Rural Space Diagnosis

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General considerations

The increase complexity of the problems concerning the planning of the territory, both at a county level and at the level of the regions studied and of every administrative unity, imposes the necessity of realizing the most propitious concordance between the existing conditions and the politics of the rural regional development. The economic and social evolution from the last decades, but especially during the period after the 1990, requires a profound analysis at the level of the commune - as a fundamental territorial unity for the rural areas, but also understanding and being aware of the current tendencies, which highlight the stage of rural development, the factors influencing the ensemble and the constitutive aspects of the communes' social-economic life, following the possible directions of social-economic development in the sense of its optimization and of the growth of the living standard.

The method of rural space diagnosis ensures the possibility of following the dynamics of the increasing level of the rural administrative unities from the Carpathian sector of Moldova Valley, and of its future modification. In the ensemble of the methods used in the analysis and planning of the territory, at any level, from the national to the regional one, the rural space diagnosis refers to a hierarchy of the administrative unities on their level of development, which thus corresponds to the highest exigencies. Conceived as a scientific criterion of classification, the rural space diagnosis is at the same time an efficient instrument which can be applied at need, for some larger or smaller periods of time, thus permitting not only to know the social-economic level of development, the identification of the weak and strong points of a commune, respectively but also the elaboration of some strategies for the development of the territorial structure. Therefore, we have proposed ourselves to determine the level of development of the communes, from the mountain sector of Moldova Valley by analyzing a number of seven criteria, which refer to essential quantitative and qualitative aspects from the physical-geographical, demographic, economic, dwelling, technical equipping of the places, social and ecologic field.

Criteria (7) and sub-criteria (23) have been operationalized through the means of a set of 47 indicators. Considering the fact that indicators conveyance through absolute values may include elements affected by distortion, we have chosen to express them in relative dimensions of force, with the exception of some indicators for which we could not determine the relative dimensions, or for which this way of presentation is not meaningful (the indicators from the physical-geographical criterion, the ones referring to the volume, the density and the evolution of the population, the access and quality of the transportation substructure, the ones regarding health, education, and the ones mentioned within the ecologic criterion).

Quantification of the specific features of the level of development from the rural administrative unities

Throughout our analysis, the commune is regarded as an element (unity of analysis) which can be defined through more specific features, and the level of development has been defined through the features or indicators which reflect the main aspects of promotion (economic, social, public utility etc).

The accomplishment of a multi-criteria characterization of the stage of development of the rural space from the region studied has imposed a passing from the analytic images supplied by indicators, to more synthetic images, on criteria. The detailed information has been aggregated on criteria, under the shape of indices, which, afterwards, have been aggregated within the synthetic index for the entire analyzed space, which expresses through a single quantified term, the level of complex advancement of the communes.

Examining the indicators proposed, we establish that they do not have the same importance, as power of characterization. For example the situation of the analyzed indicators within the physical-geographical criterion is conclusive. We consider that the indicators that concern the development of dwellings, depending on the shape of relief, as the ones calculating the natural factors of risk, present a higher importance that the presence of some natural protected areas, this is why we have attributed to that indicator an inferior value of importance (2). Also, to the economic criterion, even within the frame of the indicator concerning the structure of agricultural utilization, the grasslands and the hay fields are of maximum importance, considering the agro-pastoral feature of the mountain area, while the arable lands and the orchards occupy an entirely secondary place. We have attributed them value 3 of importance (minimum value), in comparison to 1, attributed to the indicator which renders the situation of the areas occupied with grasslands and hay fields.

Fixing the relative and absolute values, different by case, is followed by standardization using the method of ranks' hierarchy, which presupposes the arrangement of the communes into an increasing or decreasing row, by the assignment of some ranks from 1 to 12, the indicators being thus brought, at the same denominator (the rank), the first rank representing the best variant, and the last, the most inadequate variant. The equal variants have received the same rank, no matter their number.

Determining the level of development for each commune has been realized through the reckoning of the simple geometrical mean of the result of the indicators' ranks after the formula:

$$r_i = \sqrt[n]{II\, r_{ij}},$$

where n - represents the number of the indicators, i - the number of order of the commune, j - the number of order of the indicator, II_{ij} - the result of the indicators' ranks for each administrative unity.

