

## **Analysis of Regional Disparities in the Development of Human Settlements in Vâlcea County**

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**Abstract:** This paper aims at analyzing the level and nature of regional disparities in Vâlcea County. The main objectives of the paper are: to present the most relevant aspects of Vâlcea County, to individualize different types of territorial disparities after the rank of county localities (cities, towns and villages), using mainly the statistical analysis method and the graphic method, to identify the advantaged and disadvantaged geographic areas in Vâlcea County and to propose solutions to reduce the identified disparities in accordance with the trends set in the European Union (Strategy 2020).

**Keywords:** regional disparities; concentration; development

**JEL Classification:** R11; R12

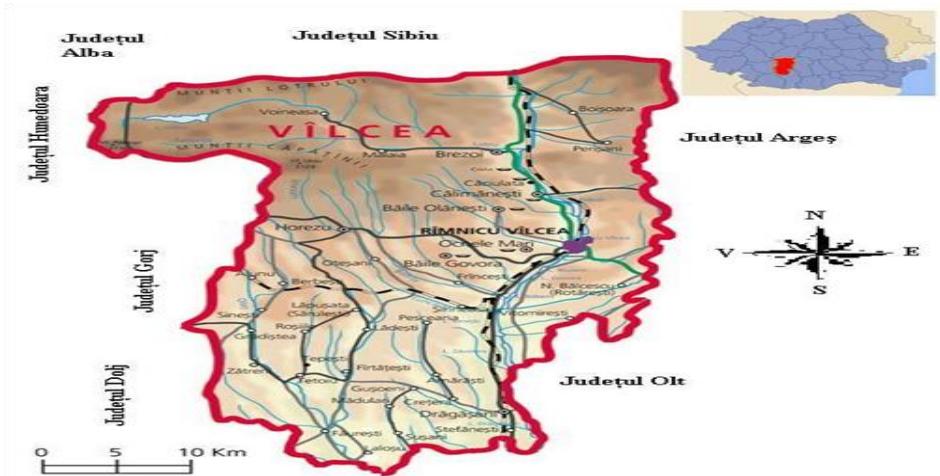
### **1. Introduction**

Located in the central-southern Romania, Vâlcea County is bordered on the north by Sibiu and Alba County, on the north-west by Hunedoara County, on the west by Gorj County, on the south and south-west by Dolj County, on the south and south-east by Olt County and on the east by Argeș County (Map 1). It is part of the South West-Olténia development region, presenting a diverse landscape, with predominance of the mountain.

The territory of Vâlcea County includes two municipalities, one of which is the county seat – Râmnicu Vâlcea and Drăgășani, nine cities - Băbeni, Băile Govora, Băile Olănești, Bălcești, Berbești, Brezoi, Călimănești, Horezu and Ocnele Mari, 78 municipalities (Voineasa, Vaideeni, and so on.) and 560 villages (according to Romanian Statistical Yearbook, 2010), each with different developmental potential and level.

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**Map 1. Vâlcea County**

*Source: processing after <http://www.comvis.ro/valea%20turistica/index.html>*

Vâlcea County holds the 23th place among Romanian counties in terms of area ( $5.765 \text{ km}^2$ ), the 18th place in terms of total population (407.764 habitants - 1,89% of the total population of Romania) and the 15th place in terms of population density (70,7 habitant/km $^2$ ).

Life expectancy at birth is 75 years, higher than the national average. The migratory movement of population in Vâlcea County shows a high percentage of immigrants at the regional level (33.93%) and a lower percentage of migrants (18.45%), meaning that there are more people arriving than leaving this region.

The unemployment rate in Vâlcea County is 7.9%, being just above the national average (7.8%) and well below the regional average (10.4%). Other indicators of quality of life and infrastructure, showing the place of Vâlcea County at national and regional level, are: the number of county hospitals (9), representing 20.93% of the regional total (43 hospitals) and only 1.89% of the national total (474 hospitals); the share of pupils and students in the county (71.147 students), which represent 17.03% at regional level and only 1.70% at national level; the length of urban roads in the county (in total 681 km), which means 25.63% of the regional total (2.657 km) and 2.55% of the national total (26.606 km), etc.

