

A PRESENCE MORE AND MORE VISIBLE – THE VERY SMALL VILLAGES FROM THE DEPRESSION OF BEIUȘ, ROMANIA

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Abstract: The settlements with very small demographic dimensions from the coverage of the Depression of Beiuș register a consistent numerical increase in the period 1900-2011, which implies automatically also an increase of their number of population. The major causes consist of the presence of the phenomenon of depopulation from this depression area, the excessive administrative division in some cases, the insulated position in the administrative units in which are included also the morphological and morphometric characteristics of the relief. The tendencies observed in the present are, on one part, of perpetuation of this ascendant trend regarding the number of very small villages, and on the other side, is envisioned the disappearance in the close future of at least two such settlements, as a consequence of the absence of a stable population inside them. As possible solutions we can propose an agglomeration of some villages from some administrative units, but is a solution of form, not of fund, in the conditions in which the demographic rebound is impossible to be stopped, at least in the present moment.

Key words: very small villages, demographic evolutions, depopulation, Depression of Beiuș

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INTRODUCTION

The depression Beiuș is overlapped from the territorial point of view over the south-east part of Bihor county, being framed from three directions of mountain units: Codru-Moma (South-West), Bihor-Vlădeasa (East) and Pădurea Craiului (North-West) belonging to the Apuseni Mountains. In the North-West part is in contact with another depression space, Depression of Holod, this representing a continuation of the first one mentioned, over the altitudes of the Valanilor hills, Magura Forau and Codrului hills (Berindei et al., 1977; Bleahu & Bordea, 1981; Herman & Benchiș, 2017; Pop, 2005). The present study presents the analysis of the very small villages (under 200 inhabitants) from the perspective of the spatial distribution, of their numeric evolution and of their population, of the quantitative reports that are established between their number of inhabitants and the total population of the administrative unit from which they are part of. Is considered

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also the identification of the causes that determined their presence so consistent in this depression area, and the enunciation of some possible solutions of stopping their numerical boom (Antonescu & Popa, 2012; Erdeli & Cucu, 2005; Filimon, 2014; Ilieș & Stașac, 2000; Mălăiescu et al., 2010; Neguț, 2011; Pop, 1995; Surd et al., 2007; Ungureanu et al., 2002; Nicoară, 1999). Depression of Beius represents a space predominantly rural, with a percentage of this type of population of over 70% from the total of population, of which 6,5% is with very small settlements (Bădescu et al., 2012).

The very small villages from the Depression of Beius, by their number and distribution, don't represent a negligible element in the beginning of this century, when the demographic evolutions from the Romanian area and not only, indicate an accentuated tendency of quantitative involution of population in both dwelling mediums (Cicharska, 2014; Muntele, 1998; Mureșan, 1999; Poenaru, 2009; Zaman & Georgescu, 2015; Safarova et al., 2008; Stașac et al., 2016). The constant increase of the number of these settlements, especially after the falling of the Communist regimen, reveal once more, if it was necessary, the size of the process of demographic ageing or even demographic dramatics that induces directly the demographic rebound. This affects much more strongly the rural area, where the demographic balances are more difficult to be maintained, so, implicitly, also these villages of reduced dimensions, that on the level of the year 2011 represented a fifth of the total of settlements from this depression (Bănică & Camară, 2011; Băcănaru et al., 2007; Ilieș et al., 2008; Pop & Benedek, 1996; Stașac & Herman, 2010; Surd, 2002). Other factors that work together to the high percentage of very small settlements are represented by the high administrative division specific to some administrative units, characteristics of the rural environment, the positioning of the villages in the units to which they belong or even on the level of this depression area.

THE MAIN CAUSES AND POSSIBLE SOLUTIONS

The causes that determined the great number of very small villages in the Depression of Beius in the beginning of this millennium are multiple, among them, being underlined the phenomenon of depopulation, the accentuated administrative division, the natural conditions, especially the elements of morphology and morphometry of the relief, but also the localization of the villages in the administrative units from which they are part of, and the level of the depression (Pop, 1995; Stoica, 2011; Stașac, 2005).

The phenomenon of depopulation of the villages has at its basis natural demographic causes, determined by the pronounced regress of the value of natality and the presence of a high mortality, caused by the high degree of ageing of the population, and mechanical causes, in the conditions when the fluxes of emigrants are more accentuated quantitatively than those of immigrants (Filimon, 2012; Giurcăneanu, 1988). This phenomenon is more visible in isolated settlements from the area of hills or mountains, having different intensities during the previous century, but with a consistent aggravation after the fall of the communist regimen.

