

Demographic and Infrastructure Problems of Villages in the Hilly-Mountainous Areas of Prilep

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Abstract: In this paper it has been investigated the issue of the dynamics of the rural population in villages in the mountainous areas of the municipality of Prilep height distribution of the mountainous villages, the area size, absolute density and agrarian population in hilly-mountainous villages, the distance of the hill-mountain villages of the municipality center and institutional infrastructure hilly-mountainous areas in Prilep. Despite the demographic decline that was made in the past 45 years, the municipality and the country will have even more incentive in the coming years to invest in infrastructure to improve little very bad living conditions and foremost here we think of infrastructure, roads, water drinking, clinics, veterinary stations, public transportation, gas stations, stores, construction of ethnic restaurants and small hotels so that at least the older generations of the cities as the least retirement to spend at home, to create minimum conditions for living and so that villages in hilly and mountainous villages to be attractive to younger generations of the cities and migrant workers from European countries and America Australia frequently to visit home, and to be able to invest in small commercial buildings in the area of tourism.

Key words: Demographic structure, geographical location, agricultural density, institutional structure, Prilep.

1. Introduction

In the paper it has been investigated more issues such as: geographical position of Prilep within our state, than movement, dynamics and structure of the national population in rural areas in mountainous areas of Prilep, also the height distribution of the mountainous districts, and the size of the areas, and agricultural absolute density of population in the hilly-mountainous villages, also there is being described the distance of hilly-mountainous villages of the municipal center town of Prilep and finally it is described the institutional infrastructure of hilly-mountainous villages in the municipality of Prilep [1]. At the end of a paper there are given scientific conclusions, proposals and initiatives for further development of the villages in the hilly-mountainous areas of Prilep.

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2. Geographical Location of Prilep

Prilep is located in the northern part of the Pelagonian valley with coordinates 41°14'26" North geographic latitude and 21°28'54" East geographic longitude of the largest valley in the country. According to the size of the area Prilep is the largest municipality in the country to 1,188 km². Its boundaries extend into central, southern and southwestern part of the state. The municipality has an average altitude [2]. The village territory is spread from northern and northwestern parts of the upper catchment area of Raechka River, south slope of Mount Babuna, as part of Prilep Pole, the South entered the territory of Mariovo and the SW¹ and W occupies a large part of Prilep Field. Prilep has a way of stretching NW-SE. From S West and bordering municipalities Krivogashtani Dolneni Chaska, and the municipality of Kavadarci of SE with Sobotsko in

¹ For explanation: S-W is South-West, NW-North West, SE-South-East, S-South.

Greece and SW and W by municipalities and Novaci mound. Prilep has a very favorable geographical position and transport links. Through Prilep passes the main road E-65. Prilep is 41 km away from Bitola, Demir Hisar 62 km from KRU 32 km from M.Brod 37 km, 49 km from Kavadarci and the capital Skopje 123 km [3].

3. Dynamics of Population in Villages in the Municipality Prilep

Prilep is comprised of 59 neighborhoods that are 58 villages and the town of Prilep community center (Fig. 1). To see how the dynamics of population took place in villages in the municipality of Prilep in the period 1961-2002 year will use the data from Table 1.

According to the Table 1, it presents in 1961 the total population of 24,320 inhabitants in the villages in the municipality of Prilep plain lived 11,376 or 46.7%, live in hilly areas 10,071 or 41.4% in mountain

villages live in 2,873 or 11.8%, while in 2002 the number of population in plain areas was 5,599 or 79.3%, lived in the hilly villages or 19.6% in 1384 and lived in mountain villages or 81 people 1:14% [4]. We feel free to conclude that the population in the period 1961-2002 was decreased by 29.0%, according to the categories of villages in the plain villages population in the period 1961 to 2002 decreased by 49.2% in the hilly villages in the period from 1961 to 2002, the population decreased by 13.7% and in the mountain villages of the population in the period 1961 to 2002 decreased by 2.8% [5]. As a conclusion the disastrous decline of the population in all three categories in the villages in the period 1961-2002 had a profound impact poor roads, water supply, sewerage, electricity and postal infrastructure, lack of health and veterinary clinics, stores, then mass migration from villages to cities and mass occurrence of going abroad for work during the 1960-1980 year [6].



Fig. 1 Limits and rural area of the municipality of Prilep.

Table 1 Dynamics of population in rural areas of the municipality of Prilep in the period 1961-2002 year.

