

RURAL AREAS IN BULGARIA AS A THREAT FOR SOCIO-ECONOMIC DEVELOPMENT

Milen PENERLIEV

“Konstantin Preslavski” University of Shumen, Bulgaria
penerliev@yahoo.com

Abstract

Approximately 1.9 million residents live in Bulgarian villages today. In the early 2015 of all 5264 towns and villages in Bulgaria the number of towns was just 257. A sufficient part of the population of the state spends its lives in them and in their adjacent territories so that it should be thoroughly researched and analyzed – the population itself with its demographic characteristics, as well as the rural areas with their features and distinctive aspects.

In the material basic methods is: analysis of statistical data, survey methods, interviews and personal observations. Large volume of results is personal conclusions the author after field trips in rural areas for 7 years.

Key words: rural, development, areas.

Resumo

Aproximadamente 1.9 milhão de habitantes vivem atualmente em cidades na Bulgária. No início de 2015, de todas as 5264 cidades e aldeias da Bulgária, o número de cidades era de apenas 257. Uma parte significativa da população do Estado gasta a sua vida nestas cidades e nos seus territórios adjacentes, sendo necessária realizar uma cuidadosa pesquisada sobre a população com suas características demográficas, bem como as áreas rurais com as suas características e aspectos distintos.

Palavras-chave: rural, desenvolvimento, áreas.

1.Introduction and objective of the paper

The definitions stated above indicate that prevalent municipalities in Bulgaria are rural areas. The territory as a space suggests organization of certain elements in an articulate system. This system in rural areas does not include only villages. It comprises also towns with population below 30 000 inhabitants, the population itself with its intrinsic demographic characteristics as well as the ongoing economic processes. For the prosperity of such territories certain resources need to be acquired or other appropriate be attracted apart of them (investments, labor, etc.). The objective of the present paper is to report the failings of the rural territories in terms of their economic adoption by means of characteristics of given indicators – certain areas are depopulated; on a comparative basis are presented different categories of settlements. In the context of economic development to expose that these are territories virtually threatening the demographic future and growth of economics not only of the concrete territory but of the statistical region which they represent and the state on the whole.

2.Data and methods

For characterizing the economic potential of the rural areas are used the following indicators.

- *Average population density*. It is significant in terms of providing labor. The territories with sharply outlined depopulation do not have such at their disposal. This factor strongly decreases their economic potential.
- *Age characteristics of the population*. As a rule villages are inhabited mainly by people at retirement age. This does not afford the economic potential needed for their development.
- *Availability of social infrastructure*. Functioning health services and schools are clear signs of perspectives in the rural areas. In the villages and in their peripheries this indicates the presence of younger population, higher birthrate, etc.
- *Unemployment*. Although this is an index determined by the above listed indicators, it is also important and as a benchmark could give grounds for some conclusions and decisions.

Some other indicators are also used.

3. Definitions of rural areas

The national definition of Bulgaria refers to rural areas belonging to LAU 1 level – municipalities. They are defined as rural when there is no settlement with population of more than 30 000. According to the national definition the rural areas (municipalities) are 231 of all 264 municipalities in Bulgaria (Fig. 1).

The definition of the European Union offered by the (OECD, 2008) is adopted because it is defined as clear and simplified, including areas which are densely populated. As early as 1994 the OECD defined the municipalities for local level (NUTS 5, LAU 1) as rural when their population density is below 150 inhabitants per square km. For regional level the units (NUTS 3 and NUTS 2) are grouped as follows (Madjarova ..., 2013):

- Predominantly rural (if more than 50% of the population lives in rural communes);
- Intermediate rural (50%–15% in rural communes);
- Predominantly urban (below 15% of the population lives in rural communes).

In 2010 the OECD changed the definition for the regional level – if there is an urban center with more than 200 000 inhabitants, which is not less than 25% of the population of a predominantly rural region, it is defined as intermediate; if there is an urban center with more than 500 000 inhabitants, which is not less than 25% of the population of an intermediate region, it is defined as predominantly urban.

