

## Priorities for Research, Planning and Management of Sustainable Spatial Development and Protection in Serbia

Saša Milijić<sup>1</sup>, Marija Maksin<sup>2</sup>, Nikola Krunić<sup>1</sup>

<sup>1</sup>Institute of Architecture and Urban & Spatial Planning of Serbia, Belgrade, Serbia

<sup>2</sup>University „Singidunum“, Belgrade, Serbia

### Abstract

This paper analyzes the problems in the tourism development and management of tourism in protected areas in Serbia. Practice in the EU suggests that the development and protection of the natural values, directs and achieves spatial definition and alignment mode using these zones and tourism potential. Managing spatial development of Serbia, according to the relevant principles and standards in the EU, based on the integrated spatial planning, environmental, economic, social and cultural factors of sustainable development. Presented with experience in design and features to improve the management and direction of sustainable development in Serbia, for instance priroitetnih mountain tourist destinations (Nature Park Stara Planina and Kopaonik National Park) and the most attractive part of the Danube corridor (National Park Đerdap). Addressed two questions: what are the possibilities for minimizing existing conflicts or those that may occur in the future, and what are the possibilities effectiveness of protected areas. Existing arrangements for protected areas in Serbia did not provide effective protection of natural and cultural heritage, tourism and local communities.

### Keywords

mountain areas, Nature Park Stara planina, National Park Đerdap, research and spatial planning, sustainable development, management

### Introduction

The area of nature conservation in Serbia is legally regulated by the Law on Nature Conservation and other legal acts which are either directly or indirectly related to nature. In addition, by-laws, particularly decisions on protected natural resources, the Law on Planning and Construction, as well as the Law on Tourism are also relevant for normative regulation of the area concerned. By adopting Spatial Plan of the Republic of Serbia – SPRS (in 1996 and 2010) and several spatial plans for the special purpose area (for protected natural resources Stara planina, Kopaonik, Djerdap, etc.), the system of spatial planning which enables harmonization of conflicting interests of tourism development and nature conservation has been established. Protected areas currently cover 5221 km<sup>2</sup> (i.e. 5,9%) with the tendency of increasing to 10% by 2015, that is to say 12% of the territory by 2012 (Figure 1). In the process of harmonization of legislative regulations related to the area of environmental protection, nature conservation and planning with the similar legislation of the European Union, it is necessary to take into account and apply the principles of international conventions signed by Serbia.

Sustainable tourism, according to the World Tourism Organisation (UNTWO), enables the management of resources which satisfies economic, social and esthetic needs, cherishes cultural integrity, essential ecological processes and biological diversity. Attracting tourists and investors in tourism contributes to economic development and social stability of local communities. However, mismanaged tourism development may result in permanent negative consequences on the environment, especially in economically vulnerable areas. For the purposes of promoting sustainable tourism, the Guidelines on Biodiversity and Tourism Development (CBD Secretariat, 2004) in protected areas, including fragile riparian and mountain ecosystems, have been defined. According to these Guidelines, sustainable tourism development requires a coordinated process of policy making, planning and management, based on the participatory approach. The precondition is development of institutional capacities and continual educational activities regarding the impact of tourism on biodiversity and good practice (*IBID*).

Sustainable development, protection and management of tourist areas in the Republic of Serbia rely upon the following principles (POPOVIĆ et al. 2012):

- Development: economic sustainability ; social and cultural appropriateness; ecological acceptability;
- Protection: organisation, planning and use of tourist areas with the application of standards of environmental protection and nature conservation; providing protection, presentation and integrated management of natural and cultural resources to the advantage of sustainable tourism; conservation and revitalisation of nature by means of income from tourism; and
- Planning: valorisation of natural and man-made tourist resources classified on the basis of their value and content.

