

TERRITORIAL DISPARITIES CAUSED BY THE CURRENT SITUATION OF THE TECHNICAL INFRASTRUCTURE IN RURAL AREAS - CENTRAL REGION¹

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Abstract

At European level, the arrangement of the territory is defined as “a spatial expression of the economic, social, cultural and ecologic policies of all societies” (“European Charter of the arrangement of the territory” - 1983). In Romania, the arrangement of the territory and urbanism activities are regulated by the Law 350/2001 regarding the arrangement of the territory and urbanism, with the afterwards changes, which sets the following objectives for the arrangement of the territory: social and economic balanced development of the regions and areas, in compliance with their specificity, improvement of the quality of life for people and human collectivities, responsible management of the natural resources and environmental protection, rational use of the territory.

Key words: arrangement of the territory, regional disparities, rural development

INTRODUCTION

The inequalities generated by the endowment of the territory from the Romanian rural communities lead to regional disparities regarding the economic, social and cultural development.

The indicators taken into consideration for the analysis of the endowment of the territory (housing comfort, technical – utilities infrastructure), of the rural areas of the Center Region, are: living area per inhabitant (square meters); the quantity of drinkable water distributed to the consumers for domestic use per inhabitant (cubic meters); the simple length of the drinkable water distribution network (km); the simple length of the

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sewerage network (km); the simple length of the natural gas distribution network (km).

The available statistical data at the level of the Romanian rural communities where used for the calculation of some indicators afferent to the 5 relevant criteria (endowment of the territory, demographic and social dimension, social infrastructure, economic dimension, investments) for building a matrix that can describe the present status of the rural socio-economic inequalities.

The calculated indicators where subjected to the cluster type analysis which represent a set of techniques that allow the construction of relative homogenous groups – clusters, depending of the considered variables.

RESULTS OF RESEARCH

The Cluster 1 is the best equipped one regarding the endowment of the territory (habitation comfort, infrastructure) of the 3 clusters, the counties that are detaching being Braşov (Bran, Şinca, Harman, Cristian, Sânpetru communes), Sibiu (Şelimbăr, Cristian communes) and Mureş (Riciu, Sântana de Mureş, Ceuaşu de Mureş, Sânpaul, Band, Albeşti communes).

In terms of the living area per inhabitant, in the Center Region, the mean value is 16,39 sm/inhab. being greater than the national mean value of 15,87 sm/inhab. The mean value of Cluster 1 and 3 is higher than the national mean value.

There are no noticeable differences regarding the mean living area per inhabitant, neither between clusters or counties: - the lowest value is the one from Cluster 3 – 15,12 sm/inhab., and the highest is the one from Cluster 1 – 18,06 sm/inhab.; - the lowest value is the one from Covasna county 15,60 sm/inhab., and the highest is the one Sibiu county - 17,10 sm/inhab.

Table 1: Centralization of indicators regarding the endowment of the territory – Center Region

	Total	Cluster 1	Cluster 2	Cluster 3
Living area per inhabitant sm (stable population at 1 st of July)	16,39	18,06	16,01	15,12
Quantity of drinkable water distributed to the consumers for domestic use cm/inhab.	20,37	49,47	10,45	10,29
Simple length of the drinkable water distribution network - km	9,39	17,04	7,23	5,16
Simple length of the sewerage network - km	1,81	6,02	0,46	0,05
Simple length of the natural gas distribution network -km.	12,01	13,63	12,90	6,31

Source: Romania’s Statistical Yearbook 2008, NIS

There are some bigger inequalities between communes in terms of living space, even if the mean value at county or Cluster level is acceptable in comparison with the national mean. Thus:

- The communes with the lowest level of housing comfort are: Bunila (Braşov) – 7,58 sm/inhab., Augustin (Braşov) – 8,01 sm/inhab., Poiana Vadului (Alba) – 8,47 sm/inhab., Lemnia (Covasna) – 9,32 sm/inhab., Apata (Braşov) – 9,82 sm/inhab.,
- The communes with the highest level of housing comfort are Corunca (Mureş) – 45,85 sm/inhab., Fundata (Braşov) – 37,03 sm/inhab., Bereni (Mureş) – 36,64 sm/inhab., Mereni (Covasna) – 34,59 sm/inhab., Bruuiu (Sibiu) – 27,81 sm/inhab.

