THE VILLAGES' DEVELOPMENT LEVEL FROM DOBROGEA REGION[1]

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Abstract: *This article intends to analyze the position of the villages in the historical region of Dobrogea from the development point of view. With the help of a methodology similar to Human Development Index (HDI) used by the UN, in Romania, in 2009 an inter-institution project (Sandu et al) elaborated the Village Development Index (VDI).*
Based on this statistic information it can be ascertained that the villages in Dobrogea have a development level superior to the national average. We then built some econometric models to establish the influence factors such as: ethnicity, coast area, delta area, which may have an influence on the development level.

Key words: *villages' development index; VDI; rural; Dobrogea; Romania*

General context

Dobrogea is a historical region well documented even since the oldest times. The ancient name of this region was Scythia Minor (visible in the map presented in Figure 1). With a tumultuous history starting with the roman domination (byzantine afterwards), continuing with brief periods of independence, periods with extended autonomy (from the Ottoman Empire), Bulgarian control, very short periods of Romanian domination(1388-289 and 1599-1601). After the Russian-Turkish war, after which the Romanian Kingdom regained its independence, the Berlin Congress established that the Northern part of Dobrogea be given to Romania, while the Southern[2] part to Bulgaria.

After the Peace Treaty in Bucharest (1913) which followed to the Second Balkan War, Romania takes South Dobrogea[3] which it keeps discontinuously[4] until 1940 when following the Treaty in Craiova, this territory goes under Bulgarian administration. In this article, we refer to the territory of Dobrogea[5] as a component part of Romania. This territory is composed of two counties: Constanta (in the Southern part) and Tulcea (in the Northern part).

Figure 1. Macedonia, Thracia, Illyria, Moesia and Dacia
Source of map: http://soltdm.com/geo/pubmaps/1.htm

Methodology and data sources

The statistic information at the base of this article is mainly taken from the results of the Population and households' census in 2002 (relative to the size of the villages and the structure of the population from the ethnical standpoint). A second data set, regarding the villages' development level, is the one supplied to readers and researchers interested by this field by Professor Dumitru Sandu – the initiator of the process (Sandu et al, 2009) of inter-institutional cooperation (NIS, Bucharest Univerity, Ministry of Finance, Ministry of Administration and Internal Affairs). The analyses are mainly descriptive without neglecting statistical validations with specific tests or building econometric models. From the software point of view, for the analysis of the data we used SPSS while the maps were elaborated using ArcGIS.

Data Analysis

The state of the facts shows that the villages of the two counties of Dobrogea (as can be seen in figure 2) are at a higher level relative to the national average. Taking into account that the development quintiles were built at national level, if Dobrogea had a status similar to the national one, all five categories should contain a equal number of villages (one fifth). Most of the villages in Dobrogea (32.3%) have a high level of development while they are quickly followed by the villages in the median area (25%). The other quintiles have weights as follows: 17.7% lower development, 14.6% the highest development and 10.4% the lowest development.
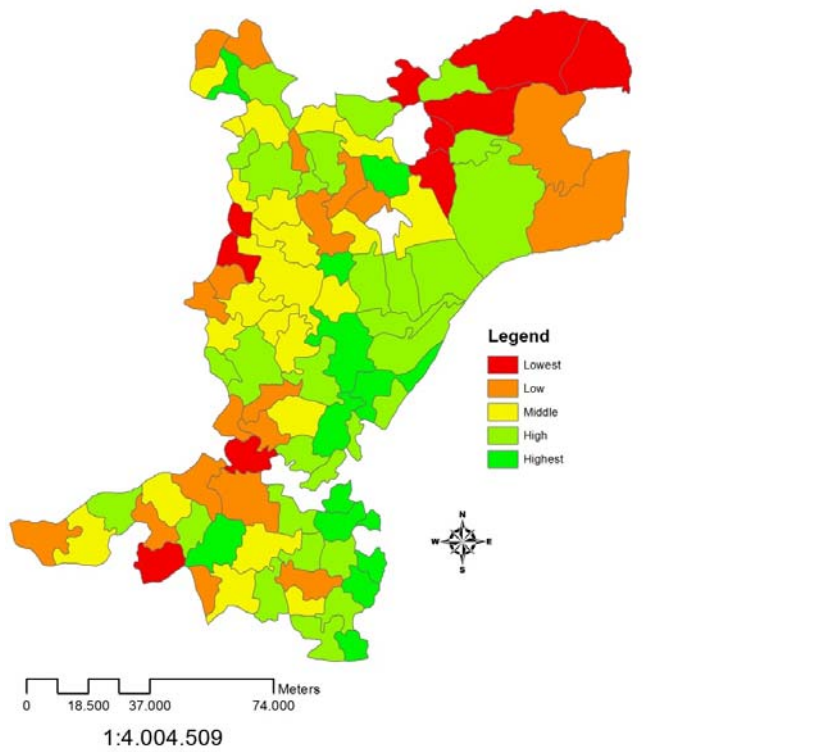
Figure 2. Villages' development level in Dobrogea region
(by quintiles designed at national level)

From the figure we can see that, in general, the villages found in the area of the Black Sea coast are found in the superior part of the classification, while the less developed villages are in the Danube Delta.

