

**POTKOZARJE REGION (BIH):
BETWEEN NODAL-FUNCTIONAL AND STATISTICAL REGION**

DOI: <http://dx.doi.org/10.18509/GBP.2018.38>
UDC: 332.14/.15(497.6)

Goran Mutabdzija

Faculty of Philosophy, University of East Sarajevo, Pale, **Bosnia and Herzegovina**

ABSTRACT:

In this paper emphasis is placed on the regional structure of Bosnia and Herzegovina (hereinafter referred to as BiH). It is complex and reflects on the creation of different regional identities, but also on the field of economic development⁸. Like other Western Balkan countries, BiH is leading a policy of approaching European integration, but it does it slowly and inefficiently [11]. This is influenced by a wide range of reasons, especially geographically, so its regional structure needs to be analyzed. This will enable you to know the real economic and geographical differences that exist between individual regions. In order to achieve this, it is necessary to abandon the concept of the existing physiognomic or economic-geographical regions because they do not reflect the real dynamics of major social changes and do not enable a good view of the perspective of the future economic and geographical development of Bosnia and Herzegovina ([7], [12], [14]). Within the European framework, the generally accepted framework for measuring economic development indicators, as well as the planning process and regional policy, became statistical regions of different hierarchical levels ([6], [10]), and in BiH, their formations have not yet been institutionalized. The aim of this paper is based on the creation and detailed description of a statistical region in the Republic of Srpska as an introduction to the process that will be set up as an imperative for BiH on the road to EU accession. This is the basis for the starting hypothesis of the importance of creating clear indicators of the achieved level of regional development, at the level of BiH and its entities, as an instrument for creating a clear regional policy and planning process.

Keywords: Potkozarje, statistical region, Bosnia and Herzegovina (BiH), Republika Srpska (RS), regional policy.

INTRODUCTION

The problem of geographical regionalization of BiH during the XX century many authors were interested in rational explanation of the processes of development and functioning of various regional structures [2], [4]. Probably, the BiH example showed all the complexity of this scientific process, since it was based on different goals of regionalization, based on appropriate theoretical and methodological concepts. Due to the complexity and diversity of the principles (homogeneity, heterogeneity, physiognomy, functionality, nodality, sustainability of development ...) and numerous indicators (qualitative and quantitative) used in the process of regionalization, different regions were

⁸ According to <https://tradingeconomics.com>, BiH is the first country in Europe for unemployment and percentage of residents who do not live in the country where they were born.

created (homogeneous and functional). Translated into the language of geography, these regions were created under the varying influence of various factors⁹, which over time determined the pulsating shape and structure of the BiH regions.



Figure 1. Bosnia and Herzegovina

Source: <https://upload.wikimedia.org>

Taking into account the historical geographical framework, three phases in the development of regionalization of this area can be identified. The first two relate to the period of the Kingdom of SHS / Yugoslavia and the SFRY, and the third period is "Dayton" and refers to a new independent BiH, organized on the principle of equality of "two entities and three nations".

Table 1. National structure of the population of Bosnia and Herzegovina¹⁰

No.	Unit	NUTS	Population	% of the total population, census 2013			
				Serbs	Bosniaks	Croats	Others ¹¹
1	Bosna i Hercegovina	1	3.531.159	30,7	50,1	15,4	3,8
2	Federacija BiH	2	2.219.220	2,5	70,1	22,1	5,3
3	Republika Srpska	2	1.228.423	81,5	13,9	2,4	2,1

Source: www.bhas.ba

The new state organization implies an adequate internal territorial organization that has been burdened over the entire period with demands for a new approach in the domain of "internal regionalization". Both, scientifically and politically, there are clear conceptual

⁹ Natural geographical, social geographical, cultural geographical and political geographical

¹⁰ Due to the decision of the State Statistical Agency to show members of the Diaspora as a resident (living outside BiH for more than 20 years), RS did not accept these census results, and in the EU and Eurostat they sent data from both Agencies.

