

GEO-DEMOGRAPHICAL CHANGES IN RURAL SPACE OF ORADEA METROPOLITAN AREA

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Abstract: An important argument in associating the bordering rural localities to Oradea municipality in order to build up a metropolitan area was to encourage and support the growth of citizens' prosperity and welfare and the continuous improvement of population's life quality. By analysing the demographic elements one can establish and interpret a series of indicators illustrating certain features of the population and which, at their turn, can stimulate or, on the contrary, slow down the metropolitan area's process of economic development. As Oradea municipality resorts to the bordering rural space for the special developing based upon the traffic's relief, development of transportation and relaxation functions, so the surrounding administrative spaces need a series of urban facilities as those linked to medical, cultural and commercial services, but also work places offered by Oradea municipality. It could be realised an economic and social cohesion as well as the promotion of a balanced development of all localities, stimulation of labour power for the quantitative and qualitative growth of economic activities, by increasing the area's competitiveness and thus being able to avoid an unjustified migration.

Key words: Oradea Metropolitan Area, rural space, rural population, demographic indicators

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INTRODUCTION

In order to register a progress in the economic development of Romanian cities it was necessary the performing of some changes that could bring a series of innovations in the local administration. To this effect, after the '90s, there were contracted a series of cooperation partnerships with many cities, as well as from Europe as from the other continents. Thus, it can be said that a new stage emerged in the cities' economic development i.e. the "stage of twin cities" (Oradea Metropolitan Area Association).

The concept of twin city appeared in Europe, not long ago after the World War II ended, precisely with the purpose to offer the possibility of closeness and understanding between the European citizens. On the other hand, through these city associations were facilitated the promoting possibilities of a series of reciprocally beneficial transnational projects.

All the same, through the "cities' confraternity" it is granted the opportunity to know more about the daily life of the citizens from other European countries, to come into contact and to carry on experience exchanges, initiate projects of common concerns such as the local development, environment, economic development and cultural differences.

Another local economic development possibility is represented by the foundation of metropolitan areas. They can contribute to the creation of a balanced partnership between the cities and the bordering rural areas, so the issues and resolutions concerning the urban politics can no longer be distinctively viewed, at the level of each city, but they must constitute concentration points for the regional developing and the assuming of responsibilities in terms of territorial cohesion (Tarța, & colab., 2007).

To this end, it was created on the 9th of May 2005 the “Oradea Metropolitan Area” Association. The association had in view - as a general objective - the economic development of the metropolitan area, and among the specific objectives it could be evoked: the alignment of Oradea Metropolitan Area to Euro-Atlantic economic and social standards in accordance with the national ones (www.zmo.ro).

Associating the territorial-administrative unities, the Oradea Metropolitan Area became an entity initially made up of 8 communes (Biharia, Borș, Cetariu, Nojorid, Oșorhei, Paleu, Sîntandrei and Sînmartin), together with Oradea municipality. To these, adhered in 2007, Girișul de Criș commune comprised of the villages: Girișu de Criș (commune centre), Cheresig, Tărian and Toboliu. A year later – 10th of January 2008 – the administrative structure of the commune is modified as a result of its split in two communes: Girișu de Criș with the villages Girișu de Criș (commune centre) and Tărian, and the Toboliu commune with the villages Toboliu (commune centre) and Cheresig.

Starting with 2010 the region of metropolitan area is extended by including another bordering commune – Ineu.

Oradea Metropolitan Area Association is a member of the European network of metropolitan regions and zones (METREX), and has in view, by applying its sustainable development strategy, for Oradea Metropolitan Area to become in the future an integrated common urban space (www.zmo.ro).

Table 1. Share of population and surface of the administrative unity in OMA
(data source: Statistical year book 2008)

No.	Name of administrative unit	Surface (km ²)	Surface (%)	Population	Population (%)
1	BIHARIA	63.37	8.41	3,915	1.56
2	BORȘ	43.41	5.76	3,548	1.42
3	CETARIU	65.34	8.67	2,187	0.87
4	GIRIȘU DE CRIȘ	45.62	6.05	3,521	1.41
5	INEU	49.51	6.57	4,266	1.7
6	NOJORID	125.57	16.67	4,646	1.86
7	OȘORHEI	64.92	8.61	6,305	2.52
8	PALEU	47.86	6.35	1,729	0.69
9	SÎNMARTIN	61.75	8.19	8,694	3.48
10	SÎNTANDREI	28.01	3.71	4,051	1.62
11	TOBOLIU	42.33	5.61	2,242	0.89
TOTAL RURAL		637.69	84.66	45,104	18.00
1	ORADEA	115.56	15.34	204,578	82.00
TOTAL OMA		753.25	100	249,682	100

