

УДК 332.1

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STATISTICAL TERRITORIAL UNITS WITH PURPOSE OF MEASURING LEVEL OF DEVELOPMENT OF REGIONS IN SERBIA



Introduction

The nomenclature of territorial units - statistical regions (in English: The Nomenclature of Territorial Units for Statistics; in French, the language of origin of the acronym: Nomenclature des Unites Territoriales Statistiques-NUTS, hereinafter: NUTS) originated more than three decades ago, with the aim to provide a uniform breakdown of territorial units, so as to create statistical regions in the European Union. The European Commission has established NUTS classification as the basic criterion for the measuring of the level of (un-)development.

The introduction of the Nomenclature of Statistical Territorial Units (Nomenklatura statističkih teritorijalnih jedinica, hereinafter: NSTJ) into the statistical system of the Republic of Serbia has represented and represents the introduction of the European statistical standard for the collection, compilation and dissemination of the data at the level of spatial units. Its purpose is statistical monitoring such as the one existing in the in the European Union's statistical system. Statistical functional territorial units represent one level within NUTS. The matter of particular importance are regional statistical data, i.e. the indicators that will serve as the basis for the evaluation of eligibility to apply for aid from the European Union's structural funds, funds providing finances aimed at development of certain statistical territorial units – regions and areas. Therefore, with a view to collecting regional statistical data, the existence of adequate nomenclature, harmonized with the European standards, is requisite, as it is the basic instrument according to which the statistical data are compiled, disseminated and analyzed.

The regional differences in Serbia have increased significantly over the several previous decades. There are numerous causes (factors) which led to such immense regional disproportions. The ever greater economic-growth deceleration in Serbia has been caused by the increase of differences. Defining territorial units for statistics and measuring their level of development should be considered an issue of primary importance. In this way the complex problem regarding regional differences can be reviewed and approached in an appropriate manner, as there is no economic equality without legal, political, social or national equality.

It is for those reasons that this paper analyzes the following: the aim and principles of NUTS classification in the EU, its breakdown criteria, the role of NUTS classification as the instruments for the utilization of structural funds' resources. It also analyzes the statistical or-

ganization in Serbia and its compliance with NUTS, recognizes the most significant problems of regional development in Serbia, level of development of statistical units of NSTJ at the level 1, 2 and 3, all with the purpose of reviewing the situation and possible measures the state should undertake in order to even out the level of development and possibilities for the utilization of resources from the available funds.

Statistical nomenclature of territorial units in the European Union

NUTS classification is both administrative and statistical; all member states are obliged to introduce this system of territory breakdown. The application of this mechanism commenced in 1981 and it referred only to the European Union Member States, but, as of recently, it also refers to the states undergoing the process of accession to the European Union.

NUTS classification has been used in public legislation since 1988 (Council Regulation (EEC) No 2052/88), but it was not passed as a particular European regulation until 2003 (Council Regulation (EC) No 159/2003, 25 May 2003), after three years of preparation. Prior to its adoption, regional classification used to be based on the documents of the Statistical Office of the European Communities – EUROSTAT. The standard has been developed by the European Union and therefore it covers in detail all Member States. However, NUTS classification does not need to coincide with the administrative breakdown of a country into regions. The users of statistical reports at the European Union level have expressed the need for their harmonization to the end of comparing data (Vuković et al, 2011). In that regard, the statistical standards for collection, compilation and dissemination of both the national and the European Union statistical reports have been requisite.

The purpose of NUTS classification

The purpose of NUTS classification (according to: Regions in the European Union, 10-11) is to serve as reference for:

