Analele Universităţii din Oradea – Seria Geografie Year **XXI**, no. **2/2011** (**December**), pp. **267-275**
ISSN **1454-2749**, E-ISSN **2065-1619** Article no. **212112-534**

THE VILLAGES FROM SĂLAJ IN THE EASTERN PART OF JIBOU LOCALITY – DEMOGRAPHIC POTENTIAL -

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Abstract: The present analysis follows the natural dynamic of population during the 1990-2010 interval using statistical data provided by the National Institute of Statistics (NIS), DSJ Sălaj, and data from local level. For the analysed territory, demographic risks are represented by the unbalanced sex structure of population, the descendant evolution of natality, to which the political-economic factor adds, an in consequence all administrative units are affected by demographic ageing. The values of the ageing coefficient show that Băbeni and Letca are communes which belong to the fifth demographic risk category (maximum) and the viability of these settlements is endangered.

Key words: demographic risk, population dynamic, communes, ageing, Sălaj

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INTRODUCTION

Essential part of the Planning Territorial Unit Some Valley from Sălaj County (SCDP, 2006; DSPTUSV, 2009), the analysed geographic space is characterised by a high degree of rurality, marked by the absence of urban settlements. The analysed unit unfolds between the counties Cluj (to the south and east); Maramures (to the north) and the rest of the Sălaj County to the west of the allignment of the localities Benesat - Surduc - Gârbou. The 14 communes and 83 constituent villages occupy a total surface of 852,64 sqkm and comprises 25,818 inhabitants, their number continuously decreasing by 41.6% compared to the year 1992, when population was of 43,956 inhabitants (figure 1).

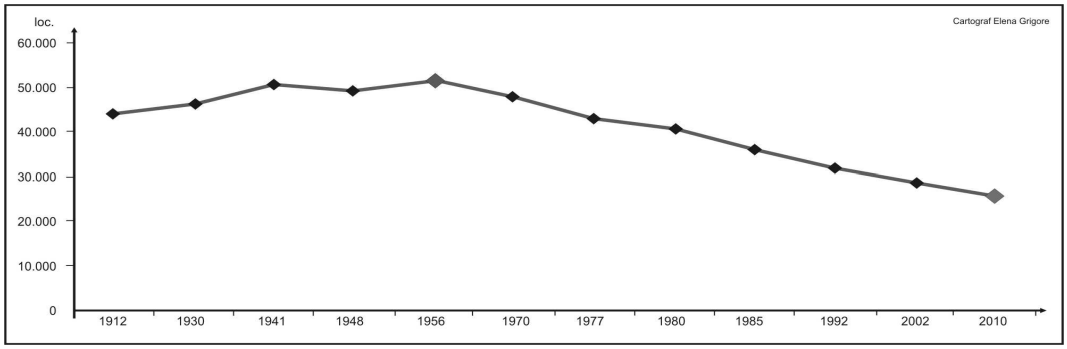

Figure 1. The evolution of the number of inhabitants during the interval 1912 - 2010

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The dynamic of population in the studied area emphasizes two evolution tendencies, clearly delimitated: an ascending tendency until 1956, when the maximum number of inhabitants is reached (51,632); and a descending tendency, until present, whose increase rate, with a negative value, largely exceeded the demographic growth from the first half of the XX-th century, leading to the present situation, of demographic retrogression.

Within the terittorial profile, the numeric evolution of the population presents the same characteristics, the difference being given by the rhythm in which the decrease of the number of inhabitants in the interval 1912 - 2010 produced, even if for short intervals of time some communes registered insignificant increases of population. In table no. 1 it can be noticed that the value of the increase rate of the population presents very large fluctuations, between -3.7% (Surduc) and -60% (Zalha), most of the studied communes - 46% having an increase rate of -40%; -50%.