Also as a consequence of a balance totally negative in the near future, a series of other villages will be able to be placed in this category, increasing more and more their percentage, but also of the specific population, inside this depression area. The manifestation with different intensities of this phenomenon is easy to be observed, so if we consider the temporal criteria, we can find for the communist period a certain stability of the number of inhabitants attributed to each village in part, and afterwards in the period of the postdecembrist democracy the decrease of population manpower would register a more pronounced rhythm in case of most of the villages. For example, the population of the village Câmp-Moți is maintained over the limit of 200 inhabitants until 1992, when were registered 157 inhabitants, and in 2011 are present

only 64. The same strong regressive demographic evolutions have other settlements as: Bâlc, Colești, Criștioru de Sus etc. In exchange, some localities have a slower rebound of the number of inhabitants: Livada Beiușului, Pântășești, Giulești etc., either as a consequence of the position less peripheral in the administrative units, or as a consequence of some socio-economical or demographic factors (Pop, 1998).

The accentuated administrative division is another cause of the high number of very small villages from this depression area. A relatively recent example is that of the detach from the village Țigăneștii de Beiuș of a new locality Păcălești. This was until 2008, a part of the locality Țigăneștii de Beiuș, but following a written request of a number of over 150 inhabitants to be recreated this village, was organized a referendum in June 2007, that registered the desire of the majority of inhabitants that their locality would be repositioned on the administrative map which existed until the territorial administrative reform from 1968¹. By the decision of the Parliament of Romania from October 2008 was recreated the village Pacalesti, as part of the commune Drăgănești², and, thus, the locality Țigăneștii de Beiuș, from which the new village was detached, remained only with 40% of the initial population.

The relief by its characteristics, especially the altitude, inclination, exposition and fragmentation of the versants is transformed in a restrictive factor of inhabitation in some cases. The clinching example is offered in this case the villages Brusturi (still without electricity), Bâlc, Criștioru de Sus where their relative isolation had something to say by the migration of some important contingents of inhabitants to the commune seat and not only. The localization in some administrative units at large distances compared to the commune center can be another factor of the numerical involution of some villages.

Thus, along time this peripheral population tended to be close to the localities that still kept elements of economic, social or even demographic attractivity. The possible solutions are hardly to be emitted in the present national demographic context characterized by a descendent tendency of the number of inhabitants (Cucu, 2002). Thus, if viable solutions as, the increase of natality and the reduction of the fluxes of emigrants are hard or even impossible to be considered, an alternative could be the agglomeration of some neighbor localities. This is a solution of form, not of fund, in the conditions when the number of population continues to be reduced, being solved, thus, only the “problem” of the high number of very small villages from the depression area.

THE TERRITORIAL DIVISION AND NUMERICAL EVOLUTION OF THE VERY SMALL VILLAGES FROM DEPRESSION OF BEIUȘ

The territorial disposal of the very small villages in the coverage of the Depression of Beiuș indicates the presence of some higher concentrations of them in four areals (Figure 1).

- the first corresponds to the central part where it can be identified eight localities of very reduced demographic dimensions, positioned in the communes Drăgănești (three), Pietroasa (two), Lazuri de Beiuș, Rieni and Budureasa (each one with a village);
- the second is represented by the Western extremity, where there are located six such settlements, five included from the administrative point of view to the commune Soimi, and the last belonging to Finis;
- the third concentrates the settlements from the Southern and South-Eastern extremity, attributed to the town Vașcău (three), to the commune Criștioru de Jos (two) and to the town Nucet (one);

¹<http://www.cdep.ro/proiecte/2008/000/50/2/doc52.pdf> (consulted on 23.04.2017, 9:05).

²<http://draganesti.ro/site/wp-content/uploads/2011/02/legea-de-infiintare-a-satului-pacalesti2.pdf> (consulted on 23.04.2017, 9:10).

- the fourth situated in the North-North-Western part includes four very small villages from communes Căbești (two), Pocola and Remetea (one in each).

The numerical evolution of very small villages. The census of the population performed in year 2011 allows the placing of the 24 villages from Depression of Beiuș in the demographic category of very small settlements.

