

## DEMOGRAPHIC ANALYSIS OF SOUTH MUNTENIA REGION

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### **Abstract**

*This paper aims to carry out a study research on the structure of the population in the South-Muntenia development region through which analyzed and interpreted statistical data are combined with theoretical aspects and lead to a detailed analysis of the regional information on the structure of the population in the South Muntenia region. The population of South-Muntenia development region, which includes the counties Argeş, Călăraşi, Dâmboviţa, Giurgiu, Ialomiţa, Prahova and Teleorman, equals 2.984.992 persons in 2017 and represents over 15% of the total population of Romania.*

**Key words:** South-Muntenia region, population, demographic survey, migration, labor force

### **INTRODUCTION**

Demographic studies, especially the information that these studies develop, are of great importance because they directly indicate the evolution of natural growth, consequently the demographic changes taking place within a community. The greatest significance of these studies derives from the direct way in which they influence social policies by marking on education, social protection, transport, health, tourism or labor market systems. Despite that based on the number of inhabitants Romania is on the top in the EU, it is facing a downward population trend due to the aging of the population, the excessive migration of young people to other countries, the relocation of their homes, and especially because the birth rate does not exceed the mortality rate, so the natural replacement of the population can not be achieved. In order to prevent the direct way in which demographic resources influence the daily life of the population, especially the way in which the evolution of labour force, labour resources and economy is marked, we need to know very well how the demographic phenomenon evolves, both rural and urban. [1] [8] [9].

### **MATERIALS AND METHODS**

Based on the accumulated theoretical information and statistical data provided by the National Institute of Statistics (ins.ro), by Eurostat (ec.europa.eu/eurostat), the statistical organism at the European Commission level and the FAO (fao.org), the Food and Agriculture Organization, it was conducted a data interpretation, research and analysis study in order to evaluate the South-Muntenia Region's information on population structure.

### **RESULTS AND DISCUSSIONS**

The South-Muntenia Development Region is situated, as its name says, in the southern part of Romania, on the territory of the historical region of Muntenia and it is composed of the counties of Argeş, Prahova, Dâmboviţa, Teleorman, Giurgiu, Ialomiţa and Călăraşi. The region natural landscape is disposed in ladders, in the Southern part being found the lowest altitudes which are rising to the North up to the altitude of 2,500 meters. Plain is predominant occupying over 70% of the area of the region, which should support the attraction of the population in this region because favorise the development of more occupations [9] [10].

With an area of approximately 34,452 km<sup>2</sup>, the South-Muntenia region occupies almost 14.5% of the total area of the country, and within it the county with the largest area is Argeş County, and the one with the smallest surface is Giurgiu County. As far as the population is concerned, a little over 15% of Romania's total population lives in this region, and judging by this criterion, the leading county in this development region is Prahova, and the last one is Ialomiţa County. In the

counties that forms this development region, the population is distributed as follows: almost 20% - Argeş County, 9.7% - Calarasi County, over 16.5% - Dâmboviţa County, just over 9% - Giurgiu County, about 9% - Ialomiţa County, 24.4% - Prahova County and over 11.5% - Teleorman County [4] [9]. Table 1 presents a series of data regarding the surface and population of the South-Muntenia development region.