## 2. Methodology

The identification and individualization of territorial disparities in the development of human settlements in Vâlcea County was performed using a system of indicators, classified into four major categories according to the rank of localities

(cities, towns, municipalities and villages). This classification helps to identify the developed and disadvantaged areas in the county and to find solutions and proposals in order to reduce disparities.

The indicators used to characterize the level of socio-economic development and to highlight the various disparities that exist within a territory, has several classifications and hierarchies based on the level to which we refer (national or international) and based on the various institutions concerned with defining a common system of indicators in Romania.

For this analysis the indicators were grouped into four categories: socio-demographic indicators (total population, births, natural increase, and marriages), economic indicators (employees, unemployed, turnover), infrastructure indicators (total length of streets, sewer network, and number of dwellings) and quality of life indicators (living space, number of hospital beds, number of teachers, and so on).

### **3. Analysis Results**

After analyzing the statistical indicators in Vâlcea County I have identified the following categories of disparities:

- The most important socio-demographic disparities are between Râmnicu Vâlcea city and Drăgășani city, given that the first one is the seat of Vâlcea County.
- The economic disparities are given by the total number of employees (higher in Râmnicu Vâlcea city than the other localities). Employment in Râmnicu Vâlcea is mainly in industry, followed by services, trade, construction and health and social care. The lowest number of employees is in information and communications (376 employees). In the next city, Drăgășani (municipality), the population is occupied approximately in the same areas, but with much lower values of employees. Also, the lowest number of employees is in information and communications (28 employees). The agricultural sector is under-represented in both cities, but with higher values in Râmnicu Vâlcea - 920 employees and in Drăgășani are only 80 employees in agriculture.
- Disparities in infrastructure indicate a much greater length of urban roads for Râmnicu Vâlcea city - 203 km, of which 154 km are modernized, compared to Drăgășani city, which has only 69 km of city streets, of which 55 km are modernized.
- Disparities regarding life quality in the two analyzed municipalities mark a higher total score of students enrolled in the schools and high schools from Râmnicu Vâlcea city (20.776 students) than in those from Drăgășani city (4.868 students). The only students from throughout the county are in Râmnicu Vâlcea city and reach a figure of 6.060 students. The teaching staff is obviously larger in

the county seat (1.657 teachers in Râmnicu Vâlcea) than in Drăgășani city (372 teachers). Finally, the number of medical staff, such an important indicator for measuring the quality of life in a city, is higher in Râmnicu Vâlcea city (428 doctors) than in Drăgășani city (52 doctors) and most doctors work in the public sector.

Thus, the territorial disparities found between the two cities are obvious. Râmnicu Vâlcea city, the seat of Vâlcea County, stands out far from Drăgășani city because it has recorded much higher values for all the indicators taken into account. Drăgășani has rather the features of a simple city than a developed one. However, both cities determine a strong influence on the surrounding communities, playing the role of local growth poles and Râmnicu Vâlcea even the role of a regional pole.

There are also regional disparities between the nine towns in Vâlcea County. The most obvious are those between the town with the highest level of development and which showed higher values for most indicators (Băbeni town – has recorded very high values for total population, employees, number of schools and enrolled students, the length of gas pipelines, and so on) and the most underdeveloped town, that has low values in many important indicators (Băile Govora town - has recorded low values in terms of area and total population, in urban infrastructure and technical facilities, number of employees, and so on). A relatively high level of development also presents Călimănești and Horezu towns and Ocnele Mari town is also poorly developed.

As regards the regional disparities among the 78 municipalities in Vâlcea County, the most developed village is Mihăești, which has recorded the highest values for four of the nine considered indicators (total population, housing, employees and doctors) and high values for the other indicators. Also, Voineasa village has recorded maximum values for total area and agricultural area and average values for the other indicators. At the opposite pole are: Mitrofani village, with minimum values for three of the analyzed indicators (housing, total area and agricultural area) and low values for the other indicators; Runcu village, with minimum values for teachers and total population; Fârtățești village, with blank values (unregistered) for employees and doctors.