- *The collection, development and harmonization of the European Union's regional statistics.* During the 1970s, NUTS gradually replaced the specific division used in different statistical domains (agricultural regions, transport regions etc.), and it was on the basis of NUTS that regional economic accounts were developed and the regional sections of EU surveys were defined;
- *Socio-economic analyses of the regions and defining development programs for underdeveloped regions.* The 1961 Brussels Conference on Regional Economies, organised by the European Commission, found that NUTS 2 (basic region) was the framework generally used by member states to apply their regional policies and is therefore the appropriate level for analysing regional/national problems, as NUTS 1 should be used for analysing regional problems within the European Economic Community, such as 'the effect of the customs union and economic integration on areas at the next level down from national areas'. NUTS 3, which broadly comprises regions which are too small for complex economic analyses, may be used for specific analysis or to pinpoint where regional measures need to be taken;
- *Creating territorial, administrative and political framework for the European Union's regional policy, i.e. creating administrative and legal framework for the development of underdeveloped regions using the European Union funds earmarked for that purpose.* This is done for the purpose of appraising eligibility for aid from the Structural Funds, regions whose development is lagging behind (regions covered by the *Convergence Objective*) have been classified at the NUTS 2 level. The regular report on the social and economic situation and development of the regions of the EU, which the Commission is required to produce every three years under Article 31 of Council Regulation (EC) No 1083/2006 concerning the European Regional Development Fund, has so far been drafted mainly for the NUTS 2 level.

NUTS classification principles

NUTS classification (Regions in the European Union, 9-10) has been created and developed according to the following principles:

a) NUTS favours institutional breakdowns.

Different criteria may be used in subdividing national territory into regions. These are normally divided into normative and analytical criteria:

- *normative regions* are the expression of political will; their limits are fixed according to the tasks allocated to the territorial communities, according to the sizes of population necessary to carry out these tasks successfully and economically, and according to historical, cultural and other factors;
- *analytical (or functional) regions* are defined according to the analytical requirements; they group together zones using geographical criteria (e.g. altitude or type of soil) or using socio-economic criteria (e.g. homogeneity, complementarities, or polarity of regional economies).

For practical reasons to do with data availability and the implementation of regional policies, NUTS is based primarily on the institutional divisions currently in force in the member states (normative criteria).

b) NUTS favours regional units of a general character.

Territorial units, specific to certain fields of activity (mining regions, rail traffic regions, farming regions, labour-market regions, etc.) may sometimes be used in certain member states. NUTS excludes specific territorial units and local units in favour of regional units of general nature/characteristics.

c) NUTS is three-level hierarchical classification.

Since this is a hierarchical classification, NUTS subdivides each member state into a number of NUTS 1 regions, each of which is in turn subdivided into a number of NUTS 2 regions and so on. At regional level (without taking municipalities into account), the administrative structure of the member states generally comprises two main regional levels (*Länder* and *Kreise* in Germany, *régions* and *départements* in France, *comunidades autonomas* and *provincias* in Spain, *regioni* and *provincie* in Italy, etc.).

The grouping together of comparable units at each NUTS level involves establishing, for each Member State, another regional level in addition to the two main levels referred to above. This additional level corresponds to a less important or even non-existent administrative structure, and its classification level varies within the 3 levels of NUTS, depending entirely on the member state: NUTS 1 for France, Italy, Poland, Romania, and Spain, NUTS 2 for Germany, NUTS 3 for Belgium, etc. There is no uniform type of internal organization and regional structure of Member States within the European Union. The forms of regional organization vary from federal states such as Germany and Austria, states with strong regional elements, such as Italy, to centralized states such as France and Hungary.

The aim of the NUTS classification is to ensure that comparable regions appear at the same NUTS level. As population size has been defined in the Regulation as a key indicator for comparability, each level inevitably contains regions that differ greatly in terms of area, economic weight or administrative powers. This heterogeneity across the EU often simply reflects the situation at Member State level.

The aim of the existence of a decentralized government system is to make the authorities closer to citizens and to place the decision making at the level closest to the problem that needs to be solved, so as to ensure efficiency and participation of broader structures of population in state management. This requires qualified institutional capacities at all NUTS classification levels. Apart from being important for these general, democratic principles, regionalization is also important for the functioning of the European Union's regional policy. Its functioning and the system of distribution of funds from the rich towards the poorer regions, directly depends on the existence of a standardized system of territorial division in the member states,

which should provide quantifiable and comparable data on the level of regions' development. Therefore, a system of statistically-based territories has been created at the European Union level.

