

# INDICATORS FOR SUSTAINABLE TOURISM DEVELOPMENT NP "ĐERDAP"<sup>1</sup>

*Dragan Momirović<sup>2</sup>, Zoran Simonović<sup>3</sup>*

## Abstract

*The according to indicators of sustainable development established by the EU experts, tourism in the National Park "Đerdap" not done on the principles of sustainable development. Economic, social and environmental status indicators show worrisome state and the red zone. Cultural and tourist satisfaction indicators show the green zone. Specifics and attractiveness of infrastructural equipment and accessibility, with the construction of hotels, marinas, sports facilities, hunting grounds, restaurants, fishing content and other supra-structural capacity, would enable NP. "Đerdap" becomes the exclusive model of sustainable tourism. In parallel, it is necessary to constantly affirm and promote the benefits of this development, with an increase in tourist traffic, better use of existing resources and other touristic potentials. On the other hand, elemental development of tourism can cause great damages to protected areas. For this reason, it is necessary to efficiently and careful planning, management and a strict monitoring in order tourism in the National Park "Đerdap" was really successful and sustainable, respecting the natural, social and cultural components of the environment.*

**Keywords:** *sustainable development, environment, sustainable development indicators, tourism, nature required*

---

<sup>1</sup> The work is part of the research project 46006 "Sustainable agriculture and rural development in achieving the strategic goals of the Republic of Serbia within the Danube region" funded by the Ministry of Science and Technological Development of Republic of Serbia

<sup>2</sup> Dr Dragan Momirović, professor, Higher School of Economics and Entrepreneurship, Metropolitan of Petra 8 Belgrade, phone: +381 11 2762 194 E-mail: [draganmomirovic@ymail.com](mailto:draganmomirovic@ymail.com)

<sup>3</sup> Dr Zoran Simonovic, Research Associate, Institute of Agricultural Economics, Volgina 15, 11060 Belgrade, phone: +381 11 2972 858, E-mail: [zoki@medianis.net](mailto:zoki@medianis.net)

## Introduction

The concept of sustainable development should be the basic guidelines on the management of tourist activity. It allows the realization of economic, social and aesthetic goals. At the same time the concept of sustainable development affects the protection for cultural and historical values, social integrity and key ecological processes.

The interaction and mutual conditionality between tourism and environmental protection is particularly characteristic, complex and complementary. In the natural environment affect tourism in two ways. First, with the increasing use of natural resources that cannot regenerate naturally or economic increase, the quantity existing resources will decrease with tendency of limiting factors for future tourism development. Second, the quality of the remaining natural resources declines, with a direct negative impact on the effects of tourism, due to inferior quality of their tourism product and the available quantity of natural resources of high quality (which was an initial condition for the development of tourism) that is constantly decreasing.

The interdependence and conditionality between tourism and environmental protection is a causal, very complex occurrence, the effects of which can be the incentive or destructive.

The aim for which continuously is pursued and maximums support the sustainable development of tourism. Sustainable tourism does not jeopardize the present, but does not question the possibilities and development prospects for future generations. It is a new philosophy of thinking is based on an integrated and complex development. That philosophy includes five basic pillars: environmental protection, the promotion of social integrity, the affirmation of the cultural identity of the local population, ensuring optimal tourism needs and realization of economic prosperity.

National parks are a special form for protection of natural and anthropogenic values of certain territorial units. Those in most cases represent a significant tourist value and are characterized by existing and potential possibilities for the development of many types of tourism. One of the best known and most attractive tourists on the territory of Serbia, the "Đerdap", which, according to a number of tourism potential presents an independent, complex tourist motive not only Serbian, but European

and world values. National park "Đerdap" is located in the northeastern part of the Timok region. It was established in year 1974. It covers an area of 63,680 h.

### **Tourism potential of NP "Đerdap"**

Natural touristic value NP "Đerdap" makes the geomorphologic and hydrographic characteristics, climate, flora and fauna. Geomorphologic tourist values of the National Park "Đerdap", and the most valuable tourist value and motive has "Đerdap", with hilly and mountainous elevations along the right bank of the Danube, which represent a powerful bulwark of the river to the south. Diversity, and the tourist attraction of Đerdap gorge, the attractiveness of certain of its special location and panoramic foster development of tourism.

