# GEODEMOGRAPHICAL FEATURES OF THE SETTLEMENTS IN THE SUB CARPATHIANS BETWEEN THE PRAHOVA AND THE DÂMBOVIȚA

# RĂDIȚA ALEXE<sup>1</sup>

**ABSTRACT** - This Sub-Carpathian sector polarised all economic life in Dâmbovița County, as its territory was also in the past a crossroads of the most important commercial routes along the Ialomița, connecting Transylvania with the south of nowadays Romania and, therefore, the number of people was greater than for other Romanian regions. Between 1930 and 2002 the population of the Sub-Carpathians between the Prahova and the Dâmbovița increased continuously according to certain economic, social, and cultural trends. We noticed that population natural growth rate decreased from 1992 to 2002 down to negative values because of both population aging and problematic medical assistance. At the same time, the migratory growth rate had an endo-dynamic feature in the areas where the natural growth rate was small and an exo-dynamic feature where the labour force was exceeding request and the unemployment rate was high.

Key words: population dynamics, population structure, the Sub-Carpathians between the Prahova and the Dâmbovița

# **INTRODUCTION**

As a result of favourable natural conditions (water resource, large wooded areas, valuable pastoral fund, and rich underground resources), as well as of favourable historical and social factors, this area was a well inhabited one at all times.

This Sub-Carpathian sector polarised all economic life in Dâmbovița County, as its territory was in the past also a crossroads of the most important commercial routes along the Ialomița connecting Transylvania with the south of nowadays Romania and, therefore, the number of people was greater than for other Romanian regions. Statistic data confirmed that information and Constantin Cantacuzino's map of 1700 showed that population and settlements density in nowadays Dâmbovița County were higher than those of other counties. Moreover, at the middle of the 19<sup>th</sup> century, Dâmbovița and Prahova counties had the highest population density (50 inhabitants/km<sup>2</sup>) out of the counties of southern Romania (V. Cucu, 1998, *România. Geografia umană și economia*, p. 112).

## POPULATION NUMERICAL EVOLUTION

Between 1930 and 2002 the population of the Sub-Carpathians between the Prahova and the Dâmbovița increased continuously according to certain economic, social, and cultural trends.

Causes of population growth were especially birth rate increase and death rate decrease, together with the migratory growth rate and economic development. In the case of certain towns (Pucioasa, Fieni, Moreni, and Breaza) and suburban communes, population increased considerably as a result of forced industrialisation during the communist period.

In order to identify the trend of the number of inhabitants in the rural area, we chose a representative sample of five communes in the researched area: Pietroşiţa, Bezdead, Vulcana-Băi, Voineşti, and Brăneşti. We identified an ascendant trend for rural population, characterised by spatial disparities due to differences in economic development (figure 2). During 1992-2002 the population of Pietroşiţa, Bezdead, and Voineşti increased, mainly as a result of high birth rates, and it decreased in Vulcana-Băi and Brăneşti because of negative natural growth rate and of emigration (including emigration abroad).

We could identify urban population's ascendant numeric evolution in an analysis of the censuses from 1930 to 2002. We discovered that during 1992-2002 urban population increased slowly in the following towns: Fieni, Pucioasa, and Breaza, in a direct relation to their economic development, while the population

<sup>&</sup>lt;sup>1</sup> Valahia University, Faculty of Humanist Sciences, Regele Carol I Boulevard, Târgoviște, Romania E-mail: radita.alexe@yahoo.com

# GEODEMOGRAPHICAL FEATURES OF THE SETTLEMENTS IN THE SUB CARPATHIANS BETWEEN THE PRAHOVA AND THE DÂMBOVIȚA

for Moreni town decreased as a result of closing down certain factories or because of a decrease in the number of employees in other economic sectors as well (figure 1).

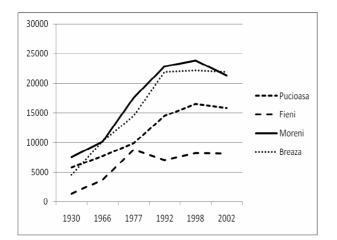
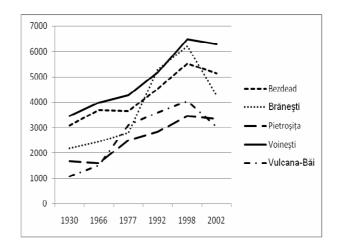


Figure 1. Population numerical evolution in the urban areas



**Figure 2.** *Population numerical evolution in the rural areas* 

# **POPULATION DENSITY**

Population density was influenced by natural factors (e.g. landforms, hydrographical network, vegetation, soil, and other natural resources) and by historical, social, and economic ones.

