THE RURAL SPACE OF THE SOUTH-MUNTENIA REGION –EVOLUTIONS AND DISPARITIES OF THE DEMOGRAPHICAL INDICATORS' VALUES IN THE COUNTIES: GIURGIU, IALOMIȚA, CĂLĂRAŞI AND TELEORMAN

BUCUR SORINEL IONEL*[1]
[1]Institute of Agricultural Economics, Bucharest, Romania
*Corresponding author's e-mail: bucursorinelionel@yahoo.com

Abstract: *As essential element of any strategy of local development, the demographical structure of a given area presents a special importance at least from two considerents: the first, linked to the sustainability of the human factor in a territory, and the second, to ensure the labour force on local plan. Starting from these considerents, the present approach proposes itself to realize an x-ray of the rural space of the South Muntenia Region,from the perspective of the structural modificatons intervened at the demographical indicators' level .*

Key words: *demography , sustainable development, development region, indicators*.

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INTRODUCTION

The approach of the changes intervened in the population structure of a given area presents a special importance linked, mainly to the impact upon the way of building any social policy or strategy of sustainable development. Starting from these specifications, the present approach proposes itself to bring forth the main modifications intervened at demographic level in four of the seven counties of the South Muntenia Region, adding this way, to the informational stock present until now.

MATERIALS AND METDODS

The modifications produced along time in the population structure have made and still make the object of some valuable research studies, not only at academic level, but also at level of the decident factors, its population and structure being able to represent the spine of an area, but also the central element around which there gravitates any local development strategy. Starting from the already existent studies, the present approach proposes itself to realize a comparative x-ray of the demographic profile at the level of the rural space of the South-Muntenia Region, in view of identifying the intra and inter-county disparities. Taking into account the fact that the South-Muntenia Region is re-grouping a number of 7 counties, being practically the biggest development Region of Romania, and the informational support is extremely complex, the present approach is axed on the analysis of indicators in four of the seven counties, which are: Călăraşi, Ialomiţa, Giurgiu and Prahova. The choice for the four counties has started from their similarities, respectively: the spatial characteristics and environment- relatively homogeneous.

Starting from the above considerents, in view of measuring the existent disparities at the level of the demographical indicators from the four counties in view, the present approach was based on the data supplied by the National Statistics Institute (NSI), through the Tempo-Online data base. From the point of view of the informational support, we must retain that the statistical data refering to population are covering the time horizon 1992-2016, both per total county, and at locality level.

RESEARCH RESULTS

a) Considerents regarding the demographical dimension of the rural communities in the counties: Călăraşi, Ialomiţa, Giurgiu and Prahova from demographical perspective

In opposition to the other three counties-components of the South Muntenia Region, respectively : Argeş, Dâmboviţa and Prahova, characterized through the presence of all the relief forms (hill, mountain and plain), generating of economic pluri – activities and implicitly of creating significant gross value added, in the counties analized, along the present approach - Călăraşi, Ialomiţa, Giurgiu and Prahova – the essential feature is given by the prevailing of the plain zone, which induces the idea of development of activities mainly in the agrifood domain.

From demographical perspective, **Călăraşi County** registered in the period 1992-2016 a recoil of total population of 7.8%, with percentages which oscillated between -8.3% (rural) and -7,1% (urban). The rural space of the county is re-grouping 60% of the total population, 40% being localized in the urban environment. The average size of a commune is of 3,795 inhabitants, over this average being situated a number of de locuitori, 20 communes. The Commune :Modelu is re-grouping 10,599 inhabitants, being the biggest commune from population point of view, at the opposed pole being: situându-se Gurbăneşti (1,183 inhabitants). As share in total population, the 20 communes situated over the average are re-grouping 60% of the total population in the county's rural space, with percentages oscillating between 5.6% (Modelu) and 2.1% (Cuza Vodă).

As opposed to Calarasi county, **Giurgiu** county is re-grouping, at the level of the rural space 67.5% of the total population, 32.5% of the population having the domicile in the urban evironment. Comparatively to the year 1992, the population of Giurgiu county diminished in the year 2016 by 11.8%, the rural space registering a diminution of 13 percents. The average size of a commune is of 3,655 inhabitants, over this average being situated a number of 17 communes. With a number of 8,601 inhabitants, the commune Floreşti-Stoeneşti is the biggest commune of the county, at the opposed pole being situated Bulbucata commune (1,374 inhabitants). As share in total population, the 17 communes are re-grouping 52.9% of the total population of the rural space, with percentages oscillating between 4.6% (Floreşti-Stoeneşti) and 2.2% (Buturugeni).