The National Park is significant "less forms and objects to relief from fluvial and karts forms."<sup>1</sup> Then a phenomenon in karts terrain (relief, which belong 17.8% of the territory) of sinkholes, caves, dry valleys, caves the most famous Rajkot's Cave, Ravništarka, Ceremošnja Dubočka caves and Vratanske outgrow or gates, which are treated as outstanding karts rarity .

Đerdap Lake originated damming the river Danube 1.5 km. downstream from the village Sip. The color and transparency of water Đerdap Lake from the viewpoint of tourism development does not meet the necessary requirements in full. The greatest significance of the tourist movement has a path that leads directly along the Đerdap Lake, which are rightly points out that the tourist value of Serbian and European contractive zone.<sup>2</sup>

Climate National park "Đerdap" is temperate continentals. The terrain configuration directly affects the difference in the weather and climate of a relatively short distance.<sup>3</sup>

National park "Đerdap" is distinguished by great complexity and diversity of the forest and associated shrub vegetation.<sup>1</sup> Forest and coastal areas

---

<sup>1</sup> Milojevic, S. (1933) ) Reljef Timočkog basena, Spomenica stogodišnjice Timočke krajine, Beograd, str 5

<sup>2</sup> Stankovic, S. (2002) Turističke vrednosti Nacionalnog parka Đerdap ,Turizam Srbije, Beograd.

<sup>3</sup> Rakićević, T. (1976) Klima Istočne Srbije, Zbornik Srpskog geografskog društva, Beograd, str 9

and their environment are known as a habitat for large number of different animal species. This diverse and widespread wealth of wildlife of the National Park "Đerdap" enables the development of hunting tourism.

National park "Đerdap" is rich in cultural and historical monuments to Neolithic origin of the modern. Of particular importance is the archaeological site Lepenski whirlpool, followed by cultural and historical monuments from the Roman period Trajan's Bridge, road and tabula Traiana, etc.

National park "Đerdap" disposes receptive capacity for its territory and the immediate environment. From tourist accommodation facilities in its territory are significant: Hotel Lepenski whirlpool with 460 beds in Donji Milanovac, Karatas village with 870 beds, and Tekke motel with 10 beds. For hunting tourism, is equipped motel Oman with 6 apartments and three smaller hunting facilities in the National Park.

### **Comparative indicators of sustainable tourism development**

Within the park are determined by three zones with different regimes of protection, natural resources, cultural monuments, fauna and vegetation relict species as follows:

- The first level of protection-strict protection of special natural and cultural values (area of 2664.25 h or 4.20%);
- The second level of protection-protection zones around the first degree of protection, the protection for particularly valuable parts of nature (characteristic ecosystems, landscapes and other valuables) and natural spaces around cultural heritage;
- The third level of protection-protecting parts of areas outside the protection zone and second degree to the activities of tourism, sport and recreation, forestry and agriculture with animal husbandry, non-polluting industry, small business, an extremely and exploitation of mineral resources, water, energy, transport, development and management village hamlets and area specific purposes.<sup>2</sup>

---

<sup>1</sup> Kojic, M. (1995): Prirodne livade i pašnjaci i njihov privredni i zdravstveno-rekreativni značaj, Zbornik radova, Banjska i klimatska mesta Jugoslavije, Vrnjačka banja

<sup>2</sup> Radakovic, N. (2002) NP „Đerdap“ Donji Milanovac, str 56

In the following presentation, we will try to using comparative indicators of sustainable tourism, the World Tourism Organization on the basis of the collected data available point of the actual impact on tourism on the environment, by measuring those physical and socio-cultural performance that originate exclusively from tourism.

## I. Economic Indicators

Economic indicators show the economic effects of the tourist business in particular tourist destination.<sup>1</sup>

### a) Seasonal character of tourism turnover

Summer tourism makes the basic tourist supply, after which the National Park "Đerdap" gained a reputation as a tourist.