Table 2: Living area per inhabitant (sm/inhab) – Center Region

County/Cluster	Cluster 1	Cluster 2	Cluster 3	Total
Alba	15,04	16,34	16,24	16,07
Braşov	18,25	16,55	14,50	16,91
Covasna	20,96	14,36	15,80	15,60
Harghita	18,38	16,24	14,63	16,71
Mureş	19,52	15,42	15,32	16,08
Sibiu	17,53	17,90	13,91	17,10
Total	18,06	16,01	15,12	16,39
National mean	17,44	16,48	14,40	15,87

Source: Romania’s Statistical Yearbook 2008, NIS

Regarding the distribution of drinkable water utility, for the Center Region, even if **the mean length of the drinkable water network** is lower than the national mean, **the mean quantity of water distributed to consumers** is higher than the national mean.

The Cluster 1 detaches from the rest, both in terms of length of the network and of mean quantity of water per inhabitant. There is a large discrepancy between the Cluster 1 and the others, but even in the case of Cluster 1, there are big differences between the components counties, especially in the case of the length of the drinkable water network.

Table 3: The quantity of drinkable water distributed to consumers for domestic use per inhabitant (cm/inhab.) – Center Region

County/Cluster	Cluster 1	Cluster 2	Cluster 3	Total
Alba	11,05	6,82	7,16	7,70
Braşov	99,46	12,92	32,37	54,43
Covasna	16,11	14,41	8,15	13,57
Harghita	31,90	17,30	14,68	21,51
Mureş	14,18	5,48	4,48	6,75
Sibiu	77,00	13,57	0,00	32,81

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County/Cluster	Cluster 1	Cluster 2	Cluster 3	Total
Total	49,47	10,45	10,29	20,37
National mean	33,48	14,58	5,08	14,77

Source: Romania's Statistical Yearbook 2008, NIS

The Braşov and Sibiu counties rank best in terms of the drinkable water distribution, the lowest ranking counties being Alba and Covasna.

The communes that protrude, in terms of: - The length of the drinkable water network, are: Bran (Braşov) – 68 km, Târlungeni (Braşov) – 65 km, Lupeni (Harghita) – 59,10 km, Şelimbăr (Sibiu) – 58,90 km, Şinca (Braşov) – 45,00 km; - The quantity of drinkable water consumed, are: Hoghiz (Braşov) – 343,55 cm/inhab., Şelimbăr (Sibiu) – 80,01 cm/inhab., Cristian (Sibiu) – 61,25 cm/inhab., Târlungeni (Braşov) 56,56 cm/inhab., Feldioara (Braşov) – 56,27 cm/inhab.

The number of communes that have no drinkable water distribution network is 123, out of which: 26,83% in Sibiu county; 21,14% in Mureş county; 20,33% in Alba county; 12,19% in Harghita county, 11,38% in Covasna county and 8,13% in Braşov county.

Table 4: The simple length of the drinkable water distribution network (km) – Center Region

County/Cluster	Cluster 1	Cluster 2	Cluster 3	Total
Alba	9,71	5,96	4,79	6,50
Braşov	27,19	7,86	8,04	16,35
Covasna	3,88	7,64	3,40	6,34
Harghita	21,26	9,58	9,26	13,17
Mureş	11,06	8,37	5,70	8,37
Sibiu	15,67	2,81	0,00	6,70
Total	17,04	7,23	5,16	9,39
National mean	19,78	11,45	4,94	10,63

Source: Romania's Statistical Yearbook 2008, NIS

Table 5: The simple length of the sewerage network (km) – Center Region

County/Cluster	Cluster 1	Cluster 2	Cluster 3	Total
Alba	1,92	0,03	0,05	0,40
Braşov	4,52	0,00	0,14	2,01
Covasna	0,12	0,90	0,10	0,64
Harghita	12,87	1,32	0,07	4,76
Mureş	6,42	0,43	0,00	1,34
Sibiu	5,49	0,00	0,00	1,87
Total	6,02	0,46	0,05	1,81
National mean	2,85	0,27	0,19	0,77

Source: Romania's Statistical Yearbook 2008, NSI

The Center Region ranks also well, in terms of the sewerage utility, compared to the national mean. The communes from the Cluster 1 benefit from a sewerage network with a length of 6,02 km, detaching from the rest of the clusters, where the length of the network varies from 0,4 km, in Cluster 2, to only 0,05 km in Cluster 3.

The communes with the longest sewerage network are: Șelimbar (Sibiu) – 50,60 km, Joseni (Harghita) – 37,90 km, Remetea (Harghita) – 35,00 km, Santa de Mureș (Mureș) – 29,30 km, Horman (Brașov) – 26,20 km.