Item number	Settlement	Altitude (m)	Lowland settlements	Hilly areas	Mountain areas	Census periods 1961-2002 years				
						1961	1971	1981	1994	2002
1	Alinci	670		+		449	486	449	281	238
2	Belovodica	800		+		356	182	73	18	24
3	Berovci	628	+			352	375	357	353	334
4	Bešište	900			+	1,171	1,016	238	93	22
5	Bonce	620	+			580	475	243	86	45
6	Veprčani	800		+		367	319	275	18	10
7	Veselčani	613	+			361	319	275	121	98
8	Vitoliste	830		+		1,291	1,110	664	290	170
9	Volkovo	780	+			148	79	79	41	42
10	Vrpsko	800		+		137	46	3	2	0
11	Galičani	617	+			341	359	335	249	251
12	G. Radobil	620		+		429	304	197	108	107
13	G. Konjari	607	+			926	922	905	685	699
14	Gudjakovo	580	+			132	41	4	0	0
15	Dabnica	605		+		117	41	17	13	66
16	Dren	570	+			46	19	16	7	10
17	Dunje	690		+		778	731	333	145	77
18	Erekovci	600	+			789	643	684	455	385
19	Živovo	920			+	250	79	7	5	0
20	Zagorani	612	+			546	455	396	190	108
21	Kadino S.	612	+			564	521	419	314	269
22	Kalen	640		+		336	287	110	38	19
23	Kanatlatci	620	+			1,523	1031	1039	990	972
24	Klepac	590	+			432	389	366	156	160
25.	Kokre	720		+		266	206	53	16	7
26.	Kruševica	759		+		637	595	283	117	87
27	Krstec	1080			+	93	21	9	8	1
28	Leništa	780		+		413	265	40	2	0
29	Lopatica	576	+			611	417	194	331	41
30	Mazučište	660	+			610	474	465	362	346
31.	M.Radobil	620	+			115	63	31	23	10
32	M.Konjari	613	+			786	804	834	713	727
33	M. Ruvci	740		+		229	250	68	27	22
34	Manastir	690		+		232	139	19	12	4
35	Marul	780		+		365	280	130	39	25
36	Nikodin	600		+		437	212	66	10	7
37	N. lagovo	640	+			251	238	212	189	213
38	Oreovec	860		+		308	172	44	16	17
39	Peštani	670		+		210	149	63	18	20
40	Pletvar	990			+	331	177	87	30	22
41	Podmol	600	+			552	448	338	185	138
42	Polčište	910			+	824	479	192	45	31
43	Prilepec	830		+		154	119	53	16	9
44	Prisad	940			+	204	95	48	9	5
45	Rakle	700		+		269	145	24	7	7
46	Selce	740		+		322	295	292	310	294
47	Smolani	650		+		20	2	0	0	0

(Table 1 continued)

Item number	Settlement	Altitude (m)	Lowland settlements	Hilly areas	Mountain areas	Census periods 1961-2002 years				
						1961	1971	1981	1994	2002
48	St. lagovo	685	+			161	93	74	49	38
49	Toplica	680		+		144	73	15	6	5
50	Topolcani	600	+			929	857	748	505	449
51	Trojaci	600		+		224	119	34	29	11
52	Trojkrsti	600	+			268	258	204	97	81
53	Carevic	696		+		166	77	32	12	10
54	Čanište	720		+		694	552	348	83	47
55	Čepigovo	600	+			216	197	218	167	162
56	Čumovo	860		+		227	171	94	33	17
57	Šeleverci	635	+			137	137	81	33	21
58	Štavica	800		+		494	413	264	107	84
Total			24	28	6	24,320	19,221	13,141	8,264	7,064
Population in plain villages	Total number of villages	24				11,376	9,614	8,517	6,301	5,599
Population in hilly villages	Total number of villages	28				10,071	7,740	4,043	1,773	1,384
Population in mountain villages	Total number of villages	6				28,73	1,867	581	190	81

Data source: Comparable data for population 1971 and 1981 Statistical Review 139, 1984 year, Skopje. Census of Population, Households and Dwellings in the Republic of Macedonia, 2002, Book X. Data on population in 1994, the municipalities of the Republic of Macedonia 2006, the Skopje [7].

Note “+” sign means that the settlement belongs to one of the three types lowland settlements, hilly areas, and mountain areas.

In the period 1961-2002, in Prilep total of five settlements are being displaced, plain villages scattered in the village Gudjakovo and from the last census of 2002 no longer residents this village, the hilly areas are displaced three villages Vrpsko, Lenishte and Smolani in latest census in 2002 and the group of mountain villages displaced is a settlement with the last census in 2002 the village alive.

4. National Population Structure and Height Distribution of Villages in Prilep

To see the national structure of the population in the municipality of Prilep [2] will use the data from Table 2.

According to the Table 2, it presents in Prilep have total population of 76,768 inhabitants, of which 70,878 (92%) are Macedonians, 22 (0.03%) Albanians, 4443 (5.8%) Roma, 917 (1.2%) Turks, 17 (0.02%) Vlachs, 172 (0.22%) Serbs, 86 (0.11%) Bosniaks and 233 others.

The density of population on Dec. 13, 2011 is at the discretion of the total population of 76,125 inhabitants or 64.27 inhabitants per 1 km², which is among the

municipalities with lasting decline in overall population. According population Prilep is the fifth place in the state.

The total number of households in Prilep is 24,398, ie on average each household has 3.2 people. National structure of the population in the villages in Prilep is given in Table 3.

