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# THE RATIO OF REGIONAL AND RURAL DEVELOPMENT IN MONTENEGRO

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### **Abstract**

This paper suggests a selective basic problem and theoretical framework of regional development of Montenegro as well as development of rural areas. Land area of Montenegro is 13 812 square km with 4800 square km of inner sea. According to the latest census (2011) it has a population of 672 656 inhabitants. The average population density is 48 inhabitants per square km. Montenegro is administratively divided into 22 municipalities. Geographically it can be divided into three regions. In agriculture there are available resources of about 0.80 ha and 0.29 ha of agricultural and arable land per capita, which is significantly above the available resources in most European countries. Montenegro has significant tourism potential in rural areas, and therefore, rural tourism is a strategic priority. Based on in details analyzed attitudes toward handling and the importance of a correlation of regional and rural development, and also the need for planning the development process, integrative planning based on the principles of sustainable development is a conceptual starting point and the assumption of application program. Balanced spatial development does not mean that Montenegro should be regarded as a single territory with the same problems and opportunities, but we need to support spatial development focusing on regional specificities and thus mitigating the differences in development.

Keywords: region, development, ecology, rural

# The ratio of regional and rural development in Montenegro

### Introduction

Montenegro covers the area between 41 °- 39 and 43 ° 33 north latitude and between 18 °- 26 and 20 °-21 east longitude. So, according to latitude, Montenegro is the southernmost part of Europe - the Mediterranean, one of the most beautiful parts of both Europe and the world. Distance between the southernmost and northernmost points of Montenegro 200 km as the crow flies, and between the westernmost and easternmost points 173 km. According to the latest census (2011) it has a population of 672 656 inhabitants. The geographical position of Montenegro is more important than the size of its territory or its population. Montenegro is situated on the crossroads of two major geographical units - Dinarides and the middle of the Mediterranean. Length of its coastline is 316 km and the surface of the inner sea is 4 800 km  $^2$ .

Length of the Montenegrin coast is 316 km coastline, although including islands and the part of the river Bojana it is 339.2 km. The coefficient of coastal dispersion is 3.51. (Bakic at al, 2009). The planned level of development of transport system, whose primary role is to provide the conditions for balanced spatial development through better international, regional, inter-municipal and local networking – is not accomplished. Agriculture, along with tourism and services, is the top priority of economic development in Montenegro. In the total GDP, agriculture accounts for about 15%, while it constantly employs about 9% of the active workforce. Many households are farmers on small holdings (about 5 ha on average), so it is a primary or supplementary source of income for over 60,000 households.

This paper has applied and the theoretical character which looks at the planning, legal and institutional framework for the protection of Montenegro. It aims to present understanding of the geographic features of Montenegro. Application of regionalization resulted from analytical - systematic approach to the main features of the research. Thus, regionalism implies understanding of space from the angle of hydrology, geomorphology, tourism and urban planning, history and economy.

By choosing the method of regionalization, it is to comply with its basic principles: complexity and elementary typicality, and homogeneity (unity) throughout the territory. This is the only way to understand the observed territorial unit and investigate such unity. Administrative division is the actual spatial expression of the entire political and economic life, no matter whether it presents the best framework for his organization.

### **Material and Methods**

In the basic methodological apparatus regionalization method was used. The authors first used a method of geosystem analysis, and then statistical analysis. Evaluation methods were used to determine the significance of geological heritage for tourism, recreation, and culture. Systematization and classification method was used to arrive at the development of correlations among the forms in space. The authors used the method of correlation in order not to have to carry out research of potential. According to natural conditions, level of development, agriculture, rural development, tourism and recreation has a distinct regional differentiation. The need for balanced development with social and environmental requirements is a requirement for all regions. Coast (an area in which a small area of concentrated natural and created values) has become very attractive for tourists but also for the Montenegrins who migrate to the more economically prosperous and expansive areas. In the Central region specific segments of tourism such as cultural and religious have great potential. (Bakic at al, 2009)

### **Results and Discussion**

Montenegro has a varied relief, which consists of high mountain ranges (Orjen, Rumija, Bjelasica, Komovi, Durmitor, Prokletije etc...), valleys (Zetska, Grbaljska, Belopavlicka ...) intersected by a number of rivers that make canyons (Moraca, Lim, Tara, Cehotina, ...). Such an arrangement of relief and the influence of climatic factors is extremely unfavorable for the construction and maintenance of infrastructure in particular. If we add to this the fact that over 55% of the total surface of Montenegro is, - 1000 m above sea level,- and about 24% of Montenegro is situated on a slope greater than 30%, we get an extremely complex and difficult framework for building and maintenance of transport infrastructure. Administratively Montenegro is divided into 22 municipalities. Geographically Montenegro can be divided into three regions: coastal region, central region and northern region.