The analysis of the relative values of the ranks attributed for each indicator (tables 1, 2, 3) prove the fact that in the region studied, there are no communes which to register only positive aspects, which might materialize into maximum values of the indicators, nor are there communes which to exclusively register negative values (minimum values). Thus, even in the case of the communes with a high level of development and a high potential, there are weak points (for example, at the criterion regarding the technique equipping of the dwellings, Sadova commune owns, at the indicator concerning the connection to the fixed telephone network, the last rank (12), an unlikely, but real situation - Sadova commune with a high economic potential is deficitary at this indicator, as compared with communes with a low level of development and placed at a greater distance from the town (Moldova Sulita, Breaza). Similarly, Moldova Sulita commune, which is characterized by a lower level and lower potential of development within the rural area studied, owns a higher weight of the dwellings built after 1990, a positive aspect, which grants it the third rank in the communes' hierarchy, while Vama commune, with a clear superior potential is on the 10th rank, Frumosu on the 11th rank and Ostra commune on the last rank.

The application of a multi-criteria diagnosis of the rural space is very important for the fact that it emphasizes the weak and the strong points of an administrative unity, information that can be used not only in estimating the level of development of the respective rural space, but it can also and it must constitute a main basis in shading the politics of development, regarding the possibilities of redeeming the disparities in what the technical equipping of the places is concerned, the quality of the dwelling and of social services, but also the possibilities of the best utilization of the local potential (V. Surd, 2002).

The reckoning of the unique general rank on criteria (table 4) has allowed us to obtain the synthetic development indicator for the entire rural space of the mountain sector of Moldova

Valley, with a value of 4-5 – which reflects a medium towards high level and potential of development, if we take into account the fact that 83,3% of the communes have a medium and high potential of development. We establish the fact that, from an ecologic and physical-geographical point of view, the rural space analyzed offers the most propitious conditions of development, a fact which is reflected by the most favourable values of the unique general rank for the ecologic (1.8) and physical-geographical (2.2) criteria. We also consider that the worst problems (the weak points) with which the analyzed region is confronted are the ones concerning the quality of the dwelling (6.8) and the demographic ones (6.5).

The unique general rank for each commune has allowed us their framing, depending on the level and the potential of development, into three categories:

- communes with a high level and potential of development, characterized by a unique general rank under 4. This category reunites the communes: Manastirea Humorului, with the highest potential of development (3), Sadova (3.4) and Pojorata (3.8);
- communes with a medium level and potential of development; They are identified by a unique general rank with values between 4 and 5. This is the most numerous category, which holds 50% from the total of the communes analyzed and it corresponds to Moldova Valley (Fundu Moldovei), Moldovita (Frumosu, Vatra Moldovitei) and Suha Bucovineana (Stulpicani and Ostra);
- communes with a low level and potential of development, with a unique general rank bigger than 5. They correspond to the upper sector of Moldova (Breaza and Moldova Sulita), being disadvantaged by the large distance to the town (32 km in the case of Breaza commune and 42 km in the case of Moldova Sulita commune). These communes are characterized by a precarious communicational substructure, technical equipping and conditions of life - much inferior to the other communes, aspects which have marked, in a negative way, the growth of the ageing demographic rank, determined not only by the decrease of the birth rate, but, first, by the maintenance of the rural-urban migration, at a high level, especially among the youths.