¹¹ Other categories are considered as three categories: members of other nationalities, those who did not want to declare themselves nationally, and persons classified as category unknown.

differences between the leading scientific authorities in each of the three nations, as it is a kind of "confrontation between unitarists and federalists"¹², which is mapped from the first developmental period. Since the territorial framework of the state has been changed and new demographic relations have been established, the roles have also changed. Serbian geographers now advocate for the concept of federalism, and Bosniaks, dominant for the concept of unitary [14]. Croatian geographers are closer to the concept of federalism. In the domain of practical solutions, there is a clear awareness of the importance of the normative principle in the domain of defining internal borders at the level of Republika Srpska, and it is only a question of the number of mesoregional entities and the criteria for their separation ([5], [8], [16]). The Federation of BiH dominates the approach of supremacy of the analytical principle and thus the annulment of the "Dayton internal structure of BiH" [12]. It is precisely this issue that addresses issues of regional structure and regional identities, which cause unstable political relations throughout BiH [15].

ENTITY AS A CONSTITUTIONAL FRAMEWORK FOR REGIONALIZATION

Based on the spatial distribution of the population, established networks of cities and settlements, urban-rural relations and connections between them, it is possible to distinguish five RS mesoregions that, according to their demographic characteristics, satisfy the elements of statistical regions [10]. The defined regionalization principles, on which different criteria are based, constitute a satisfactory framework for successful social regulation and quality organization of the RS, which will serve to optimize the utilization of its natural resources and enable as smooth a development as possible [3].

Table 2. Geographical characteristics of the Republic of Srpska and possible regions

No.	Region	km ²	%	inhabitants	%	in/km ²	NUTS
1	Republika Srpska	24.617	100	1.170.342	100	47,5	2
2	Potkozarje	2.797	12,0	185.943	15,9	66,4	3
3	Banjalučka	6.035	24,5	341.897	29,2	56,7	3
4	Dobojska	3.120	12,7	198.870	17,0	63,7	3
5	Bijeljinska	3.349	13,6	254.853	21,8	76,1	3
6	Hercegovačka	9.171	37,3	188.779	15,4	19,7	3

Source: Mutabdzija 2018, based on www.rzs.rs.ba

This regionalization is only the first level of complex regionalization that rests on other criteria. The starting point is the normative criterion, which, based on the legal identity of the RS, proceeds from the assumption that these mesoregions are enriched by Entities and the state border. The size of these mesoregions defines the NUTS¹³ classification for the third level. This is at the same time (according to the OECD¹⁴) and the minimum number of consumers that provides the prerequisites for sustainable development and the establishment of an optimal organization of education, health care, traffic and other public services. The third criterion is demographic-settlement, which respects the traditional and newly established links between individual settlements and cities. An important indicator

¹² Allusion to the first phase of regionalization 1918-41, during which Serbian scientists advocated unitarist and Muslim and Croatian scientists for federalist solutions.

¹³ The official division of the EU for regional statistics.

¹⁴ UN organization, in charge of economic cooperation and development between member states.

of these relations is the migration of the population and communication. This is visible on the basis of density and quality of the traffic network and main nodes. In the end, all these criteria sublimate the principle of functionality, on the basis of which these statistical regions take the form and nodal-functional regions.

Proposed regionalization creates basic preconditions for the implementation of the Eurostat methodology and implies serious changes in the regionalization envisaged by the Spatial Plan of the Republika Srpska by 2025. The basic criteria for shifting the internal boundaries between mesoregions are related to the traffic-geographic infrastructure, traditional connections within the former inter-community communities, modern functional links and migratory flows. The median age (average) for the RS is very high 41.3 years, and only eight municipalities have an average age below 40 years [13].

