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DEPOPULATION OF VILLAGES IN SOUTHEASTERN SERBIA AS HINDRANCE TO ECONOMIC DEVELOPMENT

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Abstract: Socio-economic data of the villages belonging to the municipality Vladičin Han were analyzed in the paper. This municipality is part of Pčinjski district and is located in southeastern Serbia. The villages have typical rural character and are located in mountain area, except Priboj, which is dislocated in the 19th century. The lowest is Priboj (350–460 m) and the highest one is Kukavica (1,170–1,230 m). The subject of this paper is also the settlements of Lebet, Rdovo and Kostomlatica. The data obtained are the result of processing database retrieved from the Statistical Office of the Republic of Serbia, related to the period 1971–2011. At the beginning of this period, the village with the largest population was Priboj (359 inhabitants). According to the last census (in year 2011), there lived 296 inhabitants with average age of 44. The settlement with the smallest population, according to the latest census, is Kostomlatica village. There live 10 inhabitants with an average age of 76.3 years. Other demographic indicators point to the extinction of the villages in this region. Depopulation is the problem to which state does not pay enough attention, especially in mountainous and border areas.

Key words: villages, age structure, depopulation, Vladičin Han, southeastern Serbia

Introduction

Abandonment of villages is a problem that started in the late 19th century and reached its peak in the second half of the 20th century. One of the main reasons for depopulation of villages was industrialization (Baumann, 2011; Xie, Wang, & Yao, 2014). During the last century, people massively came into cities for work (OFID, 2007; Gregory, 2012). Later, in developed countries tertiary sector of the economy has primacy, and in developing countries secondary sector prevailed. Agriculture is mechanized and modernized, so it required less workers.

In Western Europe, rural depopulation has led to negative evolution of the population in numerous rural regions (Pinilla, Ayuda, & Saez, 2008). The

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culmination point in Finland and Sweden came at the end of 1960s, when the “large age-cohorts” sought labor markets and simultaneously the economic growth in centers was very rapid (Vartiainen, 1989). The reasons for disappearing villages and decreasing number of their inhabitants are similar all around the world. Situation is not any different on the Balkan Peninsula, and Bulgaria is a good example. Reduced number of villages is due to changes in national boundaries, foundation of new settlements (as a result of refugee waves), urbanization, foundation of new industrial settlements in mining regions (which were statistically considered rural), etc. (Glamuzina, 1996; Mladenov & Ilieva, 2012). Also, in the northeast part of Montenegro the process of depopulation in the early 21st century reached maximum. According Rajović and Bulatović (2013) the process of depopulation in rural settlements of northeastern Montenegro, in the seventies of the twentieth century, has reached worrying proportions. The data from 1971 census shows that in 85 out of 113 rural settlements had lived 37,851 people (59.94% of total population), while, in the same area, in 2003 lived only 9,578 people (17.52% of the total population).

It is necessary to refresh anthropo'geographical data of settlements in southeastern Serbia, because existing results are old. Some of villages disappeared spontaneously — Gare (Preševo), Djordjevac (Bujanovac), Koritnik (Niška Banja), Vukojevac, Rastelica and Tačevac (Kuršumlija) (Stamenković & Gatarić, 2006). Villages along the border and across mountain vanish first. Resistant settlements are those that are gravitating towards cities, with which they are usually functionally related. Villages are sources of food, resources and population. Sorokin and Zimmerman had published the book *Principles of rural–urban sociology*. This book is 83 years old and today we still discuss about same problems. They claimed that the city cannot survive without the village and vice versa (Sorokin & Zimmerman, 1931).

If the problems exist for decades and are just deepening rather than being solved, then approach needs to be changed. Population policy and rural exodus are complex problems that cannot be solved independently of the agricultural policy, planning construction of infrastructure, sustainable development policy and all in accordance with national policy.