Table 1. Increase rate (%) during the period 1912 - 2010
(Data source: calculated by INS, DJS Sălaj)

Period	Name of locality													
	Băbeni	**Benesat**	**Cristolț**	**Gâlgău**	**Gârbou**	**Ileanda**	**Letca**	**Lozna**	**Năpradea**	**Poiana Blenchii**	**Rus**	**Șimișna**	**Surduc**	**Zalha**
1912-1956	26,9	26,6	32,8	1,0	5,2	4,6	26,9	22,9	13,3	16,8	14,0	-	47,6	23,1
1956-2010	-51,9	-33,6	-43,4	-42,6	-57,7	-36,8	-54,1	-56,4	-32,0	-44,8	-55,0	-	-32,9	-62,6
1912-2010	-42,5	-15,2	-25,1	-44,3	-55,9	-44,4	-49,1	-54,9	-29,1	-41,1	-48,7	-	-3,7	-60,0

Population density, the direct expression of its territorial distribution, presented in figure 2, underlines the higher concentration of population within the commune Bensat (55.4 inhabitants / sqkm), followed by Surduc (51.7 inhabitants / sqkm), and reduced values of the population are registered in Lozna (16.9 inhabitants / sqkm) and Zalha (18.6 inhabitants / sqkm).

On the whole, the population of the analysed territory continues its descending trajectory, started in the year 1956, with a rather alert rhythm after the year 1990, enframing in the national tendency of demographic evolution which is characteristic to the countries in transition towards a developed economy. In general, this numerical decrease of population is determined by the natality decrease, mortality increase, rural-urban migration, which led to unbalances within the population structure and to the apparition of the phenomenon of demographic ageing, to which historical and environment local factors add (Sorocovschi et al., 2009).

The study of the natural movement of population starts from the number of births and deaths, these being indicators whose action upon the population of a territory is quantitatively shown by natality (or natality rate quantified by the number of births per 1000 inhabitants) and mortality (or mortality rate quantified by the number of deaths per 1000 inhabitants).

The present analysis follows the structural dynamic of population during the interval 1990 - 2009, using statistical data provided by NIS, DSJ Sălaj, the communes' fiche and the local mayor's offices.

Natality at the level of the analysed territory presents relatively low values, a situation which characterises the entire country, having oscillations in time from 11.18‰ in 1990 to 9.25‰ in 2005, and at the level of the year 2009 the number of births increased to 267 people, and the value of natality became 10.26‰.

In the territory, the birth rate is different from one commune to another, the highest values being in Ileanda (17.3‰), Gârbou, Poiana Blenchii and Rus, and the lowest values are characteristic to the communes Băbeni, Cristolț and Șimișna. We also notice that for approximately 57% of the administrative units, the number of births decreased, if we compare them between 2005 and 2009 (figure 3).

