna. Fauna of Vranica is very interesting and varied, and provides opportunities for the development of hunting and fishing tourism. In Prokoško lake exists endemic bh. species triton.

The natural basis for tourism development needs to be conserved. Vranica, particularly in the area of the Prokoško lake is threatened by uncontrolled anthropogenic press. The most prominent geoecological problems of the region, which negatively affect the development of tourism are unplanned construction of weekend house on the Prokoško lake and fish stocking, illegal logging, and cattle overgrazing.

TOURISM ANALYSIS

Vranica represents a mountainous area which is characterized by great natural resource that represents an important basis for the development of various forms of tourism. Analysis of the tourism development on Vranica does not correspondent to tourism resources that provides.

There is a large number of problems in the development of this mountain, of which the most important are: poor transport links and connections, inadequate tourism infrastructure, lack of activities in the field of environmental protection, insufficient promotion and lack of a tourism management and planning of tourism development.

Big problem and an obstacle for tourism development planning is the lack of official statistics on tourist arrivals, as well as data on the number of tourists based on rough estimates of arrivals. The underdevelopment of tourism, but also the transport infrastructure in comparison to other bh. mountains explain the limited number of tourists. Vranica accommodation offer makes a small number of accommodation facilities - hotel "Brusnica" hotel "Rostovo" ethno-village "Babići," mountain lodge "Jezernica" mountain lodge "Rosinj", and a large number of the mentioned weekend objects. To poor tourist promotion of this mountainous region contributes the fact that in the entire state just a few tourist agency organizes tours in mountain areas. Developers of tourism and promoters of this area are primarily hiking clubs and various NGOs.

GUIDELINES AND RECOMMENDATIONS FOR TOURISM DEVELOPMENT

Tourist offer of Vranica must be recognized according to the presented naturalgeographical tourist elements that differentiate in relation to the other mountains of Bosnia and Herzegovina. Differentiation of the tourist offer must include one or more forms of tourism, for which there is demand in the tourism market, as well as resource base expressed in this case primarily through the wealth of natural elements for the development of tourism.

Taking into account the situation in the tourist market, and bh. mountains that are already positioned in the domestic as well as regional market (Bjelasnica with Igman,

Jahorina with Trebevic, Vlasic, etc.), and the current state of tourism and infrastructure in Vranica it is necessary to identify and differentiate tourist offer. Vranica, should be placed on the tourist market as:

- destination that will attract tourists looking for adventure and sports,
- destination for the development of educational tourism throughout the year and
- destination for high altitude training, etc.

The quality of the tourist offer is reflected in in the duration of the tourist season. Vranica should be a "summer and winter mountain", and have facilities that are available all year. There are basis for the development of tourist and recreational activities such as hiking, walking, cycling on Vranica butthe tourist offer should be significantly complemented with facilities in which the emphasis will be placed on the local identity of this mountainous region.

CONCLUSION

By identifying the natural attractiveness, it is possible to analyze its value in terms of use in tourism. Given the available natural attractive elements, but also the state of tourism infrastructure and tourism market, it can be concluded that Vranica can develop tourism and recreational activities such as hiking, mountain biking, hiking, etc., in the summer season, mainly due to a slightly higher temperature and insolation.

Hydrological, geomorphological and biogeographical diversity represent a good basis for development of excursion and educational tourism in this period. It is significant to point out that, duration of the snow periods, ie eight months during the year, and the hight of snow cover allow a potential winter tourism development on this mountain. However, taking into account the situation in the tourist market and the existing destinations of winter tourism in Bosnia and Herzegovina and based on the current state of tourism infrastructure and primarily poor road infrastructure, Vranica can not be base its tourism development and tourist activities on winter tourism and recreation in the snow.

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