Demographic Characteristics of Southeastern Serbia as an Indicator of Economic Stability

Southeastern Serbia (14,007 km²) includes five districts: Nišavski (2,727 km²), Pirotski (2,761 km²), Toplički (2,229 km²), Jablanički (2,770 km²) and Pčinjski (3,520 km²), which is 15.9% of the total area of the Republic of Serbia. In 1981,

only Pčinjski (5.44‰) and Jablanički districts (1.98‰) had a positive population growth (Šljukić, 2011). Except Raški district, the only other district with positive population growth according to the 2002 census was Pčinjski (Mišović, 2009). If we compare the national and ethnic structure of the last two censuses, we will see that the number of almost all major groups declined, except Roma. It should be mentioned that in 2011 Albanians in the municipalities of Bujanovac, Preševo and Medvedja boycotted the census. Because of this, according to the last census of Pčinjski district, there were 680 Albanians recorded, and in 2002 the number was much bigger (54,795). As opposed to groups whose population has constantly been increasing, the number of Serbians decreases in all districts of southeastern Serbia. Regarding percentages, Albanians took up a quarter of the population of Pčinjski district in 2002, and if we consider only other settlements (without towns) percentage is 39.

Two decades ago the South of Serbia had half a million people more than the North, but until 2011 the population of the North increased by 41,000, while in the South it was reduced by 403,000 (Penev & Marinković, 2012). In the next 15 years one in four villages in Serbia will vanish (Stojiljković, 2011). Ljubiša Marković (2012) in his scientific papers wrote that demographic substrate is the basis of progress, survival and development of any society/humanity, and the neglect of the basic truth, sooner or later, leads to devastating/apocalyptic consequences. He also stated that, until 2012, 1,600 rural settlements in Serbia disappeared, of which the majority is in southeastern Serbia (Mitrović, 2011).

One of the demographic indicators that influence the demographic development is the number of abortions. During the period from 2000 to 2007, the number of abortions is declining. "Official data were 34,255, 30,794, 29,856, 29,856, 26,645, 25,665 and 24,273 respectively" (Rašević, 2008, p. 10). The number is still high, comparing to data of other European countries. Family as a pillar of society does not have a strategy for survival in the modern world, where it is exposed to distortion and degradation. The lack of investment in the economy and the lack of population policy have led not only to negative mechanical, but also the natural movement of the population.

The state of demographic substrate in this region is extremely bad and causes of it are numerous. The Department of National Development at the Ministry of Finance has made a methodology for determining the Index of Endangered Development. Based on this index five groups are made, wherein the first is most developed and the fifth is most endangered. Pčinjski, Toplički and Jablanički districts belong to the fifth group and Pirotski district belongs to the fourth group, while Niški district is in the second group. This index includes

economic, demographic, educational, infrastructural and environmental dimensions (Cvetanović, Nikolić & Ilić, 2012).

From the above it can be seen that a demographic component is important and how unreasonably neglected it has been for years. According to the last census, from 2011, this region has a population of about one million inhabitants (935,937), of which 46% are in the rural settlements. This is not an insignificant number of people, even with its unfavorable age structure. It is disturbing that the demographic and economic picture was better, and everything indicates that the downward trend will continue. The process of degradation of the economy, which has led to the emigration of the population, can be seen in the example of the Toplički district. At the beginning of the period discussed (1971–2011) inhabitants were mostly engaged in agriculture, but in 2002 due to industrialization, only 10% of the population was agricultural. Privatization has led to the closure of almost all companies in this area — Kozara, Topličanka, Glass factory, Factory of ferrous metals, Factory of washing machines, Hisar, Mineral water factory Milan Toplica etc. The only positive example is Planika (Božić, 2012).