### **Identification of developed and disadvantaged areas in Vâlcea County**

In Vâlcea County, developed areas include the two cities (Râmnicu Vâlcea and Drăgășani), of which stands out the county seat (Râmnicu Vâlcea), and the nine towns, which compared to rural settlements they are highly developed, but comparing them to each other they have different levels of development. Thus, it stands out Băbeni town, focused on industry and with the highest number of inhabitants and the resorts-towns Călimănești, Băile Olănești and Horezu.

In Vâlcea County we can individualize as disadvantaged areas the 78 municipalities, together with their villages, because they have poor living conditions, lack of infrastructure and utilities, they do not record substantial revenues, the population is predominantly employed in agriculture, the number of employees is small, the total population is small in number and the population density is low. However, there are some municipalities (Mihăești, Voineasa) which are slightly better in terms of total population, employees and infrastructure, but we can not say they are very developed.

In addition to rural areas, in Vâlcea County other disadvantaged areas are the mountain areas (in terms of limiting the use of agricultural land), according to the classification of disadvantaged areas in the National Rural Development Programme 2007-2013, Annex 4A ([http://www.madr.ro/pages/dezvoltare\\_rurala/PNDR-versiunea-VI\\_aprilie2011.pdf](http://www.madr.ro/pages/dezvoltare_rurala/PNDR-versiunea-VI_aprilie2011.pdf)).

In Vâlcea County there are 21 disadvantaged mountain areas: Băile Olănești, Bărbătești, Berislăvești, Boiușoara, Brezoi, Câineni, Călimănești, Costești, Dăești, Golești, Horezu, Malaia, Muereasca, Perișani, Racovița, Runcu, Sălătrucel, Stoenești, Titești, Vaideeni, Voineasa.

In addition to developed urban areas and disadvantaged rural areas, in Vâlcea County we can also distinguish three areas with high development level and four areas with low levels of development, consisting generally of localities with higher and lower values for most analyzed indicators.

**Thus, Râmnicu Vâlcea – Băile Govora – Băbeni area, also called D1 area,** includes a total of nine localities, three of which are towns (Ocnele Mari, Băile Govora and Băbeni) and one is the seat of Vâlcea County (Râmnicu Vâlcea city). Also, this area includes the most developed village (Mihăești) and several villages which have recorded high values for the main analyzed indicators (Vlădești, Bunești). D1 development area includes a growth pole of regional importance (Râmnicu Vâlcea) and three potential concentration poles of local importance (Ocnele Mari, Băile Govora and Băbeni), which strongly contribute to socio-economic development of the area and influence the balanced development of rural surroundings.

The area is characterized by the predominance of services, trade and industry in the structure of economic activities. D1 area is the most developed of the three existing developed areas in the county because it has a total population of 146.775 inhabitants, spread over a relatively small and homogeneous surface – 32.609 ha.

**The second developed area in the county is Horezu - Călimănești - Brezoi area or D2 area,** which is the largest in area (177.739 ha) and somewhat discontinuous. It includes nine localities, four of which are towns (Brezoi, Călimănești, Băile Olănești and Horezu), and several fairly developed villages (Voineasa, Vaideeni, Costești). The total population of this area is 41.387 inhabitants, far lower than the

previous area population. Because this area occupies the mountain area of the county, the basic economic activity is tourism, practiced especially for mountain landscapes (Voineasa, Călimănești), spa treatments (Băile Olănești and Călimănești) and for the famous monasteries from Horezu. Besides tourism, there are also remarkable: business and commercial activities, information and communication.

The four towns have potential for local growth poles, particularly through their natural resources and financial capital obtained from tourism, which positively influences the development of neighboring villages (Costești, Muereasca).