Population density had an ascendant trend during 1930-2002 as it increased from 88.0 inhabitants/km<sup>2</sup> in 1930, up to 122.3 inhabitants/km<sup>2</sup> in 1977, and up to 140.0 inhabitants/km<sup>2</sup> in 2002. These density values were always higher than the country average.

We took into account the statistic data for the 2002 census in order to calculate population general density: Pucioasa-392.2 inhabitants/km<sup>2</sup>, Fieni-415.4 inhabitants/km<sup>2</sup>, Moreni-608.5 inhabitants/km<sup>2</sup>, Breaza-329.2 inhabitants/km<sup>2</sup>, Bezdead-89.5 inhabitants/km<sup>2</sup>, Brăneşti-237.1 inhabitants/km<sup>2</sup>, Pietroşiţa-123.3 inhabitants/km<sup>2</sup>, Voineşti-77.5 inhabitants/km<sup>2</sup>, and Vulcana-Băi-107.4 inhabitants/km<sup>2</sup>. We also noticed spatial disparities for this indicator: there were areas where general density was up to 400-600 inhabitants/km<sup>2</sup> (e.g. Moreni and Fieni) and areas where this indicator had values below 100 inhabitants/km<sup>2</sup> (e.g. Voineşti and Bezdead).

Moreover, we discovered two categories corresponding to two areas: one where population density was between 300 and 600 inhabitants/km<sup>2</sup>, overlapping the better developed area and the main communication routes, in the southern part of the researched Sub-Carpathian area, and another one where population density was below 100 inhabitants/km<sup>2</sup>, in the northern part, characterised by higher altitudes and less developed economy.

# **POPULATION NATURAL DYNAMICS**

*Birth rate* before World War I was above 40‰, and then it decreased continuously as a result of both World Wars down to 27.6‰ in 1948 and to 15.0‰ in 1966. From 1997 birth rate increased from 20.8‰ in 1997 up to 24‰ in 1992, and then decreased significantly down to 9.0‰ in 2002.

*Death rate* before World War I was over 35‰, and then decreased down to 13.4‰ in 1977, and to 11.5‰ in 1992, and to 12.4‰ in 2002.

*Population natural growth rate* was characterised by neither a linear evolution nor a uniform one, as periods of growth alternated with periods characterised by decrease or stagnation. During the last decade, birth rate decrease and average life expectancy decrease led to a decrease of the natural growth rate that was eventually characterised by negative values.

We evaluated the natural growth rate during 1992-2002 with a representative sample for both the rural and the urban area. We noticed that the values of that indicator were nearly the same for both areas (urban and rural). In 1992 the natural growth rate was high (13.8‰); after 1992 the values of this indicator

decreased continuously down to -1.9% in 2002 in the urban area and to -4.8%, in the same year, in the rural one (figure 3).

The differences between the two areas are a result of both a smaller aging rate and better medical assistance in the urban area as compared to the rural one (figure 4).

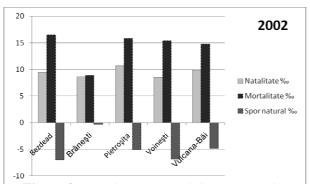


Figure 3: Population natural dynamics in the urban area (1992, 2002)

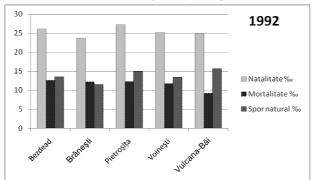


Figure 4: Population natural dynamics in the rural area (1992, 2002)

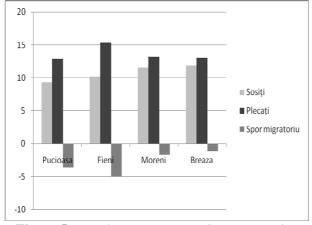


Figure 5: Population migratory dynamics in the urban area

# POPULATION MIGRATORY DYNAMICS

Migratory growth rate expressing population territorial mobility was influenced by the following factors in this area: industrialisation. urbanisation. modernisation of agriculture. and tourism development. At the 1992 census, it was a fact that 67.3‰ of the total number of people of this area was born in the commune or town it lived in at that time, 14.1% in other communes and towns and 16.8% in other counties. Moreover, while until 1992, the highest values were characteristic of the rural-urban flux (64% left the communes and 58% came into towns), after 1992 a higher value was characteristic of the urban-rural flux (figure 5 and figure 6).