**Table 1.** *Tourist turnover*

| Years             | Number of tourists | Number of nights |
|-------------------|--------------------|------------------|
| 2001              | 53.464             | 133.909          |
| 2003              | 60.681             | 126.263          |
| 2005              | 58.564             | 157.428          |
| 2008              | 69.754             | 153.848          |
| 2009              | 63.572             | 148.952          |
| 2010              | 67.958             | 167.387          |
| 2011              | 68.408             | 141.971          |
| 2012 <sup>1</sup> | 68.552             | 140.686          |
| 2013 <sup>1</sup> | 57.857             | 133.456          |

**Source:** *Republic Statistical Office of Serbia, Statistical Yearbook of the municipalities in those years, <sup>1</sup>Turist organizations of Donji Milanovac*

Seasonal character of business and disproportional distribution of annual turnover indicates a worrying trend of tourism development according to EU criteria. Nonetheless, in recent years, aiming at enriching summer supplied, certain efforts were made, such as schools in nature, walking paths, hiking, rafting on the lake, picking up medicinal herbs and forest fruits, events, conferences and the like.

---

<sup>1</sup>Jovičić, D., Ilić., Indikatori održivog razvoja, Glasnik Srpskog geografskog društva, godina 2010. Sveska XC-Br.1

And besides, the fact remains that Đerdap, at least for now, has not managed to build an image of a successful and attractive summer tourist center, to become Serbian sea.

Promotion summer supplied with the tourist market has not yielded the expected results. Tourist supplied should favor spring and autumn months (hunting tourism, rallies, conferences, etc.) as well as winter sports content (sports and recreational tourism, conferences, seminars, hunting).

Problem solving seasonal concentration tourism turnover opens up possibilities for greater inflow of investment and improvement integral-structured tourism supply to different market segments.

### **b) The ratio of the number of overnight stays and accommodation capacities**

The ratio of the number of overnight stays and accommodation capacities represents the indicator economic turnaround which is realized in a tourist destination.

It is estimated that that the relations between the mentioned factors must not be below 120 overnights per bed per year; if it is between 120 and 150 overnights per bed, capacity utilization is acceptable but not at an optimal level; while the sustainable use of capacity are realized in case the value of this indicator is 150 or more overnights per bed per year.<sup>1</sup>

According to data onto the table the relationship between the number of overnight stays and accommodation capacities shows that one bed, during the 2001 year used 90 days, 73 days in 2009, and 49 days during the year 2013. Data show that, according to the indicator of economic turnaround in the observed period, the National Park "Đerdap" has a low level of utilization of accommodation capacities for a tendency further decrease. Number of nights per bed, is below 120 in each reporting year.

Actual results point of a worrying low level of utilization of accommodation capacities, which by interpretation of EU experts is in the red zone.

---

<sup>1</sup> Jovicic, D. Ilic, *ibid.*, p. 283.

**Table 2.** Relationship between the number of overnight stays and the number of beds

| Years             | Number of nights | Number of accommodation capacities (beds) | % between the number of overnight stays and beds |
|-------------------|------------------|---|--|
| 1                 | 2                | 3   | 4 (3:2)  |
| 2001              | 133909           | 1.475                                     | 0,90:1   |
| 2009              | 148.952          | 2.035                                     | 0,73:1   |
| 2013 <sup>1</sup> | 133.456          | 2.719                                     | 0,49:1   |

**Source:** Republic Statistical Office of Serbia, *Statistical Yearbook by municipalities 2001, 2009, ITuristi organizations Donji Milanovac*

### c) The coefficient of local tourism increase

Coefficient of local tourism increases sublimates all direct and indirect impacts of tourism consumption and employment have on the local economy.<sup>1</sup>

Coefficient of local tourism increases can be analyzed from the standpoint of the impact on tourism on other economic sectors and the involvement in these industries in the tourist supply.

This indicator will analyze indirectly by way of the relationship between tourism and complementary business activity that can be included in the tourist supply of the National Park "Đerdap". Development orientation with emphasis on the development of tourism in the NP "Đerdap" initiated the development of a number of other business actives from general interest, which constitute a unique component of the overall tourism supply, thus increasing its complementarily and functionality.

Except mining all other business activities are in function tourism development, some more some less. Mining and industry has no place in national parks and in direct conflict with the goals of development of tourism and protection of nature.

In the first place in terms of equipping the park should be put road connection, which is also elements of tourist movements. Be especially emphasized and traffic functionally well connected inside of the park in the long asphalt road, I and II category, 268.2 km in length, soft forest roads

---

<sup>1</sup> Jovičić, D. Ilic, *ibid.*, p. 283.

length 306.3 km. and hard forest roads to 93.2 km, with a total length of 560.8 km, which enables internal and external connectivity with close and distant environment. Particular requirements of tourism initiated the building different transport infrastructure, walkways, parking lots, telecommunications and radio communications, marinas, piers and the like.