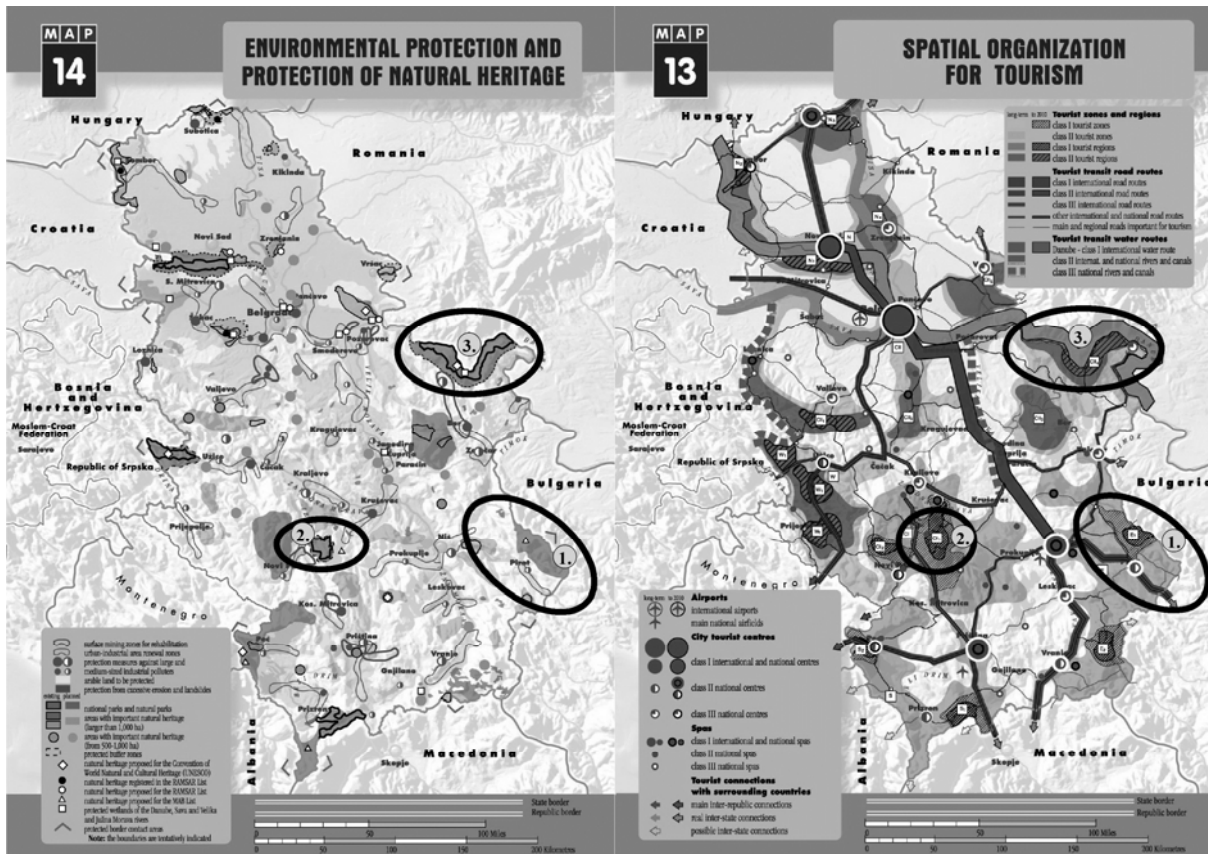


Figure 1: Areas planned for integral protection of nature and tourism development in Serbia: 1. Nature Park and tourist region Stara planina Mt., 2. National Park „Kopaonik“, and 3. National Park „Derdap“ (Source: IAUS, Documentation of SPRS, 1996-2010)

In accordance with the mentioned principles, the main aim of tourism spatial development in Serbia has been defined, with the focus on spatial and ecological support to the realization of the concept of sustainable development, by compromise integration of planning and programme documents connected with tourism development and protection of areas and fulfillment of national and local level requirements as well as the market interests and conditions of cross-border and international cooperation. Cross-border cooperation, realised in the area of nature conservation and tourism development on: Stara planina with Bulgaria, Gornje Podunavlje with Hungary and Croatia, Donje Podunavlje with Romania and Bulgaria, Gornja Tisa with Hungary and the Tara river with BIH needs to be finalised. It is necessary to establish cross-border cooperation (within Euroregion) in the area of protection and development in new contact areas.

**Examples of Sustainable Development and Protection of Areas**

The most important parts of protected natural resources in Serbia, mountains and river banks, are at the same time planned for tourism development. The basic problem of tourism development lies not so much in the limitations of potential, as in the limitation arising from some other factors (infrastructural facilities, lack of compliance of laws, etc.). The processes of integration of development and protection in Serbia have been decelerated by unresolved economic and system mechanisms, in addition to social and political issues (MAKSIN et al. 2011). Political, declarative support of market economy proved not to have created necessary stability and favourable business conditions, and to have slowed down development and protection. Unlike European practices, apart from realisation of economic and social justification and environmental appropriateness, the crucial issue in Serbia seems to be finding the manner in which tourism development will make it possible for local communities to survive in protected areas in order to avoid complete depopulation of these areas. This imposes the obligation of recognising previous errors and reconsidering the approach to development and protection along with the application of positive European practices.