Oradea Metropolitan Area reunites nowadays the following administrative and territorial unities: Oradea municipality and the communes: Biharia, Borș, Cetariu, Nojorid, Oșorhei, Paleu, Sînmartin, Sîntandrei, Girișu de Criș, Toboliu and Ineu, summing up 249,682 of inhabitants and a surface of 753,250 ha (753.25 km²), (figure 1, table 1). Thereby results a general density of 331.5 inhab/km², clearly superior towards the general density of Romania – 90.4 inhab/km² –, but if we take into consideration only the rural space then the general density is reduced to 70.7 inhab/km². Even though the rural space of OMA is of 637.7 inhab/km² (85 % of the total value), the demographic potential, however, is much more reduced comparatively to Oradea municipality, the latter being evaluated at only 45,104 inhabitants, i.e. 18 % of OMA’s total population (figure 2a and 2b).

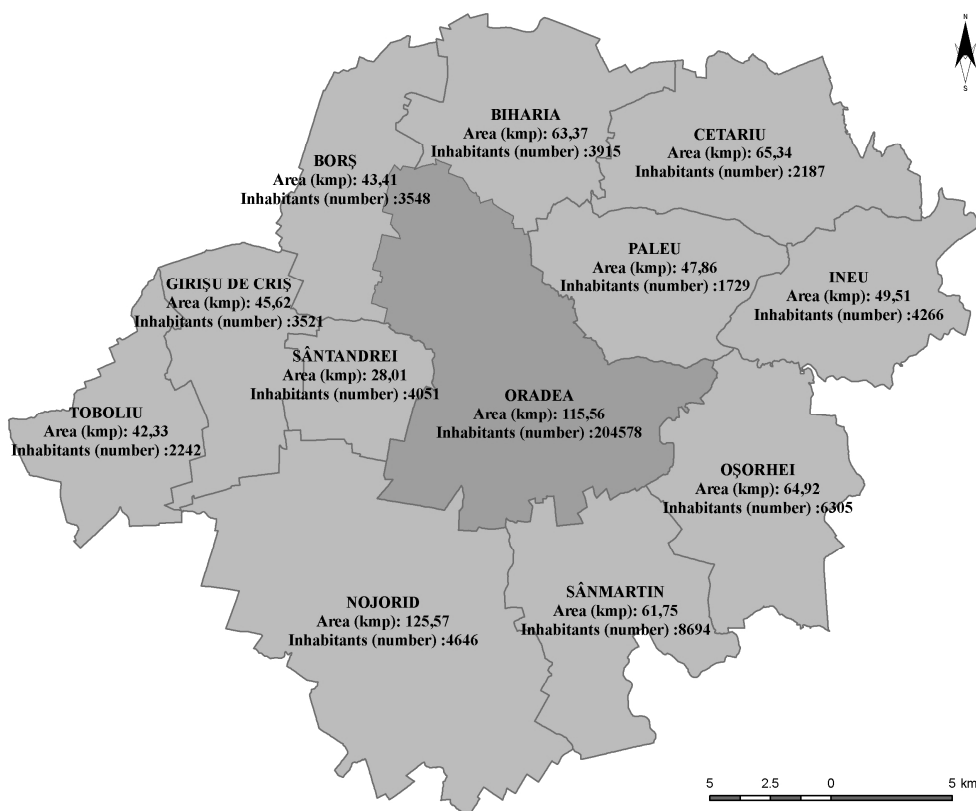


Figure 1. Administrative units belonging to Oradea Metropolitan Area (OMA)

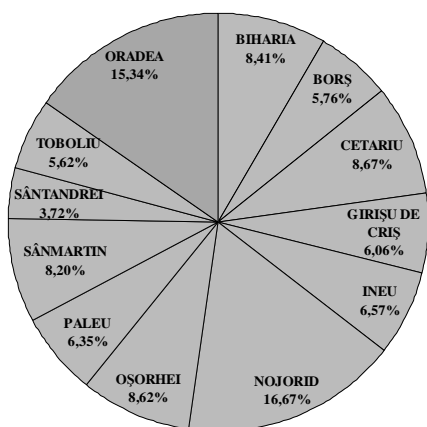


Figure 2a. The surfaces' share of administrative unities in OMA (%)

