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# THE STRUCTURE OF THE NETWORK OF SETTLEMENTS IN THE SILVANIA LAND (I). RURAL SETTLEMENTS

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**Résumé:** *La structure du reseau des établissement du Pays de la Silvanie (1). Les établissement rurales.* Le réseau des emplacements du Pays de la Silvanie est formé de quatre villes (Zalău, Şimleu Silvaniei, Jibou et Cehu Silvaniei) et 30 communes, desquelles 132 villages appartiennent. Presque une démie (49,3%) du numméro des villages du Pays de la Silvania appartiennent aux emplacements moyennes avec une population de 500-1500 habitants, étant emplacés sur les grandes vallées ou le relief a favorisé leur developpement. La distribution quantitative des emplacements (7,8 villages sur 100 km carré), le coefficient d'aréalité (14,9 km carré/villages), le degré de dispersion et le potentiel de polarité des centres de communes sur la base desquels on a établi quatre classes de valeurs.

Mots-clé: Le Pays de Silvania, des emplacements rurale, population

## General view

"Rurality is defined in relation to urbanity, often in opposition with it" (B. Ştefănescu, 2006). The expression of rurality is the village (villa, terra, predicum, fosatum) which represents the universe of its inhabitants, and which is protected by them from the intruders. The village is the result of a long standing process of humanization of its territory, "projection in space of the way in which population has managed to adapt itself to natural conditions and of the way of usage of ground and underground resources, based on some given economic and social historic relations" (Cândea Melinda, 2006).

The Romanian village is a proof of the continuity of the Romanians in this area of the country, and its actual characteristics are the result of the adjusting of its inhabitants to natural conditions and to harsh times they have been through (invasions, wars, epidemics).

Villages usually located in the river valleys were open, the absence of the artificial defence system being compensated by natural elements, especially by forests. According to archaeological discoveries, rural settlements were stable (their inhabitants being sedentary), and the living area being estimated to had covered between 3 to 7 ha (I. Crişan, 2006). The same author shows that between 8<sup>th</sup> and 10<sup>th</sup> century the number of dwellings in a settlement were approximately 20, being of three types: ground, semideep and huts, grouped into nests. The dwellings were "equipped" with varied fire equipments: stone kilns (discovered at Nuşfalău), made of mud or simple bakestones with mud garden.

Many times were they forced to retreat into woods escaping from the Tatar invasions and Turks later, and the survivors usually were coming back to the initial dwelling. This is how 242 settlements with over 12.000 families were recorded in Sălaj, in general Bucov's Conscription between 1760-1762.

In the second half of 18<sup>th</sup> century, the term of "state" meant settlements of various sizes, shapes and functions. The village of this historical period identifies itself "by its shape and relation between hearth and border or by the economic particularity" (B. Ştefănescu, 2006).

Even in this period of time, the village had, beside its peasant component, elements of other nature: schools, churches, craftsmen workshops, the residence of the lord, taverns. This

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aspect is reflected in written papers in which appear priests, elementary school teachers or teachers, scriveners, pretors, merchants, landholders, oficial employees, peasants etc.

As a result of the takeover of the Silvania Land by the Hungarian authority, of colonizations, missionaries, the village world was extremely diverse from ethnic and religious point of view, even though the Romanians were a majority.

Even today, after an intensive process of urbanization in the second half of the  $20^{\text{th}}$  century, the rural population represents here over 48% of the total population.

Going back in time, one shall notice that the majority of inhabitants in this area lived in a rural environment. At the census in1850, the village inhabitants represented 89% of the total population of Silvania Land.

The network of the actual rural settlements in the Silvania Land is formed of 132 villages. Of these, 12 belong to the cities of Zalău (1), Şimleu Silvaniei (3), Jibou (4), Cehu Silvaniei (4) and the rest of them being grouped into 30 parishes.

## The demographic size of the rural settlements

The number of inhabitants of a village shows its relation with the surrounding environment (especially the relief), with the productive land it has, with the various historical, political, economic, and administrative events, as well as its relations with other rural or urban settlements.

According to this criterion, rural settlements in the Silvania Land are divided into very small, small, medium, large and very large (table 1).