1 Coastal area, includes the coastal areas of the Adriatic Sea to the high mountains Orjen, and Rumija and has a Mediterranean climate. In this are there the municipality of Herceg Novi, Kotor, Tivat, Budva, Bar and Ulcinj. Its population is about 145,000 inhabitants. This region comprises approximately 11.5% of the total area of Montenegro; it is home to about 23% of the population. Coastal region consists of the development zone of Boka Bay, central and southern coast. This region is relatively densely populated with businesses based on tertiary activities. GDP per capita is 3,600 Euros, which is slightly lower than in the central region and twice the GDP per capita in the northern region.

Most of the activity takes place along the coast linearly. In this area investment is of high pressure, which also causes uncontrolled development. The present spatial structures and conditions in the coastal area request appropriate organization of space and the management

of the future spatial development. Cessation of industrial activities will provide the potential for the creation of new tourist zones in the coastal area. These locations include: complex behind Krasic in Tivat, at Luštica - Pristan, Cape Trašte near Bigovo, the Flower Island, Platamune, Maljevik / Black Cape, part of the Port Bar, Volujac, Valdanos, Karaula on Bojana, Mamula, Lower and Upper Arzu, Ada Bojana, Solana Ulcinj, Exportbilje in Risan, warehouse in Zelenica. The development of tourist accommodation on the coast should be carefully planned, because the carrying capacity of the municipalities in the region have almost exhausted. The number of tourists in the high season of July and August can produce negative effects, such as overloading of transport infrastructure, congested due to lack of parking space, water shortages, polluted beaches, etc.

Development of tourist accommodation will be focused on: the area of the municipality of Ulcinj, on the locations Valdanos, Velika plaza with its hinterland, as well as Solana and Ada Bojana respecting the principles of sustainable development and natural values. The area of the municipality of Herceg Novi, mainly in locations, Kobila, Njivice Savina, Meljine-Lalovina, Zelenika, Kumbor, Baosici, Arza-Mirište-Žanjice, and Lustica. The area of Tivat, mainly in locations Pržno-Blue Horizons, Zupa and Boni i, revitalizing rural areas provided adequate planning. The area of Kotor, the locations Rtac (Risan), Raškov hill (Ljuta), on land in the open in Bigovo at locations above the cliffs of Žukotrlica to Terstena in the Lower Grbalj, Perast, Gornji Stoliv. The area of Budva, Becici on location, Kamenovo-Milo er Lucica, Buljarice, Jaz and revitalized villages in Paštrovi i. The area of the municipality of Bar, locations anj Veliki Pijesak, Utjeha and Maljevik. Tourist area of coastal mountains, has the potential for additional tourism such as hiking, climbing, mountain biking, and ski tourism (Subra on Orijen and Ivanova korita- Lov en).

One of the main problems is the large seasonal anthropogenic area, emphasized by narrow coastal strip and its weak communication link with the hinterland. Coastal region is known for illegal construction. Development intensity in some parts but it has all characteristics of so called "Walling" of the shore. If it keeps this intensity, it will lead to the final loss of attractiveness of coastal areas. (Jovicic, 2010)

2. Central (Central) area covers an area that edges mountains Orjen, and Rumija in the southwest and high mountain ranges of Durmitor, Bjelasice, Komova and Prokletija in the northeast and east. It has a continental climate in the lower regions of the mountains, and on the edges. In the lower regions it occasionally snows but lasts for short time while in the upland areas and reserves it stays for more than 4 months a year. This area includes the towns of Podgorica, Cetinje, Danilovgrad. This region accounts for about 35% of the total area of Montenegro and is home to about 45% of the population. Podgorica is also a major rail and road junction. The central region consists of development zones of Zeta and Bjelopavlicka plane, Niksic and Cetinje field, resulting in the most impressive lowland area surrounded by karst areas. The present spatial structures and conditions in the Central area need appropriate organization of space in light of the restructuring of the economy and the pressure on agricultural land.