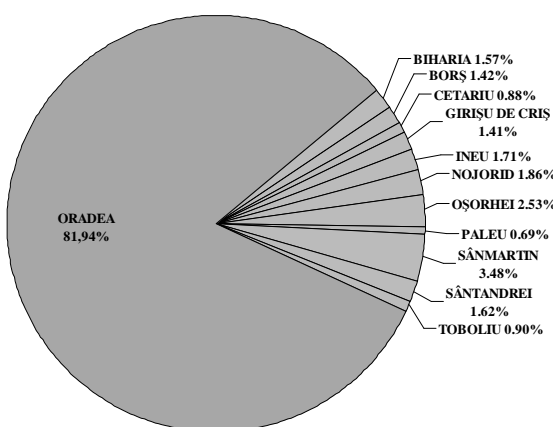


Figure 2b. The population's share of administrative unities in OMA (%)

THE DEMOGRAPHIC DIMENSION AND ITS IMPACT UPON THE RURAL SPACE IN ORADEA METROPOLITAN AREA (OMA)

The population - as a dynamic component of rural space - plays a very special role in the economic, social, and politic life. The substantiation of some rural development politics can't be performed without a good appreciation of the different aspects concerning the population's dynamics or its structures (Oțiman, 1997).

In order to intercept the rural population's dynamics within OMA we used the census data from the years 1880, 1910, 1930, 1966, 1992, 2002 as well as the data obtained from the town halls of the communes and from Oradea Metropolitan Area Association for the year 2008.

Table 2. The populations' evolution within OMA during 1880-2008
(data source: Oradea Metropolitan Area Association, Bihor County Directorate of Statistics)

No.	Commune, City	Years						
		1880	1910	1930	1966	1992	2002	2008
1	BIHARIA	3,116	3,857	3,856	4,184	3,675	3,860	3,915
2	BORȘ	3,384	3,773	3,626	3,652	3,285	3,409	3,548
3	CETARIU	2,827	3,810	3,826	1,843	2,343	2,237	2,187
4	GIRIȘU DE CRIȘ ¹	4,702	5,967	6,887	6,405	5,088	5,269	3,521
5	INEU	1,730	3,069	3,610	4,090	3,546	4,075	4,266
6	NOJORID	3,024	5,042	5,735	5,420	4,504	4,594	4,646
7	OȘORHEI	2,422	5,071	5,895	5,533	5,369	5,887	6,305
8	PALEU	2,115	2,798	2,869	1,262	1,632	1,655	1,729
9	SÎNMARTIN	2,403	3,719	4,381	5,486	7,550	7,924	8,694
10	SÎNTANDREI	1,498	2,524	4,882	3,764	3,614	3,980	4,051
11	TOBOLIU							2,242
	TOTAL RURAL	27,221	39,630	45,567	41,639	40,606	42,890	45,104
1	ORADEA	34,231	68,960	88,830	122,534	222,741	206,614	204,578
	TOTAL OMA	61,452	108,590	134,397	164,173	263,347	249,504	249,682

Following the evolution of the rural population in this time range one can notice that it presents an all over different trend towards the urban milieu (Oradea), the latter influencing the general evolution of OMA's population where the growing or decreasing periods can be clearly distinguished (figure 3). Nevertheless it can be distinguished in terms of rural population a constant increase until the year 1930, being actuated by the land reform in 1921 which facilitated the establishment of an important number of inhabitants as a consequence of land's apportionment process, thus contributing to the plane scale multiplication of the population.

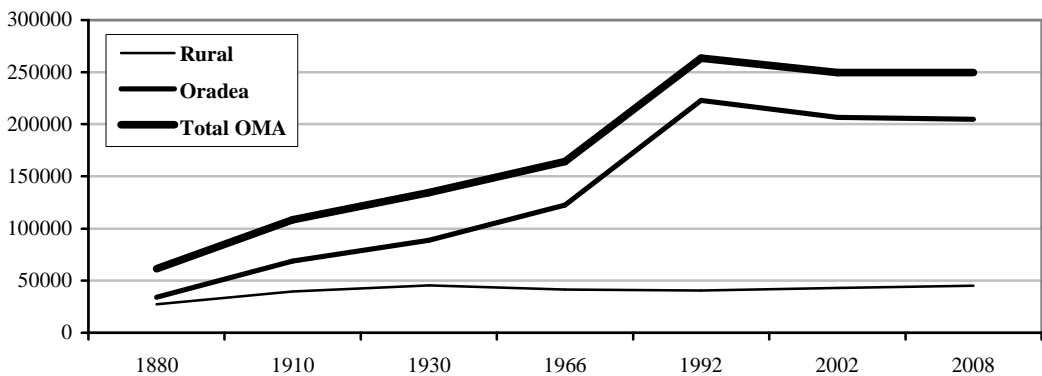


Figure 3. Evolution of OMA's population during 1880-2008
(data source: Oradea Metropolitan Area Association, Bihor County Directorate of Statistics)

After 1930 we are witnessing at a diminution of the rural population as a result of the aftermath of World War II and later on, of the instauration of the communist regime that encouraged the migration of rural population towards the urban milieu in order to sustain its industrialisation. The period after 1989 is characterised by easy fluctuations, but which follows a general ascendant trend, so that in 2008 the rural population amounted to the level registered in

¹ Together with Toboliu commune, till 2002 (inclusive)

1930. This increase was possible due to the facilities offered following the creation of OMA in order to extend the residential spaces, and the emigration of an important contingent of the population of Oradea municipality in the surrounding rural space.