According to data from the 2002 census, it is revealed that the majority of the population of 6,122 or 86.7% were Macedonian in the villages in the municipality of Prilep that 4,720 people or 77.1% live in the plain villages in 1,322 and 21.6% in the hilly areas and 80 people or 1.3% in mountainous areas [4]. Albanians were only 1 resident or 0.01% of the lowland villages. Turks in all villages represented with 794 inhabitants or 11.24% of which 791 inhabitants or 14.1% in the plain villages and 3 people or 0.2% in the hilly areas. Roma people in Prilep villages are represented with 54 people or 0.76% of whom live in hilly areas. Serbs are represented by a total of 10 people or 0.1%, of which 7 people or 0.1% live in villages plain, 2 people or 0.1% in the hilly villages and

Table 2 National structure of the population in the municipality of Prilep.

Census 2002								
Total number of residents.	Macedonians	Albanians	Roma	Turks	Vlachs	Serbs	Bosniaks	Other
76,768	70,878	22	4,443	917	17	172	86	233

Source: gender structure, national structure, number of households, population settlements in 2002 KN.10 [7].

Table 3 National structure of the population and height distribution of villages by category in Prilep in 2002.

Item number	Settlement	Altitude (m)	Valley settlement	Hilly neighborhood	Mountain neighborhood	Total population in 2002	Macedonians	Albanians	Turks	Roma	Vlachs	Serbs	Bosniaks	Other
1	Alinci	670		+		238	238	-	-	-	-	-	-	-
2	Belovodica	800		+		24	24	-	-	-	-	-	-	-
3	Berovci	628	+			334	333	-	-	-	-	-	-	-
4	Bešiste	900			+	22	22	-	-	-	-	-	-	-
5	Bonce	620	+			45	45	-	-	-	-	-	-	-
6	Veprčani	800		+		10	10	-	-	-	-	-	-	-
7	Veselčani	613	+			98	98	-	-	-	-	-	-	-
8	Vitoliste	830		+		170	167	-	-	-	-	2	-	1
9	Volkovo	780	+			42	42	-	-	-	-	-	-	-
10	Vrpsko	800		+		0	0	-	-	-	-	-	-	-
11	Galičani	617	+			251	251	-	-	-	-	-	-	-
12	G. Radobil	620		+		107	107	-	-	-	-	-	-	-
13	G. Konjari	607	+			699	699	-	-	-	-	-	-	-
14	Gudjakovo	580	+			0	0	-	-	-	-	-	-	-
15	Dabnica	605		+		66	9	-	3	54	-	-	-	-
16	Dren	570	+			10	10	-	-	-	-	-	-	-
17	Dunje	690		+		77	77	-	-	-	-	-	-	-
18	Erekovci	600	+			385	382	-	-	-	-	1	-	2
19	Živovo	920			+	0	0	-	-	-	-	-	-	-
20	Zagorani	612	+			108	108	-	-	-	-	-	-	-
21	Kadino S.	612	+			269	269	-	-	-	-	-	-	-
22	Kalen	640		+		19	19	-	-	-	-	-	-	-
23	Kanatlatci	620	+			972	111	1	791	-	-	-	69	-
24	Klepac	590	+			160	160	-	-	-	-	-	-	-
25	Kokre	720		+		7	7	-	-	-	-	-	-	-
26	Kruševica	759		+		87	87	-	-	-	-	-	-	-
27	Krstec	1,080			+	1	1	-	-	-	-	-	-	-
28	Leništa	780		+		0	0	-	-	-	-	-	-	-
29	Lopatica	576	+			41	41	-	-	-	-	-	-	-
30	Mazučište	660	+			346	345	-	-	-	-	-	-	1
31	M.Radobil	620	+			10	10	-	-	-	-	-	-	-
32	M.Konjari	613	+			727	723	-	-	-	-	2	-	2
33	M. Ruvci	740		+		22	22	-	-	-	-	-	-	-
34	Manastir	690		+		4	4	-	-	-	-	-	-	-
35	Marul	780		+		25	25	-	-	-	-	-	-	-
36	Nikodin	600		+		7	6	-	-	-	-	-	-	1
37	N. lagovo	640	+			213	207	-	-	-	-	4	-	2
38	Oreovec	860		+		17	16	-	-	-	-	-	-	1
39	Peštani	670		+		20	20	-	-	-	-	-	-	-
40	Pletvar	990			+	22	21	-	-	-	-	1	-	-

(Table 3 continued)