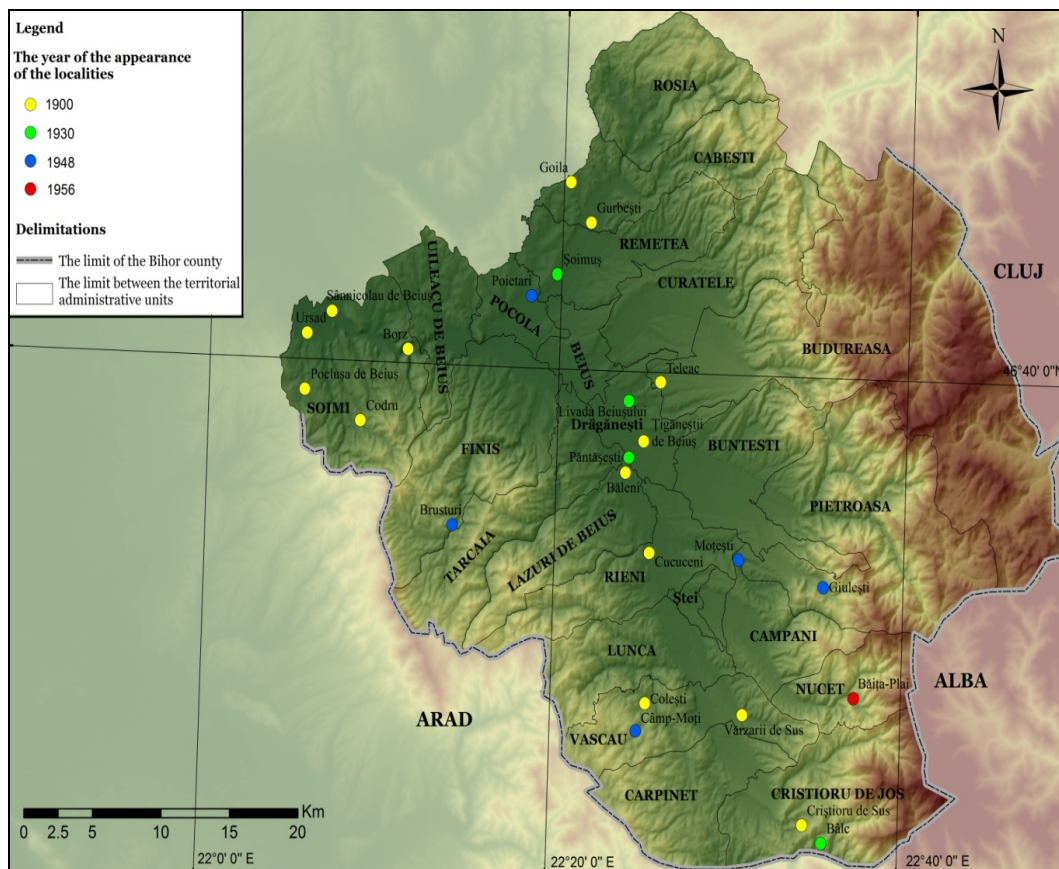


Figure 1. The geographical division and the evolution of the appearance of the very small villages from the Depression of Beius (Source: County department of Statistics Bihor)



Figure 2. Evolution of the number of very small villages from Depression of Beius in the period 1900-2011 (Source: County department of Statistics Bihor)

This number still has varied in the analyzed period of time. Thus, for example, in 1900 there were only four localities with a reduced population of 200 inhabitants; in 1930 – seven; in 1956 – nine; in 1992 – 13; in 2002 – 17. If until 1956 the increase of the number of very small localities was due to the founding of new villages that still had no considerable population, after this year, but especially after 1977, the numerical growth of the very small settlements is caused by the demographic regression found in them (Figure 2).

The population of the very small settlements from the Depression of Beius registers an ascendant evolution of the values, thus, if in 1900 to the four very small villages belonged a total population of 552 inhabitants, representing only 0,8% of the population of the entire depression area, this percentage will grow slower during the previous century (1,5% in 1956, 1,8% in 1977) and more accentuated in the post communist period (2% in 1992, 4,4% in 2011) (Figure 3).

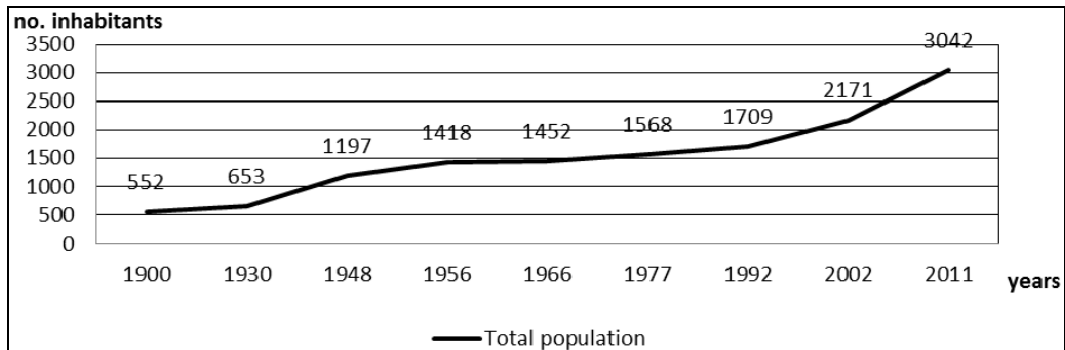


Figure 3. Numerical evolution of the population of the very small villages from Depression of Beius in the period 1900-2011 (Source: County department of Statistics Bihor)

From the four very small villages registered in the beginning of the previous century (Cucuceni, Poclușa de Beiuș, Codru, Goila), the first two will be situated in the entire analyzed period of time in this category. The third, Goila accedes between 1948-2002 in the category of small villages, while, the fourth, Codru succeeds to cross the number of 500 inhabitants beginning with the year 1930, being included in the medium villages, and afterwards a gradual demographic regression would bring it back in the initial demographic category. The transformation of some vills in settlements with legal statute determines, for year 1930, a growth up to seven of the very small villages, with a percentage of the population in the total population from the depression identical with the previous, of 0,8%. The new localities that appeared, with the number of four, don't reach the number of 100 inhabitants each (Bâlc, Livada Beiușului, Pântășești, Șoimuș).

