

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

**Bucur, Sorinel Ionel** 

# **Conference Paper**

Characteristics of the demographic system in the Romanian rural area: Developments at the regional level in the post-accession period and perspectives

# **Provided in Cooperation with:**

The Research Institute for Agriculture Economy and Rural Development (ICEADR), Bucharest

Suggested Citation: Bucur, Sorinel Ionel (2023): Characteristics of the demographic system in the Romanian rural area: Developments at the regional level in the post-accession period and perspectives, In: Rodino, Steliana Dragomir, Vili (Ed.): Agrarian Economy and Rural Development - Trends and Challenges. International Symposium. 14th Edition, The Research Institute for Agricultural Economy and Rural Development (ICEADR), Bucharest, pp. 139-143

This Version is available at: https://hdl.handle.net/10419/301773

#### Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

#### Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



# CHARACTERISTICS OF THE DEMOGRAPHIC SYSTEM IN THE ROMANIAN RURAL AREA – DEVELOPMENTS AT THE REGIONAL LEVEL IN THE POST-ACCESSION PERIOD AND PERSPECTIVES

### **SORINEL IONEL BUCUR**

### INSTITUTE OF AGRICULTURAL ECONOMICS

corresponding author e-mail: bucursorinelionel@yahoo.com

**Abstract:** Over the time, demography has been the subject of multiple researches, given its importance in the development process of any community. The population and the changes in its structure, as well as aspects related to birth, mortality or specific demographic indicators (economic dependency rate and demographic ageing index), represent the starting point in the development of any sustainable development strategy. In this context, the present approach aims to carry out an analysis of the demographic system in the Romanian rural area in the post-accession period, using data and public information from the national statistics, as well as information from relevant reports, with presenting of the main structural changes and existing gaps in regional level.

**Keywords:** *demography, structural changes, inter-regional gaps.* 

JEL classification: J11, J12, J13, J14.

#### INTRODUCTION

Among the problems that Romania is currently facing is the demographic one. Considered as the backbone of the development of any society, demography plays an important role in ensuring the stock of human resources for the sustainable development of society.

The demographic problems, related in particular, to the decline of the population, including by residential areas, but also of specific indicators, as well as, most of the time, the unpredictability of some forecasts, make demography a constantly topical subject not only for the environment academic, but especially for the decision makers. The adoption of measures that contribute, for example, to the reduction of the demographic dependency rate or the aging index requires, among other things, significant financial efforts oriented in this direction.

However, the current demographic trends do not reflect an intervention of the decisive factors likely to improve the demographic indicators, but, on the contrary, continue the trend of their deterioration, which is not an argument in favor of ensuring a sustainable demographic structure.

#### MATERIAL AND METHODS

From a methodological point of view, the present approach is based on public information provided by the Tempo-Online database. The time period analyzed covers the period 2017-2022, respectively 2023, depending on the availability of data. The analysis is based on established statistical methods such as comparisons, structures and dynamics, both on residential environments and on development regions.

#### RESULTS AND DISSCUSION

The transition of Romanian society from the centralist to the competitive model is characterized by radical changes in the evolution of demographic phenomena, in demographic structures. In the Romanian rural area, the phenomena reported at the level of the entire country are present, with oscillating intensities and dynamics, including at the regional (local) level.

From an administrative point of view, in 2023, the Romanian rural area includes a number of 2682 communes and 12958 villages. At the local level, the South-Muntenia region holds 18.1% of the total number of communes, while, in terms of the number of villages, the North-East region is in first place (18.7% of the total number, respectively with 2414 villages).

In the period 2017-2023, the resident population of Romania registered, in general, a tendency to decrease by 3%, a decrease mitigated by the changes that occurred at the level of the rural population. Thus, if in the urban environment, during the analyzed period, the population decreased by 5.7%, in the rural area we witness an increase of 0.1%. In fact, it is about a reversal of the migratory process from the village to the city, manifested over time, namely the return to the village.

Out of the eight development regions, the Bucharest-Ilfov region recorded the highest increase in the rural population with 20.9%, a situation that can be explained, among other things, by the proximity of the city of Bucharest, with a high level of development, to the rural localities of residence. However, three of the eight regions register a population decrease trend with percentages oscillating between 5.5% (South-West Oltenia) and 0.6% (South-East) (Table no. 1).

Table 1. Dynamics of the total population, urban/rural area in 2023/2017 (%)

	Total	Urban	Rural
TOTAL	-3.0	-5.7	0.1
North-West	-1.4	-5.2	2.8
Centre	-2.5	-5.3	1.1
North-East	0.2	-3.1	2.6
South-East	-4.1	-7.2	-0.6
South-Muntenia	-5.9	-7.5	-4.9
Bucharest-Ilfov	0.8	-1.8	20.9
South-West Oltenia	-6.2	-7.1	-5.5
West	-6.8	-12.5	2.2

Source: authors' own calculations based on Tempo-Online databases, 2023.