Classification of the villages by number of inhabitants
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# Table 1

Very Small	Barsa, Bic, Bocșița, Colonia Sighetu Silvaniei, Deleni, Dumuslău, Fetindia, Firminiș,			
Settlements	Fufez, Marca Huta, Naimon, Periceiu Mic, Poiana Măgura, Ratovei, Recea Mică,			
(>200 loc.)	Ţărmure, Zăuan Băi			
Small villages (201-499 loc.)	Aleuş, Bilghez, Bozieş, Bulgari, Câmpia, Chilioara, Coşeiu, Cosniciu de Sus, Cristur Crişeni, Dobrin, Doh, Domnin, Drighiu, Fizeş, Hereclean, Horoatu Cehului, Hurez, Husia, Lazuri, Leşmir, Mălădia, Mineu, Moiad, Pleşca, Porţ, Ratin, Rona, Sârbi, Seredeiu, Sici, Şoimuş, Stâna, Sub Cetate, Uileacu Şimleului, Var			
Medium settlements (500-1500 loc.)	Aghireş, Aluniş, Archid, Bădăcin, Badon, Ban, Bănişor, Benesat, Biuşa, Bobota, Bocşa, Carastelec, Cehei, Cerişa, Cosniciu de Jos, Crişeni, Criştelec, Cuceu, Deja, Dioşod, Doba, Făgetu, Gârceiu, Giurtelecu, Guruslău, Halmăşd, Horoatu Crasnei, Huseni, Iaz, Ilişua, Inău, Lompirt, Măerişte, Mal, Marin, Meseşenii de Jos, Meseşenii de Sus, Mirşid, Moigrad, Motiş, Nadiş, Noțig, Panic, Peceiu, Plopiş, Popeni, Preoteasa, Pria, Pusta, Recea, Sâg, Sălăjeni, Sălățig, Şamşud, Someş Odorhei, Stârciu, Şumal, Tusa, Ulciug, Valcău de Jos, Valcău de Sus, Valea Pomilor, Zalnoc, Zăuan			
Large villages (1501-4000 loc.)	Boghiş, Borla, Camăr, Chieşd, Cizer, Derşida, Ip, Marca, Nuşfalău, Pericei, Vârşolț			
Very large rural settlements (<4000 loc.)	Crasna, Sărmășag			

(source: Census of the population in 2002)

*Very small settlements (17)* have under 200 inhabitants and represent 12,8% of the villages. Generally, they are located in isolated places, not so easy to get to, and have no utilities. As an example are the villages in the Plopişului Mountains (Marca-Huta, 47 inhabitants), those situated ,,inside" the hills, in the upper basins of the small valleys or on the inter-river (Dumuslău, 98 inhabitants; Colonia Sighetu Silvaniei 69 inhabitants; Țărmure, 1 inhabitant; Bocşiţa, 146 inhabitants; Periceiu Mic, 33 inhabitants; Bic, 62 inhabitants; Fufez, 17 inhabitants; Poiana Măgura, 15 inhabitants).

Bearing in mind a possible territorial fitting, one must take into account that the majority of these settlements shall disappear due to natural causes (aging population) and to

#### emigration.

*Small villages*, 38, represent 28,8% and together with the very small ones (41,6%) are a feature of the Silvania Land. They are located in the inter-river areas between the couloir of the main valleys, with limited access to the main roads (Coşeiu 455 inhabitants; Chilioara 368 inhabitants; Doh 304 inhabitants, Mălădia 245 inhabitants, Sici 281 inhabitants, Mineu 403 inhabitants, Domnin 429 inhabitants etc).

Almost half of the villages in the Silvania Land (49,3%) belong to the category of *medium settlements*, with a population between 500 and 1500 inhabitants. The majority has under 1000 inhabitants (41) and only in 24 villages live more than 1000 people. Almost all villages in this category are located on the large valleys where the relief, as a foundation, allowed their extension, and as a work factor, favoured their development. Also, the possibility of constructing ways of communication with other settlements was a stimulating factor in the development of these rural settlements. For example: Tusa 810 inhabitants, Sâg 758 inhabitants, Peceiu 1095 inhabitants, Ban 548 inhabitants, Bănişor 776 inhabitants, Iaz 829 inhabitants, on the valley with the same name, Plopiş 1169 inhabitants, Meseşenii de Sus 889 inhabitants and Meseşenii de Jos 706 inhabitants, Carastelec 1163 inhabitants etc.

*Large villages* (1501- 4000 inhabitants) are few (10) and represent only 7,6% of the entire system of rural settlements in the Silvania Land. With two exceptions - Camăr (1899 inhabitants) and Chieşd (2010 inhabitants) – the other eight villages are located on the main valleys: Marca (1520 inhabitants), Ip (1669 inhabitants) and Nuşfalău (3259 inhabitants) on Barcău, Cizer (1741 inhabitants), Vârşolţ (1717 inhabitants) and Pericei (2787 inhabitants) on Crasna, Borla (1582 inhabitants) and Derşida (1918 inhabitants) on Zalău.

Only two villages have over 4000 inhabitants and belong to the category of *very large rural settlements*: Crasna (4378 inhabitants) supported as local nucleus in historic times and Sărmăşag (4710 inhabitants), stimulated by coal mining in the surrounding area. These, to which Nuşfalău can be added, constitute as local centers of attraction and action, with real perspectives of becoming towns.