Last, but not least, Bošković in his book *Transnational Organized Criminality*, states that this area is a part of trade corridor of drugs, arms and women. One of the drug routes passes through Serbia, connecting Turkey and Bulgaria on the one side and Croatia, Slovenia and Italy on the other. It is named Central route. As stated, 80–90% of the heroin confiscated in Europe, passes Balkan's route. The transfer of arms from Kosovo and Metohija to the Middle East has been described there, which involves crossing the southeastern Serbia, as well as the Central Balkan's route of trafficking of women (Bošković, 2003). Decrease of the population, primarily Serbian population, may be due to above, serious destabilizing factor in the region. This can be compared with Kosovo and Metohija, which is located on the same corridors and in the immediate vicinity of the studied area. The constant decrease of the number of the Serbs and increasing the number of Albanians, as well the already mentioned position, contributed to destabilization of this part of Serbia (Stepić, 2012). The “breaking point” in population movement in Kosovo and Metohija was also the 1970s (Krstić, 1994).

Material and Methods

The data obtained are the result of processing database retrieved from the Statistical Office of the Republic of Serbia. Statistically analyzed data are related to the period 1971–2011. Kostomlatica (7.1 km²), Kukavica (10.1 km²), Priboj

(7.3 km²) and Rdovo (12.2 km²) belong to the scattered type of villages, and Lebet (4.6 km²) to a compact type of villages.

Table 1. Number of inhabitants and households, 1948–2011

	1948	1953	1961	1971	1981	1991	2002	2011
Number of inhabitants								
Kostomlatica	203	203	176	186	72	34	22	10
Kukavica	101	121	118	111	53	42	20	19
Lebet	304	307	314	302	190	135	102	63
Priboj	536	532	478	359	334	391	392	296
Rdovo	390	402	359	314	253	162	136	80
Number of households								
Kostomlatica	29	32	34	33	21	14	13	7
Kukavica	20	22	20	19	16	17	10	10
Lebet	44	45	63	61	46	35	34	25
Priboj	108	114	130	106	105	117	131	114
Rdovo	65	62	68	67	63	54	62	41

Source: Statistical Office of the Republic of Serbia (2014a; 2014b)

These five villages were selected in order to show that the problem of depopulation in this region has deep roots. Negative consequences of demographic reproduction reflect a disruption in the ethnic balance in the Serbian population and the depopulation of rural mountain areas in Serbia (Mitrović, 2011).

Study area

These five settlements, Kostomlatica, Kukavica, Lebet, Priboj and Rdovo belong to the municipality of Vladičin Han and occupy an area of 41.3 km². Analyzed settlements have peripheral position compared to the center of the municipality, infrastructure development is unsatisfactory, agricultural potential is limited, and natural resources are hardly accessible.

Kostomlatica village is located on the southeast slopes of mountain Kukavica (1,441 m) and 16 km west from municipality Vladičin Han. In the past this area belonged to an old village, in the same location. The remains of old graveyards confirm this. Before the liberation from the Turks, Kostomlatica and Srneći Dol were one settlement (Stamenković, 2001). At the end of the 19th century its population totaled 68 inhabitants (10 households), after World War II this number was tripled — 203 inhabitants (29 households) and nowadays there are only 10 inhabitants (7 households).

Kukavica village is located 7 km northwest from the municipality of Vladičin Han and at an altitude of 1,170–1,230 m, on the slopes of mountain Kukavica.

This village was displaced during the Austro-Turkish wars and resettled in the 19th century. Kukavica was devastated twice by the Bulgarians and completely burned in 1918 (Stamenković, 2001). After liberation from the Turkish occupation its population was only 52 inhabitants (7 households). Seventy years later, population doubled — 101 inhabitants (20 households), and nowadays there are only 19 inhabitants (10 households).



Figure 1. Sketch of Serbia with the location of study area – Municipality of Vladičin Han (Source: <http://www.vladicinhan.org.rs/Opstine3/uploads/Maps/HanUSrbijiv.gif>)

Lebet is a village on the right side of Lebet's stream. It is located 18 km northeast of Vladičin Han municipality, and at the altitude of 950–1,000 m on the slopes of mountain Čemernik. Due to large migrations, plagues and other factors village was displaced, and people settled this area again in the 16th or the 17th century (Stamenković, 2001). In 1879, when village was no longer occupied, it had a population of 98 inhabitants (13 households). By the census from 1948, there were 304 inhabitants (44 households), and today there are only 63 inhabitants (25 households), which is less than the population 135 years ago.