POTKOZARJE REGION

The basic lines of relief of Potkozarje make three mountains and rivers. Grmec and Prosara have a marginal position while Kozara is located in the central part of the region. These mountains with their position and height do not represent a significant communication obstacle between urban centres because the Una and Sava valleys have been laid peripherally, and the Sana river with the valley expansion of Prijedor represents the central zone of the region. Therefore, this region unites three physiological units: Potkozarje, Pounje and Posavina. The northern border of the region and the whole Republic of Srpska is Sava that runs along the wide "tectonic trench of Sava". The area south of it is called Posavina, which is comparatively extended between the mouth of the Una (100 m) and the Drina (82 m) and is a part of the bottom of the Panonia Basin, which in the morphological view represents spacious low terrain. This is a young quarter terrain, created by the accumulation of the Sava and its right tributaries, which built macro plains (Una, Vrbas, Ukrina, Bosna and Drina) near the mouth and downstream, as the main feature in the relief of Posavina. These floodplain plains form an intermittent array whose vastness and intensity is proportional to the length of the tributaries. This is related to the surface and energy of the relief in the basin (relative elevation between the breeding and bottom of the basin) and its geological structure (softer rocks are more susceptible to erosion), which leads to an increased amount of application. Above the Sava riverbank and its tributaries Rakovica rises up the horst mountain of Prosara (363 m), which in the south passes into the Kozara massif. It belongs to the Ore and Flysch Mountains of the northern part of the Republic of Srpska. Its width between Sava and Sana (20 km) is shorter than the comparative distance between Una and Vrbas (70 km), and its structure is dominated by flysch and serpentines. Because of its natural beauty and cultural significance, this wooded mountain was declared a National Park, because during the Second World War it represented an oasis of resistance to the fascists, but unfortunately also the place of the great suffering of the Serbian people¹⁵. Una springs in Lika, 210 km long, and its lower course represents the border of the Republic of Srpska with Croatia. Pounje, in its morphological features, belongs to the periphery of the Panonia Plain, and

¹⁵ In the German offensive in 1942, 68,600 refugees from Kozara's villages, of which 23,000 children, were taken to concentration camps from Jasenovac to Auschwitz, and partisan resistance was suppressed. This is evidenced by the grandiose monument in Mrakovica, by Dusan Dzamonja and other works of art, for example film the same name by Veljko Bulajic and Skender Kulenovic's poem "Stojanka Majka Knezpoljka".

the lactic turn toward the northeast of Krupa points to the original mouth of the Panonia Sea, whose swelling extended the course further towards the northeast. The present estuary is located at Jasenovac¹⁶ and Knežpolje represents its macro plane in which near Dubica, larger settlements Draksenic, Mededa and Donja Gradina. The larger tributaries on the right side are Sana, Strigova, Mlječanica and Mostanica. Prijedor basin represents the largest tectonic extension that was additionally shaped by flood and erosion by Sana and Gomjenica, and because of the scarcity of these terrains, ponds have been built here. To the south of this basin, there is a peripanon area that starts with Podgrmec, belongs to the municipalities of Ostra Luka and Krupa na Uni (divided municipalities in the FBiH: Sanski Most and Bosanska Krupa).

In the domain of demographic characteristics, Potkozarje with 186,000 inhabitants is one of the most densely populated regions of Republika Srpska (66.4 in / km²), but the average age of the population (42.2 years)¹⁷ is above the republican average. This particularly refers to the small and marginal mountain municipalities (Oštra Luka, Krupa na Uni, but also Kostajnica) where the lack of economic activity has facilitated internal (village-city) and foreign migration (foreign). In Potkozarje only one third inhabitant lives in urban centres with > 5000 inhabitants, which makes urbanization 35.5%. Medium-sized settlements (1000-5000 inhabitants) make up 12.2%, and the smallest settlements (<1000 in.) have a share of 86.3%. An analysis of the hierarchy of urban centres shows that these are only four centres, which make up only 1.4% of the total number of settlements (293). At the level of the municipalities, the dominant position of the municipal / city centre is noted, with the concentration of the population in the municipal centre ranging from 30.9% in Gradiska, 36.6% in Prijedor and in smaller centres this is over 40%: Novi Grad 40.8%, Dubica 53.7% and Kostajnica 73.7%. The spatial distribution of the population shows the highest concentration in the Prijedor basin and along the banks of the Sava and Una, and the smallest in Podgrmec.

Table 3. General indicators on the population of the region

	Municipality	Inhabitants	km ²	in/ km ²	Average age
1	Prijedor	80.916	834	97	41,53
2	Gradiska	49.196	762	65	42,35
3	Novi Grad	25.24	319	79	42,45
4	Kozarska Dubica	20.681	499	41	43,98
5	Kostajnica	5.645	86	66	42,27
6	Ostra Luka	2.705	204	13	43,01
7	Krupa na Uni	1.561	93	17	46,32
8	Total	185.943	2.797	66,4	42,21

Based on: www.rzs.rs.ba

Prijedor is a modern and beautiful city on the banks of the Sana River and below the legendary Kozara. This is the primary regional centre, the basis of the mining and processing area, which gravitates the entire region. This area is essentially determined by three industrial branches: mining, agro-food industry and tourism. This is the main centre of the region where a regional hospital, Faculty of Mining and Geology, a professional

¹⁶ Memorial area of Donja Gradina, the biggest hub of Ustasha Jasenovac camp in which it was murdered 700,000 innocent civilians are on the right bank of the Sava River, near the mouth of the Una.