The concept of development and protection of mountain regions in Serbia is based on previous accomplishments in the field of spatial planning and design and standards which are being enforced in the countries with higher level of development. This, first of all, refers to good case studies in the development and protection of the Alps tourist region. The activation of development resulted in the construction of attractive tourist places with efforts made to avoid irreparable ecological damage in the course of their construction and exploitation. The process of development of mountain regions inevitably involves conditional degradation of the area parts due to the building of infrastructure and stationary facilities, and although this is impossible to avoid, but it can be managed by spatial plans. So far over 600 mountain resorts, equipped to meet the highest standards in terms of infrastructure, have been built in the European mountain regions. Development of mountain tourist destinations must be based on integral planning, with particular attention to economic restrictions with respect to financial support, and natural limitations, especially concerning ecological protection and climate changes.

Mountain region of Serbia, which implies the height of 600 m or more, covers 34% of the area, i.e. approximately 29.850 km<sup>2</sup> (Figure 2.). Regarding development potentials, high mountain areas lead the way (over 1500m) with surrounding areas (1000-1500m), which account for about 11% of the area, i.e. 9680 km<sup>2</sup>. High mountain regions of national importance include: Kopaonik, Stara planina, Krajište with the Vlasina river, Golija, Šar-planina and Prokletije.

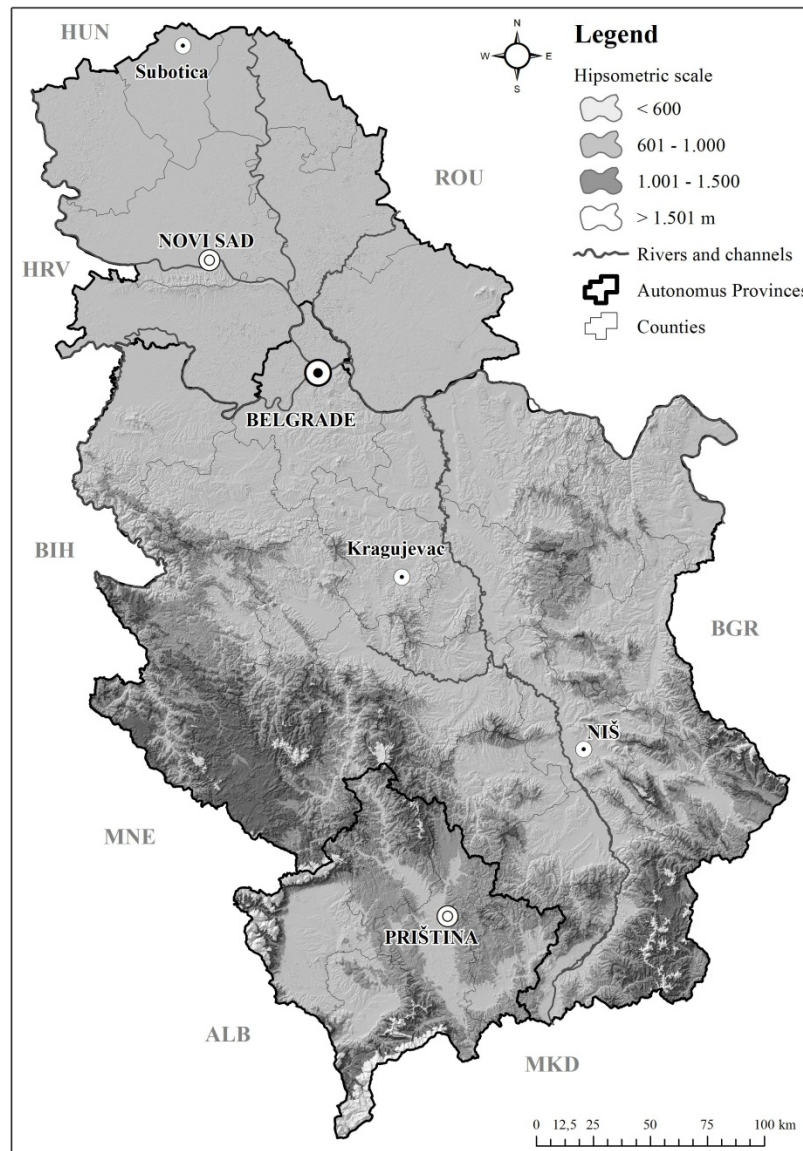


Figure 2: Mountain areas of Serbia

The Republic of Serbia has great potential for the development of mountain regions a part of which has been activated. Whereas in the countries with higher level of development mountains represent the areas not lagging behind other parts and there are special funds for development programmes of mountain communities, use and protection of resources, Serbian mountains are characterised as undeveloped areas, with severe issues.

**Spatial and environmental limitations**

of sustainable development involve: peripheral geographical location and unfavourable transport connections; inadequate infrastructure, insufficient nature protection and similar. The key problems include: the space characterised by disbalance between tourist capacities and infrastructural facilities; disappearance of agriculture and depopulation of mountain villages; the appearance of unplanned exploitation of forests; threats for ecosystems and biodiversity caused by negative influences of climate changes. Part of the problem is provoked by one-sided interpretation of sustainable development in the form of placing priority on nature conservation in protected areas. Coordination of protection and use of resources poses a particularly serious challenge for sustainable development of mountain regions of Serbia (KRUNIĆ et al. 2010). All important mountains enjoy some status of protected natural resources:

- national parks: Kopaonik, Šar-planina and Golija;
- nature parks: Stara planina and Golija;
- special nature reserves: Goč-Gvozdac, Peštersko polje; certain locations on Mokra Gora – Tutin, etc.;