Impoundment sources of water supply tourist objects and complementary contents, removal and disposal of rubbish, cleaning of trails and many other activities are representing the basics, which provide a necessary infrastructure for tourism development. One should point out one crucial problem to be solved first of all, and that is that wastewater purification, but not directly emitted mainly into the Danube, which is unsustainable in perspective for the further development of the park as a whole. Complementary activities whose integration into tourist supplies are of special importance of national parks and which significantly affect the ratio of the local tourism increase as agriculture, animal husbandry and forestry.

Area of the municipality of Kladovo for its pedological composition of the land has outstanding conditions for intensive development of agriculture and more solid linking with tourism. Agricultural production of 38,000 h. arable land and gardens, 9,600 h. meadows, vineyards 1,000 h and 300 h orchards in the fertile Key and slopes of the mountain Miroč, with modern agro-technical measures, makes it possible to link tourism with agriculture in order to supply the tourist restaurants, ecologically healthy food of domestic origins. Large grass surfaces to allow cultivation of a large number of cattle's without jeopardizing the natural environment. These benefits are not to a great extent exploited and are functional and spatial relationships, animal husbandry and tourism minimized. You should also activate the agricultural potential for Majdanpek, in which the land is owned by 99% of the private sector without an organized market production. Special development plans should stimulate the development of this branch of production that meets the requirements of the tourism industry.

Forestry is one of the oldest activities that thrived on today the National Park due to its natural resource-famous endemorelict community forests of mixed type. (70%) Previously, forests are unselectively cut off and exploited as fallen timber and firewood. Thanks to the National Park exploitative role of forestry has been significantly reduced, while increasing its landscape - aesthetic and recreational- health functions. The



advancement of multiple-use forest functions can significantly increase the level of tourist attractions, and the spatial plan needs to increase and fix degraded and sparse forest habitats.

## II. The satisfaction of tourists

The satisfaction of tourists implies a degree of satisfaction of tourists the quality of services provided and their opinion on the attractiveness of motives, state of the environment and socio-cultural characteristics of receptive places.<sup>1</sup> Analysis satisfies tourists encompasses extensively survey research of tourists on quality and other parameters important to assessing and planning the future development of the National Park in a more realistic frameworks. In this context, for the project CRDA conducted its survey in 2005 the National Park which included 900 respondents. The survey gave the following results:

**Table 3.** *The survey tourists*

| The purpose of the stay of tourists |              |                       |                           |        |          |
|-------------------------------------|--------------|-----------------------|---------------------------|--------|----------|
| 42% holiday                         | 23% business | 13% friends-relatives | 13% events                | 7% fan | 2% other |
| Used accommodation capacities       |              |                       |                           |        |          |
| 54% hotels                          | 34% resorts  |                       | 12% private accommodation |        |          |

| Assessment of the quality of the tourism supply |                        |         |                       |        |
|---|------------------------|---------|-----------------------|--------|
| 53% satisfactory                                | 20% above the expected | 15% god | 8% below the expected | 4% bed |

| Suggestions for improving the current situation |             |            |          |                  |             |
|---|-------------|------------|----------|------------------|-------------|
| 47% services                                    | 19% hygiene | 16% hotels | 10% road | 6% information's | 2% kindness |

| The commitment of tourists for re-entry |         |       |
|---|---------|-------|
| 52% probably                            | 44% yes | 4% no |

**Source:** *Stokić V. (2001) The position of lower Danube Serbia in the tourism market, Master Thesis, University Singidunum, pp 26-27*

<sup>1</sup> Jovičić, D. Ilic, *ibid.*, p 284

### **a) Repeated visit**

Preference to tourists for a repeat visits presents an indicator satisfaction with tourists is measured by the percentage of tourists that have visited this certain tourist destination. According to EU experts is best to take the percentage of repeated visits in the last five years. If this percentage is between 30-50% for the observed tourist destination, it is the degree of satisfaction with tourist's high quality.

The motives of tourists arrival in NP "Đerdap" according to the above survey is holiday to 44%, manifestations and entertainment 20%, visits to relatives and business trips 34% other 2%. The research results show that natural motives, events and entertainment are based tourism values and the most important motivational incentives for tourists to spend their holidays in the National Park "Đerdap". However, it is characteristic that a small number of tourists, as the reason for his visit, said visiting cultural and historical monuments. Of the total number of respondents, 44% indicated they would again come to rest in the National Park "Đerdap", 4% do not and 52% likely. According to the criteria of the EU this percentage of re-arrival belongs to the yellow zone.