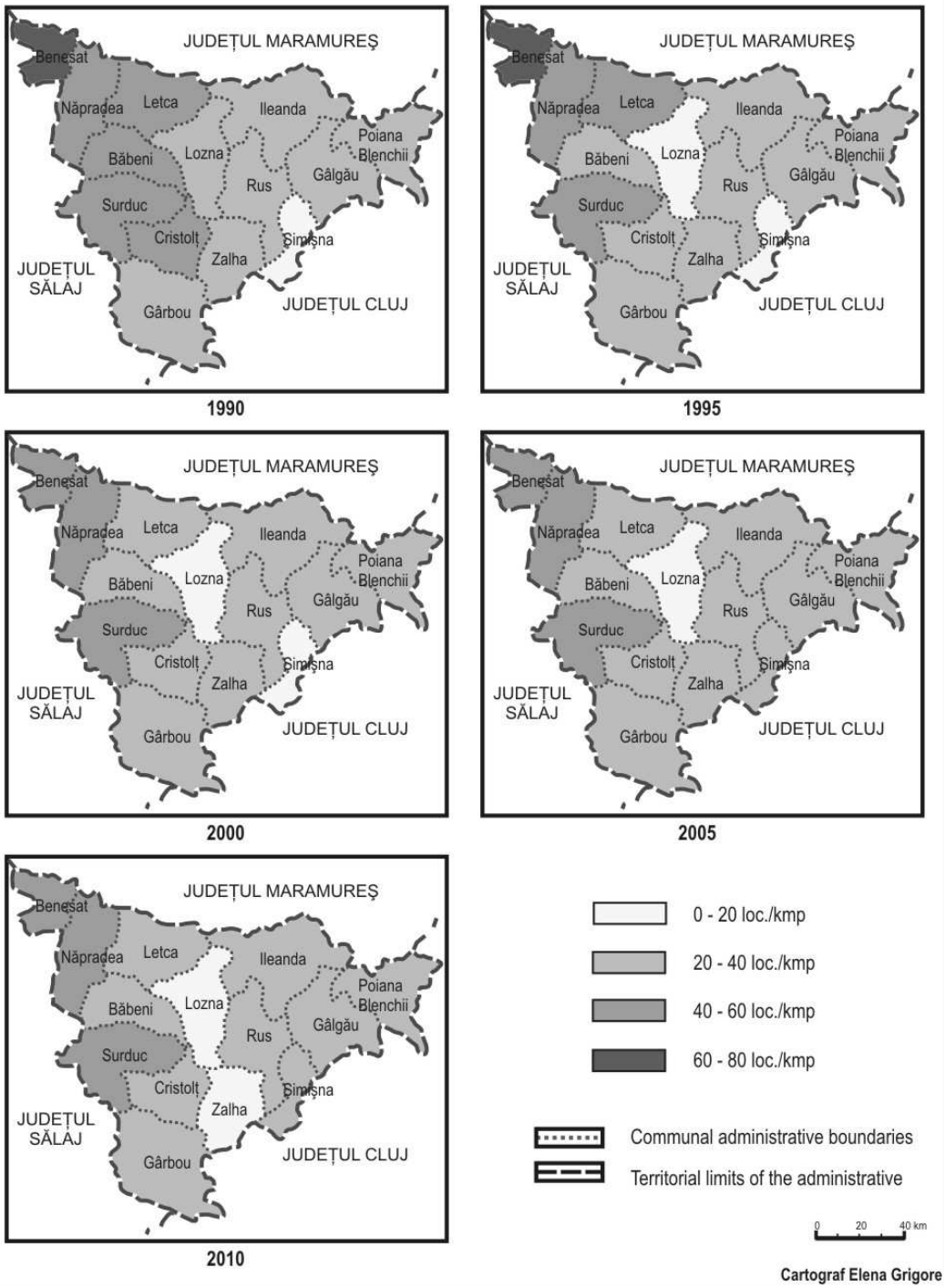

Figure 2. The distribution of population density

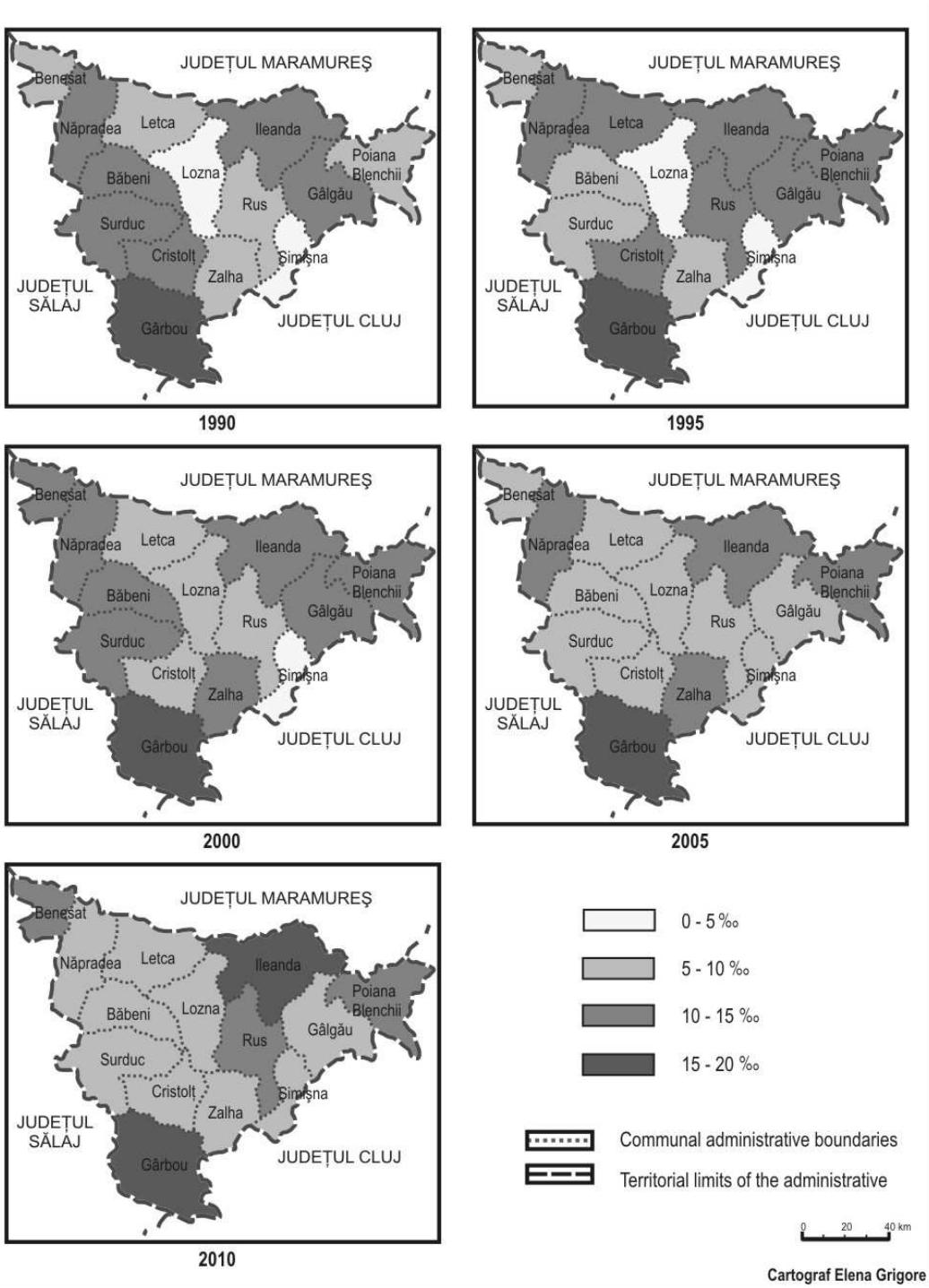

Figure 3. Population natality between 1990 and 2010

Instead, *mortality* registers high values of deaths, enframing, in its turn, in the national evolution trend. If natality decreased until 2005, and in 2009 it rectified, mortality had an inversed

evolution, increasing its value from 18.7‰ (1990) to 21.9‰ (2005), and in the year 2009 mortality rate reduced almost insignificantly, with only 0.4‰, due to the diminishing of the number of deaths, to 559 people, in comparison with the year 2005 (figure 4).