As a share in the total population, in three out of eight development regions the share of the population from the rural environment in total exceeds 50%, on the first place is South-Muntenia region (61.3%), followed by the North-East, South-West and South-West Oltenia. The three regions regroup 51.4% of Romania's rural population. It should be noted that during the analyzed period there is a visible tendency to increase the share of the rural population in total, with percentages between 0.4% (South-West Oltenia) and 3.4% (West) (Table no. 2).

Table 2. The evolution of the share of the rural population in the total population, on regions (%)

	2017	2018	2019	2020	2021	2022	2023	2023/2017 (%)
TOTAL	46.4	46.2	46.1	45.9	46.4	47.7	47.9	1.5
North-West	47.7	47.6	47.6	47.3	47.9	49.6	49.8	2.0
Centre	42.7	42.7	42.8	42.6	43.0	44.0	44.3	1.6
North-East	58.3	58.2	58.0	57.7	57.9	59.4	59.7	1.4
South-East	47.0	46.9	46.9	46.6	47.0	48.5	48.7	1.7
South-Muntenia	60.7	60.5	60.5	60.2	60.6	61.2	61.3	0.6
Bucharest-Ilfov	11.2	11.3	11.5	11.5	11.9	13.2	13.4	2.2
South-West Oltenia	54.3	53.8	53.7	53.5	54.6	54.6	54.7	0.4
West	39.1	39.1	39.3	39.3	40.3	42.3	42.9	3.7

Source: authors' own calculations based on Tempo-Online databases, 2023.

The structure of age of the rural population registered an oscillating evolution at the level of age groups. If on the whole rural area, the population between 0-14 years registered a slight increase of 0.7%, on development regions, there is a visible tendency to reduce the rural population included in this interval in only a little less than five out of the eight development regions, with percentages varying between 7.51% (West) and 1.89% (Center), which is not an argument in favor of ensuring a sustainable and sustainable labor force.

Moreover, in the period 2017-2022, the rural population between 15-64 years decreased in just six years by 11.9% on the total rural area, with percentages that oscillated between 18.44% (West) and 8.9% (Bucharest-Ilfov).

Against the background of the setback recorded in the two age categories, there is also the increase in the population in the over 65 segment, in all development regions (Table no. 3).

Table 3. Population dynamics by age structure in 2022 compared to 2017 (%)

•	0-14 years	15-64 years	over 65 years
TOTAL	0.7	-11.9	17.2
North-West	0.4	-11.2	17.6
Centre	-1.9	-11.3	18.5
North-East	6.3	-10.9	20.6
South-East	-3.2	-13.0	18.5
South-Muntenia	-2.8	-12.2	16.4
Bucharest-Ilfov	8.1	-9.0	13.3
South-West			
Oltenia	-1.9	-11.9	21.0
West	-7.5	-18.4	14.6

Source: authors' own calculations based on Tempo-Online databases, 2023.

Thus, raising the issue of the sustainable and sustainable development of rural communities is, first of all, due to the existence of a damaged demographic structure, an aging population and a high pressure of the elderly population on the working age, but also a disproportionate base in relation to the other categories of the population.

Calculated as the ratio between the population over 65 years old and the population between 15-64 years old, the rate of economic dependence has increased both overall and by development region, above the national average, with 2 of the eight regions (Table no. 4), which reflects the deterioration of the capacity of the working-age population in the effort to support the elderly population, against the background of the more pronounced growth of the last category compared to the population in the 15-64 age range.

Table 4. The evolution of the rate of economic dependence in the rural area on regions (%)

				1			
	2017	2018	2019	2020	2021	2022	2022/2017 (%)
TOTAL	44.1	45.8	47.5	49.3	50.8	54.7	23.9
North-West	41.8	43.3	44.6	46.2	47.5	51.3	22.7
Centre	46.8	48.7	50.5	52.2	53.8	57.5	22.8
North-East	47.3	49.5	51.6	54.0	55.8	60.1	27.1
South-East	46.2	48.2	50.2	52.1	53.9	57.6	24.6
South-Muntenia	45.2	47.0	48.8	50.6	52.2	55.3	22.4
Bucharest-Ilfov	42.5	44.2	45.8	47.7	48.9	51.7	21.7
South-West							
Oltenia	40.2	41.5	42.7	44.1	45.7	49.9	24.0
West	42.5	43.9	45.4	47.0	48.6	54.4	28.0

Source: authors' own calculations based on Tempo-Online databases, 2023.

The population ageing index, calculated as a percentage ratio between the population over 60 years old compared to the population between 0-14 years old, follows the same upward trend but with a much higher intensity. Thus, in 2022 compared to 2017, the ageing index of the rural population registered an increasing trend with percentages between 4.8% (Bucharest-Ilfov) and 23.9% (West) (Table no. 5).