¹⁷ Methodology of calculation: multiplication of the number of inhabitants and the average age of the given municipality, then the sum of all multiplications by municipalities and, finally, the ratio of the total population and the sum of all average years.

theatre (only outside Banja Luka), a museum and other cultural and educational institutions are located and the only one has the status of a city. Gradiska, as an urban centre of the second rank, is the centre of Lijeve polje and eastern Potkozarje, has a hospital and numerous cultural and educational institutions. The population of other municipalities is functionally related to Prijedor, except for Dubica that gravitates Gradiska. Novi Grad and Dubica are regional centres of the third rank. Novi Grad is a beautiful border town on two rivers (Una and Sana) and insufficient industrial base. Dubica has two great rivers (Una and Sava). Kostajnica, Krupa na Uni and Ostra Luka are centres of the fourth rank. Kostajnica is a small town on the Una River, known for its large chestnut forests. Small municipalities of Ostra Luka (strongly orientated to Prijedor) and Krupa na Uni (Novi Grad) are morphologically a set of dispersed rural communities. Ostra Luka is located on the left bank of the Sana River at the foot of Majdanske Mountain and on the regional road Prijedor - Sanski Most. Krupa na Uni is set up on the slopes of Grmec which have not an urban centre with pronounced elements of centrality, but only mountain villages. The municipal centre is Donji Dubovik, and the larger rural settlements are Hasani (birthplace of Branko Copic), Busević and Otoka.

Table 3. Hierarchy of urban relations

No	Number of settlements by population size							
	>20001	10001-20000	5001-10000	2001-5000	1001-2000	501-1000	201-500	<200
1	Prijedor 32.342	0	0	10	9	18	17	15
2		Gradiska 16.106	0	3	10	14	21	18
3		Novi Grad 11.063	0	0	3	8	16	17
4		K. Dubica 11.566	0	0	0	3	21	38
5				Kostajnica 4.047	0	2	1	8
6						Krupa na Uni:		12
7						Ostra Luka:		23

Based on: www.rzs.rs.ba

On the slopes of Majdanske Mountain there are surface mines of iron ore (Ljubija and Omarska), these mines are part of the Mital system that transports the ore to the Zenica and Smederevo ironworks and represent the backbone of the industrial development of the region. The agro industry is based on agricultural production and besides fodder (corn) and cattle breeding (milk), the holders of economic development are factories of food items: Mira in Prijedor, Mlijekoprodukt and HPK Draksenic in Dubica, Agrojapra Novi Grad and Top Farm Gradiska. The service sector is linked to cultural-historical and spa-recreation centres. The most important objects are: national park "Kozara", memorial area "Donja Gradina" and monastery SPC Mostanica. Valorisation of their touristic motives favours the development of various types of tourism (youth, sports and recreational, climatic, mountainous). The tourist facilities are complemented by the spa and health centre Mljecanica, the potential spa site Ljesljani, the planned nature park Potkozarje, as well as potential tourist facilities related to the Una and rural tourism in the municipality of Kostajnica. The cultural offer of this region is complemented by legends and permanent exhibitions by great artists and scientists of this region: Sreten Stojanovic from Prijedor, Stojan Celic and Lazar Drljaca from Novi Grad, Djoko Mazalic from Kostajnica and Vasa Cubrilovic from Gradiska.