### Spatial distribution of the rural settlements

The analysis of the spacial distribution of the rural settlements gives hints about the way in which their network has developed, but more important is the fact that it also gives the opportunity for an accurate vision of the future projection.

In the actual distribution of the villages in the Silvania Land, not only natural factors played an important part, but also the administrative actions by the assimilation of the villages by the parishes. The spacial distribution of the rural settlements can be noticed both as regards the quantity and the morphology.

The quantitative distribution is noticeable by means of some hints, such as density of the settlements, coefficient of area, index of dispersion, potential of polarization, average distance between two localities etc.

*Density of the settlements* indicates the ratio between the number of settlements and the unit of surface (usually 100 km<sup>2</sup>). In this respect, the average density of the rural settlements in the Silvania Land is 7,8 villages to 100 km<sup>2</sup>. At the parishes level, this coefficient is, to the utmost extent, the result of administrative distribution. Thus, there are parishes with a coefficient of settlement density way above the average: Dobrin (15), Marca (10,4), Sărmăşag (10,3), Benesat (10,3). Slightly over half of villages (16) have a coefficient of dispersion higher than the average value. Of the rest of the 14 parishes with values under the average in the Silvania Land, the lowest values is to be noticed in the case of the parishes with a larger area and few villages belonging to them: Camăr (2,5 – a village), Plopiş (3,7 – 3 villages), Nuşfalău (4,9 – 4 villages).

In the case of Silvania Land, the coefficient of density is the expression of the wrong administrative distribution by which there are parishes with smaller areas and a large number of

villages and inhabitants (Dobrin – 6 villages, area of 40 km<sup>2</sup>, 1762 inhabitants), and others with large areas and few villages and inhabitants (Camăr – a village, 40 km<sup>2</sup> și 1899 inhabitants).

*Area coefficient* is the opposite of density and indicates the ratio between the area and the number of settlements, or in other words, it shows how much land belongs to the village. The average value of an area coefficient, in the Silvania Land, is  $14.9 \text{ km}^2/\text{village}$ . Even more than the coefficient that shows the density of settlements, the area coefficient indicates clearly the big differences between the parishes. Thus, Camăr – situated in an isolated place – has the area coefficient of 40 (1 village for 40 km<sup>2</sup>), Plopiş, whose border expends further into the mountain area has 26,6, Cizer 23,6, Bobota 24,4 etc., and in the parishes of Dobrin (6,6), Benesat (9,3) and Sărmăşag (9,3), the land area belonging to a village is the smallest.

*The index of dispersion* shows the distribution of the bodies of hearths in the area. The settlement dispersion in the territory is the expression of natural factors (relief, fragmentation, hydrographic network) as well as demographic, social-economical and management factors.

The values of this coefficient give the opportunity of categorizing the parishes in the Silvania Land into the following categories:

- parishes with a reduced index of dispersion (0,00-0,50) are those that do not have any village (Camăr, 0,00) or one village (Carastelec 0,08, Şamşud 0,3);
- parishes that have two villages (without the village seat) have a small index of dispersion (0,51-1,00). Thus, is the case of Cizer (0,6), Crasna (0,9), Crişeni (0,98), Pericei (0,9), Vârşolţ (0,6);
- parishes with medium index of dispersion (1,01-2,0) have two, three or four villages (some of them are very small). Some parish centers do not have the highest demographic potential in the respective parish (Bănişor, Benesat, Bobota, Coşeiu), others, on the contrary, clearly dominate the other villages (Nuşfalău, Plopiş, Sărmăşag);
- parishes with high index of dispersion (2,01-4,0) usually have six villages (Măerişte 3,2, Valcău de Jos 3,6). There are cases when the number of villages is smaller (5) but the highest demographic potential belongs to other village than the parish seat (Sălățig 3,3; Sâg 3,1);

Last but not least, there are two parishes with a big index of dispersion (more than 4): Dobrin (4,1) and Hereclean (4,4). There are six villages belonging to them, and the highest number of inhabitants is to be found in another village than the parish seat (Doba, in the former and Dioşod, in the latter case).

The potential of polarization in the parish centers partially highlights the power of their attraction over the belonging villages. When establishing this indicator, we used the formula suggested by V. Surd and L. Nicoară (1989):

Pp = N-N'/Pc

N = parish population

N' = parish center population

Pc = conventional village population, that indicates the average number of inhabitants of a village in the Silvania Land (703 inhabitants).

The fact that the number of localities with small and very small population is big, the conventional village has 703 inhabitants, gives a high power of attraction to a good part of the parish centers in the Silvania Land.