Item number	Settlement	Altitude (m)	Valley settlement	Hilly neighborhood	Mountain neighborhood	Total population in 2002	Macedonians	Albanians	Turks	Roma	Vlachs	Serbs	Bosniaks	Other
41	Podmol	600	+			138	138	-	-	-	-	-	-	-
42	Polčište	910			+	31	31	-	-	-	-	-	-	-
43	Prilepec	830		+		9	9	-	-	-	-	-	-	-
44	Prisad	940			+	5	5	-	-	-	-	-	-	-
45	Rakle	700		+		7	7	-	-	-	-	-	-	-
46	Selce	740		+		294	294	-	-	-	-	-	-	-
47	Smolani	650		+		0	0	-	-	-	-	-	-	-
48	St. lagovo	685	+			38	38	-	-	-	-	-	-	-
49	Toplica	680		+		5	5	-	-	-	-	-	-	-
50	Toplcani	600	+			449	449	-	-	-	-	-	-	-
51	Trojaci	600		+		11	11	-	-	-	-	-	-	-
52	Trojkrsti	600	+			81	80	-	-	-	-	-	-	1
53	Carevic	696		+		10	10	-	-	-	-	-	-	-
54	Čanište	720		+		47	47	-	-	-	-	-	-	-
55	Čepigovo	600	+			162	160	-	-	-	-	-	-	2
56	Čumovo	860		+		17	17	-	-	-	-	-	-	-
57	Šeleverci	635	+			21	21	-	-	-	-	-	-	-
58	Štavica	800		+		84	84	-	-	-	-	-	-	-
Total			24	28	6	7064	6122	1	794	54	/	10	69	13
Lowland villages	24					5599	4720	1	791	/	/	7	69	10
Hilly villages	28					1384	1322	/	3	54	/	2	/	3
Mountain villages	6					81	80	/	/	/	/	1	/	/

Source: Panov, MR. (1998): Encyclopedia of villages in Macedonia, Skopje. Note “+”-sign means that the settlement belongs to one of the three types lowland settlements, hilly areas and mountain areas, “/”-means absence of the denoted ethnic group in the column.

1 resident or 1.2%. Bosnians in all villages represented with 69 people or 0.9% of which 69 Bosniaks and 1.2% live in village's plain. As others have reported 13 residents of all villages or 0.2% of which 10 people or 0.2% live in villages and plain 3 people or 0.2% live in the hilly village of Prilep.

According to the altitude distribution of the villages in the municipality of Prilep 24 villages or 41.4% are lowland areas, 28 districts or 48.3% is hilly neighborhoods and suburbs 6 or 10.3% in mountain areas.

5. Figure Size Area, Absolute and Agricultural Density of the Population in the Villages of Prilep

The study of agricultural areas is important absolute and agrarian population density of settlements in Prilep [3]. To see what the size of the area, absolute and agrarian population density in plain, hilly and

mountainous areas in Prilep will use the data in Table 4.

According to the Table 4, it presents the total surface area of all the villages in the municipality of Prilep is 1,121.7 km² or 94.9% of the total territory of the municipality of Prilep that arable land is 12,718.451 ha or 31.5% of total arable area of the municipality, while the average density of population of 1 km² in all villages is 6.3 residents and agricultural density of 100 ha in all villages was 55.5 people [5].

As lowland settlements in Prilep there are 24 with a total size of the area from 275.3 km² or 24.5% of the total area of all the villages in the municipality, arable land is represented in 8,204,689 ha or 64.5% of the total arable land in all the villages in the municipality, the average density the population of 1 km² is 20.3 inhabitants and 100 ha of agricultural density is 68.2 inhabitants.

How hilly areas in Prilep there are 28 with a total size of area of 621.4 km² or 55.4% of the total area of

Table 4 Table of the size of the areas, and agricultural absolute density of population in plain, hilly and mountainous villages in the municipality of Prilep in 2002.

Item number	Settlement	Altitude (m)	Valley settlements	Hilly neighborhood	Mountain neighborhood	Size dummy in (km ²)	Farmland (ha)	Total population in 2002	Population density of 1 km ²	Agricultural density of 100 ha
1	Alinci	670		+		11.1	700	238	21.4	34
2	Belovodica	800		+		28.0	583	24	0.9	4.1
3	Berovci	628	+			11.1	916	334	30.1	36.5
4	Bešište	900			+	67.1	1.700	22	0.3	1.3
5	Bonce	620	+			20.7	743	45	2.2	6.1
6	Veprčani	800		+		29.1	604	10	0.3	1.7
7	Veselčani	613	+			7.6	518	98	12.9	18.9
8	Vitoliste	830		+		63.3	1.435	170	7.8	34.4
9	Volkovo	780	+			6.1	335	42	6.9	12.5
10	Vrpsko	800		+		16.0	165	0	0	0
11	Galičani	617	+			7.4	601	251	33.9	41.8
12	G. Radobil	620		+		25.1	359	107	4.3	29.8
13	G. Konjari	607	+			21.1	1.689	699	33.1	41.4
14	Gudjakovo	580	+			21.2	*	0	0	0
15	Dabnica	605		+		16.7	66	66	4	15
16	Dren	570	+			19.7	10	10	0.5	7.4
17	Dunje	690		+		43.8	77	77	1.8	5.8
18	Erekovci	600	+			12.1	385	385	31.8	52.5
19	Živovo	920			+	17.2	-	0	0	0
20	Zagorani	612	+			10.4	108	108	39.2	18.0
21	Kadino S.	612	+			10.5	269	269	25.6	28.1
22	Kalen	640		+		22.6	19	19	0.8	3.6
23	Kanatlatci	620	+			21.6	972	972	45	59.3
24	Klepac	590	+			4.2	160	160	38.1	43.7
25	Kokre	720		+		21.6	7	7	0.3	1.4
26	Kruševica	759		+		27.6	87	87	3.2	7.3
27	Krstec	1080			+	15.6	1	1	0.1	0.7
28	Leništa	780		+		15.6	0	0	0	0
29	Lopatnica	576	+			16.5	41	41	2.5	6.9
30	Mazučište	660	+			16.8	346	346	20.6	25.9
31	M.Radobil	620	+			8.2	10	10	1.2	5.6
32	M.Konjari	613	+			14.6	727	727	49.8	56.6
33	M. Ruvci	740		+		11.3	22	22	1.9	3.6
34	Manastir	690		+		13.5	4	4	0.3	1.5
35	Marul	780		+		14.1	25	25	1.8	3.9
36	Nikodin	600		+		52.6	7	7	0.1	0.7
37	N. lagovo	640	+			2.7	213	213	78.9	92.6
38	Oreovec	860		+		19.1	17	17	0.9	2.2
39	Peštani	670		+		18.5	20	20	1.1	5.1
40	Pletvar	990			+	18.7	22	22	1.2	7.9
41	Podmol	600	+			11.5	138	138	12	19.1
42	Polčište	910			+	83.9	31	31	0.4	2.3
43	Prilepec	830		+		7.7	9	9	1.2	4
44	Prisad	940			+	27.0	5	5	0.2	0.9
45	Rakle	700		+		17.2	7	7	0.4	2
46	Selce	740		+		15.2	294	294	19.3	63