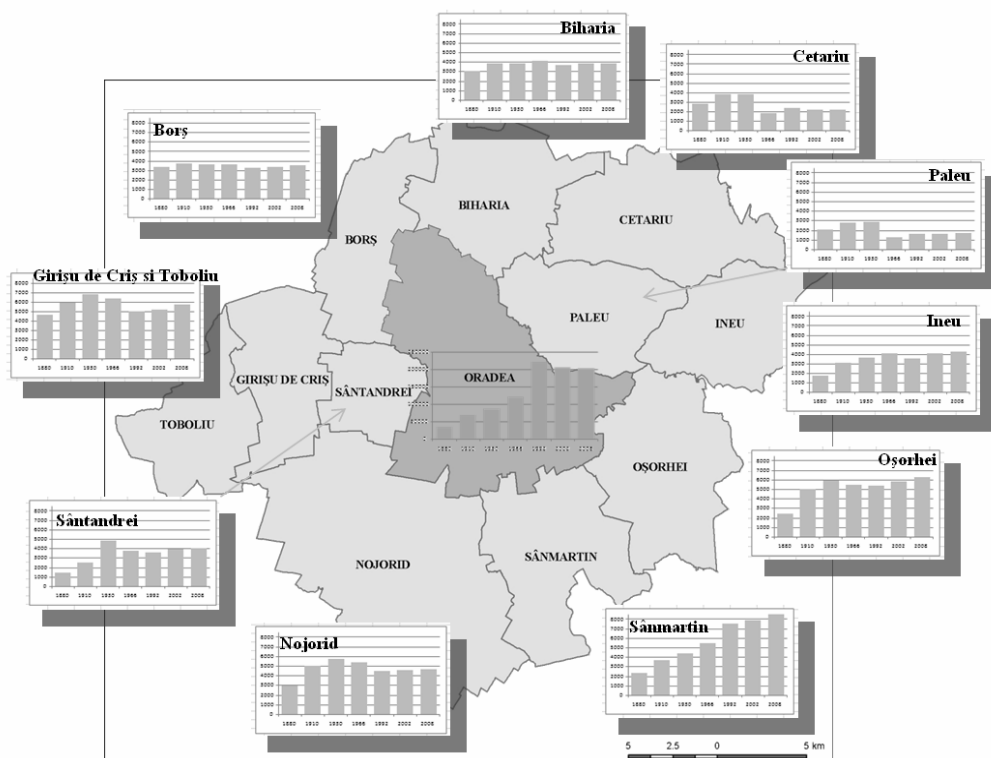


Figure 4. Evolution of OMA's population within the administrative unities (1880-2008)
(data source: Oradea Metropolitan Area Association, Bihor County Directorate of Statistics)

Table 3. The natural movement of the population within OMA during 2000-2008
(data source: Oradea Metropolitan Area Association, Bihor County Directorate of Statistics)

No.	Commune, City	2000		2002		2004		2006		2008	
		n	m	n	m	n	m	n	m	n	m
1	BIHARIA	9.6	15.5	7.9	14.2	10.1	17.6	7.9	20.2	8.7	15.3
2	BORȘ	7.7	17.9	8.0	18.6	7.5	14.9	8.5	14.6	9.6	15.2
3	CETARIU ²	8.1	22.4	7.4	20.4	7.0	20.5	13.6	24.9	7.8	15.5
4	GIRIȘU DE CRIȘ ³	12.4	17.6	8.8	15.7	13.3	13.7	12.1	14.8	17.9	19.9
5	INEU	21.6	11.0	18.4	14.6	21.8	17.4	20.5	14.2	23.2	9.1
6	NOJORID	10.5	13.3	9.3	16.2	9.3	13.8	13.9	14.8	13.3	12.5
7	OȘORHEI	12.6	12.5	13.0	14.7	13.0	10.3	13.0	14.3	11.9	10.8
8	PALEU	-	-	-	-	4.4	18.2	8.1	19.3	10.1	13.3
9	SÎNMARTIN	11.7	10.5	11.8	10.4	12.9	12.4	14.8	9.1	14.8	11.3
10	SÎNTANDREI	9.6	14.5	8.1	12.2	11.3	15.3	9.0	10.5	10.6	10.1
11	TOBOLIU	-	-	-	-	-	-	-	-	0.9	4.0
AVERAGE RURAL		11.5	15.0	10.3	15.2	11.1	15.4	12.1	15.7	11.7	12.4
1	ORADEA	8.7	9.3	8.5	10.3	9	9.6	9.9	9.7	10.4	9.6
AVERAGE OMA		11.3	14.5	10.1	14.8	10.9	14.9	11.9	15.1	11.6	12.2