Table 1. Overview of the South-Muntenia region's territory and population

	South-Muntenia region	Argeş County	Călăraşi County	Dâmboviţa County	Giurgiu County	Ialomiţa County	Prahova County	Teleorman County
Surface (km <sup>2</sup> )	34,452	6,826	5,087	4,054	3,526	4,452	4,715	5,789
Population	2,965,205	585,730	288,043	496,173	269,279	258,931	725,609	341,440
Population density	86.06	85.8	56.6	122.4	76.4	58.16	153.9	58.9
Urban population (%)	39.46	45.96	36.14	28.20	29.05	44.29	48.65	32.45
Population in rural areas (%)	60.53	54.03	63.85	71.79	70.94	55.70	51.34	67.54
Population by gender urban / rural								
Male	1,458,514	286,092	142,162	245,860	133,740	128,029	353,930	168,701
Female	1,506,691	299,638	145,881	250,313	135,539	130,902	371,679	172,739
Both sexes urban	1,170,112	269,221	104,126	139,963	78,245	114,695	353,040	110,822
Male	559,910	128,347	50,075	66,683	38,090	55,742	168,016	52,957
Female	610,202	140,874	54,051	73,280	40,155	58,953	185,024	57,865
Both sexes rural	1,795,093	316,509	183,917	356,210	191,034	144,236	372,569	230,618
Male	898,604	157,745	92,087	179,177	95,650	72,287	185,914	115,744
Female	896,489	158,764	91,830	177,033	95,384	71,949	186,655	114,874

Source: National Institute of Statistics, TEMPO-Online, accessing and processing data 03.2019.

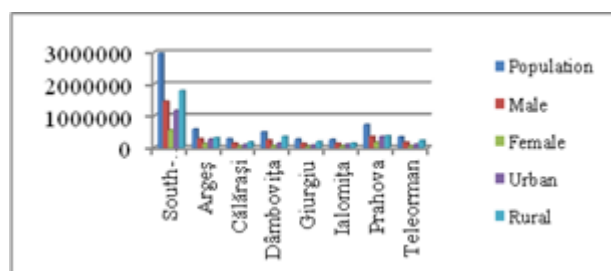


Fig. 1. Distribution of population in the region after the number, sex and area of residence  
 Source: National Institute of Statistics, Tempo-Online, accessing and processing data 03.2019.

In 2018, on the 34,452 km<sup>2</sup> area of the South Muntenia region, lived 2,965,205 people, disposed in the seven counties that make up the region as it follows: almost a quarter of the total population in Prahova County, with a

density equal to 154 persons per km<sup>2</sup>, approximately 20% in Argeş county, 16.73% in Dâmboviţa county, over 11% in Teleorman County and under 10% in Călăraşi (9.71%), Giurgiu (9.08%) and Ialomiţa (8.73%). If the highest density of the population in this region it is found in Prahova County, the lowest density is in Călăraşi County and is equal to about 57 persons per km<sup>2</sup>, and on average in the region this indicator is equal to 86 persons per km<sup>2</sup>. Analyzing the data on the residence environment in which people live in the South-Muntenia Region, we can notice that the rural population is larger than the urban population, a trend that is valid in all the counties that compose the region [4] [5] [9].

Table 2 provides information on population trends over the period 2014 -2018 in the distribution of population by age groups.

Table 2. Population, by age group, in the South-Muntenia region

Years	Total number of persons	By age group		
		0-14 years	15-59 years	Peste 60 de years
2014	3,085,723	465,503	1,844,039	776,181
2015	3,061,759	458,726	1,819,626	783,407
2016	3,031,555	451,594	1,788,525	791,436
2017	3,003,349	445,914	1,758,181	799,254
2018	2,965,205	440,394	1,725,207	799,604

Source: National Institute of Statistics, Tempo-Online, accessing and processing data 03.2019.

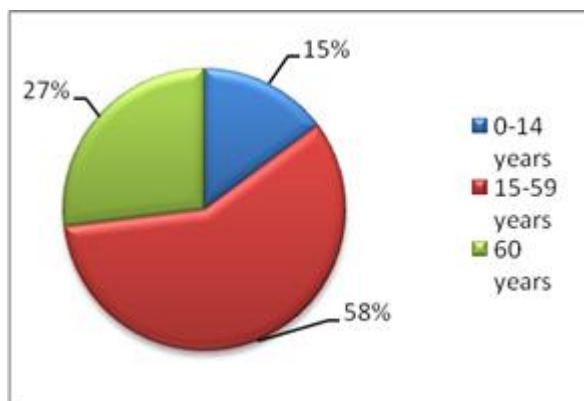


Fig. 2. Distribution of population by age groups South-Muntenia region in 2018

Source: National Institute of Statistics, Tempo-Online, accessing and processing data 03.2019.