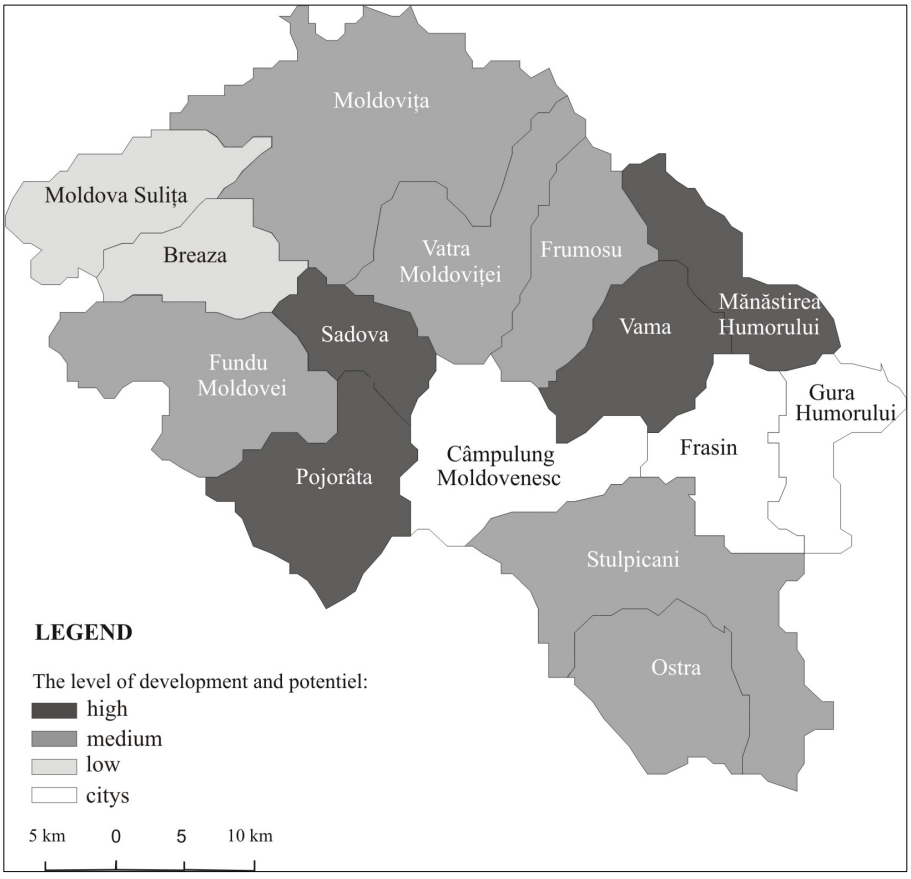

Figure 1. The level and the potential of development of the communes from the mountain sector of Moldova Valley.

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Anexes

Table 1. The unique partial rank on criteria and the unique general rank for the rural space from the mountain sector of Moldova Valley.

Commune	Unique general rank	The unique partial rank on criteria						
		Physical-geographical	Demographic	Economic	Standard of living	Technique equipping	Social	Ecologic
Breaza	5,5	2,7	11,4	5,5	8,4	6,1	3,0	1,5
Frumosu	5,0	2,0	5,8	6,5	9,2	4,5	5,8	1,4
Fundu Moldovei	4,8	2,6	9,4	4,2	6,6	4,9	3,7	2,2
Mănăstirea Humorului	3,0	2,0	3,7	5,0	1,9	3,9	3,1	1,6
Moldova Sulița	6,0	2,4	8,5	7,0	10,1	7,5	5,4	1,6
Moldovița	5,0	2,1	6,1	5,2	8,8	5,7	6,0	1,7
Ostra	4,5	2,2	3,5	6,2	6,1	2,9	9,6	1,6
Pojorâta	3,8	2,0	8,4	3,8	5,2	2,4	3,2	2,1
Sadova	3,4	2,2	5,7	4,0	2,3	4,4	3,3	2,1
Stulpicani	4,6	2,2	3,9	5,5	7,7	3,9	7,2	2,3
Vama	3,7	1,9	5,4	5,4	6,6	2,0	2,7	2,2
Vatra Moldoviței	4,9	2,2	6,3	5,6	9,4	3,2	5,7	2,0
Synthetic indicator	***4,5***	***2,2***	***6,5***	***5,3***	***6,8***	***4,2***	***4,8***	***1,8***

Table 2. The physical-geographical criterion.