Criteria for division of NUTS into levels

The importance of the regions in Europe has been visible ever since the establishing of European Economic Community in 1957. The status of regions was more clearly and precisely regulated by the Maastricht Treaty in 1992 (Europa, Summaries of EU legislation) and by the document „Guiding Principles for Sustainable Spatial Development of the European Continent“ from 1994 (CEMAT, 2000), introducing new model of administrative and territorial organization of European countries based on the so called NUTS system. The document established the nomenclature with five NUTS categories according to the size of the size of territorial administration as follows:

- NUTS 1 has 4-5 million inhabitants (federal unit);
- NUTS 2 has 1-4 million inhabitants;
- NUTS 3 has 150.000-800.000 inhabitants;
- NUTS 4 has 10.000-100.000 inhabitants;
- NUTS 5 has under 10.0000 inhabitants.

On 26 May 2003, the European Parliament and the Council of the European Union passed the new statistical nomenclature of territorial units (Council Regulation EC No 1059/2003) or the nomenclature of territorial units for statistics i.e. standards referring to the administrative breakdown of countries for statistical needs (it came into effect on 21 June 2003).

The European Union's territory has been divided into “regions“ - territorial units for statistical needs. NUTS has been established based on the following principles:

1. NUTS favours the existing administrative breakdowns;
2. NUTS favours general geographical units;
3. NUTS is a hierarchical classification.

Regional statistics represents a very important element of the European statistical system. The NUTS classification defines economic and statistical territorial units within the European Union member states. Each unit is assigned a name. This system divides the European Union's territory (i.e. each Member State's territory) into five hierarchical levels: three basic levels, NUTS 1, NUTS 2 and NUTS 3, but if the European Union Member States find it necessary, they can further develop sublevels – two additional levels, LAU 1 and LAU 2 (Local Administrative Units), which are not subjects of NUTS classification, and shall not be considered further in this paper. This classification is hierarchical (European Commission, Eurostat) meaning that NUTS level 1 - territory of a member state, i.e. of its republics - comprises territorial units of level 2, and level 2 units comprise level 3 territorial units.

The starting point for determining of NUTS classification are the already existing administrative units of a member state as the basis for the defining of NUTS statistical territorial units. This means that an administrative unit implies a geographical area with administrative powers to make administrative or political decisions for the given area, in accordance with legislative and institutional framework of the Member State. In order to enable adequate classification of administrative units within a member state, criteria have been defined, one of the most important criteria being the maximum population necessary for the setting up of the units at different NUTS level (Table 1).

Analyzing Table 1, one can conclude that NUTS regulations are based on minimum and maximum values which are the norm for the average size of NUTS regions. If there are no administrative territorial units meeting the population criterion in a Member State, it is possible to aggregate smaller administrative units into special statistical units on the grounds of geographical, socio-economic, historical, cultural and natural criteria.

Table 1
Criteria for the division of NUTS levels according to the population of the European Union member states

Level	Minimum population	Maximum population
NUTS 1 (state level)	3 000 000	7 000 000
NUTS 2 (regional level)	800 000	3 000 000
NUTS 3 (county/area level, municipal unions)	150 000	800 000

Source: European Commission, Eurostat, 2014; Mirić, 2009.

The lowest level - NUTS 3 (county/district or a larger number of local communities, set up on interest basis around one or two urban centres / initiators of development), has been assessed by the European Union as the most suitable for cross-border cooperation and as such fulfils the conditions for the receiving of financial aid from the European funds intended for that aim. NUTS 2 level is most suitable for regional development management.

Analyzing Table 2, one can see that the European Union's largest Member States have the highest number of NUTS 1 regions: Germany - 16, France - 9, Great Britain - 12, Italy - 5, Greece - 4, Spain - 7. In other European Union countries there are only NUTS 2 and NUTS 3 regions. Table 2 shows that in 12 European Union Member States the first regional level (NUTS 1) coincides with the state level, and in eight cases it also coincides with the second regional level (NUTS 2).