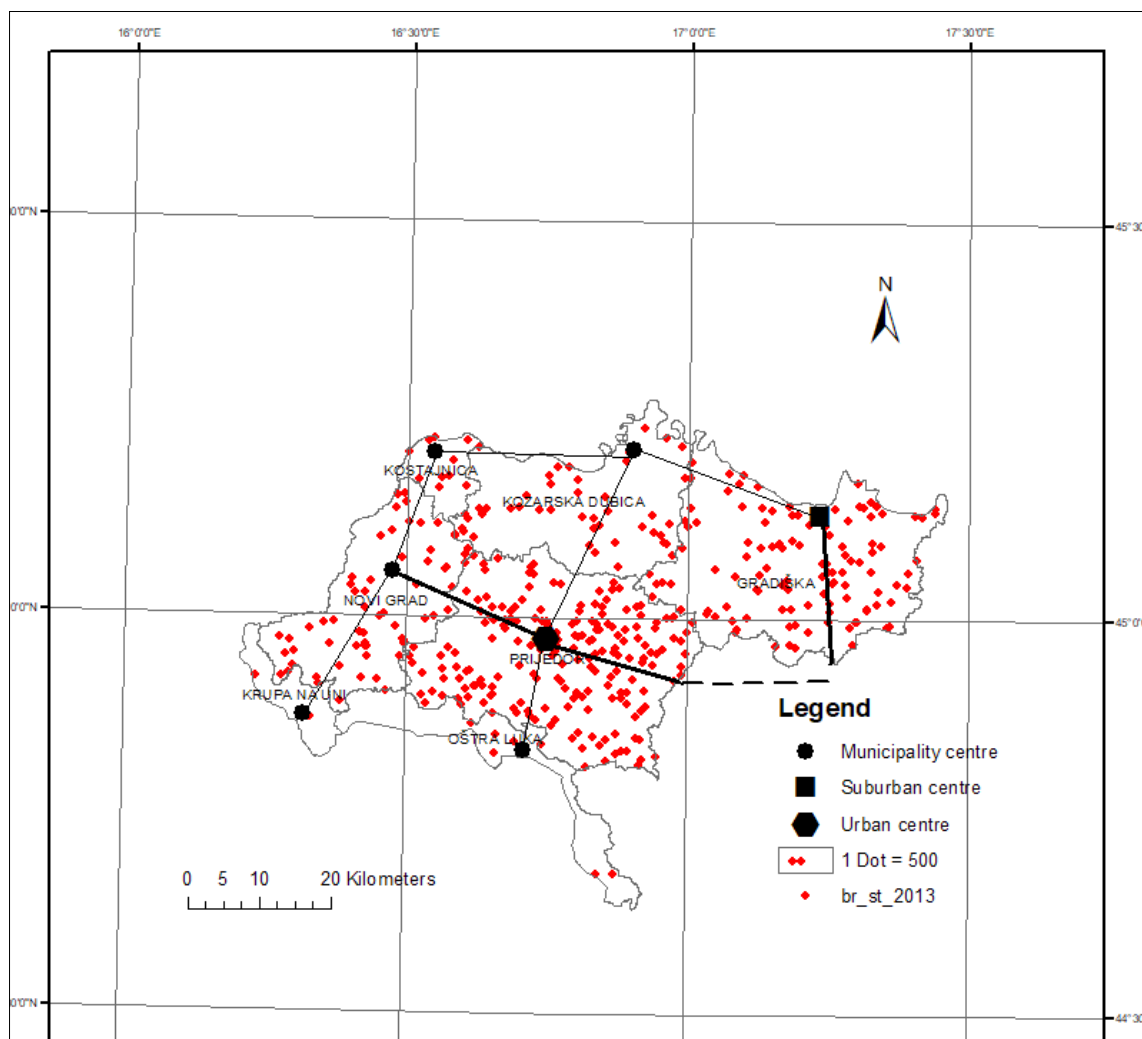


Figure 2. Spatial-functional connections within Potkozarje region
Source: Mutabdzija, 2018. QGIS

In the domain of transport infrastructure, the main roads are the Banja Luka-Gradiška highway and Banja Luka-Prijedor-Novigrad (planned construction of the highway). The other roads are marginally laid in the Una valleys (Novigrad-Kostajnica-Dubica) and Sava (Dubica-Gradiška). The railway line Novi Grad-Banja Luka is of strategic importance for the Republic of Srpska, and in Prijedor there is an Uria sports airport. The river port in Gradiska was not used.