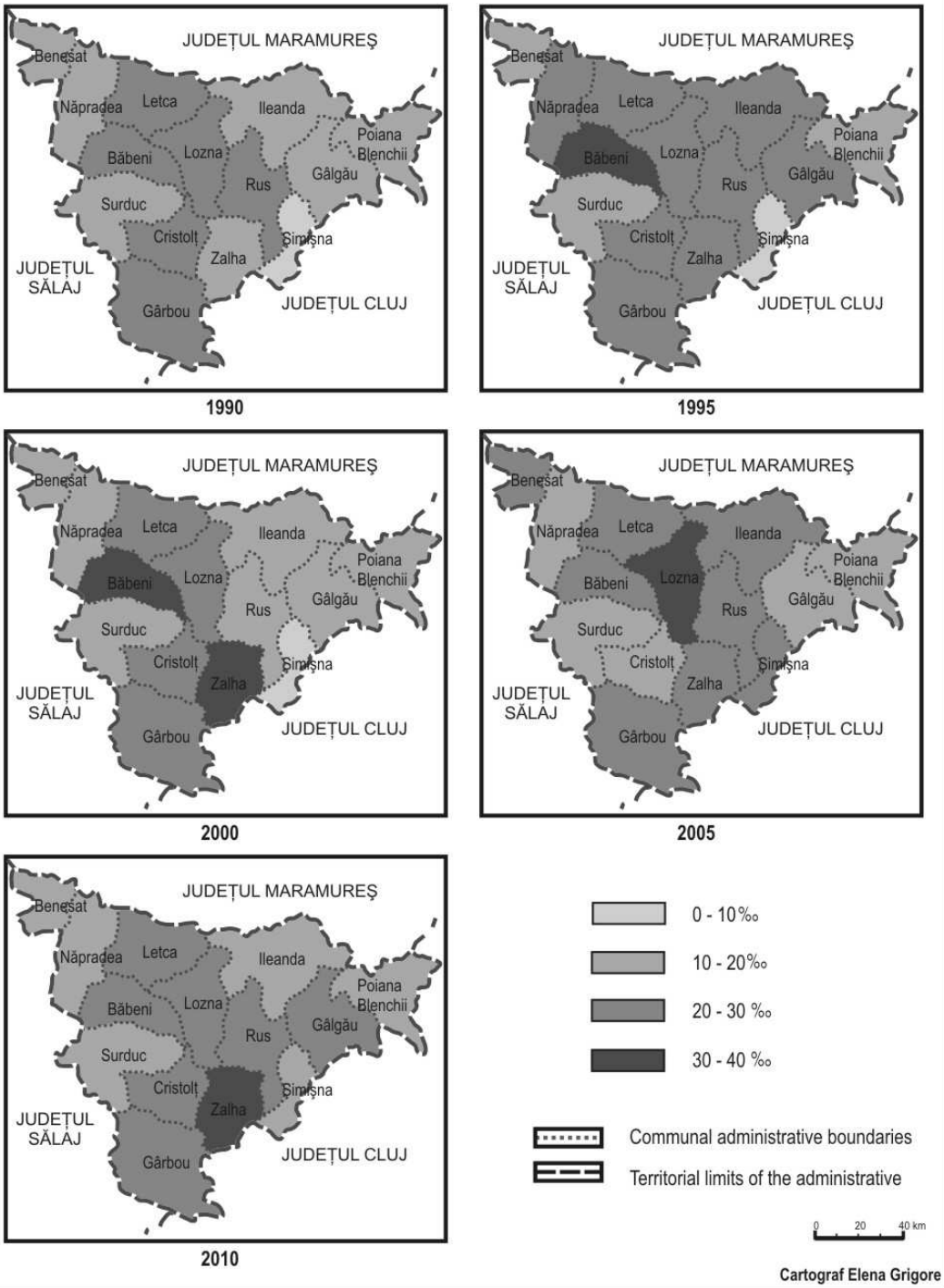

Figure 4. Population mortality between 1990 and 2010

In territorial profile, mortality shows values significantly differentiated at the administrative unit level, starting from 36.6‰ in Zalha and 31.6‰ in Gârbou and up to 11.9‰ in Şimişna and 15.1‰ in Benesat, approximately 43% of the communes being situated in the value interval 10 - 20‰.

National augmentation, the expression of the difference between natality and mortality, has negative values, both at the level of the entire territory and at national level, oscillating betwwen -1.6‰ (Poiana Blenchii) and -26.9‰ (Zalha). This situation has an important weight upon the numerical dynamic of the population, substantially contributing to the descendant tendency of the inhabitants of the analysed territory, thus determining population losses and endangering rural development by the reducing of the human resource.