According to the European typology of “urban–rural” regions there are 15 predominantly rural, 12 intermediate and only one – predominantly urban (Sofia-capital). Predominantly rural regions have a territory of 59.49 thousand square km. and population 2 719 thousand and

intermediate – 50.13 thousand square km. and 3 263 thousand respectively (Penerliev et al. 2015).

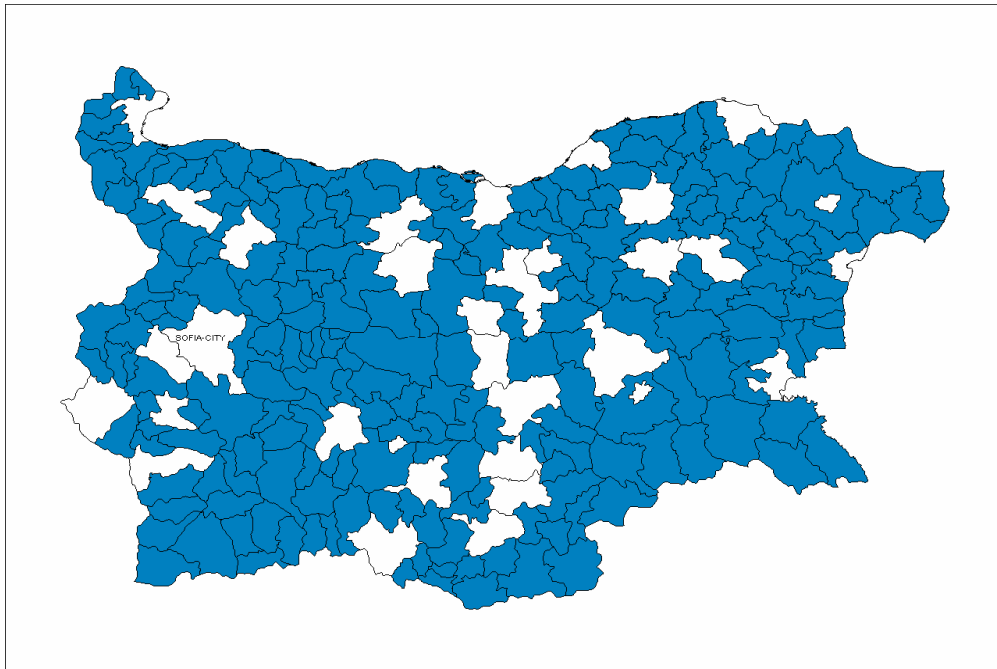


Figure 1. Rural areas in Bulgaria LAU 1 level (geographical scale 1: 1000000)

Source: National concept spatial development (2013-2025)

Report examined the rural areas of the municipalities Shumen, Silistra and Dobrich are selected (Figure 2). Each one of them has its distinctions from the others (sea outlet, river outlet or inland territory). Thus conceivably the differences of the examined indicators could be determined in view of their geographic location.



Figure 2. Selected model areas for analysis of the rural territories.

Source: M.Penerliev

In the four municipalities of Silistra region which have outlet on the Danube river in 2013 lived 79 967 people (Table 1). The biggest and populated is Silistra municipality with near 50 000 people. This is almost 62% of the whole population in Danubian municipalities. This presents a big concentration of people in regional center. Two of every three citizens live in this municipality. The poorest populated municipality is Sitovo with around 5 000 people.

Table 1 -
 Population in Danubian municipalities for the period 2001–2013

Municipality	Total (people)		In towns (people)		In villages (people)	
	2001	2013	2001	2013	2001	2013
Tutrakan	19152	14780	10322	8373	8830	6407
Glavinitsa	13743	10553	2087	1521	11656	9032
Sitovo	6740	5197	-	-	6740	5197
Silistra	61294	49437	41597	34216	19697	15221
TOTAL	100929	79967	54006	44110	46923	35857

Source: National Statistical Institute.