Table 2
Number of NUTS in some European Union Member States

State	NUTS 1	NUTS 2	NUTS 3	State	NUTS 1	NUTS 2	NUTS 3
Austria	3	9	35	Hungary	3	7	20
Belgium	3	11	43	Malta	1	1	2
Bulgaria	2	6	28	Holland	4	12	40
Cyprus	1	1	1	Croatia	1	4	21
Czech Republic	1	8	14	Germany	16	41	439
Denmark	1	1	15	Poland	6	16	45
Estonia	1	1	5	Portugal	3	7	32
Finland	2	6	20	Romania	2	8	42
France	9	26	100	Slovakia	1	4	8
Greece	4	13	51	Slovenia	1	1	12
Ireland	1	2	8	Spain	7	19	52
Italy	5	20	110	Sweden	1	8	21
Latvia	1	1	4	Great Britain	12	37	133
Lithuania	1	1	10	EU-28	94	272	1322
Luxembourg	1	1	1				

Source: WP2: Indicators on Transformative Use of ICT– D2.1 Indicator Stocktaking Report. P. 24-26.

Should one ask what is the essence of the adopted regional division and the criteria on which this division is based, the following answer and conclusion might ensue: „NUTS 2 regions have been specified by the members states as the main framework for the implementation of the regional policy, and hence they are relevant for the analysis of regional and national problems. NUTS 1 level serves for the analysis of the relations between region within the European Union, whereas NUTS 3, as small region, does not offer conditions for complex analyses, but points towards the areas where certain specific regional policies are required“. Everything mentioned above leads us to the conclusion that regulations on NUTS establish future

improvement of regional breakdowns used by the European Union. The first revision of NUTS classification took place/ was planned in 2006, three years after adoption of the version of 2003. The same rules were applied to 10 new Member States, i.e. the amendments were possible in 2006. This means that, in exceptional cases, the ban before amendments is allowed, and it last only 2 years for new Member States. The amendments to NUTS classification can be proposed by the European Commission every 3 years, further to the initial remarks provided by the EUROSTAT, obtained from the Member States' national statistical offices. The changes of the national administrative regions practically automatically lead to the changes of NUTS classification. By all means, for non-administrative regions, NUTS regulations necessarily require that changes have to lead to the reduction of standard deviations regarding size of the regions (measured based on the population size).

Statistical organization of the Republic of Serbia

There are different approaches to the defining of regions and regionalization of economic space of the Republic of Serbia. Pursuant to Article 4, item 9 of the Law on Regional Development adopted in 2009, NSTJ is a set of concepts, names and symbols describing groups of territorial units with aggregation levels containing criteria according to which aggregation has been made and which have been regulated in line with the European Union's standards.

According to Radulović, (2012, p. 75) and Radulović et al (2013, p. 3), the basis for the defining of NSTJ was the Regulation of the European Parliament and the Council of the European Union no. 1059/03 on NUTS. It is important to mention that EUROSTAT has not given an official approval regarding NSTJ to the body competent for statistical classification (NUTS 1, NUTS 2 and NUTS 3) due to the still ongoing discussion at the political level regarding the status of the Kosovo and Metohija Region: "In the field of classifications and registers, the issue of regional statistical classification (future NUTS classification) remains open due to the need to clarify its territorial scope. This goes beyond the scope of technical expertise and requires a political decision" (Serbia 2013 Progress Report (translation into Serbian, p. 41)). In line with the Law on Regional Development, further to the proposal of the Statistical Office of the Republic of Serbia, the Government determined the criteria for the defining of statistical functional territorial units at three levels: NSTJ 1, NSTJ 2 and NSTJ 3. („The Official Gazette RS“, No. 109/09 and 46/10).

The criteria (stipulated by Article 5, paragraph 2 of the Regulation, „The Official Gazette RS“, No. 109/09 and 46/10), according to which NSTJ levels are aggregated, are based on general criteria defined in line with the European Union's standards:

- population number;
- geo-political position;
- natural resources;
- existing territorial organization;
- cultural and historical heritage.

The levels of territorial units aggregation represent standards used to collect, compile, disseminate and analyze statistical data and indicators on the successfulness of the regional development measures. Official statistical regionalization of the Republic of Serbia's economic space has been determined by the Law on Regional Development, and further to the proposal of the Republic Statistical Office, in line with NSTJ, for the needs of planning and implementing regional policy and stimulating regional development. NSTJ is based on the Republic of Serbia territorial organization.