Commune	Shapes of relief on which settlements have developed				Natural reservation of national interest	Natural factors of risk			
	Shapes of relief		Altitude			Risk of floods		Risk of landsliding	
	Medium values[1]	Rank	Medium values[2]	Medium values		Medium values[3]	Rank	Coefficient of risk[4]	Rank
Breaza	4,3	7	897	4	2	2,3	1	1	1
Frumosu	2,7	2	620	1	2	3,3	2	2	2
Fundu Moldovei	4,3	7	905	4	1	2,2	1	2	2
Mănăstirea Humorului	3,3	4	648	1	2	3,3	2	1	1
Moldova Sulița	5,0	8	965	5	1	2,0	1	1	1
Moldovița	3,5	5	700	2	2	2,8	1	1	1
Ostra	3,0	3	690	2	2	3,5	2	1	1
Pojorâta	3,0	3	765	3	1	3,0	2	1	1
Sadova	3,0	3	680	2	2	3,0	2	2	2
Stulpicani	3,0	3	685	2	1	4,0	2	2	2
Vama	2,0	1	553	1	2	3,5	2	3	3
Vatra Moldoviței	4,0	6	672	2	2	2,7	1	1	1

Table 3. The demographic criterion.

Commune	Population in 2002		Density of population in 2002 (inh/kmp)		Evolution of population				Factors of population growth						Index of demographic ageing (2002)		Index of professional reconversion (2002)	
	Abs. value	R_p	Abs. value	R_d	1966-2002	R 1966-2002	1990-2002	R 1990-2002	RmN 1990-2002	R_N	RmM 1990-2002	R_M	RmMn 1990-2002	R_{Mn}	Abs. value	R_{id}	Abs. value	R_{ifm}
Breaza	1690	**11**	20,0	**12**	-431	**11**	-176	**8**	11,2	**8**	13,5	**12**	-7,2	**10**	160,9	**12**	115,2	**6**
Frumosu	3582	**6**	36,0	**4**	367	**5**	28	**4**	13,3	**6**	9,4	**2**	-1,6	**3**	120,2	**10**	95,5	**11**
Fundu Moldovei	4146	**5**	23,6	**8**	-309	**10**	-574	**11**	11,9	**7**	11,5	**6**	-4,6	**7**	113,1	**9**	90,9	**12**
Mănăstirea Humorului	3582	**6**	36,9	**2**	588	**1**	132	**1**	14,0	**4**	9,8	**3**	-6,9	**9**	91,1	**3**	108,5	**8**
Moldova Suliţa	2084	**10**	21,1	**10**	-199	**8**	-307	**9**	13,3	**6**	11,8	**8**	-9,3	**12**	103,9	**7**	125,0	**2**
Moldoviţa	5021	**3**	20,1	**11**	-338	**9**	-510	**10**	14,7	**3**	11,0	**5**	-7,7	**11**	83,8	**2**	123,9	**3**
Ostra	3158	**7**	31,1	**5**	236	**7**	-650	**12**	17,5	**1**	9,0	**1**	-3,9	**6**	46,7	**1**	125,4	**1**
Pojorâta	3109	**8**	22,6	**9**	-552	**12**	12	**5**	10,9	**10**	13,5	**11**	0,9	**1**	129,7	**11**	102,7	**10**
Sadova	2483	**9**	36,5	**3**	385	**3**	61	**3**	11,0	**9**	11,7	**7**	-0,7	**2**	110,9	**8**	109,7	**7**
Stulpicani	6223	**1**	28,7	**6**	537	**2**	86	**2**	13,7	**5**	10,5	**4**	-3,7	**5**	101,7	**4**	117,0	**5**
Vama	6011	**2**	44,1	**1**	371	**4**	-72	**6**	10,5	**11**	12,1	**9**	-2,6	**4**	103,5	**6**	104,6	**9**
Vatra Moldoviţei	4659	**4**	26,4	**7**	265	**6**	-139	**7**	17,3	**2**	12,2	**10**	-5,1	**8**	102,5	**5**	123,3	**4**

[1] The medium value corresponding to each settlement has resulted from the assignment of some coefficients from 1 to 6, as it follows: 1- for the villages of terrace from the depressions of confluence from the transversal sector of Moldova; 2 – the villages of terrace developed within the depressions of confluence on the longitudinal valley of Moldova, Moldoviţa, Suha Bucovineană, and Humor; 3 – the mixed villages of terrace and of mountainside; 4 – the villages of valley low terraced and with an exclusive disposing along the valley; 5 – mixed villages in which dispersion on the mountainsides is predominant; 6 – villages of flat land. Then we resorted to summing up the coefficients and dividing the result per the number of the constitutive villages of every settlement.