Note: n – index of natality, m – index of mortality

² Together with Paleu commune, until 2002 (inclusive)

³ Together with Toboliu commune until 2006 (inclusive)

The population's numerical evolution in terms of administrative unities is synthesised in fig. 4 where it can be followed for each commune. Graphics from fig. 4 represent the evolution of the number of inhabitants for the rural milieu as well as for Oradea municipality. Hereof, it can be observed that the year 1992 represents a landmark for the share owned by the rural population. Even though the population didn't increase considerably, one can notice, however, a constant increase of it.

The rural population's *natural movement* establishes significant changes in the evolution of birth and death rate. Even though it is defined by a "natural regress", at least till the level of year 2008, a year where the balance of the two demographic indicators aim at an obvious equilibrium (-0.7 ‰), comparatively with -4.9 ‰ in 2002 (figure 6). In contrast with the rural space of the metropolitan area, Oradea municipality knows an improvement of the situation, so that starting with 2006 the natural balance registers positive values, denoting a light demographic growth as opposed to the period 2000-2005 when the natural balance had negative values (figure 6).

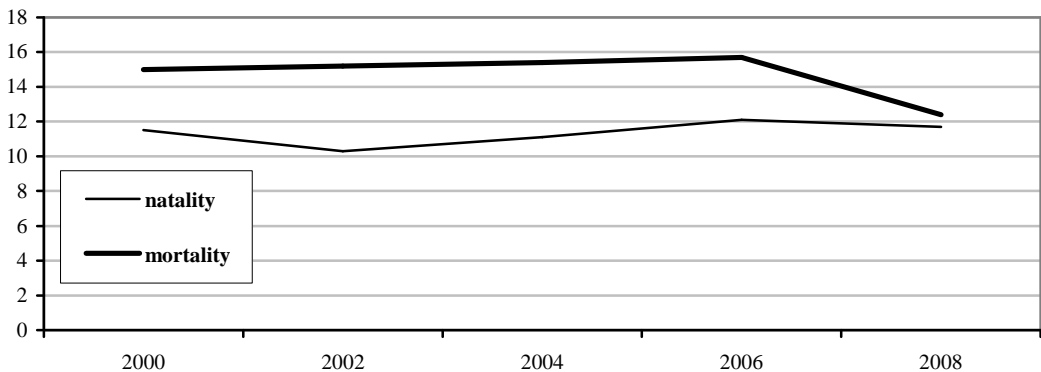


Figure 5. The natural balance in the rural space of Oradea Metropolitan Area
(data source: Oradea Metropolitan Area Association, Bihor County Directorate of Statistics)

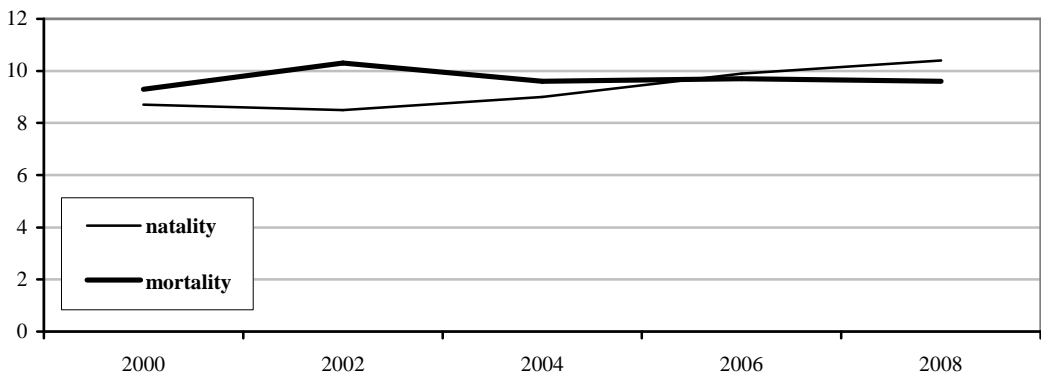


Figure 6. The natural balance of Oradea Municipality's population
(data source: Oradea Metropolitan Area Association, Bihor County Directorate of Statistics)

The situation is totally reversed in the case of *migratory movement*, videlicet in terms of rural space we are dealing with positive values of the migratory balance, thus a demographic growth generated by the immigration phenomenon of the population arrived especially from Oradea. This growth being more obvious in the analysed range (2000-2008), having a maximum value of 25.5 ‰ in 2008 (figure 7). The population's decrease through the emigration phenomenon represents a feature of Oradea municipality which since 2006 has recorded negative values of the migratory balance attaining in 2008 a value of -4.0 ‰ (figure 8).