This coefficient refers to the possibility of attraction of the parish center for a certain number of conventional villages. The smallest value of the potential of polarization is 0 (zero) (Camăr has no village in its component), and the highest is 4,7 (Hereclean).

Within these limits we established the following categories:

• parish centers with very low potential of polarization (0,0-1,0) are 6 (18 %), some very close to 0 (zero) – Carastelec 0,1 has a very small village in its component, Dumuslău

with 98 inhabitants. To the same category belong the parishes of Chieşd (0,9), Cizer (1,0), Şamşud (0,8), Vârşolţ (1,0);

- seven parish centers (21 %) have a medium potential of polarization with values ranging from 1,01 to 2,0. They have few villages as "subordinates", but have a better spacial positioning than the first ones: Benesat (1,8), Coşeiu (1,2), Crişeni (1,7), Dobrin (2,0), Halmăşd (2,0), Marca (2,0), Pericei (1,7);
- parish centers with high potential (2,01-3,0): Bănişor, Crasna, Dobrin, Horoatu Crasnei, Plopiş, Someş Odorhei şi Sărmăşag, are characterized by a large density of villages in their area;
- a high potential of polarization (over 3,0) have most of the parishes in the Silvania Land (10) and indicates a fact. According to the estimated coefficient of polarization, the parishes with the highest power of attraction are Hereclean (4,7), Sâg (4,8), Bobota (3,6), Sălățig (3,7).

Perished settlements, settlements on the way of perishing, viable settlements

In the long process of administrative management of the population in the Silvania Land, some settlements have perished, others – favoured by their position in the territory, or by the existence of natural resources – have developed.

*Perished settlements.* Not all the settlements that are not mentioned in documents any longer have perished, because some of them have been assimilated by neighbouring settlements.

Furthermore, the fact that they were not mentioned in the past documents any longer, cannot be seen as a certainty of their disparity. That is why we consider that some settlements are not mentioned in the past documents any longer.

In the Silvania Land there are 50 such cases, some settlements being mentioned in one document only, at the beginning of their existence (Borana in 1220, Adriantelek, in 1241, Elye, in 1299, Poyaspotok, in 1219). Instead, there are human settlements that lasted in time (Bydeskweth from 1452 to 1549; Waykfalwa, 1481-1768).

As one can notice in figure 2, it is clearly shown that many of them persihed when "merging" with other settlements (Miczetelke, mentioned in 1409 as being within the "borders of Zălău", Nadahaza (1492) merged within the borders of Firminiş, Gyalatelka (1568) in the area of Uileacu Şimleului).

No	Name of locality	Year of its mentioning	Location near the village
1.	Adriantelek	1241	Cristelec și Carastelec
2.	Alzeg, Alszög	1499, 1546	Ratin
3.	Borana	1220	comitatul Solnoc
4.	Guthmer	1410	Leşmir
5.	Gyetvir	1496	Vârșolț

Perished localities in the Silvania Land

Table 2

The reasons for the disparity of some settlements are multiple: their location in easily accesibile places, and thus, being exposed to the invasion of allochthons. The invasion of the Tatars in 1241, the fights between the feudals, the epidemics, the social movements (the riots in 1437 and 1454) and the repercusions which followed their suppression were the reasons for their disparity.

Settlements on the way of perishing. Isolation, lack of means of transport, poor economical situation, the mirage of the cities are some of the reasons which determined the ,,drainage" of some isolated settlements, with the tendency of disappearance in the near or far future.

P. Cocean (2004) suggests, based on number of inhabitants, 5 classes of human

settlements viability:

- settlements with certain disparity are those with under 50 inhabitants. In the Silvania Land only five settlements belong to this class, and their disappearance is certain: Ţărmure (1 inhabitant), Fufez (17), Periceiu Mic (33), Marca-Huta (47), Poiana Măgura (15);
- *settlements on the way of perishing* are those in which live between 51 and 100 inhabitants. Such cases are: Colonia Sighetu Silvaniei (69), Deleni (94), Naimon (92), Ratovei (76), Bic (62);
- settlements in the condition previous to the process of perishing have between 101 and 200 inhabitants: Sâncraiu Silvaniei (173), Fetindia (165), Recea Mică (170), Bocșița (146).

The settlements in the Silvania Land which belong to the 3 forementioned classes make 12,8 %.

- settlements in a state of uncertainty (201-250 inhabitants) are: Firminiş (213), Mălădia (245), Plesca (211), Horoatu Cehului (222);
- *viable settlements* are considered those with over 250 inhabitants, which ensures not only their existence but in some cases, even their evolution towards becoming towns (Crasna, 4378 inhabitants; Sărmăşag, 4710 inhabitants). To this class belong most of the rural settlements in the Silvania Land (99) which gives stability to the network of settlements.

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