(Table 4 continued)

Item number	Settlement	Altitude (m)	Valley settlements	Hilly neighborhood	Mountain neighborhood	Size dummy in (km ²)	Farmland (ha)	Total population in 2002	Population density of 1 km ²	Agricultural density of 100 ha
47	Smolani	650		+		9.7	-	0	0	0
48	St. lagovo	685	+			3.3	38	38	11.5	15.8
49	Toplica	680		+		14.2	5	5	0.4	1.2
50	Topolcani	600	+			13.7	860	449	36.4	52.2
51	Trojaci	600		+		19.7	357	11	0.6	3.1
52	Trojkrsti	600	+			2.4	98	81	33.8	82.7
53	Carevic	696		+		20.1	367	10	0.5	2.7
54	Čanište	720		+		36.7	1.627	47	1.3	2.9
55	Čepigovo	600	+			6.2	467	162	26.1	34.7
56	Čumovo	860		+		9.4	396	17	1.8	4.3
57	Šeleverci	635	+			5.7	248	21	3.7	8.5
58	Štavica	800		+		17.4	708	84	4.8	11.9
Total		24	28	6		1,121.7	12,718.451	7,064	6.3	55.5
Lowland villages		24				275.3	8,204.689	5,599	20.3	68.2
Hilly villages		28				621.4	4,908.062	1,384	2.2	28.2
Mountain villages		6				229.5	60.7	81	0.4	133.4

Source: [1].

Note “+” sign means that the settlement belongs to one of the three types lowland settlements, hilly areas, and mountain areas.

each village community, arable land is represented on 4,908.062 ha or 38.6% of the total arable land in all the villages in the municipality, the average density population of 1 km² was 2.2 people and 100 ha of agricultural density is 28.2 inhabitants.

As mountain settlements in Prilep there are 6 in total size dummy of 229.5 km² or 20.5% of the total area of all the villages of the municipality, arable land is represented on 60.7 ha or 0.47% of the total arable land in all the villages in the municipality, the average density 1 km² population of 0.4 residents and 100 ha of agricultural density is 133.4 inhabitants.

6. Distance of the Villages from the Municipal Centertown of Prilep

The distance of the villages from the municipal center is a very important factor especially for urban and economic development of rural areas, so the closer are the villages to the municipal center they have reduced migration of population and more urban and economic development and vice versa. To see what is the distance of the villages from the municipal center of Prilep will use the data from Table 5.

According to the Table 5, it presents the first group

of villages away from 0-10 km has 13 districts or 22.4% of the neighborhoods in the municipality, in the second group at a distance of 10-15 km have 12 districts or 20.7% of the total number of settlements and in the third group of remote villages over 15 km from the municipal center are 33 districts or 56.9% of the neighborhoods in Prilep [6].

The group of lowland villages distanced from 0-10 km has 13 villages, 8 villages belong in the second group of 10-15 km 4 villages and the third group 12 villages over 15 km.

The group of mountain villages distanced from 0-10 km there are 8 villages, 4 villages belong in the second group of 10-15 km, 6 villages and in the third group of 18 villages over 15 km.

The group of mountain villages distanced from 0-10 km has 4 villages, 1 village belongs in the second group of 10-15 km 2 villages and in the third group above 15 km 3 villages.

7. Institutional Structure of Villages in Prilep

To see how the institutions are being deployed and some important buildings in settlements in Prilep will use the data from Table 5.

Table 5 Distance of villages from the municipal center town of Prilep 0-10, 10-15 and over 15 km.