- areas planned for protection: Valjevske planine, Kučajske planine, Zlatibor, Jadovnik, etc.

### Limitations in the management of sustainable development

are consequences of unadapted legal basis for planning, inadequate organisation of institutions and administrative and economic division of mountain region. This results in uncoordinated development. A special problem lies in individual views and decisions on development, ranging from municipalities interested in the development of their part of a mountain to various industrial branches whose particular interests are usually not in line with other activities and nature protection.

The SPRS (1996) regards mountains as tourist places and areas with natural heritage and resources, which sets strategic framework for sustainable development and protection. The new SPRS (2010) confirmed the continuation of planned and development treatment of tourist areas, with emphasis on high mountain areas (Stara planina, Kopaonik, etc.) and river corridors (The Danube, the Sava, the Drina, etc.).

Special features of Stara planina which had an impact on the creation of spatial plan include: Nature park (with Bulgarian part of the mountain it is a candidate for UNESCO MaB); high mountain region with potentials for development of tourism throughout the year, etc. Simultaneously with making of plans, the activities on the preparation of the Regulation on Protection of Nature Park, Master Plan of Tourism and construction of ski tourist centre were performed. Adoption of Spatial Plan in 2008 provided planned basis for: the protection of Nature park by means of defining nature conservation regimes; reserving space for tourism development, improving transport connections; enhancing the quality of life in local communities, etc.

During the preparation of Spatial Plan, conflicting interests of protection of natural resources on one side, and tourism development on the other, were prominent. In the process of harmonization, a compromise solution for nature protection and tourism development was reached thanks to cooperation and coordination of activities of IAUS and competent institutions for protection of natural heritage. By this, the requirements of nature conservation were fulfilled and the construction of tourist and recreational infrastructure at heights from 1100-2169m, which is a key tourist zone for the development of ski centres was enabled.

By concept of dispersive development and construction which has been applied in most parts of Stara planina, planning solutions will not have an unfavourable influence on the environment which cannot be kept under control (MAKSIN-MIĆIĆ et al. 2009). However, in one part of Stara planina the applied concept of excessive construction in the tourist resort "Jabučko Ravnište" may have an adverse effect on nature, especially when it comes to water supply, disposal of waste waters etc.

A similar approach to tourism planning and nature conservation was used in case of National park "Kopaonik". Main goals were: harmonization with limited capacity of space and natural resources for hosting visitors; preservation of natural resources and reduction of waste production, realisation of new development potentials of tourism with preservation and improvement of natural and cultural heritage; and enforcement of the principle of responsibility in case of caused damage and provision of appropriate compensation.