### **III. Cultural indicators**

Cultural indicators include degree preservation of the cultural identity of the local population affected by the tourists that come from different midfield with different cultural characteristics.

### **a) The relationship of accommodation capacities and the number of local peoples**

This indicator show "how cultural impact in terms of architectural appearance of the tourist area thus and the request for the provision of the necessary infrastructure, which burdens the budget of local communities."<sup>1</sup> If the number of beds in accommodation capacities larger than the number people for 1, 6 times situation is assessed as unfavorable. In this case, the local people are endangered extensive building the tourism industry. The proportion of 1, 5: 1 or less is favorable for local community.

---

<sup>1</sup> Jovičić, D. Ilic, *ibid.*, p 285

**Table 4.** *The relationship of accommodation capacities and of local population*

| Year              | Number of people | Number of accommodation capacities (beds) | Proportions       |
|-------------------|------------------|---|-------------------|
| 1                 | 3                | 2   | 4 (3:2)           |
| 2001              | 9.142            | 1.475                                     | 0,16:1 green zone |
| 2009              | 7.383            | 2.035                                     | 0,27:1 green zone |
| 2013 <sup>1</sup> | 6.004            | 2.719                                     | 0,45:1 green zone |

**Source:** *Republic Statistical Office of Serbia, Statistical Yearbook by municipalities 2001, 2009, <sup>1</sup>Tourism organizations Donji Milanovac*

According to available data onto the settlements of National Park "Đerdap" permanently inhabited people in 2001 year was about 9,142, in 2009 year it was estimated that there were 7,383 inhabitants and year 2013 year 6,004 inhabitants. Decrease a population that permanently lives in the National Park "Đerdap" is consistent with the declining birth rates, which is reveals some worrying and dramatic tendencies in the whole Timok region. Increasing the accommodation capacity is a result of privatization and activities of entrepreneurs.

In 2001, year the proportion of the relationship between the number of accommodation capacities (beds), and the number of permanent inhabitants are 0, 16: 1. In 2009 year, based on the assessment, the relationship between these two elements has improved and amounts to 0, 27:1. However, the improvement is not the result of a large increase in capacity. The absolute amount of increase accommodation capacity for eight years is only 560 beds. The number of inhabitants in the same period, based on estimates, decreased drastically, in absolute amount, a total of 1,759 inhabitants. Certainly, increasing capacities and a drastic reduction in the number of inhabitants has affected the improvement relationship between the proportions of these two elements.

Trend certain increase in the number of accommodation capacities and a drastic reduction of inhabitants continued throughout the entire the period analyzed with a tendency of further deterioration. In 2013 year a proportional relationship between the number of accommodation capacities and the number of permanently inhabited an inhabitant is 0.45:1. These relationships indicate a sustainable proportion, according to EU standards, so-called green zone, which talks about a slight impact on

tourists on the cultural identity of the local community. Development plans on NP "Đerdap" identified the lack accommodation capacities whose building future will probably come to the saturation of space, which can lead to enormous levels of risk and vulnerability of the environment. Due to the potential adverse environmental and cultural consequences, it is necessary to original plans of tourism development reduced to the optimum level while increasing the degree of utilization of existing capacity, in order to achieve more effective results.

### b) The intensity of tourism

The intensity of tourism is an indicator showing the degree cultural saturation of the local community. The high degree of cultural saturation indicates a negative impact on the local community and disturbance of its identity and impact on reducing the experience. The intensity of Tourism will present the relationship between the number of nights expressed in thousands and the number of local inhabitants expressed in the hundreds.