On the level of year 1956 was created the last village placed in this demographic category, Băița-Plai, as a direct consequence of the debut of the mining exploitation from the area. Even if it registers only 150 inhabitants at that moment, its economic development is doubled also by a demographic one in the conditions when over a decade it crosses the number of 400 inhabitants.

These fulminatory evolutions are temporary, but as will be observed in the following years, when Băița-Plai reduced gradually and constantly the population effectives. In this year the population of the very small villages from the depression represent 1,5% of the total population, and in the following decades of the communist period, the percentage of this type of population would grow and also the number of very small localities. The first post communist census (1992) finds a number of 13 very small villages, with a total population of 1709 inhabitants, numbers that will be almost

double in the following decades. If in 2022 were registered 17 such villages, with a population of 2171 inhabitants, which represent 2,8% of the total population, in 2011, as we already recalled, there are 24 very small villages, with a total number of inhabitants of 3042. If we cross the rigid limit, imposed theoretically, of 200 inhabitants as upper demographic limit of the very small settlements and we analyze the data registered by the census, to these 24 localities will be added, if they hadn't already done it until the present, others, which in 2011 had a population of a bit over 200 inhabitants. For example: Saca, with 205 inhabitants; Vărzarii de Jos and Mierag, each with 208 inhabitants etc.

The rhythm of evolution of the population number of the very small villages calculated for the entire period included between the years 1900 – 2011 shows, particularly, for each locality the demographic tendency to which it corresponds. Thus, of the 24 villages from this category, 19 register negative values of this demographic indicator, the most decreased values being in Bâlc (-84%), Criștioru de Sus (-80%), Colești (-73%), Câmp-Moți (-72%) etc. Only five villages have positive numbers: Goila (6%), Livada Beiușului (13%), Pântășești (7%), Șoimuș (160%) and Codru (121%).

These, unfortunately, are not overlapped to an ascendant trend of the present population, but indicate the fact that at least for now the respective localities keep a number of inhabitants superior to year 1900. A comparing glimpse between the values of the rhythm of evolution calculated on the level of the administrative unit and the village/villages from its constituency allows the accomplishing of certain typologies, depending on the similitudes or differences found. Thus we can differentiate:

- the presence of a rhythm of evolution with negative values, on the level of the total population of the administrative unit, and in the very small villages from its constituency (Figure 4 a, b). To this specific correspond administrative units as: Vascau, with all the three very small villages from its subordination (Câmp-Moți, Colești and Vărzarii de Sus), with the mention that on their level the rhythm of evolution has strongly negative values that underline even the decrease with three quarters of the present population comparing to the initial one (Țucra, 2000);

Criștioru de Jos, whose very small villages, Bâlc and Criștioru de Sus mark also evolutions accentuated negative of the number of inhabitants, the first recalled keeping only a population of 10 persons; Pietroasa, with a more visible decrease of the number of inhabitants in the village Motesti; Budureasa; Lazuri de Beiuș and Pocola, on the level of which the situation is modified substantially, in the way that the descendent trend of the population effectives is more visible on the level of the administrative units and less in the very small villages from their constituency.

- the presence of a rhythm of evolution with positive values on the level of the administrative units and negative values in the component villages (Figure 5 a, b), specific in Nucet, where the town as administrative unit benefits of an demographic plus, while Baita-Plai registers a loss of approximately a quarter of the total population; in Rieni, which has a surplus of 10 percentage compared to the initial population, and the locality Cucuceni registers a major demographic decline; in Finis, where the village Brusturi holds only four inhabitants, with a decrease of over 90% of the population manpower.

- other types of models of evolution of this type of rhythm. In Draganesti, on the level of the administrative unit and in the two from the three very small villages, are present positive evolutions of the population manpower, and Țigănești de Beiuș registers a bisection of the population number, following the detach from it of the new founded village Păcălești (Figure 6 a); in Șoimi, the situation is somehow reverse, in the way that UAT and the four of the five very small villages from its constituency have negative values of the rhythm of evolution, and the village Codru is the exception to the rule, with the number of over 120% (Figure 6 b).

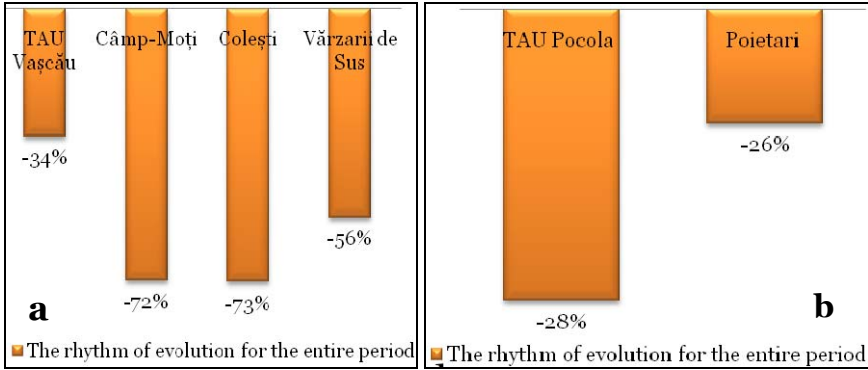


Figure 4. The rhythm of evolution for the entire period (1900-2011) for TAU³ (Territorial administrative units) Vașcău and the very small villages from its constituency (a) and TAU Pocola and village Poietari (b) (Source: County department of Statistics Bihor)

