# Socio-Economic and Ecological Indicators of the Metropolitan Area of Bucharest

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#### **ABSTRACT**

The metropolitan area is defined as an association on the basis of a voluntary partnership between urban and rural localities, where collaboration relations are established at different levels. The level of influence of the metropolitan area is established depending on the territory it organizes as a regional, national or international metropolis.

As a result of the researches carried out, (inclusively in the DEMOS project) the Metropolitan Area of Bucharest (MAB) may include 61 administrative units within a radius of 50 km around the capital.

In comparison to other capitals and metropolitan areas from Central and Eastern Europe (Berlin, Budapest, Prague, Warsaw), Bucharest occupies the fifth rank in terms of number of population and square kilometres, but it is ranking the first in terms of density (inhabitants/square kilometre), with 1266 inhabitants/ sq. km, in comparison to the second ranking city – Warsaw – having only 638 inhabitants/sq. km. This fact makes a strong argument for developing a metropolitan area in Bucharest.

#### **KEYWORDS**

metropolitan area, population density, urban agglomeration, administrative unit, development association

JEL Classification O18, O44, Q01, R11, Q57

By metropolitan area we understand the area constituted by association on the basis of a voluntary partnership between urban and rural places, where collaboration relations are established at different levels. (Cocean, P., 2002).

This area comprises the localities situated within a distance of less than 30 km around first ranking towns, between which there are reciprocal relationships of influence regarding the field of lines of communication as well as the economic, social / cultural and existing infrastructure fields (Ianoş, I., 2000).

Therefore, the metropolitan area becomes a development association, an inter-community one, constituted on the basis of a partnership that has in view:

- cooperation regarding the field of urban development;
- realizing certain common projects, which the villages or communes could not implement on their own;
- the possibility to have easier access to European funds.

To detail the issues previously mentioned, there has to be emphasized the fact that the fields in which the local councils of the localities can cooperate are the following:

- the management and modality of using the lands (local policies regarding the value of the lands and of the tax paid for them, creating green belts, functional division into zones of the territory of the metropolitan area etc.;
- territorial development according to national and district plans as well as exploitation of the potential of the metropolitan area (MA);
- economic development, having in view the following:
  - the first ranking town represents the source of metropolitan economic development;
  - the criteria of town economic development that generate to the neighbouring localities;

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- the public services, the infrastructure, the need for work and its formation, the development and diversification of economic activities, the migration impact etc.
- planning the habitation according to the local and metropolitan necessities, according to the general
  and specific development aims and to the habitation necessities, as well as according to the afferent
  requisitions;
- development and maintenance of the infrastructure systems by the first ranking town and by the surrounding localities, as entities producing goods and public services;
- financing public services by the local councils in the MA, that will coordinate their fiscal policies and those for renting the public premises, as well as identification of the transfers from the central budget and of extra-budgetary financial sources, etc.
- elaboration of power policies by coordinating the production, distribution and consumption activities
  in the MA, that imply aspects related to: the typology of the transport network, the modality of
  distributing public utilities, the afferent facilities and the identification of alternative resources;
- natural environment management;
- institutional organization and development of human resources;
- exploitation of local characteristic elements for the development of identity.

The influence level of the metropolitan area is established depending on the territory it organises, structures and connects with the great economic international flow (Bonnet, J., 2000):

- Regional metropolis (or "metropolis of balance") great agglomeration characterized by a
  concentration of equipments and services having influence and the role of balancing the urban
  reinforcement at a regional level; "regional capital" aspiring to the future status of international
  metropolis, disposing of tertiary services of metropolitan level and more or less developed
  international functions;
- 2. National metropolis having specialized functions, a diversified structure of activities, a powerful concentration of enterprises and national and international institutions, a very good accessibility, therefore *international role and influence* (economy, relations, competitiveness);
- 3. International metropolis major relational pole that serves as an interface between local economy and international economy.

In relation to the characteristics of the European metropolises, the Capital of Romania has the following position:

- it is a metropolis from the point of view of its size and status as a capital but not from the point of view of the international influence and functions, because it does not have either international institutions with decisional force or functions with metropolitan characteristics, but only some company subsidiaries, bank societies etc.
- it is situated in the 3rd size category, that is between 1 and 3 millions inhabitants but having an unfavourable dynamic because of the demographical reduction during the 1990-2000 decade. The uplifting process, with visible effects over about two decades, can be initiated on the basis of certain demographic and socio–economic policies, but with visible effects only over about two decades. In the case of Bucharest it is necessary to add to these issues a policy to attract young people with postgraduate and superior studies requested by the change of the sectorial profile of the capital;
- Bucharest can be included (with some hesitations) in the category of "peripheral regional metropolis, with limited international influence, supplying few tertiary services at a metropolitan level and poorly developed international functions", similarly to Athens and Lisbon, but having the

possibility to work on the advance to the superior category of "regional metropolis with a powerful international influence, with a poorly specialized structure of activities and specialized or incomplete international functions" just like Rome, Madrid or Berne; this situation could be consolidated by:

- the increase of the European regional role, especially by replacing the status of *peripheral* capital of the south-eastern European zone with that of a sort of "relay" between the relations north-south (the Baltic Sea Region CADSES) and east-west but also, according to the CEMAT conference Hanover September 2000, the status of "bridge" between Europe, Near East and Asia therefore, by attracting certain international and regional-European functions;
- the development of metropolitan services.