Table 4. The migratory movement of OMA's population during 2000-2008
(data source: Oradea Metropolitan Area Association, Bihor County Directorate of Statistics)

No.	Commune, City	2000		2002		2004		2006		2008	
		i	e	i	e	i	e	i	e	i	e
1	BIHARIA	11.5	8.1	29.9	10.0	42.3	14.9	30.9	13.4	29.6	13.5
2	BORȘ	17.6	6.7	26.9	7.4	37.0	9.5	29.5	6.7	49.3	3.9
3	CETARIU ⁴	12.9	7.5	30.8	10.2	41.5	14.0	26.8	16.0	28.3	16.5
4	GIRIȘU DE CRIȘ ⁵	13.5	9.3	34.9	10.2	38.0	14.6	31.1	10.3	30.1	18.7
5	INEU	12.7	5.1	22.0	12.5	30.0	13.9	16.7	9.9	21.3	17.1
6	NOJORID	15.8	7.3	32.9	13.0	30.4	25.7	30.8	13.5	42.8	14.0
7	OȘORHEI	14.7	8.1	24.9	9.3	31.4	15.4	31.4	12.0	37.4	15.9
8	PALEU	-	-	-	-	33.3	20.1	42.9	12.4	85.0	9.8
9	SÎNMARTIN	13.8	14.5	18.6	21.2	18.7	19.7	34.5	14.5	53.0	13.5
10	SÎNTANDREI	24.7	7.8	22.8	16.6	39.3	21.3	27.4	12.5	44.2	14.3
11	TOBOLIU	-	-	-	-	-	-	-	-	6.2	9.4
AVERAGE RURAL		15.2	8.2	27.1	12.3	34.2	16.9	30.2	12.1	38.8	13.3
1	ORADEA	7.0	9.2	10.0	12.1	11.0	16.0	12.9	13.1	13.5	17.5
AVERAGE OMA		14.4	8.4	25.4	12.2	32.1	16.8	28.6	12.2	36.7	13.6

Note: i – index of immigration, e – index of emigration

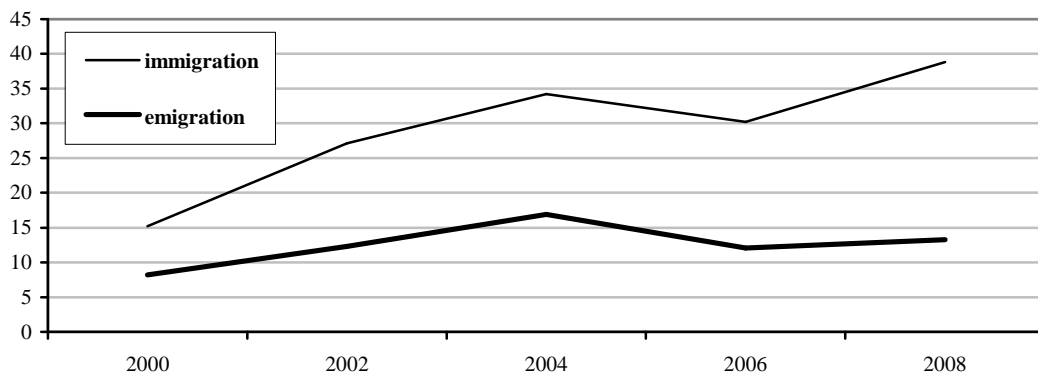


Figure 7. The migratory balance in the rural space of Oradea metropolitan area
(data source: Oradea Metropolitan Area Association, Bihor County Directorate of Statistics)

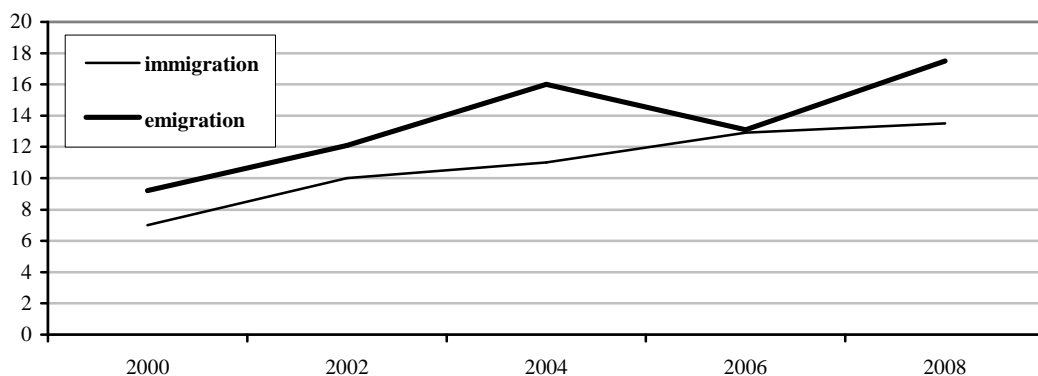


Figure 8. The migratory balance of Oradea municipality's population
(data source: Oradea Metropolitan Area Association, Bihor County Directorate of Statistics)