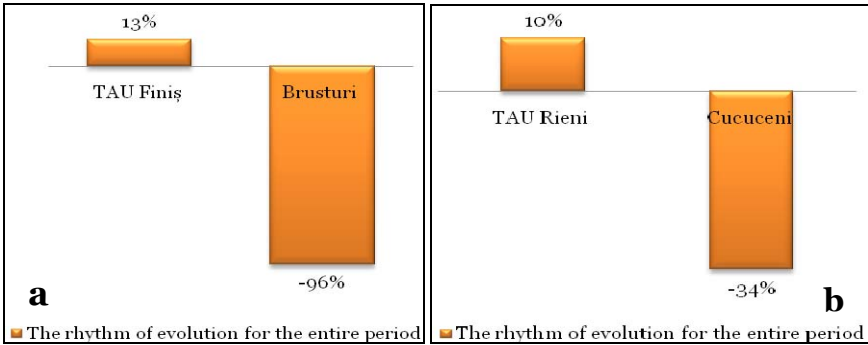


Figure 5. The rhythm of evolution for the entire period (1900-2011) for TAU (Territorial administrative units) Finiș and village Brusturi (a) and TAU Rieni and village Cucuceni (b) (Source: County department of Statistics Bihor)

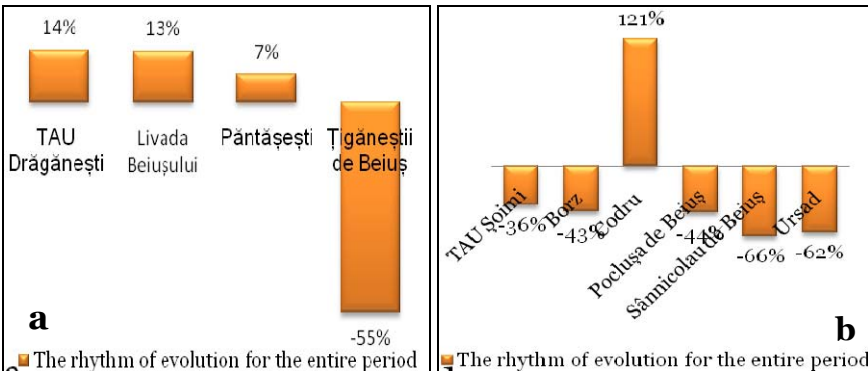


Figure 6. The rhythm of evolution for the entire period (1900-2011) for TAU (Territorial administrative units) Drăgănești and the very small villages constituent (a) and TAU Șoimi and the very small villages from its constituency (b) (Source: County department of Statistics Bihor)

To this specific are undersigned also the values of the rhythm of evolution from commune Căbești. Commune Remetea presents a different situation, in the way that on

³ TAU - Territorial administrative units

the level of the total population is found a regress, and in village Soimus is found a substantial growth of the number of population in the analyzed period.

The annual average rhythm of evolution calculated for the eight periods of time shows the particular evolutions registered by these villages from the Depression of Beiuș (Figure 7). Thus, the synthetizing of the values obtained allows the accomplishing of a typology:

- In a first category we can include villages as: Băița-Plai, Câmp-Moți, Giulești, Moțești etc., on the level of which is found a sudden decrease of numbers owned by this demographic indicator at a certain time, and afterwards the tendency of evolution of the number of population would be maintained regressive, but in more slower rhythm.