Taking into consideration the criteria, NSTJ level in the Republic of Serbia comprises (as stipulated by Article 6 of the Decree „The Official Gazette RS“, No. 109/09 and 46/10): NSTJ 1 – consisting of two statistical territorial units, being:

- Serbia – North (including the Vojvodina Region and Belgrade Region);

- Serbia – South (including the Region of Šumadija and Western Serbia, Region of Southern and Eastern Serbia and the Region of Kosovo and Metohija).

NSTJ 2 – comprising five statistical planned regions:

A) Regions having the status of legal entity and representing administrative and territorial units:

- The Vojvodina Region – represents a geographical, socio-economic and historical whole. It comprises Zapadnobački, Južnobański, Južnobački, Severnobański, Severnobački, Srednjobański and Sremski administrative district. The region covers the area of 21,603 km² with the population of 1,931,809 inhabitants, regional GDP of 859,808 million RSD (26.8%) i.e. 80,433,607,781.00 EUR, or GDP of 4,335 EUR per capita. It includes the territory of the Autonomous Province of Vojvodina.

- Belgrade Region – it comprises the Capital City area which is a local self-government unit (with 17 townships). The status, position and jurisdictions for the exercising of rights and duties of the city of Belgrade as the capital city of the Republic of Serbia have been defined by a separate Law. This region does not comprise any internal areas. Its surface amounts to 3,226 km², with the population of 1,659,440, regional GDP – 1,271,691 million RSD i.e. 12,473,648,899.00 EUR (39.6% of the total GDP), i.e. the GDP of 7,572 EUR per capita;

- Region of Kosovo and Metohija – it comprises Kosovski, Pečki, Prizrenski, Kosovskomitrovački and Kosovskopomoravski administrative districts. The region's area is 10,939 km² and it includes the territory of the Autonomous Province of Kosovo and Metohija, which is currently under UN administration.

B) Regions which are not legal entities and are not administrative and territorial units:

- Region of Šumadija and Western Serbia – it comprises Zlatiborski, Kolubarski, Mačvanski, Moravički, Rasinski, Raški, Šumadijski and Pomoravski administrative district. The region's area is 26,495 km² with 2,031,697 inhabitants, regional GDP amounting to 610,143 million RSD i.e. 5,984,716,067.00 EUR (19.0%), or GDP of 2,952 EUR per capita.

- Region of Southern and Eastern Serbia - it comprises Borski, Braničevski, Zaječarski, Podunavski, Pomoravski, Jablanički, Nišavski, Pirotski, Pčinjski and Toplički administrative district. The region's area is 26,246 km² with 1,563,916 inhabitants, regional GDP amounting to 466,979 million RSD i.e. 4,580,461,833.00 EUR (14.6%), or GDP of 2,795 EUR per capita.

The most significant issues of regional development in the Republic of Serbia

Socio-economic changes occurring in Serbia since the 1990-s to the day, affected every aspect of life (family, education, material aspect, etc.), but differed depending on the regional specificities (due to traditional way of life, adopted system of values, etc.), thus contributing to the Serbia's negative demographic balance. Suffice to say that Serbia has 377,335 inhabitants less in 2011 than in 2002 (source: Statistical Office of the Republic of Serbia, 2013). This declining trend regarding the number of inhabitants is the consequence of birth rate (1.4 children per woman), ageing of population (average age is 41.2) and negative migratory trends. In Serbia, there is a traditionally negative outflow of population moving, either internally from rural to urban areas (lately from poorer to economically more stabile areas), or externally from Serbia abroad, mostly to Western Europe countries (Germany, Austria, USA, Canada etc.).

Regional unevenness regarding level of development of certain territories in the Republic of Serbia represents one of the most complex developmental problems. Namely, there is 1:3 ratio in differences regarding the level of development of regions, and 1:6 regarding the level of development of areas (source: Statistical Office of the Republic of Serbia, 2012). This places Serbia among the European countries with immense differences regarding level of development. There are also issues and problems of:

- depopulation;

- population migration towards urban and economically developed centres (rural-urban), contributed to the population concentrating in larger cities.