The metropolitan area of Bucharest might include a number of 61 administrative units, situated within a radius of 50 de km around the capital and having strong connections with the core city. The creation of a metropolitan area is realised as a necessity of the relationships that are established and intensified between the polarizing city and the surrounding localities. This is the scientific substantiation of the inclusion of the interrelation indicators in the formula for determining the borders of the metropolitan area. Consequently, a metropolitan area has to include those localities around the polarizing city that have strong enough interrelations with the polarizing city.

Between the core or polarizing city (that is the development pole) and the settlements around it there are established bidirectional relationships, meaning that people, products and ideas follow one direction, towards the centre, as well as another direction, towards the exterior (Cândea, M. & Bran, F., 2001).

Generally, at least during the first stage of the urban development, the attraction exerted by the city is more powerful, the urbanization, especially the one based on the concentration of the population in cities, realised more through the migration rural-urban, is the prevailing one (Majuru, A., 2003). During the following stages of the urban development, the opposed direction, from the core city towards the exterior, becomes more powerful, the result being, mainly, the formation of metropolitan areas or of functional urban areas.

In comparison to other capitals and respectively metropolitan region-areas, the situation of the MAB is as shown in the charts no. 1, 2 and 3.

POPULATION – number of inhabitants							
Capital	Metropolitan Region	Metropoli- tan Area	Urban Agglomeration	Capital	% Capital in the Region	% Capital in the Agglome-ration	
Berlin	6.010.000		4.260.000	3.460.000	58	81	
Budapest	3.480.000		2.480.000	1.860.000	53	75	
Prague	2.306.500	1.725.000	1.368.900	1.200.500	52	88	
Warsaw	2.418.600			1.628.500	67		
<b>Bucharest*</b>	2.304.934	unspecified	E - 2.307.000	E - 2.009.000	E – 87	E – 87	
		_	A -2.500.000	A -2.165.000		A - 86.6	

Chart no. 1. The population of metropolitan areas and of the capitals included by these areas

(\*data regarding Bucharest according to PUG – E = existent in 1998, A = anticipated for 2025 but, subject to the endorsement of PATIC – AUB and PATZ/R)

Chart no. 2. The surface of metropolitan areas and of the capitals included by these areas

TERRITORY - sq. km.

	Metropolitan	Metropoli-	Urban	Capital	Average radius - kilometers		
	Region	tan Area	Agglomeration	Сарітаі	Region	Agglomeration	Capital
Berlin	30.369			889	98		30
Budapest	8.930		2.536	525	53	28	23
Prague	11.511	3.913	1.667	496	61	23	22
Warsaw	49.428			496	125		22
Bucharest*	1.821		A = 1.729	E = A = 228	24	23,5	8,5

<sup>\*</sup> data regarding the status of Bucharest according to PUG - E = existent in 1998, A = anticipated for 2025 but, subject to the endorsement of PATIC – AUB and PATZ/R

Chart no. 3. The density in metropolitan areas and the capitals included by these areas

DENSITY - inhabitants / sq. km.

	Region	Metropolitan Area	Urban Agglomeration	Capital	Agglomeration without Capital
Berlin	198			3.900	185
Budapest	390		977	3.544	309
Prague	157	441	821	2.418	144
Warsaw	638			3.284	
Bucharest*	1.266		E = 1334 A = 1446	8.893	E = 199 A = 223

<sup>\*</sup> data regarding the status of Bucharest according to PUG - E = existent in 1998, A = anticipated for 2025 but, subject to the endorsement of PATIC – AUB and PATZ/R

The actual development, from a functional point of view, of an "urban agglomeration" around Bucharest was determined by the existence of the communes near the Capital. By placing certain functions that are essential for the Capital on their territory, by the intense relationships regarding work and services and by the multiple conditions with respect to the development and the diminution of present dysfunctions, there becomes obvious the necessity of an inter-commune cooperation, but maintaining the own identity of each administrative unit. Besides, the conception regarding the Agglomeration of Bucharest is validated by the evolution of the majority of the great European cities that, once reaching high stages of evolution, they reached the development on institutionalized basis (inter-communal council), having an Executive Plan and Urban Regulations in common. Such processes of constitution of urban agglomerations were identified in Romania as well (Bucharest, Iaşi, Oradea, Constanţa, Alba Iulia, Cluj-Napoca etc.), these great cities "exporting" urbanization in the neighbouring communes and going beyond their own administrative territory by the expansion of activities, settlements, technical and urban infrastructure and of public transport on the territory of the limitary communes but, at the same time, generating their development by the workplaces and services supplied for their inhabitants.

### **BIBLIOGRAPHY**

- 1. Bonnet, J. (2000), Great World Metropolises, European Institute, Iași.
- 2. Cândea, M. & Bran, F. (2001), *The Romanian Geographical Space. Organization, Planning, Sustainable development,* Economic Publishing House, Bucharest
- 3. Cocean, P. (2002), *Regional Geography. Evolution, Concepts, Methodology*, Presa Universitară Clujeană, Cluj-Napoca.
- 4. Ianos, I. (2000), Territorial Systems. A Geographical Approach, Technical Publishing House, Bucharest.
- 5. Majuru, A. (2003), Suburbs of Bucharest or the Outskirts as Way of Existence, Compania Publishing House, Bucharest.