In **Ialomiţa county**, 52.6% of the population have their domicile in the rural space, 47.3% being re-grouped in the urban environment. Comparatively to the year 1992, the total population of the county diminished in the year 2016 by 6 percentages, the biggest reduction being the most significant reduction being registered in the rural environment (-9,6%), as for the urban environment, the population being reduced only by 1.7%. The average dimension of a commune is of 2,609 inhabitants, over this average situating a number of 23 communes. With a number of 7,016 inhabitants, Bărbuleşti is the biggest commune, at the opposed pole being situated Ciocârlia, with only 780 inhabitants. As share in total population of the county, the 23 communes are re-grouping 56% of the population's total, with percentages oscillating between 4.6% (Bărbuleşti) and 1.7% (Gheorghe Doja).

On the same rurality trend is also inscribed **Teleorman county**. Characterized by a number of 92 communes, the rural space of the county is re-grouping 63.6% of the population's total, 36.4% of the population having the domicile in the urban environment. The average dimension of a commune is of 2,675 inhabitants, over this average situating 40 communes. With a number of 7,457 inhabitants, Orbeasca is the biggest commune of the county, at the opposed pole being situated Rasmireşti, with only 863 inhabitants.

As share in total population, the 40 communes situated over the average are re-grouping 57.6% of the county's population, with percentages oscillating between 3% (Orbeasca) and 1.1% (Ciolăneşti).

As indicator characterizing the repartition of the population on total area of an areal, in the year 2014, the population's density is oscillating between 40.3 inhabitants per square km. (Giurgiu) and 55.7 inhabitants per square km. (Ialomiţa), between the two being intercalated: Călăraşi (41.9 inhabitants per sq. km.) and Teleorman (47.7 inhabitants per sq. km.). Synthetically expresssed, the four counties are presenting the following characteristics:

Total communes number: **251**	Total population in rural: **788 452 inhabitants**	Average density of the population: 46.4 inhab. /sq. km.
Teleorman – 91 communes;	Teleorman – 252, 594 inhabitants;	Ialomiţa – 55.7 loc/kmp;
Ialomiţa – 59 communes;	Călăraşi - 192 160 inhabitants;	Teleorman – 47.7 loc/kmp;
Giurgiu – 51 communes;	Giurgiu – 187, 622 inhabitants ;	Călăraşi – 41.9 loc/kmp;
Călăraşi – 50 communes.	Ialomiţa – 156 076 inhabitants .	Giurgiu – 40.3 loc/kmp.

The involutions registered in the demographical indicators are the result of some pyramids of the ages- totally unbalanced- in all the four analysed counties. Thus, in the rural space of these counties comparatively to the urban environment, the share of population by age categories is constantly exceeding the values registered in the urban space , evidencing an aged population (**Figure 1**).

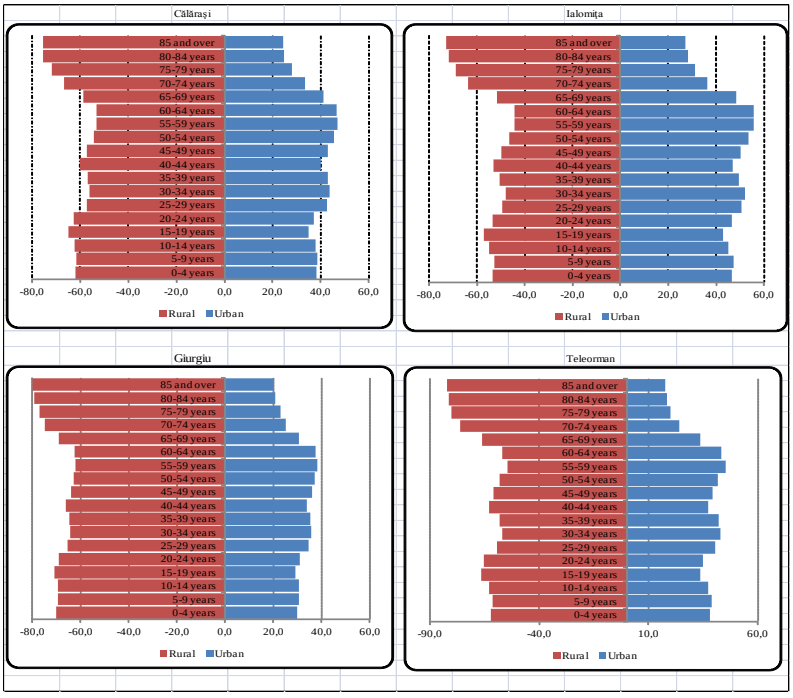

Figure 1. Population's pyramid in the counties: Călăraşi, Giurgiu, Ialomiţa and Teleorman, by averages and age groups, in the year 2016 (%)