In demographic aspect Sitovo municipality is interesting – 100% of its population lives in villages, which means that the municipal center is a village. The distribution of population in towns and villages has an interesting trend. The quota of urban population (so called level of urbanization) in the researched area is at least 55%! Here we can mention that the average level of urbanization in Bulgaria in 2013 is 73% – the quota of the urban population. Danubian municipalities give an essential response with this trend.

From one side its due of entirely village municipality, but at all its influence with population 5200 people is not essential.

In Table 1 we can see Glavinitsa municipality has very small quota of its urban population- only 11%. Over 9 000 people live in villages. The urban level in this researched territory is on the average one for the country in 60s of 20th century. Only Silistra municipality has index near to the average one for the country – in 2013 the urban level was 68%

If proposed for analysis demographic data are examined in comparable principle for a longer period, then appear interesting trends. In comparable aspect in the period 2001–2013 obviously the population greatly decreases. In the researched municipalities from 100000 people in 2001 has decreased to under 80 000 people in 2013 – reduction in 20% (Penerliev, 2013). This trend is higher than the average one for the country. For the researched period the population of the country decreases with around 8%. There in Danubian Dobrudzha the trend of depopulation is greatly represented. In regional plan, on municipality level this trend is permanent. Interesting coincidence has in the quota of decreasing population in the municipalities with outlet on Danube. Tutrakan, Sitovo, Glavinitsa municipalities have decreased their population exactly with 23% each. Silistra municipality also follows this trend with 20% reduction. In fact the conclusion is that all researched municipalities have depopulated faster to average rates in country.

The examination actual process of depopulation in towns and villages shows a sequence of negative trends. For example in period 2001 – 2013 if Bulgarian towns have lost their population in 3.3% in these researched municipalities this quota was 21%. (Penerliev, M. L. Shefka, 2014). This process of urban depopulation is with extreme negative parameters even according EU scale. Some more: Glavinitsa municipality has decreased its town population for the aforesaid period with over 27%. Silistra municipality also has lost (as the biggest and most economic developed among all) with 17%. Obviously the problems of the towns in these municipalities are bigger than the other ones. In analysis of village depopulation essential response with the average indexes are not represented. With average rate in Bulgaria of the village depopulation 19% for the period 2001–2013, for villages of Danubian municipalities is around 24%. Tutrakan municipality is the first one with this index 27% (Table 1).

There is no clear strategy for building mill bases in respect of this – Silistra region is Bulgarian granary. If we examine another indicator – the average population density (in people/sq.km) the demographic potential of territory can be characterized. Implementing the regional approach we examine this index on municipal level. With average density for Bulgaria – 65 people/sq.km the differences there are much more striking! The average density in Sitovo municipality is only 19.1 people/sq.km, in Glavinitsa municipality is 21.9 people/sq.km and in Tutrakan municipality is 33 people/sq.km. These municipalities have lower indexes. The process of depopulation is obvious. We consider the fact these municipalities are rural and in Bulgarian villages live only 1.9 million people. Obviously in respect of the only three towns the low average density is not surprising. But it is a threat for future social-economic development of the territory.

The other applied model area is Shumen District. It is considerably dissimilar to the territory of Silistra Municipality.

Shumen District is situated in the central part of Northeastern Bulgaria and occupies an area of 3.39 thousand sq. km which is 3.05% of the territory of the state. The district is part of the Northeastern region, comprising also the neighbouring districts of Varna, Dobrich and Targovishte. Shumen District includes 10 municipalities (Venets, Varbitsa, Hitrino, Kaolinovo, Kaspichanm Nikola Kozlevo, Novi Pazar, Veliki Preslav, Smyadovo and Shumen) and 151 populated locations of which 8 are towns and 143 villages. The total number of the population in Shumen District by 2014, December, 15th is 199 055 (2.5%) of the population of the state. Largest is the territory of Shumen Municipality (19.2% of the area of the district) and smallest – the territory of Venets Municipality (6.6% of the area of the district).