In the Central region specific segments of tourism such as cultural and religious have great potential. Problems arise because of the widespread transit and excursion tourism in the area. Transit and excursion tourism in the Central region, especially in Cetinje and the area around Lake Skadar are to be completed by other forms of tourism, leading to prolonged stay of tourists in the region. Throughout the region, religious tourism is to be developed further (Ostrog Monastery, Cetinje monastery, monasteries and churches in the archipelago and the Skadar Lake, etc..) (Ljesevic, 2012).

Central region faces a number of major development and spatial-ecological problems. Population migration and deagrarisation are characteristics of this region, and they are in the rural areas of the northwestern part. It can be said that the depopulation and land

reclamation issue are present in all parts of rural areas, with the exception of the Zeta plain, and on the other hand, during a vigorous process of the migration of the population in Podgorica, as well as the growth of suburbs.

3. The northern region consists of the area of the mountain massif of Durmitor, Bjelasice, Komova and Prokletija. The climate is mountainous with mild summers and cold, harsh winters. Snow remains longer than 4 months a year. There are Bijelo Polje, Pluzine, Savnik, Zabljak, Pljevlja, Mojkovac, Rozaje, Berane, Kolasin, Andrejevica and Plav towns. This area of about 53.5% of the total area of Montenegro has about 32% of the population. The northern region consists of the development zones formed in the valleys of the Lim, and ehotina, Tara, Piva and Ibar rivers with mountainous areas. Even though agriculture employs a significant portion of the population, underdeveloped, and other natural resources are not sufficiently activated.

Concentrations of population are in several urban centers formed in the valleys of these rivers. GDP per capita is 1,800 Euros which is much smaller than in the other two regions. (Monographies Podgorica 2010) The present spatial structures and conditions in the northern region requires a spatial orientation which offers development inputs that will mitigate emigration processes, taking into account the protection of the environment. The specific role of mountain tourism is primarily to ensure the creation of possible additional activities for income generation and employment, strengthening rural development, avoiding further displacement and protection of, so called "Cultural landscape". We need to relate the development of tourism in Central and Northern region with other sectors of the rural economy, particularly in agriculture, food processing and handicrafts. This involves proper protection of the environment, architecture, landscaping, urban planning, etc.. It should provide protection from uncontrolled development, as it is happening now in Durmitor. (Final draft, 2006)

During the planning ski tourism development should take into account the negative effects of global warming, which will, presumably, be a limiting factor in the development of this type of tourism. Based on the aforementioned criteria, for the mountain tourism development there are the following tourist rural areas: Durmitor, Bjelasica and Komovi Mora ke mountains, Prokletije between the rivers Tara and Cehotina. In the area of Durmitor and Sinjajevine should be specifically supported the development of the following segments: Ski tourism, focusing on the slopes helmets, and edges (the Bukovici) as well as in Mali Stuoc, Savin Kuk, Javorova a, walking and hiking, mountain biking, hunting and fishing, for example. in Savnik, tourism, eg. in the Piva - Komarnica. This area offers a tour of the authentic natural resources, various biodiversity of mountains, rivers and lakes in the National Park "Durmitor", "Active & Extreme", for example the NP "Durmitor" and Tara. The development of tourist accommodation should be careful because of the limited carrying capacity in this environmentally sensitive area. It is necessary to give priority to the development of medium and high standard than to accommodation of low standard.

In the Bjelasica and Komovi the development of the following segments will be promoted: Visiting of the authentic natural resources, rivers, lakes, and especially the National Park "Biogradska gora," Programs and excursion tours from view - the mountains, which are particularly popular for foreign tourists, various "wellness" programs to improve the physical and mental health by relaxing influence of climate and preserved nature, hiking, mountaineering, ski tourism, Active & Extreme, mountain biking. It is necessary to start from the functional differentiation of certain micro location on the premises of the area, (when new or amending existing spatial plans of municipalities) such as Marinkovac, Suvodo - Šiška (which includes attractive high chain Bjelasica with its highest tops), Jelovica Jezerine - Kljuc - Vranjak, Kolasin (which includes the town and a number of rural and cottage settlements in the region), to be considered for the development of tourism (Final draft,

2006). The development of tourist accommodation should be carefully planned in line with the carrying capacity. In the area of Montenegrin Prokletija the development of tourism in following segments should be promoted: Ski tourism, focusing on Cmiljevica - Turjak Ro aje - Haile - Štedin, Plav-Gusinje, Verusa-Mokro, tours through authentic natural resources with various biodiversity, rivers, lakes, hiking, climbing, mountain biking etc.