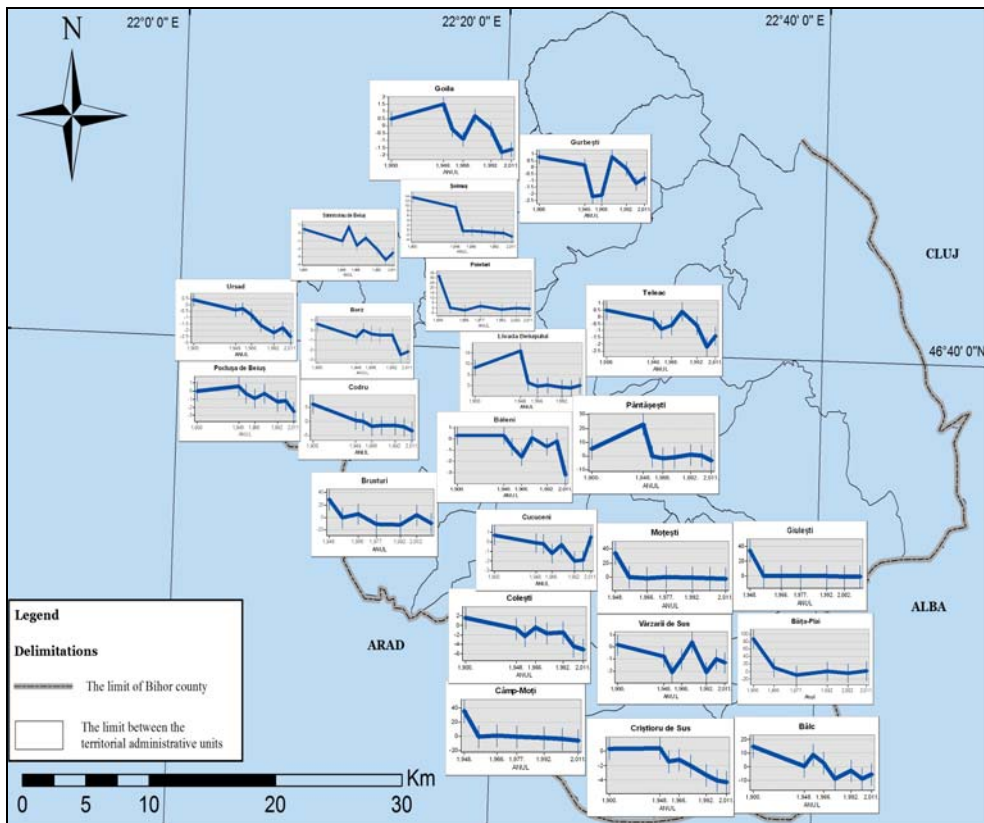


Figure 7. The annual average rhythm of evolution of the population of the very small villages from the Depression of Beiuș in the period 1900-2011 (Source: County department of Statistics Bihor)

- The second category corresponds to these villages that mark accentuated oscillatory evolutions of the annual average rhythm of evolution: Vărzarii de Sus, Goila, Băleni, Gurbești etc.

- A third category concerns the villages that own values of this rhythm that register a gradual rebound, as: Ursad, Codru, Colești.

- The last category proposed is that of those villages which on a general regressive fund of the average rhythm of evolution, register for the last period of time (2002-2011) a tendency of value appreciation of the percentages, for example the locality Cucuceni registers even a positive number, of 0,5%.

The percentage of the very small villages from the administrative units of which they are part of, the gap between the most reduced, respectively the most high being of 30% (Figure 8). Thus, we can accomplish a classification of the 13 administrative units that have in their constituency this type of settlements.

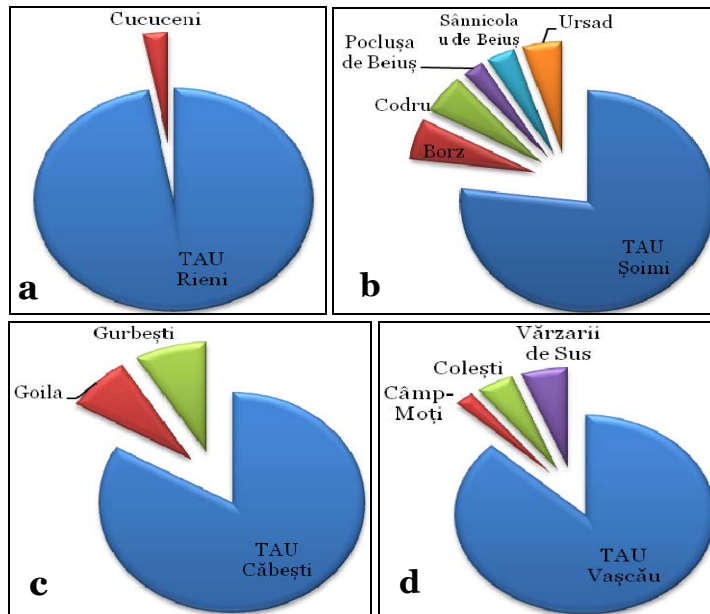


Figure 8. The percentage of the population of the very small villages in the total population of TAU in which are included in year 2011 (Source: County department of Statistics Bihor)

a. TAU with a percentage of the population of the very small villages of under 5% of their total population. These own in their administration only a single settlement of very reduced demographic dimensions and are the following: Finiș with the smallest village from the demographic point of view (Brusturi with only 4 inhabitants) with a population of 0,1% of the total; Remetea with a percentage of the population of the village Soimus of 4% of the total; Rieni with a value of 3% attributed to the population manpower from Cucuceni.

b. TAU with a percentage of the population of the very small villages between 5-10%. These are five, having in its constituency either of single settlement of this type (Pocola, with the village Poietari, which owns 7% of the total population; Nucet, with the village Baita-Plai, with 5%; Budureasa, with Teleac, with 6%), or with two such villages (Criștioru de Jos, with the villages Bâlc and Criștioru de Sus; Pietroasa, with Giulești and Moțești).

c. TAU with a percentage of the population of the very small villages of over 10% of their total population. This category includes five administrative units, these having two or more such villages in their administrative structure. For example: Vașcău and Drăgănești own three settlements of very small dimensions, whose population integrates a value of 14% of the total population of each administrative unit. The highest percentages of the population of very small villages in the administrative units from which they are part of are those of the communes Căbești, with 20% and Șoimi, with 30%. If in the case of the first the value is the result of the high percentage of population of each of the two village in the total population (Goila with 9,5%, Gurbеști with 11,5%), in case of the second the high percentage is due to the large number of villages (5) that are in the constituency of commune Șoimi, identifying here values that vary between 4% (Poclușa de Beiuș) and 8% (Borz).