In figure 3 we present the distribution of the villages in Dobrogea by development level and number of ethnical groups present. We can state that there is a direct proportional connection between ethnic diversity and development level in the village.
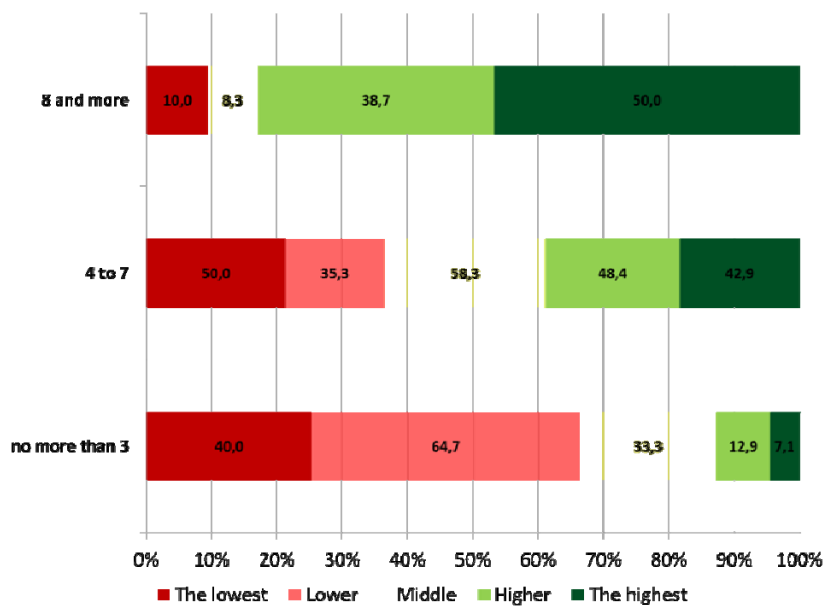

Figure 3. Villages' development level by number of ethnic groups

This directly proportional connection is statistically significant (after running the χ^2 test) with a probability higher than 99.99%. The Pearson's coefficient φ had a level of 0.55 while Crammer's V was 0.39. These values show a strong connection between the two variables.

The next step in our analysis was to build a regression model which highlights the factors which influence the villages' development level. We used the following elements as independent variables: the number of ethnic groups in a village, the weight of Turkish ethnics with two dummy variables which signal if the respective commune is in the Black Sea coast or in the Danube Delta. We chose a linear regression model and the results of parameters' estimation are presented in Table 1.

Table 1. Regression summary

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1　(Constant)	42,919	2,215		19,373	,000
Number of ethnic groups	1,474	,369	,329	3,989	,000
Turks share	-28,335	17,953	-,126	-1,578	,118
Coast village?	17,172	3,393	,421	5,061	,000
Delta village?	-7,917	3,280	-,194	-2,413	,018

a. Dependent Variable: VDI - Village's Development Index

The model is valid (after running the F test) with a probability higher than 99.99% and explains the dependent variable to a degree of 42.7%. Except for the weight of the Turkish ethnics (which can be kept in the model with a probability of maximum 88.2%) all the other variables are statistically significant. As was shown in the one to one analysis (figure 3) ethnical diversity has a favorable impact on the dependent variable. The same direction is followed by the dummy variable which signals the villages placed in the Black Sea coast. An unfavorable influence is registered for the placing of the village in the Danube Delta area along with the weight of Turkish ethnics[6].

Conclusions

In conclusion, we can state that although the villages in Dobrogea are situated above the national level, the situation is not uniform. Thus, the villages found on the Black Sea coast or the ones with a stronger ethnical diversity have a better placement from the development level point of view. At the opposite end are the villages in the Danube Delta or the ones with a significant Turkish minority.

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[2] In the south of Danube and from Silitra, in a straight line up to the village of fishermen Ofidaki (today's Vama Veche)

[3] Provence also known under the name "Quadrialater"

[4] During the First World War, in 1969 Bulgaria (along with the German allies) reconquers the Quadrilater as well as an important part of Northern Dobrogea which it administers for two years until the ending of the Neuilly sur Seine Peace Treaty in 1919.

[5] Also called North Dobrogea

[6] This negative impact is probably given also by the poor instruction level registered by the feminine population in the Turkish ethnic group (see Isaic-Maniu and Herteliu, 2005)