**The last and the third developed area is Drăgășani area or D3 area**, located in the southeastern part of the county, on the lowest surface, compared to all other areas (17.203 ha). It has only five moderately developed localities, the four villages being strongly influenced by Drăgășani city, which also represents the local growth pole. The total population of the area is 33.196 inhabitants, of which Drăgășani city includes the largest part (20.331 inhabitants). The basic economic activities are industry and agriculture, the region being recognized for its vast vineyards.

With regard to the underdeveloped areas in Vâlcea County, they are four in number and are named after their geographical position in the county.

**The first underdeveloped area is the South-West area or S1 area**, which contains the largest number of localities of all existing areas (29). Of the 29 localities, two are the Bălcești and Berbești towns, that are a little more developed in comparison with the surrounding rural areas and they have some influence over them because many people are migrating to these two towns. S1 area is the largest of the four underdeveloped areas, with a total area of 148.297 hectares, stretching from the foothills area to the Subcarpathian hills and close to the Carpathian mountains (Bărbătești, Stoenești villages). The total population is quite large (93.766 inhabitants), being the second most populated area, after D1 area. Population is employed more in agriculture, focusing on gardening, horticulture and animal husbandry, but also in industry, especially in the two towns. The two towns in S1 area could represent poles of attraction for other settlements in the neighborhood, especially because it offers more opportunities compared to those offered by rural municipalities.

**The second underdeveloped area is called Southern area or S2 area** and it has 19 localities, all represented by municipalities and villages. The surface of this area is 77.933 ha, being the second largest underdeveloped area, after S1 area. The total population is 45.500 inhabitants, with more people than even have some of the developed areas (D2 and D3). This area is among the poorest areas of the county, especially because there is no city/town - potential development pole in this area. Also, the area includes some of the poorest municipalities, which have very low

values for most important analyzed indicators (Mitrofani, Lalosu, Lungăști, and so on).

The S2 area occupies most part of the piedmont plateau area, which leads to the predominance of the agricultural sector due to favorable conditions to practice these economic activities. The proximity to the developed areas D1 and D3, with the growth poles Băbeni and Drăgășani, and also the proximity to Bălcești town, could represent an opportunity for this area to grow more.

**The next underdeveloped area is the Eastern area or S3 area**, which includes a relatively small number of localities (9), all municipalities and villages, spread over a relatively small area (only 46.407 ha). The S3 area also records a small number of inhabitants (29.723 inhabitants), being the penultimate of the areas in this respect.

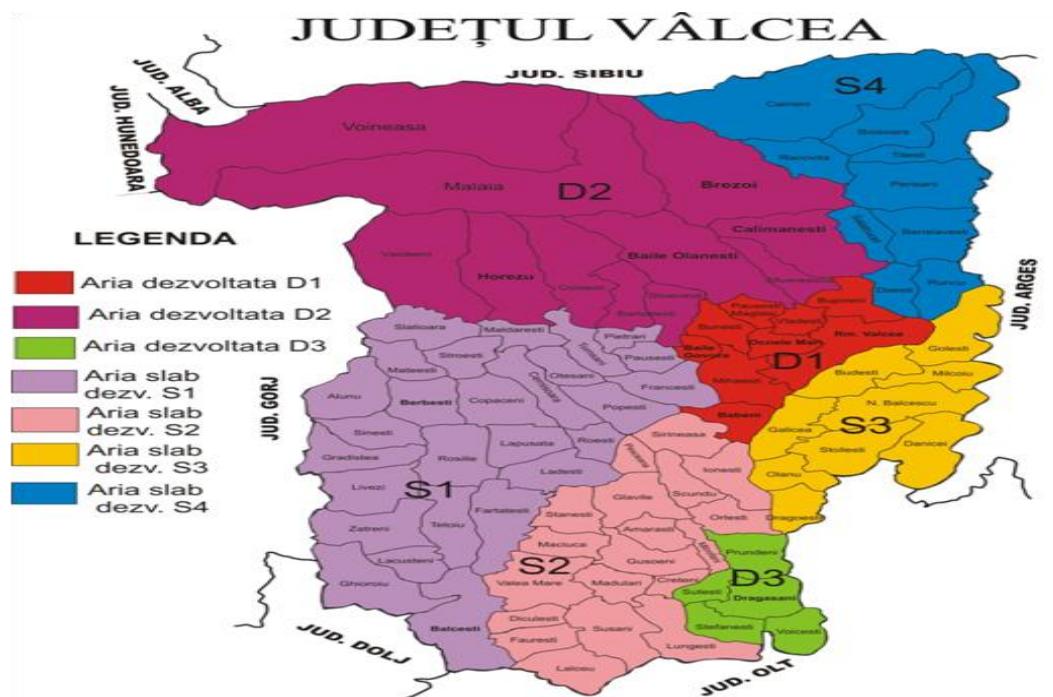
The S3 area has the advantage of proximity to the most developed area of the county (D1), the concentration poles Râmnicu Vâlcea - Băile Govora - Băbeni being able to influence the overall economic growth and development of this disadvantaged area.