As regards the **population territorial movement**, this indicator offers us the image of the inputs and outputs of a space demography, comparing cumulated value of the establishment and immigrations in the territory with the leaving and emmigrations from the territory. In general, the balance of the population territorial movement is negative, except the years 2000 and 2005, due to the people who established their domicile in the analysed area (in the year 2000 there were recorded 424 persons). At the level of the year 2009, in most communes (64%) there were recorded population losses, due to the leaving from the locality, the most important loss was supported by the commune Poiana Blenchii (-10.5‰). At the opposite pole there is the commune Ileanda, which benefited of the input of 64 arrived persons, which contoured a proportion arrived / departured of 12.2‰ (table 2).

Table 2. The rate of the establishment and leaving of inhabitants (‰)
(Data source: INS, DJS, Sălaj)

Locality	1990		1995		2000		2005		2010	
	Imigration rate	Emigration rate	Imigration rate	Emigration rate	Imigration rate	Emigration rate	Imigration rate	Emigration rate	Imigration rate	Emigration rate
Băbeni	6,11	46,86	9,32	15,39	14,49	13,97	9,85	11,41	18,87	15,54
Benesat	3,46	22,78	0,00	16,88	21,03	12,01	17,83	8,61	11,95	10,69
Cristolţ	11,65	46,08	7,59	28,05	80,01	11,10	4,62	10,57	5,70	12,12
Gâlgău	14,54	51,42	14,24	16,38	23,79	6,12	8,26	9,76	11,32	21,43
Gârbou	5,09	73,29	19,69	24,70	7,90	13,83	10,78	13,81	14,20	23,36
Ileanda	10,57	36,99	32,53	24,39	19,85	13,23	17,56	10,03	27,11	14,83
Letca	2,46	39,73	16,38	12,78	16,40	10,19	14,22	12,84	8,83	15,70
Lozna	20,05	52,74	34,85	30,70	27,58	9,78	8,27	25,73	23,18	19,32
Năpradea	5,58	33,85	32,78	17,75	16,19	10,46	12,76	8,73	11,53	16,78
Poiana Blenchii	6,44	46,89	9,33	18,66	7,30	16,80	7,77	10,87	17,78	28,29
Rus	0,97	61,11	13,58	17,16	13,78	12,20	20,51	6,83	20,92	12,73
Simişna	0,00	0,00	0,00	0,00	0,00	0,00	0,73	2,20	8,79	14,38
Surduc	12,03	35,85	25,07	23,62	9,78	7,34	15,78	13,19	15,75	19,22
Zalha	1,23	67,94	21,44	29,58	8,43	14,33	6,45	8,30	8,23	10,28

The population structure represents its division into several categories and groups taking into account a series of demographic characteristics, and the study and control of their evolution represents the main condition of social development, and also of the limitation of the effects of some possible unbalances which might appear in the given territory (Vert, 2001).

The indicators regarding age and sex are essential demographic traits, the structure on age and sex groups having a major importance in understanding other phenomena (natality, mortality etc) with a special impact upon economic activities, and the detailed knowledge about these structures offers us useful information about the tendencies of population evolution. For the analysed geographic space, *the structure of population per age groups in the year 2010* (figure 5)

was analysed, and from its interpreting it contours the phenomenon of population ageing, emphasized with the help of the indicator of demographic ageing. The value of this indicator is given by the direct relationship between old population (60 years old and over) and young population (0 - 20 years old) and it is 1.68 at the level of the entire analysed territory.