Moraca mountain area covers the area of spacious and typical chains near the rivers Mora a, Bijela, Gracanica and Mrtvica. Tourist valorization of attractive space is to be expected in the distant future, after the opening of the transport, infrastructure development and evaluation of hydropower potential of the Moraca, - area between the rivers Tara and Cehotina. Development is possible in the following segments: skiing and summer mountain tourism. It is necessary to give priority to the development of medium and high standard of accommodation.

Regional structure of Montenegro can be differentiated according to geographic distribution of natural conditions for the development, the existing links between the economy and the structure of the settlement, the general level of development and prospects for future development. These factors cause a certain regional homogeneity which differs in parts of Montenegro. Significant changes in political and economic terms that have taken place in this region, are the main reason for mitigation of regional disparities in development of Montenegro. (Monographies Podgorica 2010)

Production orientation in the most important regions in the Montenegrin agriculture is quite clearly differentiated. So, in the Coastal region of predominant agricultural activity and orientation is focused on the production of citrus fruits, early vegetables, olives, herbs, and seedlings of subtropical plants and greenhouse production:- in the central region there is production of continental fruits and vegetables, flowers, greenhouse production and collection of medicinal plants and wild fruits: and the Northern region production of milk, meat, potatoes, wool, fish farming and gathering berries. Commercial and other logic dictate that the use of comparative advantages should be carried out in the future, which means that regions dominate existing slightly in these would or modified production orientation. (Official Gazette of Montenegro, 2008)

Wherever possible, especially in the northern region, we need to stimulate the production of healthy food and organic agriculture. In the coastal region we need to stimulate the production and processing of Mediterranean crops. In the coastal region of the zone of intensive agriculture we need to save a minimum of 11.900 ha of which 8900 ha in Vladimirsko and Ulcinjsko fields and 3,000 ha in Grbaljsko, Mr evo and Tivat fields.

In the Central region for intensive production we need to save about 40,500 ha, of which in Bjelopavlici plain, approximately 33,000 ha in Nikši field, Zupi and Grahovsko area of 7,500 ha in the Northern region of intensive agriculture to 47,000 ha of the best land area of the river Lim and Ljubovinje, 19,000 ha in the area of Plav-Gusinje Basin and Ibar Valley area of 19,000 ha, and the area Pljevlja and Kosanica, about 9000 ha. For other agricultural production (healthy food and organic agriculture) we need to save land in the area of the upper canyon, Polimlja Plavsko - Gusinje valley and valley of the Ibar and ehotina.

Regionalization of Montenegro shows need for identification, development and implementation of specific tourism and recreation programs: traffic and telecommunications infrastructure, reconstruction of airports and water infrastructure, community infrastructure, improvement of the quality of tourism services; tourism development of rural hinterland; education for tourism, the implementation of equity, and institutional management, marketing and organizational restructuring of the tourism industry; specific forms of tourism in rural areas. (Jovicic, 2010)

### Conclusion

The work has theoretical and applied character which looks at the planning, legal and institutional frameworks of Montenegro. The authors in its conception first used a method of geosystem analysis, followed by statistical analysis. Administratively Montenegro is divided into 22 municipalities. Geographically Montenegro can be divided into three regions. In the Southern region of the zone of intensive agriculture a minimum of 11.900 ha of which 8900 ha in Vladimirsko and Ulcinjsko fields and 3,000 ha in Grbaljsko, Mr evo and Tivat fields should be saved. In the Central region for intensive production of 40,500 ha, of which Bjelopavlici plain, approximately 33,000 ha in Nikšic field, parish and Grahovsko area of 7,500 ha should be saved.

In the Northern region for intensive agricultural production should be set aside 47,000 ha of the best land. Of these, the area of the river Lim and Ljubovida, the 19,000 ha in the area of Plav-Gusinje Basin and Ibar Valley area of 19,000 ha, and the area Pljevlja and Kosanica, about 9000 ha. Significant changes in political and economic terms that have taken place in this region are the main solution for mitigation of regional disparities in the development of Montenegro.

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