**Table 5.** *The ratio of the number of overnight stays and the number of local population*

| Tourist overnights by years | Number of people | Number of accommodation capacities (beds) | % Between the number of overnight stays and beds |
|-----------------------------|------------------|---|--|
| 1                           | 3                | 2   | 4 (3:2)  |
| 2001                        | 9.142            | 133.909                                   | 0,06:1   |
| 2009                        | 7.383            | 148.952                                   | 0,04:1   |
| 2013                        | 6.004            | 133.456                                   | 0,04:1   |

**Source:** *Republic Statistical Office of Serbia, Statistical Yearbook by municipalities 2001, 2009, <sup>1</sup>Tourisam organizations Donji Milanovac*

By comparing the number of nights expressed in thousands permanently inhabited and hundreds of faces obtained the proportions for 2001 year 0.06: 1, for 2009 year 0.04: 1 and 0.04 for 2013 years. According to the criteria of EU experts on the cultural identity of the local community was not influenced by the tourist industry. This means that these proportions belonging to the green zone. However, in applying this indicator needs to be careful. In particular, the ratio of the proportion between the number of overnight stays and the number of local populations may show

considerable fluctuations. These oscillations depend on the type and specificity of tourist destinations.

#### **IV Social Indicators**

##### **a) Involved of tourism in the local net domestic product**

Most of the tourist capacities of NP "Đerdap" are located on the territory of three municipalities Golubac, Majdanpek and Kladovo. This dispersion of accommodation capacities, contributes to the development and appreciable filling in of the municipal budget, material strengthening of the economic sector, increasing local employment and the like. According to available data municipalities of Golubac belongs to underdeveloped communities, which uses funds of the Fund for Development of Underdeveloped Regions in which the tourism participation in the net domestic product of 2.7%, Majdanpek 10.5% and Kladovo 5.3%. The unfavorable trend is a result of low capacity utilization, low of visitors and aggravated and unfavorable economic conditions.

#### **IV. Indicators of environmental condition**

##### **a) Using and land occupation**

National park "Đerdap" is distinguished a low level of urbanization and most tourist and other capacities of the territorial unevenly distributed and built outside the core of the park.

##### **b) The percentage of tourists who do not come by own car**

According To the survey, 48% of tourists in the National Park "Đerdap" come with their own car. By bus comes 28% of a tourist transport 8% while the rest rent car and train. A high percentage arrival owns car brings a number of negative consequences of the national park: the increased exhaust emissions, endangering the green area, the higher the level of noise and the like.

##### **c) Other indicators on the state of the environment**

Although, due to the lack of relevant data in this analysis are not analyzed all the other indicators of state of the environment laid down by the EU experts, the most important characteristics of state of the environment on

the territory of the National Park "Đerdap" consist of the following: the park ecosystems that make up the basic natural values are under strong antropoozoogeonog influence that is reflected in the increased degradation of forest ecosystems and forest communities, the level of communal hygiene is unsatisfactory, especially purification and drainage of waste water directly into the Danube and other rivers and exploitation of copper ore, large-scale, produced in Majdanpek a large amount of waste that cannot manage in an adequate manner.

### **Sustainable development and rural tourism**

NP "Đerdap" is characterized by favorable natural and anthropogenic conditions for the development of rural tourism. The basis of developing this type of tourism consists of landscape and environmental values are well preserved rural areas. In the villages of the national park, there are very interesting and attractive natural objects and cultural and historical monuments. Also, there are industrial buildings as sources of air pollution and water resources.

Supply in rural areas of the national park, the content can be very rich and diverse, from the authentic rural landscapes, folk architecture and handicrafts, folklore, healthy food and beverage, hunting and fishing and recreational involvement in agricultural work and rural affairs.

The lowland villages, are compact type and very urbanized, where one house abuts the other and where the courtyard (the courtyard) small, and their estate uniform and under agrarian cultures. A plains settlement does not constitute a distinct motive value of tourists.

Hill and mountain villages by their physiognomy belong of the old-vlach type of rural settlements. This group of settlements has the best potential for developing rural tourism. Particularly attractive areas as development of this type of tourism are located in rural settlements on the slopes on mountain Stol, Dubašnica, and other places.

Rural tourism is an important segment of the program of revitalization of villages and overcoming rural underdevelopment, especially the hilly and mountainous settlements of the national park. We draw attention to the environmental and social-cultural dimension in accordance with the concept of sustainable development.

Selective supply this type of tourism implies appropriate standardization of quality services and adequate housing conditions, investment in

infrastructure, health services, environmental protection, prevention of uncontrolled urbanization, and education of the rural population. An important segment of the tourism product of rural tourism is the tourism in the framework of the agricultural holding. The specificity of the tourism product and the needs for a guest is not just silent observers but also users, material and cultural values of the villages.