Source: Calculations on basis of data from Tempo - Online, 2017.

b) Evolutions and structural modifications of the demographical indicators

From the perspective of the demographical indicators, the present approach had in view the modifications intervened at the level of: rate of economic dependence, the index

of population's ageing and the population of over 80 years old, as well as the evolution of the birth rate, mortality rate and natural increase .

Calculated as ratio between the population of over 65 years old and that comprised in the interval 15-64 years old, the rate of economic dependence in the rural environment of the three counties (**Table 1**) increased in the year 2016 comparatively to the year 1992, with percentages oscillating between 6.6% (Giurgiu) and 33.3% (Teleorman) which is reflecting the increase, by different intensities of the old population's pressure towards the labour force.

Table 1.

Evolution of the economic dependence rate in the rural space of the analysed counties in the period 1992-2016 (%)

Year	CL	IL	GR	TR
1992	23.8	23.9	29.6	32.0
1993	24.9	24.9	30.8	33.4
1994	26.1	25.8	32.1	34.6
1995	27.0	26.8	33.2	35.9
1996	27.6	27.4	33.7	36.8
1997	28.5	28.5	34.5	38.0
1998	29.6	29.5	35.6	39.1
1999	30.5	30.4	36.1	39.8
2000	31.2	31.4	36.6	40.8
2001	32.1	32.3	37.4	41.9
2002	32.4	32.9	37.7	42.7
2003	32.6	33.3	37.7	43.3
2004	32.5	33.5	37.5	43.6
2005	32.9	33.9	37.6	44.3
2006	32.9	34.0	37.0	44.2
2007	32.8	34.2	36.2	44.1
2008	32.5	34.1	35.3	43.6
2009	32.2	33.8	34.7	43.6
2010	31.8	33.6	33.8	43.1
2011	31.2	33.1	33.1	42.7
2012	30.6	32.4	32.6	42.5
2013	30.0	31.6	32.2	42.8
2014	29.8	31.4	32.0	42.7
2015	29.8	31.2	32.0	42.9
2016	29.4	30.8	31.6	42.7
2016/1992 (%)	23.5	29.2	6.6	33.3

Source: Own calculations, on basis of data from Tempo-Online, NSI, 2017.

On the same increasing trend, but with a much higher intensity is also inscribed the ageing population's index, calculated as percentage ratio between the population of 60 years old towards that comprised in the interval 0-14 years old.

Thus, in the year 2016 comparatively to the year 1992, the index of population's ageing in the rural environment of the four counties is represented by percentages comprised between 15% (Giurgiu) and 32.6% (Teleorman) (**Table 2**).

The involutions registered as regarding the economic dependence rate and that of the demographical ageing index are the result, among others, of the significant increase of the old population, especially of that of over 80 years old.

Table 2.

Evolution of the index for demographical ageing in the rural environment of the four analysed counties, in the period 1992-2016 (%)

Year	CL	IL	GR	TR
1992	116.9	125.4	151.8	196.2
1993	122.2	131.5	156.0	201.4
1994	126.3	134.7	159.3	203.9
1995	130.0	138.0	161.7	207.8
1996	130.1	137.2	162.6	206.8
1997	131.3	138.5	163.0	208.8
1998	131.0	137.3	161.6	206.5
1999	130.6	136.6	160.6	204.2
2000	132.9	137.8	163.1	205.9
2001	134.5	138.4	163.7	207.3
2002	138.5	142.2	165.7	211.5
2003	141.4	144.8	168.4	215.1
2004	145.1	148.5	171.4	220.9
2005	148.2	152.6	174.1	226.4
2006	147.1	151.5	173.6	227.8
2007	147.1	151.0	174.5	233.5
2008	145.0	149.6	174.9	238.0
2009	146.3	150.6	175.1	242.0
2010	146.9	150.4	175.4	245.2
2011	146.5	149.9	176.0	248.4
2012	145.9	148.0	176.3	250.0
2013	147.3	148.8	176.9	254.6
2014	147.8	149.2	175.8	256.5
2015	149.2	150.4	176.2	258.3
2016	151.1	151.8	174.7	260.1
2016/1992 (%)	**29.2**	**21.1**	**15.0**	**32.6**

Source: Calculations on basis of data from Tempo - Online, 2017.