**The last and the poorest of all areas of the county is the North-Eastern area or S4 area**, which is composed of nine localities, all municipalities and villages, like the previous area. The total population of 18.421 inhabitants, which represents the smallest population of all analyzed areas, is spread over an area of 76.289 ha, including much of the mountain area of the county.

The mountainous area offers the opportunity of tourism exploitation (especially in the villages Câineni, Boiușoara and Titești), the population being employed both in tourism activities (employees in restaurants and tourist accommodation establishments, however, insufficient in number) and in agriculture, with emphasis on livestock. The quality of life of people in the area is very low.

The major advantage of this underdeveloped area is the proximity to the developed areas D1 and D2, which have important major growth poles, as Brezoi, Călimănești, Băile Olănești, Râmnicu Vâlcea and Ocnele Mari, based on very diverse economic activities (from tourism and industry to services, trade, constructions, etc.), which could help the North-Eastern area to grow faster.

So, Vâlcea County includes three developed areas, totaling 23 localities, and four underdeveloped areas, with 66 localities (Map 2), between which have been detected territorial disparities regarding the surface, the total population, number of employees, number of teachers, and so on, revealing differences in the level of development of each area.



**Map 2. Map of regional disparities in Vâlcea County - developed and underdeveloped areas**

Source: processing map from the site <http://www.cjvalcea.ro/valcea.htm> in Corel Draw X4

#### Proposals to mitigate regional disparities in Vâlcea County:

- The application of polycentric development policy, meaning to develop or create more urban growth poles, which could positively influence the development of rural surrounding localities to acquire a territorial balance;
- The proposals (also found in the Social-Economic Development Strategy of Vâlcea County, 2009-2013) regarding the development of several strategic areas (natural resources and environmental protection, economics, business and technology, tourism, human resources and services, infrastructure) in order to obtain a balanced development of the entire county.

#### 4. Conclusions

This paper is a summary of the diploma done in the year 2011, which proposed to individualize the regional disparities in Vâlcea County. Also, there were proposed possible solutions to reduce the gaps identified in the development of human settlements in the analyzed county.

The obtained results indicate that there are clear socio-economic disparities between urban and rural areas in Vâlcea County:

- The territorial disparities between the two cities (Râmnicu Vâlcea and Drăgășani) highlight the superiority of the seat of Vâlcea County (Râmnicu Vâlcea), which enjoys a high level of socio-economic-demographic development, being the only regional pole of influence in Vâlcea County;
- Regarding the nine towns, the results of the analysis showed that there are regional disparities between the most developed town - Băbeni and the less developed town - Băile Govora;
- In rural areas, most villages have a relatively low level of development, with little population, small number of employees, sometimes nonexistent infrastructure endowments, fewer schools and hospitals, and disparities show that the most developed village is Mihăești and Mitrofani is the least developed village.

This analysis could contribute to the consolidation of the regional development strategy for South-West Oltenia and of the Vâlcea County strategy, in terms of future regional policy and Europe 2020 Strategy.

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