We identified two types of mobility:

- endo-dynamic type, characteristic of the areas with a small natural growth rate, but polarising labour force (Breaza, Moreni, and Pucioasa);
- exo-dynamic type where people left for other areas rich in jobs such as Târgovişte, Ploieşti, and Bucharest.

For the last years, we identified a migration trend abroad of the people in the rural area either for a certain period or without returning.

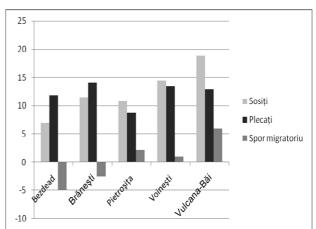


Figure 6: Population migratory dynamics in the rural area

# **POPULATION STRUCTURE**

This Sub-Carpathian sector had different values for the urban and rural areas. For instance, in the urban one, those values were almost the same for the three *age groups*. We noticed that the values for the adult and old people were close to our country average, and the young population group slightly exceeded the corresponding country value (table 1).

# GEODEMOGRAPHICAL FEATURES OF THE SETTLEMENTS IN THE SUB CARPATHIANS BETWEEN THE PRAHOVA AND THE DÂMBOVIȚA

	0-19	20-64	65 and over
Urban	25.43	63.32	11.25
Rural	32.05	53.75	14.20
The researched area	26.52	59.08	14.40
Romania	25.17	60.07	14.00

### **Table 1.** Population structure on age groups (%) in 2002

The elderly accounted for 14.40% at the 2002 census and revealed an aging population if we take into account that a population was considered young if those over 65 years old did not account for 7%, it was in an aging process when values were between 7% and 12% and it was considered already old when percentages exceeded 12%. The elderly accounted for 11.25% of the total urban population and that was less than Romania's average, but still over the threshold of aged population.

On the other hand, the young accounted for the highest values (32.05%) in the rural area, while adults accounted for the lowest percent of the entire researched area (53.75%). That was also a result of labour force's external migration after 1992.

*Population Gender Structure* revealed that women accounted for 51.1%. The feminity index increased in the rural area (e.g. Pietroșița and Brănești) where agriculture or light industry was the main activity (e.g. Pucioasa) and decreased in towns specialised in heavy industry (e.g. Moreni, Fieni).

# Active Population Structure

Active population structure changed significantly during the last decades as a result of social and economic changes. Population working in services sector increased together with the unemployment rate, especially in the urban area.

Thus, during 1992-2002 the percentage of active population decreased continuously as a result of active people's number decrease in the industrial units of three towns (Moreni, Fieni, and Pucioasa) as well as in the case of those working in transport or in certain state budget supported activities (research, culture, and sports). Active people's number increased in agriculture, hotels, finance and banks, constructions, education and health, especially in the rural area.

At the 2002 census, population structure was the following: 12.38% were working in the primary sector, 38.12% in the secondary one, and 43.48% in services. We also noticed differences between the urban and rural area for the secondary sector as this was better represented in towns, as 41.15% of the active population worked in industry and constructions, while, in the rural area, most active people worked in agriculture and forestry.

We noticed especially an increase of population working in services, both in the urban and rural area, where the percentage was higher in towns in the case of hotels and public alimentation.

A result of the social and economic evolution of the last period was an increase in unemployment rate affecting severely the researched population.

#### REFERENCES

ALEXE, RĂDIȚA (2005), Elements of Bio-Geographical Regional Determination in the Subcarpathians between the Prahova and the Dâmbovița River, RRRS, Number 1, Editura Presa Universitară Clujeană, Cluj-Napoca.

COCEAN, P. (2005), Geografie Regională, Editura Presa Universitară Clujeană, Cluj-Napoca.

COCEAN, P., coordonator (2007), Amenajarea teritoriilor periurbane. Studiu de caz: Zona periurbană Bistrița, Editura Presa Universitară Clujeană, Cluj-Napoca.

CUCU, V. (1998), România. Geografie Umană și Economică, Editura Glasul Bucovinei, Iași.

ERDELI, G., CUCU, V. (2005), *România. Populație. Așezări umane. Economi.*, Editura Transversal, Popp, N (1939), *Subcarpații dintre Dâmbovița și Prahova*, BS RRG, București.

SURD, V. (2001), Geodemografie, Editura Presa Universitară Clujeană, Cluj-Napoca.

\*\*\* 1930, 1966, 1977, 1992, 2002, Recensământul populației și locuințelor, Institutul Național de Statistică.