[2] The medium attitude of the main nuclei from the constitutive villages of the communes analyzed. Rank 1 has been attributed to the villages with altitudes between 550 – 650 m, rank 2 to those with altitudes of 651-775 m, 3 – 751-850 m, 4 – 851-950 m, 5 – over 950 m.

[3] In estimating the risk of producing floods we have attributed to each village a coefficient, depending on the degree of exposure to this factor of risk; 1 – villages situated far from the risk of floods (villages of flat land); 2 – small risk for the villages in which the dispersion on the mountainsides is predominant; 3 – medium risk for mixed villages (terrace and slope) and the ones of valley weak terraced and with exclusive disposing along the valley; 4 – high risk in the case of settlements of terrace from the depressions of confluence.

[4] In estimating the risk of producing landsliding we took into account the localities in which there have been signalized landsliding (potential or reactivated after rains). Thus, we have attributed the next coefficients: 1 – small risk of landsliding; 2 – medium risk; 3 – high risk (with sliding reactivated after rains).

Table 4. The economic criterion (a) and the living criterion (b).

The economic criterion (a).

Commune	The agricultural potential										The forestry potential		The touristic potential				The industrial potential				The diversity of the economic activities				The degree of occupation of the population			
	Agricultural ground/inh		The structure of the agricultural usage (ha/inh)						The charge of animals/ha		The forestry surface/inh		The degree of touristic activity				Board and loadings[5]		Unities of processing the agricultural products[6]		The weight of the nonagricultural occupied population from the total occupied population		The forms of private industry[7]		Active occupied population		The occupied population in agriculture[8]	
	Value	R	Arable		Grasslands and hay fields		Orchards		Value	R	Surface	R	Natural objectives		Anthropic objectives		‰	R	‰	R	‰	R	‰	R	‰	R	%	R
			Value	R	Value	R	Value	R					Nr.	R	Nr.	R												
Breaza	2,0	2	0,03	8	2,0	2	-	5	0,29	5	2,8	3	-	4	1	2	-	6	-	7	74,1	11	29,5	7	511,2	2	21,1	8
Frumosu	0,7	7	0,07	4	0,9	4	-	5	0,38	4	2,0	7	-	4	-	3	-	6	0,6	4	189,2	9	28,5	9	393,9	3	35,4	11
Fundu Moldovei	1,5	3	0,04	7	1,5	3	-	5	0,25	7	2,5	5	1	3	-	3	-	6	1,4	1	302,0	5	43,9	3	367,3	5	11,1	2
Mănăstirea Humorului	0,6	8	0,2	1	0,4	8	0,002	1	0,40	3	2,1	6	-	4	2	1	2,1	3	-	7	103,0	10	33,5	6	572,9	1	40,6	12
Moldova Suliţa	2,9	1	0,05		2,8	1	-	5	0,40	3	1,8	8	3	1	-	3	-	6	-	7	41,0	12	23,5	12	269,3	4	17,4	7
Moldoviţa	0,9	5	0,1	2	0,8	5	0,0006	3	0,13	9	4,0	1	-	4	1	2	-	6	0,4	5	235,2	6	35,8	5	267,3	10	15,9	5
Ostra	0,3	9	0,03	8	0,3	9	-	5	0,29	5	2,8	3	-	4	-	3	-	6	-	7	468,0	1	27,5	10	331,9	8	25,0	10
Pojorâta	1,0	4	0,03	8	0,9	4	-	5	0,15	8	3,3	2	2	2	-	3	1,0	4	1,0	3	376,9	2	40,5	4	339,1	6	9,2	1
Sadova	0,9	5	0,05	6	0,9	4	-	5	0,45	2	1,8	8	-	4	-	3	4,8	2	1,2	2	345,6	3	50,3	2	315,8	9	13,4	3
Stulpicani	0,8	6	0,1	2	0,7	6	0,0008	2	0,55	1	2,6	4	2	2	-	3	-	6	-		305,3	4	27,2	11	248,0	11	22,1	9
Vama	0,6	8	0,09	3	0,5	7	-	5	0,28	6	1,6	9	-	4	-	3	6,9	1	0,2	6	220,7	8	53,8	1	234,0	12	17,0	6
Vatra Moldoviţei	0,8	6	0,06	5	0,8	5	0,0002	4	0,40	3	2,8	3	-	4	2	1	0,9	5	-	7	233,0	7	29,0	8	333,3	7	14,0	4