Despite this, there is still a large number of communes (269), in the Center Region, that have no sewerage network, out of which: 23,79% in Mureș county, 22,30% in Alba county, 17,10% in Sibiu county, 14,50% in Brașov county, 12,64% in Harghita county and 9,67% in Covasna county.

The Center Region also detaches from the national mean, in terms of the natural gas distribution, both at global and cluster levels. There are some smaller differences between clusters, in terms of the mean length of the network.

Table 6: The simple length of the natural gas pipeline distribution (km) Center Region

County/Cluster	Cluster 1	Cluster 2	Cluster 3	Total
Alba	10,12	9,30	3,31	8,48
Brașov	17,36	8,96	6,03	12,08
Covasna	1,08	2,27	0,00	1,70
Harghita	7,53	3,42	4,90	4,88
Mureș	24,59	26,79	11,46	23,90
Sibiu	12,94	12,03	7,68	11,60
Total	13,63	12,90	6,31	12,01
National mean	9,69	5,26	0,81	4,44

Source: Romania's Statistical Yearbook 2008, NIS

Between the components counties, there are some important differences; the county that detaches from the others, in terms of the length of natural gas distribution network, is Mureș county – 23,90 km of network, followed by Brașov county, with 12,08 km and Sibiu, with 11,60 km; the lowest ranking county, from this point of view, is Covasna, with only 1,7 km of network.

The communes that benefit from the longest natural gas distribution network are situated in Mureș county (Band 77,20 km, Acatari 63,00 km, Riciu 60,70 km, Ceuașu de Câmpie 60,10 km, Gornești 58,20 km, Valea Largă 58,20 km, Sânpetru de Câmpie 56,20 km communes).

The number of communes without a natural gas distribution network, from the Center Region, reaches 169 localities, out of which 45 are in Alba county, 39 in Harghita county, 32 communes in Covasna county, 19 in Brașov and Mureș counties and 15 in Sibiu county.

CONCLUSIONS

The Center Region, in terms of technical – utilities infrastructure, ranks better than the national mean value, at all the analyzed indicators levels.

In terms of territory endowment, there are 61 communes in the Center Region that have no drinkable water distribution network, sewerage network or natural gas distribution network, out of which: in Alba county – 22 communes (36,07%); in Covasna county – 10 communes (16,39%); in Harghita and Sibiu counties – 9 communes in each (14,75% each county); in Mureş county – 6 communes (9,84%) and Braşov county – 5 communes (8,20%).

The communes that rank high, in terms of technical – utilities infrastructure are: *Şelimbăr* (Sibiu county) – 58,90 km length of drinkable water distribution network, 50,60 km length of sewerage network, 33,20 km length of natural gas distribution network, *Sântana de Mureş* (Mureş county) – 35 km length of drinkable water distribution network, 29,30 km length of sewerage network, 32,10 km length of natural gas distribution network, *Frumoasa* (Harghita county) – 28 km length of drinkable water distribution network, 25 km length of sewerage network, 28,90 km length of natural gas distribution network, *Albeşti* (Mureş county) – 24,90 km length of drinkable water distribution network, 18 km length of sewerage network, 38,30 km length of natural gas distribution network, *Harman* (Braşov county) – 16,60 km length of drinkable water distribution network, 26,20 km length of sewerage network, 37,70 km length of natural gas distribution network.

There are also communes that rank good, in terms of drinkable water distribution network and natural gas network, but very low in terms of sewerage network, for example: *Bran* (Braşov county) – 68 km length of drinkable water distribution network, 45,60 km length of natural gas distribution network, 0 km length of sewerage network, *Riciu* (Mureş county) – 35 km length of drinkable water distribution network, 60,70 km length of natural gas distribution network – 2 km length of sewerage network, *Ceauşu de Câmpie* (Mureş county) – 30,40 km length of drinkable water distribution network, 60,10 km length of natural gas distribution network – 0,30 km length of sewerage network, *Sâncraiu de Mureş* (Mureş county) – 41,60 km length of drinkable water distribution network, 39,30 km length of natural gas distribution network – 8,8 km length of sewerage network, *Sânpaul* (Mureş county) – 43,40 km length of drinkable water distribution network, 39,50 km length of natural gas distribution network, 0 km length of sewerage network, *Şinca* (Braşov county) – 45 km length of drinkable water distribution network, 31,10 km length of natural gas distribution network – 6 km length of sewerage network.

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