Priboj village is now located on the altitude of 350–460 m, but earlier it was on a higher level, on the mountain slopes. It is 12 km southern from the Vladičin Han municipality (Stamenković, 2001). At the end of the 19th century its population was 332 inhabitants (49 households), by the 1948 census there were 536 inhabitants (108 households) and today the number is 296 inhabitants (114 households).

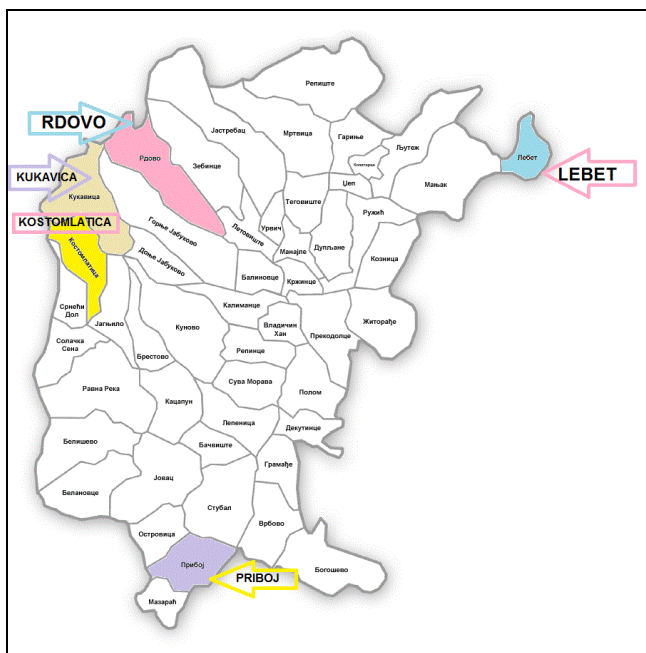


Figure 2. Sketch of analyzed settlements in the Municipality of Vladičin Han (Source: <http://www.vladicinhhan.org.rs/Opstine3/uploads/Maps/MapaNaseljav.gif>)

Rdovo lies between Rdovska and Zebinska streams, right tributary of the Južna Morava River. It is situated 7 km southwest from the Vladičin Han municipality and at the altitude of 600–1,010 m. According to the tradition, the old village disappeared due to the plague, and the new one was formed in the 18th century (Stamenković, 2001). In the late 19th century, Turkish invaders retreated from the area of this village and its population then was 130 inhabitants (18 households). After seventy years, population was much higher with 390 inhabitants (65 households), and by the last census in 2011 that number decreased to 80 inhabitants (41 households).

Research Results

After the period 1948–1953 and in Lebet until 1961, when population increased or stagnated, number of inhabitants constantly decreased, except in Priboj, where index of population was 117 for the period 1981–1991, and 100 for the period 1991–2002. In all other villages the population was constantly decreasing. The greatest decrease was noted in the last decade. During the 63 years, shown in the Table 1, the Priboj population halved, in Lebet and Rdovo remained at one fifth, in Kukavica slightly less, and in Kostomlatica only 5% of its original number. The situation is clearer if we observe the number of households and their structure. Number of households was constantly decreasing from 1961 (in Kukavica from 1953). Slight increase was recorded for the period 1981–1991 in the villages of Priboj and Kukavica, and for the period 1991–2002 in the villages of Rdovo and Priboj. One of the reasons for the increase is the change in census methodology. Namely, definition of permanent residents of a settlement was changed. Another reason is the increasing number of single-person households and those with two or three members. In 2011 the percentage of households with one or two members was 54% in Priboj, 68% in Lebet, 80% in Rdovo, 90% in Kukavica (1 household with three members) and 100% in Kostomlatica. The situation was also bad twenty years ago, when the proportion of these households in the total number was greater than half in three villages (Kostomlatica 71%, Kukavica 65%, Rdovo 52%), and in two villages it was third of the total number (Priboj 38%, Lebet 37%).