⁴ Together with Paleu commune, until 2002 (inclusive)

⁵ Together with Toboliu commune until 2006 (inclusive)

The population's *age group structure* within the rural space of the metropolitan area emphasizes a certain equilibrium generated by that positive migratory balance, and in the same time sustained through a revival of the natural balance which determines the young population from the pyramid's base to be pretty well accentuated (figure 9), in comparison with Oradea municipality (figure 10).

Analysing the data at the level of each commune, one can notice that the most obvious growths of the young population are in Oșorhei and Sînmartin communes (figure 11).

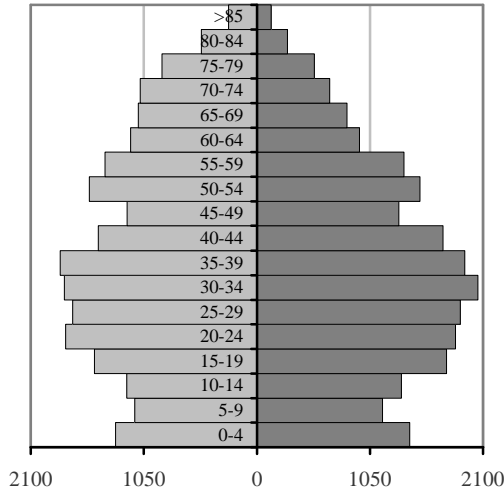


Figure 9. The population's *age group structure* within the rural space of the metropolitan area (data source: Bihor County Directorate of Statistics)

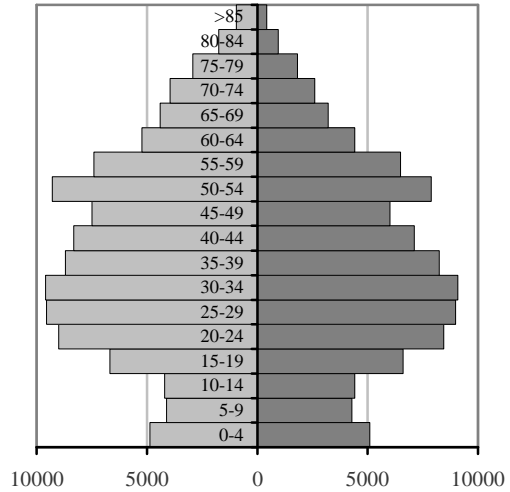


Figure 10. The *age group structure* of Oradea Municipality's population (data source: Bihor County Directorate of Statistics)

The demographic evolution and economic reorganization hallmarked the *labour power* from metropolitan area's rural space. Thus, the rural labour power plays a determinative role within the economy's flow of the metropolitan area, the latter being a significant consumer of goods and services, but in the same time an essential factor of the production.

The economic profile of the rural space from the metropolitan area is less diversified in comparison with Oradea municipality, and is mainly defined through activities linked to the primary sector, especially the agricultural one. The second and third sectors – the industries and services – don't have a significant share in communes' economic profile. One can notice, however, a couple of industrial unities in the little investors' category, but also a couple of major production units such as Celestica (microelectronic components) in Borș, Europroton (ceramic blocks) in Biharia. In Borș commune we try to draw in foreign investors by building up an Industrial Park, near DN 1, on a 25 ha surface.

An exception in respect of the economic profile is that of Sînmartin commune where the activities from the third sector prevail (especially the services), a significant share of the population being engaged in tourism activities.

After the 2002 census the employment rate from the metropolitan area's rural space was of 32.8 %, while the unemployment rate was of 3.4 %, clearly inferior towards the unemployment rate at the level of Romanian rural space which was of 10.4 % in 2002. These values can't be concretely mirrored in the rural environment because agriculture – which represents the primary sector, by its seasonal feature, claims the unskilled labour power whose activity can also be temporary.

The fact that agriculture owns an important share in the economic profile of rural space, it results from the share of the agricultural area whose value reaches 73.7 % of the total value, which, in its return, can be distributed – taking into consideration the use mode of lands – as follows: 76.7 % tillable, 1.4 % orchards and vineyards, 16.3 % pastures and 5.6 % meadow (figure 12).