CONCLUSIONS

The depression of Beius is distinguished by the high number of very small settlements, spread especially in the central, southern, western and north-western part. Surprisingly the eastern part situated at the periphery of the mountain area, represented by the massifs Bihor and Vlădeasa, don't include such settlements. From the evolution point of view, if on the beginning of the previous century this type of villages was weakly represented in this depression area, gradually their number increases by two methods, either by the transformation of some vills in villages, with legal statute, or by the numerical involution of the population of these villages. Thus, on the level of year 2011, a fifth of the settlements from the analyzed area are included in the category of very small villages, to these being allocated 5% of the total population. We can estimate that the tendency of growing of the number of these settlements will be maintained and even will be accentuated during the following centuries, in the conditions when there is a consistent reserve in the small villages, where more than 15 localities register a population of under 300 inhabitants. From the performing of a comparing analysis between the demographic evolutions registered on the level of the administrative units and the very small villages from their constituency was observed the presence of a multitude of situations, but still predominates as percentage, those in which the administrative units, and the villages included, hold a negative rhythm of evolution of population, and those in which the administrative unit that includes them is enjoying a rhythm of positive evolution and the localities of a negative one.

Regarding the percentage owned by the population of the very small settlements population in the total population of the administrative unit they are part of, is detached visibly in front of the classification the commune Soimi, in which the five constituent villages concentrate 30% of the total population, followed by Căbești with 20%, Drăgănești and the town Vașcău, each with a value of 14%. The most reduced percentage is that of the commune Finis, where the village Brusturi with only 4 inhabitants doesn't succeed to cross 0,1% of the total population. The evolution particularities of the population manpower specific to each village, found with the help of applying the formula of annual average rhythm of evolution, show the presence of a regressive general fund of the population of these villages, with strong oscillatory evolutions or on the contrary with a tendency of gradual reducing, smooth, of the number of population manpower. The depression of Beius is placed therefore in the typical rural area, in which predominates the settlements of small and very small dimensions, specific in a great measure to this type of depression relief.

REFERENCES

- Antonescu, D., Popa, F., (2012), *Growth and decline of urban areas in Romania* în Romanian Journal of Economics, vol. 34, București, (consulted on-line).
- Băcănaru, I., Velcea, I., Oancea, D., (2007), *The Romanian Village. Study of Human Geography*, Universităţii Creştine „Dimitrie Cantemir” publishing house, Sibiu.
- Bădescu, I., Şişeştean, G., Şerban, A., (2012), *Life and Death in the Romanian village*, Mica Valahie publishing house, Bucureşti.
- Bănică, A., Camară, G., (2011), *Accessibility and tourist function development of the Romanian small town*, GeoJournal of Tourism and Geosites, vol. 7, 4 (1): 122-133, Oradea.
- Berindei, I., O., Pop, G., P., Măhăra, G., Posea, A., (1977), *The Plain of the Crişuri, Crişul Repede, The Country of Beius*, in Researches in the Geography of Romania, Scientific and Encyclopedic publishing house, Bucureşti
- Bleahu, M., Bordea, S., (1981), *The Mountains Bihor-Vlădeasa*, Sport-Tourism publishing house, Bucureşti.
- Cicharska, A., (2014), *Demographic changes in East Central Europe in the period of transformation*, Revista Romană de Geografie Politică, 16 (2): 126-133, Oradea.
- Cucu, V., (2002), *Romania. Human and Economic Geography*, Transversal publishing house, Târgovişte.
- Erdeş, G., Cucu, V., (2005), *Romania. Population. Human Settlements. Economy*, Transversal publishing house, Bucureşti.