Basic factors, influencing the alterations in the number and structures of the population are the demographic processes – fertility, mortality and migration. In 2014 there was only one village in the district with less than 20 inhabitants (Bedzhene, Novi Pazar Municipality – 19 inhabitants). The largest village in Shumen District is Todor Ikonomovo, Kaolinovo Municipality, with population of 2451. The populated locations in the district are divided into four categories:

- From 10 to 100 inhabitants – 9 settlements;
- From 101 to 500 inhabitants – 50 settlements;

- From 501 to 1000 inhabitants – 53 settlements;
- More than 1000 inhabitants – 35 settlements;

It is obvious that denser populated settlements with population above 500 residents prevail.

This will improve the *average density* index and will deliver stronger economic potential to this model territory in terms of work force.

Opposite is the situation with the villages in Seaside Dobrudzha.

The table makes it clear that there are just 7 villages, in which depopulation is not registered, i.e. there is increase in the number of population there. As we are analyzing other indicator, we will pay attention to the villages with decreasing population. Following the above mentioned definition and its range, some significant ascertainments can be made. The total number of settlements in process of depopulation (within the three municipalities) is 54. 51 of them are villages. The only urban settlements in the region are municipal centers as well (Shabla, Kavarna and Balchik). Decrease in the number of population is registered in the three of them (Penerliev, 2014).

Appendix 1 gives clear notion of the depopulation process in the villages of Seaside Dobrudzha in the researched period (2001–2014). If we perceive the range of *depopulation rate* index given above (Table 1) the results will become much clearer in terms of the demographic situation in the region. It is evident that 51 of the villages in Seaside Dobrudzha are with decreasing number of population. 7 of them are with low depopulation (the number of population decreased with less than 10% in the course of the years). The villages with medium depopulation are 11 (the decrease in the number of population there is 10–20%). The number of villages with high depopulation is 27 (the depopulation in these villages is within the range 20–60%). In 5 of the villages in Seaside Dobrudzha the decline of the population is 60–80% (these rates of depopulation are critical). Irretrievable is the depopulation in one village – the reduction of the number of inhabitants there is more than 80%.

The regional analysis shows that only 14% of all villages are in the group of those with low rate of depopulation. The largest number of villages from this category is in Balchik Municipality. We must also mention the fact that there are seven villages (12% of the total number of villages) with increasing population.

Furthermore, the average number of inhabitants in one village is slightly below 200. This is almost twice less than the villages in Shumen Municipality. The demographic situation of this territory is heavily deteriorated – the depopulation processes are very strong and are not in unison with the average rates for the state.

The analysis of the data about the researched model territories is still in process. However, at this stage of the research a lucid correlation with the reduced number of population in the villages and the decreased number of schools in them is made. This process is clearly illustrated by Table 2.

The regional analysis of the territory of the district of Silistra shows that for the studied period the total number of schools was reduced 1.5 times as the total number of children of

primary stage is 795 less; for junior high school it is 1752 less, but for the high school it is 1124 less. The ratio of students in the tertiary education for the academic year 2014/2015 is 3862/3600/1610. The number of children in high school decreased by almost half, but Table №3 shows that the average attendance of pupils at the primary stage is 20 children, for the junior high school is 21 children and for the high school – 23 children.

The biggest average attendance in the primary stage was observed in the municipality of Silistra – 22 children and in the municipality of Sitovo – 21 children, and this trend continued in junior high school for the municipality of Silistra – 24 children and for Sitovo municipality is 32 children. In high school the most average attendance of pupils is in the municipalities of Silistra and Tutrakan – 24 children.

Table 2
Educational system data for the period from the school year 2005/2006 to school year 2014/2015 in the district of Dobrich

Municipalities	Total number schools	School for the school year 2005/2006								
		I–IV grade			V–VIII grade			IX–XIII grade		
		classes	students	Average attendance	classes	students	Average attendance	classes	students	Average attendance
Silistra	14	87	1759	20,21	106	2130	20,09	74	1775	23,97
Balchik	11	49	970	19,79	47	949	20,19	10	260	26
Kavarna	7	38	667	17,55	37	758	20,48	17	360	21,17
Shabla	3	12	210	17,5	11	235	21,36	4	84	21
Municipalities	Total number schools	School for the school year 2014/2015								
		I–IV grade			V–VIII grade			IX–XII grade		
		classes	students	Average attendance	classes	students	Average attendance	classes	students	Average attendance
Silistra	11	63	1413	22,43	50	1188	23,76	37	879	23,76
Balchik	7	43	786	18,28	33	711	21,55	7	150	21,43
Kavarna	6	26	601	23,11	20	513	25,65	12	281	23,42
Shabla	2	8	126	15,75	7	162	23,14	-	-	-

Source: National Statistical Institute in Dobrich (<http://www.nsi.bg/node/11412>).