The first settlement with negative natural increase was Priboj in 1971 (-5), while from 2002 the natural increase was not positive in any of the studied villages (data from the Statistical Office of the Republic of Serbia, on request). But, the main cause of negative absolute population growth is negative migration balance. Namely, in the period 1971–1981 from all five villages, 365 inhabitants emigrated, and in 1981 there lived 902 inhabitants. Likewise, in the period 2002–2011, 200 inhabitants emigrated, and in 2011 there lived 468 inhabitants in all five villages.

The average age of population shows that the situation was alarming at the beginning of the period (Table 2). In 1971 the average age of residents in the analyzed villages was 30 years and older and in 1981 average age was already over 40 years (Kukavica — 44 years). Today in Kostomlatica village inhabitants are on average 76.3 years old. The youngest resident is a man in the age-cohort 40–44, and after that two men and one woman in age-cohort of 70–74. Villages like this one are left to fate for years now, but analysis and systematization of the evolution of Serbian villages in the last half-century can provide solutions to

rebuild the settlements that have not yet passed the critical age. Government investments are necessary, such as farm subsidies, reconstruction of infrastructure, water supply and sanitation, as well as make tradition and life in rural settlements attractive, etc.

Table 2. The average age of the population

	1971	1981	1991	2002	2011
Priboj	39.1	39.7	37.7	40.7	44.0
Rdovo	32.4	37.7	48.5	51.8	63.9
Kostomlatica	31.1	43.4	56.7	67.4	76.3
Kukavica	31.0	44.0	57.6	67.7	68.0
Lebet	30.2	32.8	39.8	45.4	54.9

Source: Statistical Office of the Republic of Serbia (1972, 1982, 1992 book 4; 2003, book 2; 2012, book 2)

Good indicator of demographic aging process² is the share of those over 60 in the total population (Figure 1). During the period 1971–2011 settlement has never been young (share of population over 60 ages in total population was always over 8%). The settlement was on the verge of aging in 1971 in Kukavica and in 1981 in Lebet, while other villages were above this limit. The percentage between 10 and 12 was characteristic of the Rdovo village in 1971. All other villages during the entire period had a share of population older than 60 years, more than 12%, which indicates that population cannot renew naturally. In Kostomlatica this percentage is 90% and in Kukavica 73.7%, over half is in Lebet (54%) and Rdovo (51.3%) and in Priboj it is constantly around 24%. Even more devastating is the fact that in Rdovo, Kostomlatica and Kukavica there is no youth under 15 years of age and in Priboj (17.6%) and in Lebet (11.1%) that number is also small.

² If the share of population over 60 ages in the total population is (Djurđjević, 2001):

- less than 8%, then settlement is young;
- between 8 and 10%, then settlement is on the verge of aging;
- between 10 and 12%, then settlement is in the aging process; and
- more than 12%, means that settlement is old.

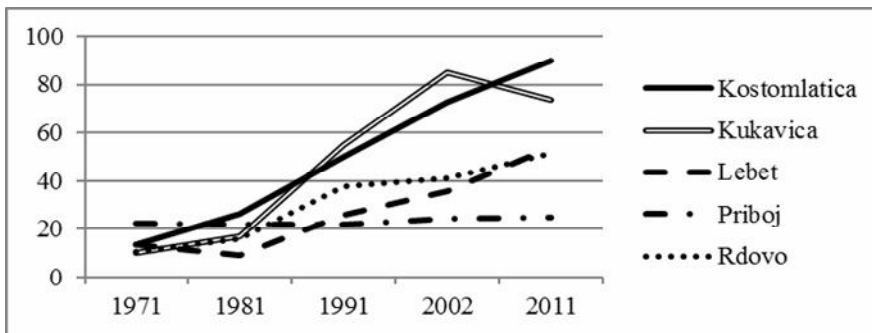


Figure 3. Share of people aged over 60 in the total population

Population growth was positive only during the period 1971–1981. In the coming decades it is consistently negative, while in Kostomlatica there was no child born since 1980. The absolute population growth in Priboj was -34‰ during the period 2002–2011.