Item number	Settlement	Altitude (m)	Valley settlement	Hilly neighborhood	Mountain neighborhood	Distance (0-10 km) (kilometers)	Distance (10-15 km) (kilometers)	Distance (over 15 km) (kilometers)	
1	Alinci	670		+			+	11	
2	Belovodica	800		+				+	17
3	Berovci	628	+			+	7		
4	Bešište	900			+			+	43
5	Bonce	620	+					+	29
6	Veprčani	800		+				+	34
7	Veselčani	613	+				+	13	
8	Vitoliste	830		+				+	46
9	Volkovo	780	+			+	9		
10	Vrpsko	800		+				+	51
11	Galičani	617	+			+	10		
12	G. Radobil	620		+				+	28
13	G. Konjari	607	+			+	9		
14	Gudjakovo	580	+					+	40
15	Dabnica	605		+		+	7		
16	Dren	570	+					+	27
17	Dunje	690		+				+	29
18	Erekovci	600	+					+	23
19	Ž. ivovo	920			+			+	50
20	Zagorani	612	+				+	15	
21	Kadino S.	612	+				+	12.5	
22	Kalen	640		+				+	26
23	Kanatlatci	620	+					+	24
24	Klepac	590	+					+	22
25.	Kokre	720		+				+	30
26	Kruševica	759		+				+	18
27	Krstec	1080			+		+	13	
28	Leništa	780		+		+	6		
29	Lopatica	576	+					+	35
30	Mazučište	660	+			+	5		
31	M.Radobil	620	+					+	27
32	M.Konjari	613	+			+	7		
33	M. Ruvci	740		+			+	12	
34	Manastir	690		+				+	38
35	Marul	780		+			+	14	
36	Nikodin	600		+				+	37
37	N. lagovo	640	+			+	5		
38	Oreovec	860		+		+	8		
39	Peštani	670		+				+	32
40	Pletvar	990			+	+	9		
41	Podmol	600	+					+	29
42	Polčište	910			+			+	37
43	Prilepec	830		+			+	12	
44	Prisad	940			+		+	13	
45	Rakle	700		+				+	33
46	Selce	740		+		+	2		
47	Smolani	650		+				+	26

(Table 5 continued)

Item number	Settlement	Altitude (m)	Valley settlement	Hilly neighborhood	Mountain neighborhood	Distance (0-10 km) (kilometers)	Distance (10-15 km) (kilometers)	Distance (over 15 km) (kilometers)
48	St. Iagovo	685	+			+	10	
49	Toplica	680		+				+
50	Topolcani	600	+					+
51	Trojaci	600		+				+
52	Trojkrsti	600	+					+
53	Carevic	696		+				+
54	Čanište	720		+				+
55	Čepigovo	600	+					+
56	Čumovo	860		+			+	15
57	Šeleverci	635	+				+	14
58	Štavica	800		+			+	12
Total			24	28	6	13	12	33
Lowland villages		24				8 villages from 0-10 km	4 villages from 10-15 km	12 villages over 15 km
Hilly villages		28				4 villages from 0-10 km	6 villages from 10-15 km	18 villages over 15 km
Mountain villages		6				1 villages from 0-10 km	2 villages from 10-15 km	3 villages over 15 km

Data source: Ref. [8].

Note “+” sign indicates that settlement belongs to that group of distance 0-10 km, 10-15 km and more than 15 km.

Table 6 Institutional infrastructure for settlements in the municipality Prilep.

Item number	Settlement	Altitude (m)	Contained a valley settlement	Hilly neighborhood	Mountain neighborhood	Prim. school to Gr4	primary school to 9th gr.	Asphalt to village	Water	Sewer	Clinic	Email	Store	commercial facility	petrol pump	church	monastery	mosque
1	Alinci	670		+		+		+	+	-	-	-	+	-	-	+	-	-
2	Belovodica	800		+		-	-	-	+	-	-	-	-	+	-	+	-	-
3	Berovci	628	+			-	-	-	+	-	-	-	-	+	+	+	-	-
4	Bešište	900			+	-	-	-	-	-	-	-	-	-	-	+	-	-
5	Bonce	620	+			-	-	+	+	-	-	-	-	-	-	+	-	-
6	Veprčani	800		+		-	-	-	-	-	-	-	-	-	-	-	-	-
7	Veselčani	613	+			+	-	+	+	-	-	-	+	-	-	+	+	-
8	Vitoliste	830		+		+	-	+	+	+	+	+	+	+	-	+	+	-
9	Volkovo	780	+			-	-	-	-	-	-	-	-	-	-	+	-	-
10	Vrpsko	800		+		-	-	-	-	-	-	-	-	-	-	-	-	-
11	Galičani	617	+			+	-	+	+	-	-	-	+	-	-	+	-	-
12	G.Radobil	620		+		+	-	-	+	-	-	-	+	-	-	+	-	-
13	G. Konjari	607	+			+	+	+	+	-	-	-	+	-	-	+	-	-
14	Gudjakovo	580	+			-	-	-	-	-	-	-	-	-	-	-	-	-
15	Dabnica	605		+		-	-	-	-	-	-	-	-	-	-	-	-	-
16	Dren	570	+			-	-	-	-	-	-	-	-	-	-	-	+	-
17	Dunje	690		+		-	-	-	-	-	-	-	+	-	-	+	+	-
18	Erekovci	600	+			+	-	+	+	-	-	-	+	-	-	+	-	-
19	Živovo	920			+	-	-	-	-	-	-	-	-	-	-	-	-	-
20.	Zagorani	612	+			+	-	+	+	-	-	-	+	-	-	+	-	-
21	Kadino S.	612	+			+	-	+	+	-	-	-	+	-	-	+	-	-
22	Kalen	640		+		-	-	+	-	-	-	-	-	-	-	+	-	-
23	Kanatlatci	620	+			+	+	+	+	-	+	+	+	+	+	+	-	+
24	Klepac	590	+			+	-	+	+	-	-	-	+	-	-	+	-	-
25	Kokre	720		+		-	-	-	-	-	-	-	-	-	-	-	-	-
26	Kruševica	759		+		-	-	+	+	-	-	-	+	+	-	+	-	-
27	Krstec	1,080			+	-	-	-	-	-	-	-	-	-	-	-	-	-
28	Leništa	780		+		-	-	+	-	-	-	-	-	+	-	+	+	-
29	Lopatnica	576	+			-	-	-	-	-	-	-	-	-	-	-	-	-
30	Mazučište	660	+			+	-	+	+	-	-	-	+	+	-	+	-	-
31	M.Radobil	620	+			-	-	+	-	-	-	-	-	-	-	+	-	-