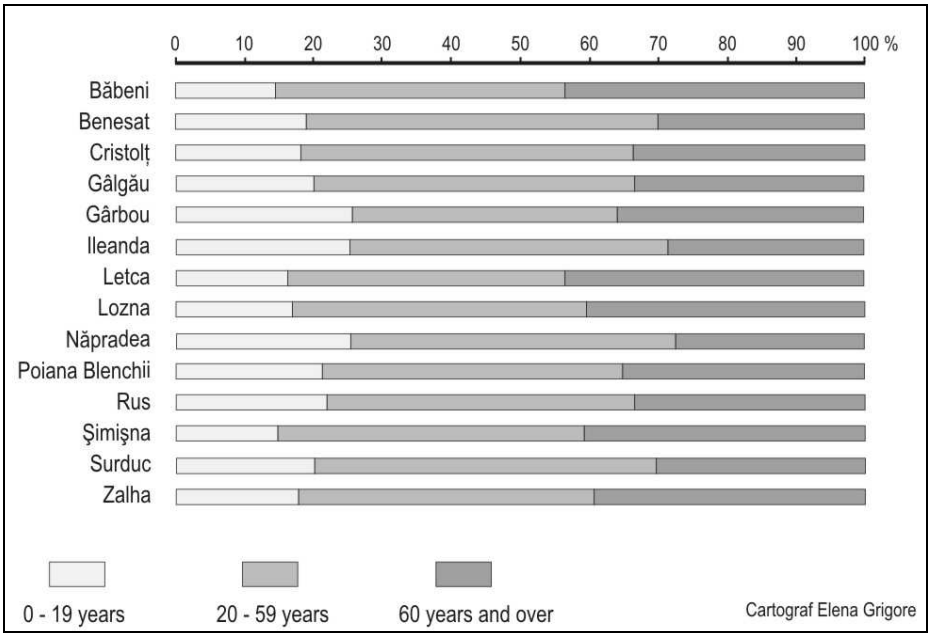

Figure 5. The population structure per age group of the eastern Sălaj communes, 2010
(Data source: INS, DJS, Sălaj)

In the territory, critical situations are met in the communes Băbeni (259 young persons against 780 persons with age of 60 and over), Şimişna (183 young persons against 509 old persons) and Letca (324 young persons against 874 old persons). It is worrying the fact that the indicator of demographic ageing has supraunitary values in all the analysed communes, varying from 1.06 (Năpradea) to 3.01 (Băbeni), existing 4 administrative units where the percentage of old population exceeds 40% out of the total of population.

The population structure on sexes (2010) shows a slowly increased percentage of the female population of 51.7% (figure 6) the eastern - Sălaj analysed space exceeding by this value the normal unbalance of 1 - 2 percentages in favour of the female population, due to the higher life expectancy of women. In the territory, the same dominance of the female population can be noticed, except the commune Zalha where there is a balance between the two indicators, also mentioning the fact that the commune Băbeni detaches as the administrative unit with the lowest number of male population (45.9%).

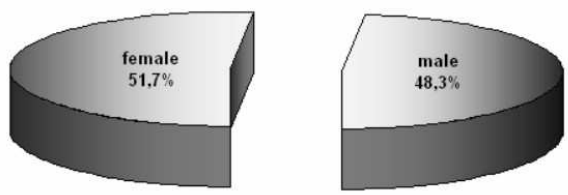

Figure 6. The population structure on sexes in the year 2010

In the specialised literature it contours more and more clearly the notion of risk, defined by several authors as Bogdan and Niculescu (1999), Ianoş (2000), Cocean (2007) etc., in whose vision risk represents the possibility of the apparition of a phenomenon or process with negative consequences. Cocean (2007), quoted by David and collaborators (2010) underlined that: if in case of natural risks it can appear as events less predictable, wich manifest through intempestive leaps from one state to another, in the moment when critical energetic threshold are exceeded, the events in the category of demographic risks, analysed in the present paper, have got a gradual manifestation. By adding, we also mention the definition of demographic risk offered by Surd (2001) ... *„an extreme social process (phenomenon), dangerous for the individual and society in its whole, whose consequences are materialized in social disasters, measured also in the number of victims."* Surd and collaborators (2007) concluded that, most of the times, the notion of demographic risk ressembles a manifestation of negative type which endangers society, and the higher the number of actions, the closer the producing of turbulences to the release phase is.