- Filimon, C., (2014), *Depression Oradea-Bratca. Study of Population and Settlements*, Presa Universitară Clujeană publishing house, Cluj-Napoca.
- Filimon, L., (2012), *The country of Beiuș: Study of Regional Geography*, Presa Universitară Clujeană publishing house, Cluj-Napoca.
- Giucăneanu, C., (1988), *Population and Settlements from the Romanian Carpathians*, Scientific and Encyclopedic publishing house, București.
- Herman, G., V., Benchiș, L., B., (2017), *Fairs, forms of expression of the local identity. Case study: Beiuș fair, Bihor County, Romania*, Analele Universității din Oradea, Seria Geografie, 27(1), pp.108-113.
- Ilieș, A., Stașac, M., (2000), *Geographical study of the Population*, University of Oradea publishing house, Oradea
- Ilieș Alexandru (coordonator); Baias S., Baias Iuliana, Blaga L., Buhaș S., Chiriac A., Ciocan Janeta, Dăncuș M., Deac Anca, Dragoș P., Dumitrescu G., Gaceu O., Godea I., Gozner Maria, Grama V., Herman G., Hodor N., Hurley P., Ilieș Dorina, Ilieș Gabriela, Ilieș M., Josan Ioana, Leșe G., Măduța F., Mojolic Diana, Morar C., Olaru M., Stașac M., Stupariu M., Sturza Amalia, Ștefănescu B., Tătar Corina, Vârnav R., Vlaicu M., Wendt J., (2014), *Crisana-Maramures. Atlas geografic al patrimoniului turistic/ Geographical atlas of tourism heritage*, 302 p (română/engleză), Editura Universității din Oradea, ISBN 978-606-10-1298-5.
- Mălăescu, S., Ilieș, G., Josan, I., (2010), *The sightseeing traditional village: an opportunity! The sociological traditional village- a threat! – An analysis of the favourability for tourism development of two theoretical conceptualizations of the traditional village*, GeoJournal of Tourism and Geosites, vol. 6, 3(2): 109-120.
- Muntele, I., (1998), *Population of Moldova in the Last Two Centuries*, CORSON publishing house, Iași.
- Muresan, C., (1999), *The Demographic Evolution of Romania. Old Tendencies, Recent Changes and Perspectives (1870-2000)*, Presa Universitara Clujeana publishing house, Cluj-Napoca.
- Neuș, S., (2011), *Human Geography*, Academiei Române publishing house, București.
- Nicoară, L., (1999), *The Hills of Crasna. Study of Geography of the Population and Human Settlements*, „Focul viu” publishing house Cluj-Napoca.
- Poenaru, M., (2009), *An approach to social policy in Romania from the lifecycle perspective*, Romanian Journal of Economics, vol.28, București, (consulted on-line).
- Pop, G., P., (1995), *The Bobâlna Valley. A Model of Geodemographic Evolution*, Studia UBB, Geographia, XL, (1-2): 123-134, Cluj-Napoca.
- Pop, G., P., (1998), *Model of Rural Involvement. The Village Calna, Cluj county*, Studia UBB, Geographia, XLIII, (1): 49-60, Cluj-Napoca.
- Pop, G., P., (2005), *Romania. The Western Hills and Plain*, University of Oradea publishing house, Oradea
- Pop, G., P., Benedek, J., (1996), *The Small Villages from Romanian and the specific of their activity*, Studia UBB, Geographia, 41 (1-2): 119-138, Cluj-Napoca.
- Safarova G., Scherbov S., Pirozhkov S., (2008), *Future trends of population ageing in Russia and Ukraine: a probabilistic view*, Paper prepared for the European Population Conference 2008, Barcelona, Spain, July 9-12, 2008, <http://epc2008.princeton.edu/papers/80730> (consulted on 15.05.2017, 20:45)
- Surd, V., (2002), *Introduction in Geography of the Rural Area*, Presa Universitară Clujeană publishing house, Cluj-Napoca.
- Surd, V., Zotic, V., Puiu, V., Moldovan C., (2007), *The Demographic Risk in the Apuseni Mountains*, Presa Universitară Clujeană publishing house, Cluj-Napoca.
- Stașac, M., Herman, G., V., (2010), *Ethnographic values of the traditional village of „Zarand Land”*, GeoJournal of Tourism and Geosites, vol. 6, 3(2), 152-162, Oradea.
- Stașac, M., (2005), *The reconstruction of the rural environment in the Crișuri Plain*, University of Oradea publishing house, Oradea.
- Stașac, M., Filimon, C., Petrea, R., Bulzan, A., (2016), *The demographic behavior of small towns in Romania in the post-communist period analyzed through the dynamics of the population. Case study: the small towns in the Bihor County, România*, Anale Universității din Oradea, 26 (2), 210-222.
- Stoica, I., V., (2011), *The effect of population aging on rural areas. Case study : The Sărățel hydrographic basin (Buzău Subcarpathians)*, Analele Universității din Oradea, 21 (2), 294-302.
- Țucra, N., (2000), *Vașcău. Commune-Town-Region. Monography*, Brevis publishing house, Oradea.
- Ungureanu, A., Groza, O., Muntele, I., (2002), *Moldova – Population, Manpower and Human Settlements in Transition*, CORSON publishing house, Iași.
- Zaman, G., Georgescu, G., (2015), *Regional aspects of economic resilience in Romania, during the post-accession period*, Romanian Journal of Economics, vol. 40, București, (consulted on-line).
<http://www.cdep.ro/proiecte/2008/000/50/2/doc52.pdf> (consulted on 23.04.2017, 9:05).
<http://draganesti.ro/site/wp-content/uploads/2011/02/legea-de-Infiiintare-a-Satului-Pacalesti2.pdf> (consulted on 23.04.2017, 9:10).
<http://revecon.ro/articles/2015-1/2015-1-0.pdf> (consulted on 22.04.2017, 22:40).
<https://ideas.repec.org/a/ine/journal/v1y2009i37p134-167.html> (consulted on 20.04.2017, 22:00).
<https://ideas.repec.org/f/pan234.html> (consulted on 20.04.2017, 18:30).

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