(Table 6 continued)

Item number	Settlement	Altitude (m)	Contained a valley settlement	Hilly neighborhood	Mountain neighborhood	Prim. school to Gr4	primary school to 9th gr.	Asphalt to village	Water	Sewer	Clinic	Email	Store	commercial facility	petrol pump	church	monastery	mosque
32	M.Konjari	613	+			+	+	+	+	-	+	-	+	+	-	+	-	-
33	M. Ruvci	740		+		-	-	-	-	-	-	-	-	-	-	+	-	-
34	Manastir	690		+		-	-	+	-	-	-	-	-	-	-	+	+	-
35	Marul	780		+		-	-	-	-	-	-	-	-	-	-	+	-	-
36	Nikodin	600		+		-	-	-	-	-	-	-	-	-	-	+	+	-
37	N. Iagovo	640	+			+	-	+	-	-	-	-	+	+	-	+	-	-
38	Oreovec	860		+		-	-	+	+	-	-	-	-	-	-	-	-	-
39	Peštani	670		+		-	-	-	-	-	-	-	-	-	-	+	+	-
40	Pletvar	990			+	-	-	+	+	-	-	-	+	+	-	+	-	-
41	Podmol	600	+			+	-	+	+	-	-	-	+	-	-	+	-	-
42	Polčište	910			+	-	-	-	-	-	-	-	-	-	-	-	+	-
43	Prilepec	830		+		-	-	-	-	-	-	-	-	-	-	+	+	-
44	Prisad	940			+	-	-	-	-	-	-	-	-	-	-	-	-	-
45	Rakle	700		+		-	-	-	-	-	-	-	-	-	-	-	-	-
46	Selce	740		+		+	-	+	+	-	-	-	+	+	-	+	+	-
47	Smolani	650		+		-	-	-	-	-	-	-	-	-	-	+	-	-
48	St. Iagovo	685	+			+	+	+	+	-	-	-	+	-	-	+	-	-
49	Toplica	680		+		-	-	-	-	-	-	-	+	-	-	+	-	-
50	Topolcani	600	+			+	+	+	+	+	+	+	+	+	+	+	-	-
51	Trojaci	600		+		-	-	-	-	-	-	-	-	-	-	+	-	-
52	Trojkrsti	600	+			+	-	+	+	-	-	-	+	-	-	+	-	-
53	Carevic	696		+		-	-	-	-	-	-	-	-	-	-	-	-	-
54	Čanište	720		+		-	-	+	-	-	-	-	-	-	-	+	-	-
55	Čepigovo	600	+			+	-	+	+	-	-	-	+	-	-	+	-	-
56	Čumovo	860		+		-	-	-	-	-	-	-	-	-	-	+	-	-
57	Šeleverci	635	+			-	-	+	-	-	-	-	-	-	-	+	-	-
58	Štavica	800		+		-	-	+	+	-	-	-	-	-	-	+	-	-
Total			24	28	6	20	5	29	26	2	4	3	24	15	3	43	11	1
Lowland villages			24		16	5		19	17	1	3	2	16	9	3	21	2	1
Hilly villages			28		4	/		9	8	1	1	1	7	5	/	20	8	/
Mountain villages			6		/	/		1	1	/	/	/	1	1	/	2	1	/

Source: Ref. [8].

Note “+” sign indicates that there exist such type of institution in the listed settlement.

According to the Table 5 in all 58 rural villages in the municipality of Prilep there is following institutional infrastructure: 20 elementary schools, 5 primary schools and 9 Letka, 29 villages have paved way to the village, 26 villages have village water, only 3 villages have sanitation, 4 ambulances, three post offices, 24 shops, 15 commercial buildings, 3 gas stations, 43 churches, 11 monasteries and one mosque.