In the analysed territory, demographic risks can be due to the cumulated action of the demographic ageing process (by the modifying of the population structure per ages in favour of those old people) as a long term tendency, with the unbalance of the structure per sexes of the population and with the descending evolution of natality, to which we can also add the national socio-economic context of a country in transition, which finds itself within the phase of the unfolding of the process of joining the EU. On the whole, all the analysed administrative units are affected by demographic ageing, a process identified by the calculation of the ageing coefficient, and in almost 93% of the communes the female population dominates numerically the male population (table 3, figure 7, figure 8).

Table 3. Demographic coefficients (2010)
(Data source: calculated by INS, DJS Sălaj)

Administrative units	Ageing coefficient	Feminization coefficient number of women per 100 men
Băbeni	4.06	117.7
Benesat	2.09	106.9
Cristolț	2.69	100.7
Gâlgău	2.13	106.5
Gârbou	1.73	101.7
Ileanda	1.58	114.0
Letca	3.34	117.3
Lozna	2.95	113.3
Năpradea	1.40	105.8
Poiana Blenchii	2.24	102.1
Rus	1.95	106.5
Simişna	3.69	109.8
Surduc	2.07	104.6
Zalha	2.76	100.0

By corroborating the two coefficients, the conclusion is that the analysed space comes under the median class of demographic risk, but detaching the communes Băbeni and Letca which belong to the fifth category of demographic risk (maximum), where the settlements' viability is endangered.

It is mentioned that the descending tendency of demographic factor in most of the localities from the Eastern part of Sălaj may determine in the future the insufficiency of the necessary of human resources for covering the jobs. At present, the analysed space confronts problems like this, therefore the authorities from Sălaj should draw up viable economic strategies to create jobs and their occupying by local active work power.

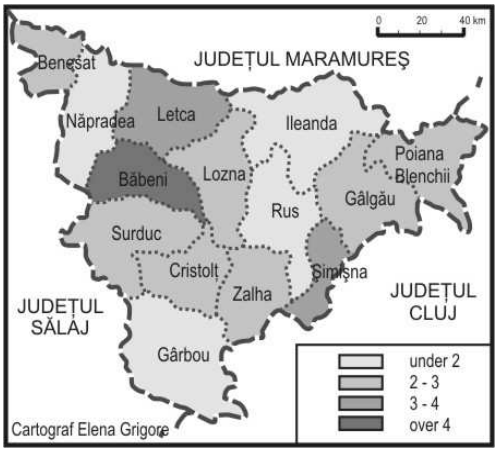

Figure 7. The demographic ageing coefficient (2010)

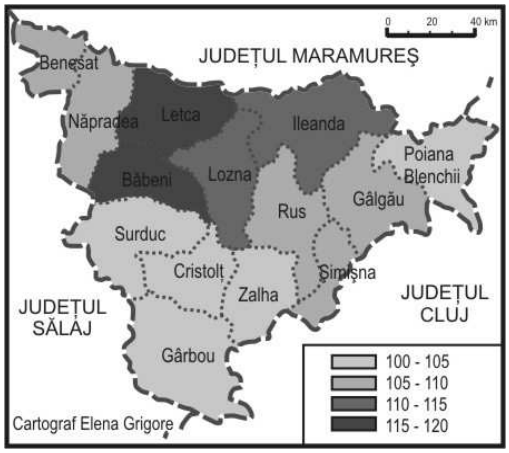

Figure 8. Feminization coefficient (2010)

ACKNOWLEDGMENT

This work was supported by the project POSDRU/88/1.5/S/61150 *„Doctoral Studies in the field of life and earth sciences"*, a project co-financed through Sectorial Operational Program for the Development of Human Resources, 2007-2013, from European Social Fund.

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Submitted: June 07, 2011 | Revised: September 05, 2011 | Accepted and published online September 16, 2011