Regarding the population of the South-Muntenia Region, following the analysis of the data in Table 2, we can see that a negative trend in the whole region is outlined during the reference period. Every year during the analyzed period the number of inhabitants decreased by about one percentage point, which led to a decrease of the population by just over 4%.

This decrease is due to the fact that between 2014 and 2018 the number of births was lower than the number of deaths, as evidenced by the decrease of the population aged 0-14 by almost 6%, the decrease by 6.4% of the population between the ages of 15 and 59 years and the increase in the number of people aged 60 and over by 3%.

This population aging phenomenon is not only valid in the South-Muntenia Region, because also in all Romania the number of people aged 60 years and over increased by 3% and the population aged 0-14 and 15-59 years declined by 5.5% and respectively by 6.5%.

Also more aging population and negative natural growth are two phenomena present at the level of the entire European Union, phenomena supported by the decrease of the population aged 0-49 years and population growth aged 50 and over [11].

In Romania, recording a negative natural growth and population aging have become two phenomena encountered each passing year, which leads to GDP decline, increase in the pension fund and the social and health insurance and thus the decrease in life expectancy.

For these reasons, many of our country's inhabitants, in the hope of a better life, migrate, most of the time taking their entire family abroad, especially looking for a better paid job [ 5, 6, 9 ].

The migration of the population is also important in analyzing the demography of a region. In the region analyzed, population migration is experiencing a negative trend, since in all years taken into reference (2013-2017), the number of departures was higher than the number of arrivals. Due to the fact that the level of arrivals increased by only slightly over 3% during the analyzed period and the level of departures increased by over 11%, the balance of the internal migration is increasing by almost 130%, which reinforces the negative trend known by the migration of population within the region. This fact is determined by the level of the internal migration balances of the counties of the South-Muntenia region, respectively in Argeş County, almost 60% more people departed than they have settled in 2018 compared to 2013, 278% in Călăraşi County, in Dâmboviţa County with 182%, in Ialomiţa County with 56%, in Prahova County with 233%, and in

Teleorman County with 117%. The only county in the studied region where the number of persons who have settled is higher than the number of people who left, is Giurgiu County, but the percentage of 2% is not representative enough to compensate for the general

phenomenon of migration from the rest of the counties, unlike the prior years to the reference period, in which also in Dâmbovița county there was a positive migratory balance [8] [9].

Table 3. Internal migration movement with change of residence in South-Muntenia Region

	2013	2014	2015	2016	2017
South-Muntenia Region					
Arrivals	45,797	49,151	47,438	51,506	47,010
Departures	49,073	52,296	51,436	56,078	54,517
Internal migration balance	-3,276	-3,145	-3,998	-4,572	-7,507
Argeș County					
Arrivals	9,869	10,112	10,160	10,586	10,041
Departures	10,600	10,831	10,719	11,424	11,205
Internal migration balance	-731	-719	-559	-838	-1,164
Călărași County					
Arrivals	4,361	4,589	4,392	5,103	4,396
Departures	4,688	4,969	4,913	5,741	5,632
Internal migration balance	-327	-380	-521	-638	-1,236
Dâmbovița County					
Arrivals	8,060	8,755	7,987	8,833	7,993
Departures	8,482	8,990	8,464	9,153	8,760
Internal migration balance	-422	-235	-477	-320	-767
Giurgiu County					
Arrivals	3,922	4,533	4,435	4,883	4,185
Departures	3,662	3,773	3,907	4,287	4,091
Internal migration balance	260	760	528	596	94
Ialomița County					
Arrivals	4,062	4,297	4,145	4,550	4,076
Departures	4,768	5,069	4,897	5,312	5,180
Internal migration balance	-706	-772	-752	-762	-1,104
Prahova County					
Arrivals	10,101	11,187	10,804	11,514	11,100
Departures	10,446	11,844	11,803	12,621	12,248
Internal migration balance	-345	-657	-999	-1107	-1,148
Teleorman County					
Arrivals	5,422	5,678	5,515	6,037	5,219
Departures	6,427	6,820	6,733	7,540	7,401
Internal migration balance	-1,005	-1,142	-1,218	-1,503	-2,182

Source: National Institute of Statistics, Tempo-Online, accessing and processing data 03.2019.