Table 3.

Evolution of the population of over 80 years old in the rural environment of the four analysed counties (no. of inhabitants)

Year	CL	IL	GR	TR
1992	2.7	3.0	3.2	3.3
1993	2.8	3.2	3.4	3.5
1994	3.0	3.2	3.5	3.6
1995	3.1	3.3	3.7	3.9
1996	3.0	3.2	3.6	3.9
1997	2.8	3.0	3.4	3.9
1998	2.5	2.6	3.0	3.5
1999	2.3	2.5	2.9	3.3
2000	2.3	2.5	3.0	3.4
2001	2.4	2.6	3.2	3.5
2002	2.6	2.8	3.5	3.8
2003	2.8	3.0	3.7	4.0
2004	3.0	3.3	4.0	4.4
2005	3.3	3.5	4.3	4.8
2006	3.5	3.7	4.6	5.2
2007	3.8	4.0	4.8	5.5
2008	4.0	4.2	5.0	5.8
2009	4.3	4.5	5.2	6.0
2010	4.5	4.7	5.4	6.3
2011	4.7	4.9	5.5	6.5
2012	4.9	5.1	5.5	6.7
2013	5.2	5.4	5.7	6.9
2014	5,3	5,6	5,8	7,0
2015	5,4	5,7	5,8	7,2
2016	5,5	5,9	6,0	7,4
2016/1992 (%)	**102,6**	**94,0**	**85,7**	**121,3**

Source: Calculations on basis of data from Tempo - Online, 2017.

Along 25 years' time, the population of over 80 years old registered increases comprised between 85.7% (Giurgiu) and 121.3% (Teleorman), tendency visible at national level also (**Table 3**).

From the rate of birth point of view, the period 1990-2015 is characterized by a visible trend of diminution in the rural space by percentages exceeding 20% (**Table 4**).

Thus, except the Giurgiu county, where the birth rate was reduced by 24.2%, in the other three counties the diminution percentages are exceeding 30%, the counties: Ialomiţa and Teleorman exceeeding even the regional average.

Table 4.

Evolution of birth rate in the rural space of the counties components of the South-Muntenia Region (live births at 1,000 inhabitants locuitori)

	South-Muntenia	CL	GR	IL	TR
1990	12.7	13.3	12	13.7	10.9
1991	11.4	11.3	10.4	11.8	9.8
1992	11.7	11.2	10.5	11.2	10.3
1993	11.7	11.6	10.6	12.4	10.1
1994	11.5	11.5	10.5	12.4	10.1
1995	11.2	11.2	10.8	12	9.6
1996	10.7	10.6	10.5	11	9
1997	10.9	11.7	10.5	11.2	9.4
1998	10.9	11.6	9.8	11.9	9.3
1999	10.8	11.7	10	11.7	9
2000	10.7	11.7	9.9	11.5	8.8
2001	10.3	10.9	9.7	12.2	8.1
2002	9.8	10.8	9.1	10.3	7.6
2003	9.9	11.1	9.4	10.5	7.5
2004	9.6	10.5	9.1	10.1	7.1
2005	9.6	10.6	9	10.3	7.3
2006	9.4	10.8	9.4	10.4	7
2007	9.1	10.4	9.3	10.3	6.8
2008	9.4	10.9	10.1	10.9	6.9
2009	9.8	11	10.1	11.3	7.6
2010	9.2	10	9.5	10.7	7.2
2011	8.6	9.7	9.4	9.9	6.6
2012	8.7	9.9	9.4	10	7.1
2013	8.7	9.6	9.2	9.6	7.2
2014	8.4	8.7	8.6	9.6	7.1
2015	8.2	8.8	9.1	8.5	6.6
2015/1990(%)	**-35.4**	**-33.8**	**-24.2**	**-38.0**	**-39.4**

Source: Calculations on basis of data from Tempo-Online, 2017.