Table no. 5. Evolution of the demographic ageing index on regions (%)

	2017	2018	2019	2020	2021	2022	2022/2017 (%)
TOTAL	106,8	109,1	110,9	112,6	115,8	124,3	16,4
North-West	99,7	102,4	104,4	106,3	109,8	116,7	17,1
Centre	113,3	116,4	119,5	122,5	126,9	136,8	20,8
North-East	92,1	93,4	94,3	94,7	98,2	104,4	13,4
South-East	115,6	119,2	122,9	126,7	132,9	141,6	22,5
South-Muntenia	112,6	116,4	120,4	124,7	129,5	134,8	19,7
Bucharest-Ilfov	109,5	109,7	108,3	106,9	107,2	114,7	4,8
South-West							
Oltenia	95,4	99,9	103,3	107,1	109,3	117,7	23,3
West	116,2	118,1	119,8	121,4	124,9	144,0	23,9

Source: authors' own calculations based on Tempo-Online databases, 2023.

Calculated as the difference between the number of live births and the number of deceased persons, the natural increase in the rural environment registered a continuous and increasing deterioration in the period 2017-2022 (Table no. 6). If overall, this difference increased by almost 32%, the most significant increase is in the Center region, which recorded a tripling of the difference between the number of live births and the number of deceased persons. Moreover, even in the Bucharest-Ilfov region, in six years, the natural increase became negative after in 2017 it had positive values.

Table 1. The evolution of natural increase in rural areas in a regional profile (no. of people)

_	(no. or people)									
	2017	2018	2019	2020	2021	2022				
TOTAL	-41824	-43049	-39380	-53843	-74957	-55180				
North-West	-3410	-3465	-2921	-5612	-8180	-5584				
Centre	-913	-1380	-1052	-2728	-4684	-2911				
North-East	-5672	-6762	-4923	-7469	-11830	-8640				
South-East	-7060	-7661	-7639	-8407	-11442	-9008				
South-Muntenia	-12880	-12783	-12524	-16191	-20280	-15748				
Bucharest-Ilfov	170	114	20	-260	-806	-316				
South-West										
Oltenia	-8868	-8498	-8261	-9513	-12297	-9754				
West	-3191	-2614	-2080	-3663	-5438	-3219				

Source: authors' own calculations based on Tempo-Online databases, 2023.

Without being interpreted in a negative way, but with an important effect not only from the point of view of the pressure created on the working-age population, but also in relation to the social policy measures involved, the life expectancy tends to decrease by approx. 2 years, with percentages varying between -1.2 years (West region) and -2.8 years (Bucharest-Ilfov region) (Table no. 7).

Table no. 2. Life expectancy in rural area, on regions (years)

							2022/2017
	2017	2018	2019	2020	2021	2022	(%)
TOTAL	74.13	74.19	74.23	74.36	73.61	72.75	-1.9
North-West	74.08	74.28	74.53	74.62	73.76	72.65	-1.9
Centre	74.62	74.64	74.67	74.88	74.1	73.14	-2.0
North-East	73.95	73.92	73.77	74	73.65	72.82	-1.5
South-East	73.43	73.39	73.29	73.28	73.17	72.24	-1.6
South-Muntenia	74.17	74.25	74.21	74.13	73.23	72.13	-2.8
Bucharest-Ilfov	75.34	75.13	75.2	75.79	74.78	73.76	-2.1
South-West Oltenia	74.27	74.44	74.75	74.96	74.39	73.18	-1.5
West	74.51	74.61	74.91	75.28	74.55	73.61	-1.2

Source: authors' own calculations based on Tempo-Online databases, 2023.

### **CONCLUSIONS**

During the analyzed period, we are assisting to a decline in the population in Romania. If in the urban area the reduction of the population is much more pronounced, in the rural area there is a visible trend of a slight increase in the population in the period 2017-2023 by 0.1%, with percentages that vary from one region to another.

Population growth in rural areas in certain areas can be explained by the transfer of population in the near of economically developed areas, which allow the maintenance of jobs within them, areas located being situated at a reasonable distance from the localities of residence or domicile.

A worrying trend is the deterioration of the population structure by age groups, with negative effects on the sustainability of the labor force. In addition, the growth of the elderly population, even in the conditions of a slight setback in the average life expectancy, represents a negative aspect from the perspective of the need for state intervention through measures to support this trend.

# **BIBLIOGRAPHY**

- Guran-Nica, L. (2023), Aspects of the demographic crisis in Romania, in Anthropological Researches and Studies, nr.13, <a href="https://www.journalstudiesanthropology.ro/en/aspects-of-the-demographic-crisis-in-romania/a33">https://www.journalstudiesanthropology.ro/en/aspects-of-the-demographic-crisis-in-romania/a33</a>;
- 2. Ghețău, V. (2003), Situația demografică a României avantaj ori handicap în perspectiva integrării? În volumul: Dezvoltarea economică a României, Editura Academiei Române, București;
- 3. \*\*\* Baza de date Tempo-Online, INS, București, 2023;