Traditions and literature, original folk songs and costume, naive painting, old buildings and the like directly affecting tourists to know more about the culture and lifestyle of the rural population

In NP "Đerdap" has no organized tourist rural households. The supply of rural tourism, for now a small but perspective, the nucleus maximum should strengthen the material basis of rural tourism. Then, devise a more offensive performance in the markets, with the application of marketing concepts, with special emphasis on ecological components and content, with the inclusion the wider social community.

### **Conclusion**

Analysis of sustainable development of tourism in the National Park "Đerdap" could not be done completely. The main reason is the lack of data. Professional services do not record data that are important for determining indicators for sustainable development.

Economic indicators suggest that the NP "Đerdap" does not satisfy prescribed criteria. Tourist turnover has seasonal concentration of the summer. The consequences of are negative economic effects. Therefore, it is necessary to extend the summer season and promote the supply of the autumn and spring months by organizing various events, seminars, teaching in nature, hunting and fishing tourism. It is necessary to improve the integral-structured tourism supply of various forms of tourism. At the same time, it is necessary to conceive quality tourism promotion at the local and international tourism market.

The surveying, tourists who have stayed in the National Park "Đerdap" it was found that over 80% were satisfied with the quality of services provided. Even 44% of the surveyed said they would come again to rest and recreation in the national park. However, the indicator tourist satisfaction, insisting on the number of repeated visits. No lack of data, we cannot say with certainty that there is continuity in repeated visits. We are

currently working a new survey (which is not yet completed) which will be used safely; see the degree of satisfaction with tourists to the EU criteria. Cultural indicators show sustainable relationship, according to EU standards, so-called green zone, which talks about the insignificant impact of tourists on the cultural identity of the local community.

Social indicators, in particular, participation in net domestic product of the total local domestic product is worrying and very low. The unfavorable trend is a result of low capacity utilization, low of visitors and difficult and unfavorable economic conditions.

Indicators of environmental worrying trend, in particular, as the largest number of tourists come in their own cars. Arrival of tourists a large number of cars jeopardizes and harms the environment. The habits of tourists that come by public transport are difficult to change. It should affect special incentives to make more use of public transport.

In addition, the state of the environment seems strong influence of anthropogenic factors of the natural ecosystems of the park. Then, the low level of communal hygiene and treatment and the drain of waste water directly into the Danube. The problem is the inadequate management of waste comes from households and mining industries.

On the basis of indicators of sustainable development of tourism in protected zones, as defined by the European Union and on the basis of available data, we can conclude that with the NP. "Đerdap" tourism is not developed on the principles of sustainable development. Tourism in the national park is not developed. Therefore, in the near future is not threatened by a great danger that could affect endangering ecological and socio-cultural factors. But that does not mean you should not take the measures necessary for sustainable development. The increase in tourist traffic, could lead to jeopardizing existing environmental conditions, which, already having problems.

### **Reference**

1. Ilić, B., Simonović, Z. (2013). Gamzigradska Spa - Factors spa tourism and its impact on the development of Zajecar region. *Economics*, 61 (3), 85-98.



2. Jovičić, D., Ilić., Indikatori održivog razvoja, Glasnik Srpskog geografskog društva, godina 2010. Sveska XC-Br.1
3. Kojić, M. (1995): Prirodne livade i pašnjaci i njihov privredni i zdravstveno-rekreativni značaj, Zbornik radova, Banjska i klimatska mesta Jugoslavije, Vrnjačka banja.
4. Milojević, S., (1933) Reljef Timočkog basena, Spomenica stogodišnjice Timočke krajine, Beograd
5. Radaković, N, (2002): N.P. „Đerdap“Donji Milanovac.
6. Rakićević, T., (1976) Klima Istočne Srbije, Zbornik Srpskog geografskog društva, Beograd
7. Republic Statistical Office of Serbia, Statistical Yearbook by municipalities 2001, 2009, 2001, 2009.
8. Simonović, Z. (2014). Manage Serbian agriculture in transition, Institute of Agricultural Economics, Belgrade.
9. Stanković, S. (1975): Turistička valorizacija veštačkih jezera SR Srbije, Posebno izdanje SGD. knjiga 41, Beograd.
10. Stanković, S. (2002): Turističke vrednosti Nacionalnog parka Đerdap ,Turizam Srbije, Beograd.
11. Stokić V., (2011) Položaj donjeg Podunavlja Srbije na turističkom tržištu, Master rad, Univerzitet Singidunum, str 27
12. Tourist organization Donji Milanovac