The reason for migrations over the last 15 years is better and larger labour market. Prior to this period the reasons for migration were de-agrarianisation and industrialization. This can be best observed through the population density in Serbia (Table 3). Analyzing data from Table 4, one can conclude the migrations cause additional depopulation and an uneven spatial distribution of population - the population which moves from less developed regions to the most developed Belgrade region, the region in which growth of population has been recorded despite negative natural increase rate.

Table 3

Population density in 2011

Regions	Population density per km ²	Population, %	Serbian territory, %
Republic of Serbia	91.9	100	100
Belgrade Region	511.6	23	3.6
Vojvodina Region	89	26.9	24
Region of Šumadija and Western Serbia	76	28	30
Region of Southern and Eastern Serbia	56	21.8	29.6

Source: Statistical Office of the Republic of Serbia, 2012.

Uneven distribution can be better observed through a division into areas according to the population density (Table 4). Analyzing the data from Table 4, one can conclude that 40% of total population lives in areas with low or medium range population density which make 80% of the territory. In the areas with high population density and prominent concentration of population, as much as 60% of the population inhabits 20% of total territory, wherein almost 25% of total population lives in Belgrade. In comparison with the surrounding countries, Serbia has the most unfavourable demographic trend.

Table 4

Area typology as per population density in 2011

Type of area inhabitants/km ²	Surface, %	Population, %	Number of municipalities 2011	Number of municipalities 2002
Area with low population density (<50)	44.5	15.5	63	52
Area with medium range population density (51-100)	32.5	26.0	53	56
Area with high population density (101-150)	11.5	16.1	16	22
Area with prominent concentration of population (>151)	11.5	42.4	13	15

Source: Statistical Office of the Republic of Serbia, 2012.

Demographic ageing of population – average Serbian inhabitants is over 40 years old and is among the oldest in Europe. The population's age structure is an indicator of the population status and quality. The basic indicator of the presence of the ageing process is the average age, which recorded a growth from 40.3 to 41.6 years of age, over the period 2002-2011, as can be concluded on the grounds of the data on the estimate of the number of inhabitants for 2011 (source: Statistical Office of the Republic of Serbia, 2012). According to the Statistical Office of the Republic of Serbia's data, the ageing of population also entails the increase of the share of old population. Age coefficient for 2011 shows that out of 1,000 Serbian inhabitants, as much as 237.1 are the elderly (over the age of 60), which is an increase compared to 2002,

when there were 226.7. The situation is most unfavourable in the region of Southern and Eastern Serbia, where this coefficient for 2011 was 254, as compared to 326.5 for 2002. The Belgrade region is the only one in which the decrease of the share of the elderly was recorded – from 235.5 to 230.6, this being the result of the influx of younger working-age population from other regions.

The decrease of the youth coefficient – the average number of the young (up to 20 years of age) as per 1,000 inhabitants, was recorded in all regions. This coefficient, at the level of the Republic of Serbia, recorded a fall from 223 to 207.4 over the observed period, with the lowest value in the Belgrade region (196.4). Should we compare the number of the elderly per 100 young inhabitants in 2011, we shall see that it is growing at the republic level from 100.7 to 114.3. This trend has been growing evenly in all regions: Southern and Eastern Serbia 119.9, Belgrade Region 117.4, Vojvodina Region 108.6 and the Region of Šumadija and Western Serbia 112.8. In those regions there were more young inhabitants than the elderly ones in 2002 (94.7 and 99).

Serbian population's life expectancy

According to the data from Table 5, we can conclude that the Serbian inhabitants' life expectancy of significantly lower than the European average.

Table 5

Demographic indicators in the surrounding countries in 2010

State	Average age	Life expectancy	
		Men	Women
Serbia	41.4	71.4	76.6
Bulgaria	41.4	70.3	77.4
Rumania	38.3	70.1	77.6
Croatia	41.3	73.5	79.9
Hungary	39.8	70.7	78.6
Macedonia	35.8	72.9	77.2
EU-27	40.9	76.7	82.6

Source: Eurostat, Statistical Office of the Republic of Serbia, 2010.