The table clearly illustrates the negative trends in these areas. The number of students and the number of classes are decreasing and this affects directly the number of population in under-working age. Practically this is the economic future of the territories, if it does not migrate to the large cities, or abroad.

As opposed to them, the trend in Shumen District is different regarding the analysis of the educational infrastructure. We are analyzing the state of the nursery schools in the district.

The statistics gives interesting aspect of the number of children attending nursery schools. Data is available about the number of children in the municipalities, as well as the number of nursery schools in them. Interesting would be the index juxtaposing the number of children and the number of nursery schools. In Table 2 this indicator is for 2014. The statistics does not include the Shumen Municipality, which is, as we have mentioned above, urban. The analysis indicates that in given municipalities with larger number of nursery schools (for

instance Varbitsa and Kaolinovo municipalities) the average number of children in a school is smaller. In the municipalities with smaller number of schools (Smyadovo) the average number of children is higher. In Novi Pazar Municipality there are 9 nursery schools with 602 children – the average number of children attending a nursery is 67. Juxtaposing it with Table 1, it is evident that the large number of nursery schools in Kaolinovo Municipality, for example, is not because of their concentration in the municipal center. There are only two settlements there (the villages of Omarchevo and Lisi Vrah) without working nursery school. In fact even with average numbers. Actually even with averaged rates (which could mean that in some municipalities the number of children is below the intermediate – 26) Kaolinovo Municipality has good demographic potential. These 412 children will “supply” the primary and secondary schools in the municipality (or the neighbouring ones). In fact the protection of the nursery schools with such number of attending children should be basic concern of the municipal authorities. These children are the upcoming generation expected to keep the positive demographic trends in the municipality. Contrariwise – the municipalities with few nursery schools would not be able to fulfill primary and secondary schools with students. Closing down of schools and dismissing pedagogical staff will be inevitable then.

Table 3
 Average number of children in nursery schools in the villages of Shumen municipalities
 (2014/15 school year)

Municipality	Number of nursery schools	Number of children	Average number of children in a nursery school
Veliki Preslav	6	358	60
Venets	9	244	27
Varbitsa	12	402	34
Kaolinovo	16	418	26
Kaspichan	6	236	39
Nikola Kozlevo	7	239	34
Novi Pazar	9	602	67
Smyadovo	4	201	50
Hitrino	5	150	30

Source: National Statistical Institute.

The names of the particular villages will not be informative to the reader. However, it is obvious that the demographic future here is much better than the rest of the researched model areas. We reckon that the larger number of population in the villages (more than 500 residents) necessitates the protection and development of schools. They contribute to the slight migration mobility of young families, in the presence of employment, admittedly.

Often in the Bulgarian scientific literature analysis of the religious structure of the population is made. It is a fact that in the rural territories of Shumen District the Muslim population is of higher proportions. Yet, it is also a fact that in the villages of Silistra District it is not few. Where is the reason then?

1. Conclusions

The analyses are still going on but the following significant conclusions are drawn:

Based on the dynamic analysis of the specified indicators, the paper makes corresponding conclusions. It outlines basic recommendations for overcoming the negative trends in the researched territories. Some of them are:

1. The indicator *average density* is much deteriorated and for certain areas depopulation is a leading demographic problem.
2. The age structure of the rural population is deeply worsened and for some of the villages their "deletion" from the map of the state is a question of no more than a decade.
3. In the villages with functioning schools the demographic and socio-economic development respectively is more favorable, etc.

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