As indicator expressing the capacity of sustainable revival of a nation, the number of newly born reported to the fertile women number (with the age comprised between 15-49 years old) has registered, for 24 years a significant recoil in each of the four analysed counties. Although the specialty economic theory and literature appreciates that the number of newly borns/ fertile woman should be situated around the value of 2.2 children, the demographical reality of the four counties confirms the fact that the number of the newly born does not exceed, averagely one child. Reported to the year 1992, in the year 2015, the number of the newly-borns/fertile woman was reduced by percentages variating between -26.3% (Giurgiu) and -42.5% (Teleorman) (**Table 5**).

Tablel 5.

Evolution of the number of newly-borns/fertile woman in the period 1992-2015

	Călăraşi	**Giurgiu**	**Ialomiţa**	**Teleorman**
1992	0.058	0.055	0.056	0.058
1993	0.059	0.056	0.062	0.057
1994	0.059	0.055	0.062	0.057
1995	0.057	0.057	0.060	0.055
1996	0.054	0.055	0.055	0.051
1997	0.059	0.055	0.056	0.054
1998	0.058	0.051	0.059	0.053
1999	0.058	0.053	0.058	0.052
2000	0.058	0.052	0.057	0.051
2001	0.054	0.051	0.062	0.047
2002	0.052	0.046	0.050	0.043
2003	0.053	0.047	0.050	0.042
2004	0.049	0.045	0.048	0.039
2005	0.048	0.043	0.049	0.040
2006	0.050	0.045	0.049	0.038
2007	0.047	0.044	0.049	0.036
2008	0.050	0.047	0.051	0.036
2009	0.050	0.047	0.052	0.039
2010	0.045	0.044	0.050	0.037
2011	0.043	0.043	0.046	0.033
2012	0.044	0.042	0.046	0.036
2013	0.042	0.041	0.044	0.036
2014	0.038	0.038	0.043	0.035
2015	0.039	0.041	0.039	0.033
2015/1992 (%)	**-31.7**	**-26.3**	**-30.1**	**-42.5**

Source: Calculations on basis of data from Tempo-Online, 2017.

Thus, the changes intervened after 1989, both in economic and social plan, over which were superposed the rigours of the community space, without existing, at national level, an adequate policy for the population's protection, have had as effect the deterioration of the demographical indicators. This process is more visible in the counties and zones from the plain, where due to the existence of some mono-activities in the sphere of the agricultural sector, the adjusting to a new economic and social reality hit itself to both the realities present of each arealand, sometimes to the opposition to the change.

A worrying situation is to be found as regards the mortality rate which is inscribing on an ascending trend, in 3 of the analysed counties, the biggest increase being registered in Teleorman (+58.8% in the year 2015 comparatively to the year 1999) (**Table 6**).

Table 6.

Evolution of mortality rate in the rural space of the four analysed counties of the South-Muntenia Region (born dead at 1000 new borns)

	South-Muntenia	CL	GR	IL	TR
1990	5.4	7.3	4.4	7.6	3.4
1991	5.7	8.3	3	3.6	5.1
1992	5.4	8.5	3.1	7.1	4.5
1993	4.8	5	1.8	6.1	4.3
1994	6.5	8.5	5.8	6.1	8.7
1995	5.6	8.3	5.7	6.4	5.6
1996	6.2	8.8	4.6	7.9	3.2
1997	6.4	9.3	4.6	8.8	3.5
1998	6.2	7.2	8	6.4	6
1999	7.6	9.3	5.9	8.4	8.1
2000	6.4	6.4	9	6.1	5.7
2001	6.8	10	7.1	7.4	5
2002	6.7	10.5	5.5	5.8	4.5
2003	6.6	6.7	2.7	7.8	10
2004	6.4	6.7	6.1	7.8	5.8
2005	6.3	8.1	4.6	8.8	8.2
2006	6.2	7.4	3.8	8.8	5.1
2007	5.1	8.2	1.7	6.6	4.3
2008	4.8	6	2.6	5.1	4.7
2009	4.6	2.8	1.5	5.5	5.4
2010	4.6	7.6	3.3	5.8	5.2
2011	6.1	5.8	5.6	7.6	4.6
2012	5.1	6.2	1.7	6.9	5.4
2013	5.4	8.7	2.3	8.1	6.1
2014	5.1	4.2	3.1	5.3	7.7
2015	5.3	7.7	4.7	6	5.4
2015/1990(%)	**-1.9**	**5.5**	**6.8**	**-21.1**	**58.8**

Source: Calculations on basis of data from Tempo-Online, 2017.

Comparatively to the regional average, the natural increase in the rural environment registered in the period 1990-2015 a reduction tendency in two of the three counties, the most accentuated increase being found in the Teleorman county (**Table 7**).