Lowland villages in Prilep have the following institutional infrastructure: 16 primary schools and 80% of total number of all rural primary schools to Grade 4 in the municipality, 5 primary schools and 9 Letka or 100% of all municipalities in nine years, 19 villages have paved road to the village or 65.5% of all

villages having paved road to the village in the municipality, 17 villages have village water supply or 65.4% of all rural water supply in the municipality, only two villages have sanitation or 66.7% of the village sewage in the municipality, three ambulances or 75% of all rural clinics in the community, two post offices or 66.7% of all rural post offices in the municipality, 16 stores, or 66.7% of the village shops in the municipality, 9 commercial buildings or 60% of all commercial buildings in the rural municipality, 3 gas pumps or 100% of all gas stations in rural municipalities, 21 church or 48.8% of all rural churches in the community, two monasteries or 22% of all rural monasteries in the community and one

mosque.

Hilly villages in Prilep have the following institutional infrastructure: four primary schools and 20% of total number of all rural primary schools to Grade 4 in the municipality, has no school to Letka 9, 9 villages have paved way to the village or 31.0% of all villages having paved road to the village in the municipality, 8 villages have village water supply or 30.8% of all rural water supply in the municipality, the village has only one sewage or 33.3% of the village sewage in the municipality, one ambulance or 33.3% of all rural clinics municipality, post 1 or 33.3% of all rural post offices in the community, 7 shops or 29.2% of the village shops in the municipality, 5 commercial buildings and 33.3% of all commercial buildings in the rural municipality has no gas station, 20 churches or 45.5 % of all rural churches in the community, eight monasteries or 72.7% of the village monasteries and mosques in the municipality has.

Mountain villages in the municipality of Prilep have the following institutional infrastructure: no primary school to grade 4, the school has no Letka 9, one village has paved way to the village or 3.4% of all villages having paved road to the village in the municipality, village 1 a rural water or 3.8% of all rural water supply in the municipality, in a mountain village has no sewer, no clinic, no post offices, one store, or 4.2% of all shops in the village municipality, one commercial building, or 6.7% of the rural economy facilities in the community, no gas stations in a single mountain village, two churches or 4.7% of all rural churches in the community, one monastery or 9.1% of all rural monasteries and mosques in the municipality has.

8. Conclusions

Prilep is comprised of 59 neighborhoods that are 58 villages and the town of Prilep community center;

In hilly villages in the period 1961-2002, the population decreased by 13.7% and in the mountain

villages of the population in the period 1961 to 2002 decreased by 2.8%. As a conclusion the disastrous decline of the population in all three categories in the villages in the period 1961-2002 had a profound impact poor roads, water supply, sewerage, electricity and postal infrastructure, lack of health and veterinary clinics, stores, then mass migration from villages to cities and mass occurrence of going abroad for work during the 1960-1980 year; the hilly areas are displaced three villages Vrpsko, Lenishte and Smolani the last census in 2002 and the group of mountain villages displaced is a settlement with the last census in 2002 the village lives; Macedonians represented the majority of 1,322 and 21.6% in the hilly areas and 80 people or 1.3% in mountainous areas; the height distribution in Prilep 28 districts or 48.3% is hilly neighborhoods and suburbs 6 or 10.3% in mountain areas; the height distribution in Prilep 28 districts or 48.3% is hilly neighborhoods and suburbs 6 or 10.3% in mountain areas; most have Athar hilly areas of 275.3 km² or 24.5% of the total area of all villages in the municipality, the largest area of farmland have plain, villages and greatest population densities are plain villages.

In the first group of villages away from 0-10 km most villages have a flat 8, the second group of villages away from 10-15 km uphill villages have six in the third group of villages 15 km apart over most of the hill districts have 18.

The existence of only four schools in the hill villages and mountain villages in no clearly indicates that no young population and they are on the verge of demographic devastation, none no school until 9 Letka in hilly and mountainous villages, asphalt only to nine hilly and one mountain village, water is only eight hilly and mountainous village sanitation has only one hill and no mountain village clinic there is only one hill and no mountain village, mail only one hill and no mountain village seven stores in a hilly and only one in the mountain villages, five commercial buildings in hilly and only one in the mountain

villages, gas stations will level even in hilly highland villages, there are 20 churches in hilly and mountainous villages in two, eight monasteries exist in hilly one in mountain villages, and not even in the mosques even in hilly mountainous villages in the municipality of Prilep.

Despite the demographic devastation that was made in the past 45 years the municipality will have even the state in the coming years many retracted to invest in infrastructure to improve a little very bad living conditions and foremost think of infrastructure, roads, water drinking, clinics, veterinary stations, public transportation, gas stations, stores, construction of ethnic restaurants and small hotels so that at least the older generations of the cities as the least retirement to spend at home, to create minimum conditions for living and so bitat villages in hilly and mountainous villages attractive to younger generations of the cities and migrant workers from European countries and America Australia frequently to visit home, and be able to invest in small commercial buildings in the area of tourism.

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