

## DEMOGRAPHIC DEVELOPMENT OF THE TOWN OF KNIN IN 1991/2001 INTERCENSAL PERIOD

MARTIN GLAMUZINA  
ŽELJKA ŠILJKOVIĆ  
NIKOLA GLAMUZINA

Department of Geography, University of Zadar  
*Odjel za geografiju, Sveučilište u Zadru*

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Primljeno:

The Town of Knin, as many other war-affected areas in Croatia, has experienced significant demographic, socio-economic and political changes. The most prominent changes include notable reduction in the number of inhabitants and altered population structures. Ethnic composition has changed significantly in comparison to prewar period, partly due to immigration of Croats from Bosnia and Herzegovina.

**Key words:** Town of Knin, age structure, ethnic composition, migrations, economy

Grad Knin je, kao i ostala područja u Hrvatskoj koja su bila izravno pogođena ratnim djelovanjima, doživio mnoge političke, društveno-gospodarske i demografske promjene. Osim znatnog smanjenja broja stanovnika, promijenila se i njihova struktura. Narodnosni sastav bitno je izmijenjen u odnosu na prijeratno razdoblje, što je i posljedica doseljavanja hrvatskog stanovništva iz susjedne Bosne i Hercegovine.

**Ključne riječi:** Grad Knin, dobna struktura, narodnosna struktura, migracije, gospodarstvo

### Introduction

In the last decade of the 20<sup>th</sup> century, Croatia experienced many social and political changes, which severely affected the demographic situation, especially in war-affected areas. The war has triggered many demographic disturbances at the Croatian state territory, but also at the wider Croatian ethnic territory (NEJAŠMIĆ, ŠTAMBUK, 2003). The situation is particularly difficult in the areas that were directly affected by the war (ŠTERC, POKOS, 1993). Knin area was also exposed to war activities, which had significant impact on the decrease in number of inhabitants and on the changes of population structures. The war induced mass emigration from this area, but after the war a part of the prewar population returned and many people from Bosnia and Herzegovina immigrated here.

In medieval Croatia Knin was the crown seat, diocesan seat and county center (MAGAŠ, 1996). After the Ottoman invasion, at the end of the 17<sup>th</sup> century a great number of people from Bosnia and Herzegovina immigrated to this area. For centuries, Knin has been an important traffic junction, which links Southern (Dalmatia) with Central Croatia. After the railway had been built at the beginning of the 20<sup>th</sup> century Knin became a very important railway junction and from that time the town started its intensive development.

There are a few papers on the population of Knin area and they mostly deal with the ethnic composition of the population (CRKVENČIĆ, 1991; NEJAŠMIĆ, 1992). The most significant changes in 1991/2001 intercensal period were reduction in the number of inhabitants by 44 per cent and altered population structures, particularly ethnic composition.

### Notes on methodology

According to the old administrative and territorial system, which was in operation during 1991 census, the former Knin Municipality comprised 42 settlements. By the Law on Counties, Towns and Municipalities from 1992 new territorial units were formed, among which was Zadar-Knin County that comprised the whole Knin area. However, the changes made by the new Law on Counties, Towns and Municipalities from 1997 included changing county borders and incorporating the whole Knin area into a newly founded Šibenik-Knin County (BERTIĆ, 1996). According to the latest administrative and territorial system, which was also in operation during 2001 census, the former Knin Municipality is now divided into the Town of Knin and five municipalities: Cijljane, Ervenik, Kijevo, Kistanje and Orlić. This paper will deal only with the latest demographic changes in the Town of Knin, which comprises 13 settlements: Golubić, Knin, Kninsko Polje, Kovačić, Ljubač, Očestovo, Plavno, Polača, Potkonje, Radljevac, Strmica, Vrpolje i Žagrović. The area in question has a surface of 355.8 km<sup>2</sup> and had 15,190 inhabitants (42.7 inh/km<sup>2</sup>) in 2001.

In order to understand completely the changes in population structures in the Town of Knin, it is inevitable to give a review of the intercensal population change and natural population change. Most of the data used will be from 1991 and 2001 censuses. The analysis of contemporary demographic changes will include the data on vital statistics only partially, because there are no complete vital statistics data during the occupation of this area. The most attention will be given to population trends and changes in population structures. However, it is necessary to point out certain differences in methodologies used in two above-mentioned censuses, particularly differences in defining total population of the country. The major differences refer to Croatian citizens who have been living abroad, but have a permanent dwelling in Croatia. In 1991 census the total number of inhabitants included also the population that was working abroad, regardless of how long they had been there. On the other hand, according to 2001 census methodology, the total number of inhabitants included only those persons that had been abroad up to one year as well as those who kept close economic, traffic and constant relations with their families in Croatia (Popis stanovništva, kućanstava i stanova 31. ožujka 2001., Statistička izvješća 1167). Similar changes in methodology were recorded in vital statistics – until 1992 the data on births and deaths of the population that was living abroad had been published at the level of former municipalities and from 1993 to 1997

the data were published at the level of settlements. However, since 1998 a new methodology has been used and, according to it, the birth data are recorded only for those children whose mothers have a permanent dwelling in Croatia and have been abroad for less than twelve months, and for those children whose mothers do not have a permanent dwelling in Croatia, but have been living there for more than twelve months.