Table 7.

Modification of the natural increase in the year 2015 comparatively to the year 1990 (%)

	Total		Urban		Rural	
	1990	2015	1990	2015	1990	2015
South- Muntenia	1.3	-5.2	5.2	-2.2	-1.1	-7.5
CL	1.8	-5.6	6	-2.2	-0.7	-7.7
IL	-1.4	-6.6	5.3	-3.5	-4.1	-8.1
GR	2.7	-4.6	7.5	-1.1	-0.2	-7.8
TR	-1.6	-10.2	5.5	-2.8	-5	-14.5

Source: Calculations on basis of data from Tempo-Online, 2017.

A favourable evolution is met at the level of the infant mortality rate. The specialty literature [2] is defining four cascades of the infant mortality, respectively:

- The first cascade with a level of the rate of 4-6 dead children /1,000 new borns;
- The second cascade with a level of the rate of 6-9 dead children /1,000 new-borns;
- The third cascade with a level of the rate of 9-15 dead children /1,000 new borns;
- The fourth cascade with a level of the rate of over 15 dead children /1,000 new borns.

From the analysis of the available statistical information, we must retain that until the year 2006, the infant mortality rate was situating all the four counties in the fourth cascade, respectively with over 15 dead children /1,000 new borns, as after this year to register a visible tendency of improvement at this indicator (**Table 8**).

Table 8.

Evolution of infant mortality rate in the rural space of the analysed counties in the period 1990-2015 (deceased under 1year old an/1000 live borns)

	South –Muntenia Region	**CL**	**GR**	**IL**	**TR**
1990	31.5	38	32.5	42.9	27.2
1991	25.4	25.9	23.6	32.4	30.3
1992	25.5	30.1	21.7	30.5	31.7
1993	26.6	29.9	30.6	29.8	26.6
1994	25.5	26.9	32.6	34.8	31.1
1995	24.4	28.7	29.7	27.4	24.6
1996	26	25.2	27.3	33.8	26.5
1997	24.7	31.4	28	34.4	23.3
1998	23.6	23.6	27.7	32.8	18.1
1999	21	25.2	17.8	24.4	21.4
2000	20.3	22.6	17.1	28.5	19.1
2001	21.4	24.4	14.4	25.7	18.7
2002	18.1	23.6	15	16.6	19.2
2003	20.9	27.1	20.6	24.3	19.4
2004	18.5	17.7	17.9	23.6	19.1
2005	18.3	18.3	22.3	17.7	20.4
2006	18.1	26.1	19.2	20.8	17
2007	13.1	13.2	11.2	11.4	18.8
2008	14.1	11.1	11.9	14.7	20.6
2009	11.7	17.6	8.8	11.6	10.8
2010	12.4	17.9	14.4	12.3	14.6
2011	11.1	11.1	15.7	15.2	11
2012	12.1	20.2	11.8	13.9	10.3
2013	9.4	14	8.6	7.3	11.3
2014	10.8	13.8	14.9	13.4	11.1
2015	8	13.8	5.3	9.1	10.3
2015/1990 (%)	**-74.6**	**-63.7**	**-83.7**	**-78.8**	**-62.1**

Source: Calculations on basis of data from Tempo-Online, 2017.

CONCLUSIONS

The analysis of the demographical phenomena in the four of seven counties-components of the South-Muntenia Region has put into evidence the existence of some significant gaps both inter- and intra- counties. The specific characteristics of each county, from point of view of geographical placing, size or population, are conferring to each of them attributes which are delimiting them in an obvious way ,ones from the others, from the point of view of the potential owned, but also of the way of available resources' valorification.

The demographical structure reflects a deterioration of the main demographical indicators with direct significant impact on the ensurance of the future necessary of labour force. The high share of the old population (of over 80 years old) means the implementation of social support measures for these categories, support having in view from the possibility to create special centers for the old people's care and, this way to eliminate the pressure upon the young generations, up to measures for the natality incentives, in order to ensure a sustainable demographical basis in the future. The relative reduction of mortality rate, general and infant, can have a dual interpretation, being due to some natural and objective causes as are, in case of infant mortality, the reduction of the dying risk at the newly born.

Starting from the above considerents, we consider as necessary the involvement of all the decident factors in the identification of the most adequate solutions for demographical development in the rural space from the local level, in view of reducing the inter- and intra counties gaps.

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