Regarding the number of persons who settled in the South-Muntenia region in 2017, Prahova County had the highest contribution by 24%, followed by Argeș county by 21%, then by Dâmbovița County with 17 %, Teleorman County with 11% and the counties Călărași, Ialomița and Giurgiu had lowest contribution of 9%.

Taking into account the number of persons

who migrated, externally or internally in 2017 in the South Muntenia Region, the county from which people migrated the most is Prahova County with 22%, followed by Argeș county by 21%, then by county Dâmbovița with 16%, Teleorman county with 14%, Călărași county with 10%, Ialomița county with 9% and Giurgiu county with 8 %.

Compared to the populations' migration trends

in all the development regions in Romania, the migratory flow in South-Muntenia region is an accentuated one and the number of

people leaving the region is higher than the number of people who establish their domicile within it.

Table 4.Changes of residence by region during 2007-2017 - rate per 1000 inhabitants

	Year 2007		Year 2010		Year 2013		Year 2017	
	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
Region North-West	42.1	41.3	51.5	49.0	39.2	37.0	44.6	41.4
Region Centre	40.6	40.7	45.6	45.9	34.5	34.4	39.2	37.8
Region North-East	58.6	65.2	70.8	76.6	63.0	59.6	60.8	65.2
Region South-East	48.1	49.5	52.5	56.0	39.6	42.8	42.2	48.7
Region South-Muntenia	57.4	56.9	62.9	65.7	45.8	49.1	47.0	54.5
Region Bucharest - Ilfov	45.0	39.5	84.1	73.7	63.3	60.9	73.9	57.1
Region South-West	43.4	46.3	47.4	51.4	32.5	35.9	33.5	39.0
Region West	39.1	34.7	44.2	40.8	32.7	30.9	39.0	36.4

Source: National Institute of Statistics, Tempo-Online, accessing and processing data 03, 2019.

This trend is due to the shortage of jobs, which determines the residents of this region to migrate to other more developed regions in the country and most of the time abroad. Also, a very big impact it has that the majority of young people living in this region choose, after they graduate from high school, to follow the courses from the Bucharest-Ilfov or South-East regions universities, which leads to changing their residence over time [4] [5] [6].

## CONCLUSIONS

During the analyzed period, a negative trend is observed in the South-Muntenia region regarding the numerical evolution of the population, trend that is present both on the whole territory of the country as well as at the level of the European Union and the development of this tendency is highlighted mostly due to the increase in the negative birth rate registered in recent years and the increase in life expectancy, which led to the increase of the population aged 60 and over 60 years.

Although the South-Muntenia region is ranked the 2nd in Romania in terms of population, it is also the 2nd, but this time downwards, in terms of population growth over the reference period, registering a decrease of just over 4% in 2018 as compared to 2014.

The decline of the population of South-Muntenia Region can not be attributed solely to the negative birth rate or the decrease of the number of people aged 15 to 59 who mostly support the number of people aged 60 and over by paying contributions to state, but also on the back of the internal and external migration movement, a phenomenon that is quite accentuated. The negative sign of the balance of internal migration across the region in 2017 (-7,507) and the fact that during the reference period migration has increased by 130%, represent extremely important factors which must be taken into account at the demographic analysis of the region, these figures greatly influencing the resulting trend. In conclusion, taking into consideration all the above mentioned, we can firmly say that the trend of the population of the South-

Muntenia region, during the reference period,  
is a descending one

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