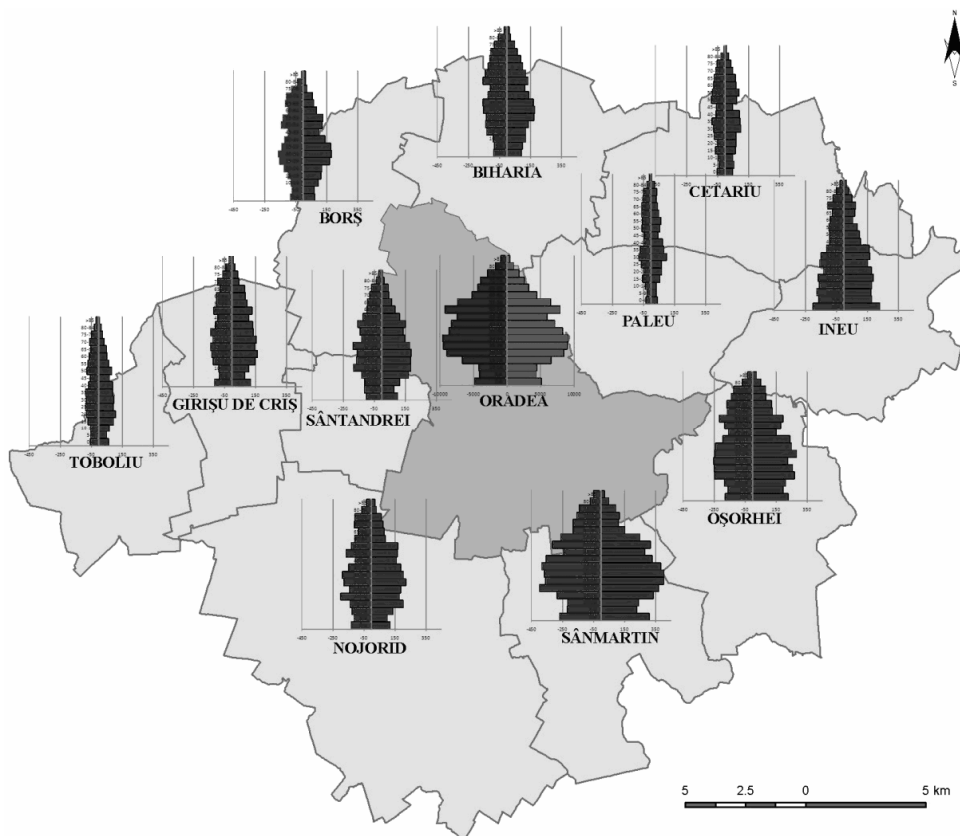


Figure 11. The structure of the population on age groups at the commune’s level (data source: Bihor County Directorate of Statistics)

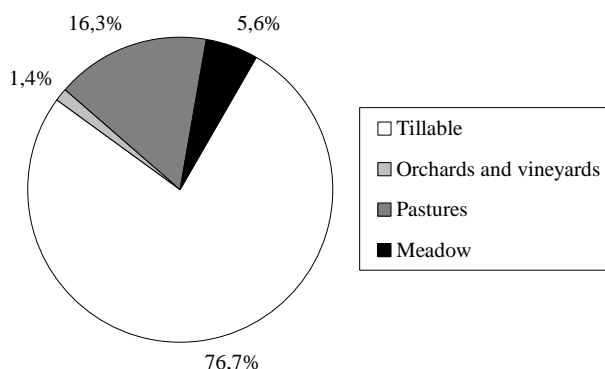


Fig. 12 The structure of agricultural real estate in OMA’s rural space (2008) (data source: Bihor County Directorate of Statistics)

Therefore, the agriculture could be an important economic factor, and concurrently an income source for the rural population even for a part of the population laid off within the urban environment. But with all the agriculture’s modernisation efforts, the land’s working still prevails in the individual system; the land’s working is practiced by more and more families.

To this effect, there are more and more vegetable growers, this phenomenon being easy to be noticed by the organisation of administrative spaces – the garden, almost entirely occupied with many solars.

CONCLUSIONS

Within Oradea Metropolitan Area, the rural space has a special signification because it can contribute to the execution of an economic and social cohesion through a balanced partnership, this being the only way to facilitate the promoting possibilities of a series of reciprocally beneficial transnational projects.

Through this partnership it was created a balanced partnership between Oradea municipality and the bordering rural areas, thus contributing to the promotion of a harmonious development of all localities belonging to the metropolitan area, encouraging the labour power and increasing the area's competitiveness.

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