The state of economy has changed dramatically, as can be seen from the data for the 1970s. In this area there was an agrarian overpopulation and the census of 2002 indicates a completely different picture (Figure 4). Namely, 12 years ago in Kostomlatica there was one, in Kukavica two and in Lebet six inhabitants who worked in agriculture. In Priboj and Rdovo that number was just over 20. If we consider the change in population, age structure, as well as constant downward trend in the agricultural population, we can conclude that in two of the five villages there may be a few people who are engaged in agriculture. Income from agriculture had only 82 households in the entire municipality of Vladičin Han by census of 2011 (Statistical Office of the Republic of Serbia, 2013, book 13).

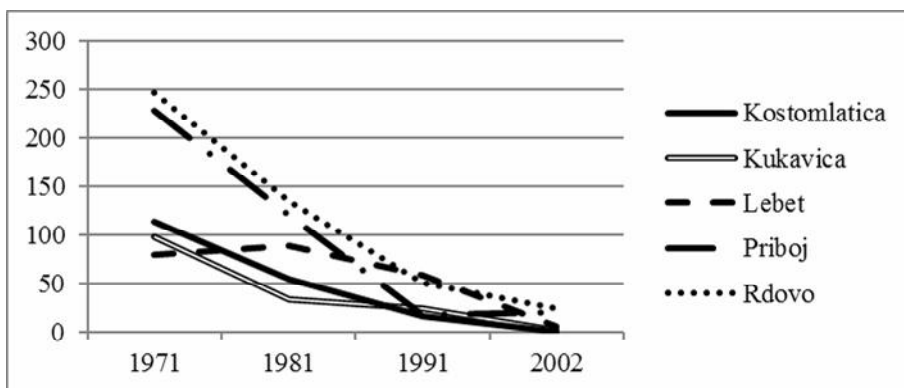


Figure 4. Decreasing number of agricultural population, 1971–2002

These five villages were selected for the analysis because they are the highest altitudes in the Vladičin Han municipality, and among the first affected by the rural exodus. Analyzed socio-demographic data indicate how the problem has deep roots, (since the beginning of analyzes period) and how its solving is not in accordance with the trends of modern society. This image can also be applied to a broad region of southeastern Serbia. The settlements that are in category “old” should serve as an example for the settlements that are in aging process, in order to avoid the same fate. Since the natural regeneration of the population is not possible, one of the solutions could be immigration of the population and economic investments of the state in this area.

Conclusion

Whether the disappearance of villages is necessarily a consequence of the industrialization and urbanization, and is it even desirable in order meet the challenges of modernization? Perhaps it is just the desire to be part of the “global village”, as adverse effect, created “other” settlements. Settlements in Serbia are classified as urban and “others”. The name itself suggests that settlements require clearer systematization. In order to avoid complete extinction of these settlements, it is necessary to take special measures for economic development, since the existence of the settlement is conditioned by economic development, while on the other hand economic growth depends on human capital.

We live in the era of globalization. Instant pop-culture threatens to swallow longstanding tradition. Unless there are strategies that are created and implemented to represent the tradition, which is not obsolete but timeless identity of the nation, than the survival of the people will be threatened. By losing the heritage, we can easily fly away and merge with someone else’s landscapes. For years the problem has been that someone else's landscapes are more attractive as a land for escape. Family as the basic unit of society pales in modern trends. Whether the family is an outdated way of organizing people into groups or it is attacked as the strongest link? May Serbia, after half a century of depopulation, even ask itself this question?

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