Living[9] (b).

Commune	Habitable surface				The endowment of the dwellings with plumbing				The degree of modernization and comfort of the dwellings				The ageing of the houses		New houses	
	The habitable surface in mp/inh		The number of inhabited rooms		Plumbing		Own plumbing		Bath[10]		Thermic station		The weight of dwellings built after 1970		The weight of new dwellings built between 1990-2002	
	Value	R	Value	R	%	R	%	R	%	R	‰	R	%	R	%	R
Breaza	17,1	**3**	1,1	**2**	3,1	**12**	3,1	**12**	3,5	11	-	**10**	30,5	**8**	12,8	**4**
Frumosu	15,5	**6**	1,1	**2**	9,3	**9**	8,1	**8**	12,8	8	1,6	**8**	26,1	**11**	8,0	**11**
Fundu Moldovei	15,7	**5**	1,0	**3**	19,6	**6**	16,1	**5**	17,6	6	4,8	**5**	34,1	**4**	11,0	**8**
Mănăstirea Humorului	18,8	**1**	1,1	**2**	34,6	**2**	34,1	**1**	27,6	3	11,0	**2**	47,0	**1**	19,7	**1**
Moldova Sulița	13,6	**10**	0,8	**5**	4,3	**11**	4,3	**11**	2,8	12	-	**10**	33,1	**6**	13,0	**3**
Moldovița	14,5	**9**	0,9	**4**	11,8	**8**	11,7	**7**	9,7	9	1,9	**7**	31,0	**7**	11,9	**5**
Ostra	13,0	**11**	0,9	**4**	58,4	**1**	4,5	**10**	57,6	1	5,4	**4**	14,1	**12**	3,6	**12**
Pojorâta	17,0	**4**	1,1	**2**	20,4	**5**	20,2	**4**	21,0	5	11,7	**1**	29,1	**9**	10,7	**9**
Sadova	18,3	**2**	1,2	**1**	31,9	**3**	31,0	**2**	32,9	2	11,7	**1**	38,3	**2**	14,9	**2**
Stulpicani	15,3	**7**	0,9	**4**	14,3	**7**	13,3	**6**	13,1	7	4,4	**6**	34,0	**5**	11,4	**6**
Vama	14,6	**8**	0,9	**4**	26,4	**4**	22,7	**3**	25,2	4	9,4	**3**	28,4	**10**	9,9	**10**
Vatra Moldoviței	14,5	**9**	0,8	**5**	8,2	**10**	7,5	**9**	7,5	10	0,7	**9**	34,2	**3**	11,3	**7**

[5] The weight of the agro touring board and lodgings has been obtained by the reference to the total number of dwellings in each locality.
[6] The unties of processing of the agricultural products have been reported at a thousand inhabitants.
[7] It has been followed the weight of any forms of private industrial units (commercial association, family associations, natural person) at a thousand inhabitants.
[8] The occupied population in agriculture at a hundred hectares of arable ground.
[9] At the sub criteria the endowment of the houses with plumbing, the degree of modernization and comfort of the houses, the age of the buildings and the new ones, the reference was made at the total number of permanent dwellings.
[10] We took into account the total number of baths (both the ones within the house, and also the ones outside the house).

Table 5. The criterion concerning the technique equipping of the localities (a), social (b), economic(c).