Low population number in underdeveloped areas and continuous decrease of population. Demographic devastation affects more than 50% of Serbian municipalities. Higher economic activity and better educational, social and other infrastructure in some areas resulted in population moving from less promising parts of the country and concentrating in cities, particularly in Belgrade.

Negative natural increase rate

According to the data from Table 6, based on the results of the census taken in 2011, one can conclude that the negative natural increase rate is a characteristic of four Serbian statistical regions with the population of 7,120,666 (excluding Kosovo and Metohija). In 2011, Serbia had the same population number as in 1970. Between two last censuses, Serbia lost 377,335 inhabitants (5%), i.e. 4.5 times more than during the previous inter-census period, corresponding to the population of a large city such as the city of Novi Sad. Serbia lost 42,000 inhabitants per annum.

Analyzing the data in Table 7, we have reached the conclusion that Serbia has the lowest natural increase rate among the surrounding countries. Infant death rate is below the European average.

Table 6

Regional demographic indicators

Regions	Population in 2011	Depopulation 2002-2011	Natural increase 2002-2011
Republic of Serbia	7,120,666	-377,355	-316,493
Belgrade Region	1,639,121	62,997	-33,782
Vojvodina Region	1,916,889	-115,103	-100,283
Region of Šumadija and Western Serbia	2,013,388	-123,493	-85,240
Region of Southern and Eastern Serbia	1,551,268	-201,736	-95,168

Source: Statistical Office of the Republic of Serbia, 2012

Table 7

Demographic indicators in Serbia and the surrounding countries, in 2010

State	Natural increase rate (%)	Natural increase (in 000)	Infant mortality rate (%)
Serbia	-4.7	-34.9	6.7
Bulgaria	-4.6	-34.7	9.4
Rumania	-2.2	-47.5	9.8
Croatia	-2.0	-8.7	4.4
Hungary	-4.0	-40.1	5.3
Macedonia	2.5	5.2	7.6
EU-27	1.0	513.3	4.1

Source: Eurostat, Statistical Office of the Republic of Serbia, 2010.

Undeveloped infrastructure – insufficient investments into infrastructure (undeveloped roads network, problems with electrical energy, undeveloped water supplies network), still undefined business infrastructure (industrial zones, industrial parks, business incubators) etc. In Serbia there are immense differences regarding existing infrastructure, both between regions and within regions (completeness and quality of roads network, water supplies and sewage network, number of fixed telephony subscribers, availability of Internet connections). Areas of Pčinja and Raška have the works roads network in Serbia. Roads network consists of 43,258 km of roads, therein 10.5% being main roads, 10.7% regional roads and 65,5% local roads. Corridor 10, significant for the development of transport, economic activities in Serbia and development of underdeveloped areas in Southern and Eastern Serbia, as the pan-European roadway stretches over the 835 km in length and has not been completed. Although the roads in Serbia have sufficient capacity for the current and estimated scope of transport and traffic over the mid-term period, the basic problem is that the roads network is in poor condition due to inadequate maintenance. This affects the low quality of services, high costs of vehicles exploitation and reduces traffic safety. Unsatisfactory condition of the roads network (due to the lack of funds for the maintenance and development of roads) is especially severe with local roads, which are of primary importance for the every-day functioning, development and activation of potentials of municipalities, settlements and rural areas. The improvement of transport infrastructure is of enormous significance for the raising and increase of local economies' activities and reduction of areas' isolation. The municipalities with least local asphalted roads are: Trgovište, Koceljevo, Crna Trava, Sjenica, Tutin, Lebane, Majdanpek, Novi Pazar, Kuršumlja, Vladičin Han, Osečina, Dimitrovgrad, Nova Varoš, Brus, Vlasotince (Source: Republic Statistical Office, 2011), and they belong to the group of insufficiently developed local self governments. The basic characteristics of water supplies in Serbia are: worn-out water supplies network, great loss of water and unsustainable state of the distribution system, lack of facilities for the treatment of waste water and sewage network.