In terms of tourism, the most attractive part of the Danube flow through Serbia is Donje Podunavlje, i.e. National park "Djerdap", spatial plan for which has also been made. Tourist, natural and cultural potentials of Djerdap make it the leading protected area of the Danube river basin in Europe. It can be networked with other attractive tourist areas, especially on the Romanian side of the river bank zone. Exceptional natural heritage, common history and tradition, valuable cultural heritage are all reflections of intercultural influences and connections of different communities in the Djerdap region and its regional and transborder surroundings (MAKSIN et al. 2012).

National park "Djerdap" has been pronounced as IBA (Important Bird Areas), IPA (Important Plant Areas) and PBA (Prime Butterfly Areas). It is a part of the EMERALD network of areas (Emerald Network of Areas of Special Conservation Interest – AsCI) in Serbia, and potentially the NATURA 2000 network. The area is listed on the Tentative List of UNESCO World Heritage (WHC 2011), the list of Carpathian areas and has been included in the programme of European Green Belt Project. It has been nominated for the biosphere reserve of UNESCO MaB, and the flow of Danube and its riverbank zone for the Ramsar area. The initiative for establishing of common natural resource of cross-border area of Djerdap has been started and it will include National park "Djerdap" on Serbian and Nature park "Portile de Fier" on Romanian side.

Due to terrain configuration and peripheral position, no big urban centres have been formed nor has there been significant industrial development in the Djerdap part of the Danube area. The construction of dams Djerdap I and Djerdap II and formation of the lake have influenced the changes of seaworthiness on the river and contributed to the improvement of availability, infrastructural facilities, development of new industrial branches (power supply, tourism, etc.). The tourist offer is not sufficiently developed and improved, not to mention connected. Spatial plan includes integral concept of protection and development. Tourism will represent the basic and alternative branch of economy and a kind of compensation to local inhabitants for various development limitations imposed by regimes of protection of natural and cultural heritage and resources. Presentation and promotion of natural and cultural values of Djerdap, development of Danube aquatorium with the most attractive section of the nautical waterway, tourist settlements in the river bank zone and hilly and mountainous zones all have extreme importance for the tourism development of the mentioned area.

### **Concluding Remarks**

Tourism, spatial development and management of protected areas in Serbia faces several challenges. The most important parts of mountains and river banks in Serbia have certain kind of status of protected natural resources or they are in the process of gaining one. The problem arises due to potential or manifested conflict, most frequently between nature conservation and tourism development. Prevention and relativisation of this conflict is formally obtained by means of spatial differentiation of protected zones from the ones planned for development and, in particular, balancing activation of tourist potential and nature conservation regimes.

In line with the EU trends, tourism represents one of the most dynamic areas of development, especially in ecologically preserved and economically underdeveloped areas. Priorities of tourism as a branch of industry are aimed at preservation and improvement of natural and cultural heritage, that is to say at defining common interest with regard to rational use and space management, which is a precondition of sustainable development. Continuation and further enhancement of the already started process of tourism development in the instances of mountain regions and Podunavlje in Serbia do not appear to be the antithesis of protection; on the contrary, they are complementary activities.

Regarding the elements of management system in protected areas in Serbia, there exist Spatial Plan of the Republic of Serbia, a set of spatial plans for the special purpose area and various programmes of development and protection which cannot adequately function on their own without the elements of development guidance, system conditions or correlation with them. The application of planning documents will depend on and require government support and private initiative, efficiency in the management of development and protection as well as giving equal consideration to economic, spatial, ecological and social factors of development. The establishing of cooperation with the Institute for Nature Conservation of Serbia during which harmonization of planning solutions for the areas of protected natural resources with the areas of tourism development was done, had special relevance in the process of making spatial plans for protected areas of Serbia (Stara planina, Kopaonik, Djerdap, etc).

## Aknowledgements

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## Contact

Saša Milijić  
[sasam@iaus.ac.rs](mailto:sasam@iaus.ac.rs)

Nikola Krunić  
[nikola@iaus.ac.rs](mailto:nikola@iaus.ac.rs)

Institute of Architecture and Urban & Spatial  
Planning of Serbia  
Bul. kralja Aleksandra 73/2  
11000 Belgrade  
Serbia

Marija Maksin  
[mmaksin@sinigdunum.ac.rs](mailto:mmaksin@sinigdunum.ac.rs)

University „Singidunum“  
Danijelova 32  
11000 Belgrade  
Serbia



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