The technique equipping of the localities (a).

Commune	The supply with water in a centralized system		The supply with electric power		The connection to the telephone networks				The access and the quality of the transportation substructure	
					Fixed		Mobile		Railways	Roads
	(%)	R	(%)	R	(‰)	R	(‰)	R	R	R
Breaza	-	**9**	88,1	**9**	27,8	**9**	24,5	**4**	**3**	**3**
Frumosu	0,9	**5**	98,4	**3**	38,0	**5**	17,5	**9**	**2**	**3**
Fundu Moldovei	3,1	**3**	96,6	**6**	30,6	**8**	18,1	**8**	**2**	**3**
Mănăstirea Humorului	0,3	**7**	99,0	**1**	34,1	**6**	23,2	**5**	**3**	**3**
Moldova Sulița	-	**9**	83,2	**10**	15,4	**11**	9,8	**10**	**3**	**3**
Moldovița	0,1	**8**	95,4	**7**	32,9	**7**	20,8	**7**	**2**	**3**
Ostra	50,4	**1**	99,0	**1**	56,0	**3**	2,5	**11**	**3**	**3**
Pojorâta	-	**9**	99,0	**1**	64,0	**2**	22,3	**6**	**1**	**1**
Sadova	0,7	**6**	98,2	**4**	14,9	**12**	22,3	**6**	**1**	**2**
Stulpicani	1,0	**4**	97,0	**5**	27,5	**10**	29,5	**1**	**3**	**3**
Vama	3,2	**2**	98,5	**2**	55,4	**4**	29,4	**2**	**1**	**1**
Vatra Moldoviței	0,7	**0**	95,0	**8**	64,4	**1**	27,4	**3**	**2**	**2**

Social (b).

Commune	Health (nr. inh/physician)		Education (nr. pupils/teacher)		Communication (nr. tv. subscription/1000 inh)		Infant death (demises under 1 year/1000 borne alive)	
	Absolute value	Rank	Absolute value	Rank	(‰)	Rank	(‰)	Rank
Breaza	1690	**2**	10,4	**2**	48,5	**10**	-	**1**
Frumosu	1791	**3**	11,9	**8**	75,9	**6**	32,3	**4**
Fundu Moldovei	2073	**4**	11,6	**6**	103,2	**4**	-	**1**
Mănăstirea Humorului	1791	**3**	10,7	**3**	88,2	**5**	-	**1**
Moldova Sulița	2084	**5**	11,7	**7**	44,6	**12**	-	**1**
Moldovița	2510	**8**	13,8	**10**	66,7	**8**	-	**1**
Ostra	3158	**11**	14,8	**11**	68,7	**7**	35,7	**5**
Pojorâta	3109	**9**	10,1	**1**	150,2	**1**	69,0	**6**
Sadova	2483	**7**	10,9	**4**	111,2	**2**	-	**1**
Stulpicani	3112	**10**	10,9	**4**	45,3	**11**	26,3	**3**
Vama	1502	**1**	12,2	**9**	106,6	**3**	-	**1**
Vatra Moldoviței	2330	**6**	11,1	**5**	53,7	**9**	23,3	**2**

Ecologic (c)

Commune	Air	Water	Ground	Woods	
	The quality of the air (the frequency of outrunning LMA on polluting substances)	The quality of the water (the frequency of outrunning LMA on polluting substances)	Affected grounds by factors of limiting the quality	Woods affected by phenomena of drying and grubbing from the total forestry surface	
	Rank	Rank	Rank	Value	Rank
Breaza	1	1	1	966	5
Frumosu	1	1	2	488	2
Fundu Moldovei	1	1	2	2553	12
Mănăstirea Humorului	1	1	2	983	3
Moldova Suliţa	1	1	1	1284	6
Moldoviţa	1	1	2	957	4
Ostra	1	2	3	167	1
Pojorâta	1	1	2	1621	9
Sadova	1	1	2	1863	10
Stulpicani	1	2	2	1425	7
Vama	1	1	2	1893	11
Vatra Moldoviţei	1	1	2	1581	8