CONCLUSION

The regionalization of the Republic of Srpska is desirable and necessary, and the statistical regions have the form of non-administrative units with a basis in European practice (planning and regional policy) and the EU legislation. Due to the complexity of the internal structure of BiH, this issue has not yet been institutionalized, and in the domain of scientific considerations of BiH's regionalization, there are significantly different views of the number, type and form of statistical regions compared to the ones described. The optimal selection of criteria for the implementation of regionalization can be statistically and nodal-functional, and its goal is the need for better planning and creating a deliberate regional policy. This will enable:

1. Creation of more uniform spatial-demographic relations between the Banja Luka and Potkozarje regions,
2. By separating the Potkozarje as a separate mesoregion, functional relations in the border zone are strengthened, thereby preventing the unnecessary growth of Banja Luka over the possibility of a balanced development of the entire region,
3. Because of the insufficient number of inhabitants of the Prijedor region (<150,000), the neighbouring municipality of Gradiska (not Laktasi) is added, due to functional connections along the Sava corridor (Gradiska-Dubica-Kostajnica-Novi Grad) and the mesoregion is renamed to Potkozarje;
4. In the hierarchy of cities and settlements, Prijedor is clearly distinguished as the primary regional centre in which 16.5% of the total population of the region lives.
5. Thus created, the region of Potkozarje has the elements of the statistical region according to the NUTS 3 criterion, and the characteristics of the nodal-functional region according to functional connections within the network of the settlement.

REFERENCES

- [1] Agencija za statistiku BiH. Popis stanovništva, domaćinstava i stanova u Bosni i Hercegovini, 2013. Rezultati popisa. Sarajevo: Agencija za statistiku BiH, 2016.
- [2] Avdagic, A., Jahic, H. Izučavanje regionalnog razvoja u Bosni i Hercegovini. Zbornik Euroregije i jugoistočna Evropa, 2008: 201-208.
- [3] Vlada RS. Strateški plan ruralnog razvoja RS 2009-15. Banja Luka: MPVŠ, 2009.
- [4] Gnjato, R. Teorija i praksa srpske Regionalne geografije, Glasnik GDRS, 17, 2013: 1–37.
- [5] Ekonomski institut Banja Luka. Republika Srpska u procesima regionalnog organizovanja sa posebnim osvrtom na EU RED projekt ekonomskih regiona u BiH. Banja Luka, 2004.
- [6] Jaksic, D. et al. Osnove politike regionalnog organizovanja u Republici Srpskoj, Ekonomski institut, 2010.
- [7] Markovic, Đ. J. Geografske regije Republike Srpske. Bijeljina, Kontakt M, 1998.
- [8] Mutabdzija, G. Strategija regionalnog razvoja Republike Srpske - konceptualne osnove. Teritorijalni aspekt razvoja Srbije i susednih zemalja. Univerzitet u Beogradu, Geografski fakultet, 2010.
- [9] Mutabdzija, G. Regionalna politika - doprinos održivom razvoju ruralnih područja Republike Srpske. III kongres srpskih geografa, 2011: 703-708.
- [10] Mutabdzija, G. Republic of Srpska: Socio-Geographic Challenges, SciGeo Journal of University Alexandru Ioan Cuza, 59 (2), 2013: 209-219.
- [11] Mutabdzija, G. Evropski Izazovi-od geografskih ka inovativnim regijama. Istočno Sarajevo, Zavod za izdavanje udžbenika i nastavnih sredstava Republike Srpske, 2016.
- [12] Osmankovic, J., Pejanović, M. Euroregije i Bosna i Hercegovina. Sarajevo, FPN, 2009.
- [13] Republički zavod za statistiku RS. Otvorena knjiga o popisu 2013-drugo, dopunjeno izdanje. Republički zavod za statistiku Republike Srpske, 2017.
- [14] Spahic, M., Jahic, H. Geografske regionalizacije Bosne i Hercegovine u svjetlu evroatlanskih integracija. Bosna i Hercegovina – 15 godina Dejtonskog mirovnog sporazuma, 2011: 171-192.
- [15] Tihi, B. Ekonomska cijena postojeće regionalne podjele u BiH. Euroregije i jugoistočna Evropa, 2008: 13-20.
- [16] Urbanisticki zavod RS. Prostorni plan Republike Srpske do 2025. Banja Luka, 2015.