Undeveloped service sector – poor territorial coverage by health-care institutions, schools, retail facilities etc.

Insufficient educational level among population – high percentage of illiterate persons. The largest share of the illiterate belongs to the population over the age of 60 (80.7%). Higher levels and quality of education in the society taken as a whole affect economic development, innovativeness, democratism and social cohesion. It influences the improvement of working-age population abilities, productivity increase of the employed, more efficient transfer of technologies and knowledge from educational system and science to economy and society.

Low educational level and inadequate staffing structure of the population affect almost 2/3 of local self-governments. Another prominent issue is that there is a discrepancy between the existing and necessary educational profiles.

High unemployment rate is present in all parts of Serbia. It is both an economic and social problem. According to the data of the Statistical Office of the Republic of Serbia, unemployment rate is the highest among young persons aged 25-29. The majority of the unemployed are the persons with I and IV degree of education (28%), whereas those with VII degree of education account for some 6% of the unemployed. Differences between regions or within a region are shown in the fact that employment rate in Belgrade and other cities is higher than in other areas. Still, the situation regarding employment does not markedly differ between regions in Serbia, as the employment rates are low in all regions. In all regions (including Belgrade Region), actual employment rates are far lower than the ones necessary for Serbia to gradually catch up with the European Union average.

Local administrations' insufficient programmatic and project preparedness for the attracting of domestic and foreign investments and favourable credit lines. There are no well-prepared projects in Serbian municipalities, thus adding to the higher costs for the state, as a commission is paid if the funds that have been reserved if are not used. The biggest problem is the lack of sufficiently educated staff in municipalities to implement local projects.

It is important to point out some additional problems: low living standard and poor quality of life of population, high poverty rate, low investment rate – in comparison to the needs, they are at a very low level, low number of economic entities and low capacity of the existing economic entities, low-technology production and low level of new technologies use, slow restructuring process, lack of capacities among certain local self-governments and the absence of regional level in some parts of the country.

Conclusion

The past Serbian policy regarding regional development (2007-2012) was not efficient as it neither recognized nor respected the existing statistical territorial units which should have been the basis for the measuring of the level of development in Serbia and defining of intervening measures.

The lack of adequate comparative analyses on the significance and role of statistical territorial units, as non-administrative areas, having an important role as the basis for the measuring of the level of development of regions in Serbia, indicates that the data on regional differences provide requisite data enabling the understanding of the differences regarding the level of development. Such data also allows for the adequate measures to be undertaken so reducing the differences. In the new regional policy, the state's role has been reduced to removing and alleviating the restraints the endangered areas face, i.e. capacitating those areas for auto-propulsive development. This applies in particular to the assistance to the areas with particular developmental problems, through investments and stimulating capital influx, so those areas can compensate for its structural weaknesses. For the state support to be efficient, it is necessary to ensure its continuity and maintain the intensity of support over a longer period. Adequate regional policy in Serbia also needs to be defined as soon as possible, and its goals

should be levelling and leading a more even regional development in Serbia. This policy should be based on the inter-regional division of work and inter-regional competences.

In order to solve the piled up problems burdening current development of Serbia, regional policy and regional development should be integrated into Serbia's strategic priorities. New regional policy in Serbia should provide an answer to the crucial problems of regional development in Serbia. The goal to achieve sustainable demographic development of Serbia is to enlarge natural increase, which would simultaneously decelerate the ageing of population, until the moment the future population is as numerous as the existing one. This means that in order to compensate the loss of population due to depopulation, in the beginning the reproduction level would have to be above the level necessary for the mere replenishing of population. In the end, we can conclude that the existing statistical organization of the Republic of Serbia allows for the established statistical territorial units to aspire towards the structural support of the European funds. A more even regional development, more rational usage of natural and other resources and raising total level of the populations' living standard, as Serbia's basic strategic goals, should be linked with defined statistical territorial units as the starting points for the measuring of the level of (under)development of units in Serbia.

Acknowledgments

This paper is the result of the project 47007 financed by the Ministry of Education, Science and Technological Development of the Republic of Serbia.

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