### Intercensal population change

In order to comprehend the qualitative population changes, i.e. changes in population structures, it is necessary to give a preview of changes in the number of inhabitants in the Town of Knin, because the last intercensal period was marked by significant changes that also affected population structures. If we compare the number of inhabitants in 1991 with that in 2001 we can observe that population decreased in all the settlements within the Town of Knin, except one (Tab. 1).

Tab. 1 Population of the Town of Knin, by settlements, from 1948 to 2001

Tab. 1. *Kretanje broja stanovnika Grada Knina, po naseljima, 1948.-2001.*

Settlement	1948	1953	1961	1971	1981	1991	2001	Index 2001/1991
Golubić	2,242	2,405	2,243	1,885	1,617	1,424	654	45.9
Knin	2,763	3,543	5,116	7,300	10,933	12,331	11,128	90.2
Kninsko Polje	925	960	958	970	320	408	536	131.4
Kovačić	968	1,138	1,486	1,310	1,050	1,185	915	77.2
Ljubač	254	269	251	207	184	172	87	50.6
Oćestovo	680	672	654	558	455	351	160	45.6
Plavno	2,573	2,719	2,519	2,414	1,925	1,720	266	15.5
Polača	2,001	2,045	1,990	1,834	1,567	1,586	134	8.4
Potkonje	276	272	276	260	220	198	85	42.9
Radljevac	566	608	593	505	447	387	105	27.1
Strmica	1,730	1,833	1,793	1,557	1,280	1,334	268	20.1
Vrpolje	711	727	688	607	516	536	204	38.1
Žagrović	1,359	1471	1,597	1,465	1,340	1,393	648	46.5
<b>Total</b>	<b>17,048</b>	<b>18,662</b>	<b>20,164</b>	<b>20,872</b>	<b>21,854</b>	<b>23,025</b>	<b>15,190</b>	<b>66.0</b>

Sources: KORENČIĆ, M. (1979.): *Naselja i stanovništvo SRH 1857.-1971.*, JAZU, Zagreb.

Popis stanovništva, domaćinstava i stanova 31. 3. 1981., Stanovništvo, tabele po naseljima, Općina Knin, Republički zavod za statistiku, Zagreb, 1982.

Popis stanovništva, domaćinstava, stanova i poljoprivrednih gospodarstava, 31.ožujak 1991., Stanovništvo prema spolu i starosti po naseljima, dokumentacija 882, RZS, Zagreb, 1994.

Popis stanovništva, kućanstava i stanova 31. ožujka 2001., Državni zavod za statistiku, <http://www.dzs.hr/Hrv/Popis%202001/popis20001.htm>

From the first official census in 1857 to the Second World War the population in the Town of Knin was constantly increasing, with the exception of two intercensal periods (1869-1880 and 1910-1921) when this area had a population decrease. In the period after the Second World War until 1991, the population of the Town of Knin was increasing constantly due to traffic and economic importance of Knin, so it is evident that the war in 1990's and living conditions after the war were the most prominent factors of depopulation of this area (Fig. 1). In many areas in Dalmatian hinterland, the war only accelerated the depopulation processes that began in 1960's and 1970's (GRAOVAC, GLAMUZINA, 2002).

The population increase of the Town of Knin until 1991 was mostly the result of increase in the settlement of Knin, while the other settlements either stagnated or recorded slight decrease. The decades after the Second World War in Croatia were marked by several socio-economic processes (such as industrialization, deruralization, urbanization etc.), which had a significant impact on spatially differential structural and dynamic population features (NEJAŠMIĆ, 1991). In 1948/1953 intercensal period only two settlements recorded population decrease (Očestovo -1.2 per cent, Potkonje -1.4 per cent), but in the next two intercensal periods (1953/1961 and 1961/1971) the number of settlements affected by depopulation rose to nine (Golubić, Kninsko Polje, Ljubač, Očestovo, Plavno, Polača, Radljevac, Strmica and Vrpolje) and eleven (all settlements except Knin and Kninsko Polje), respectively. The most intensive depopulation recorded before the Homeland War was in the period from 1971 to 1981, when all settlements, except Knin, depopulated.

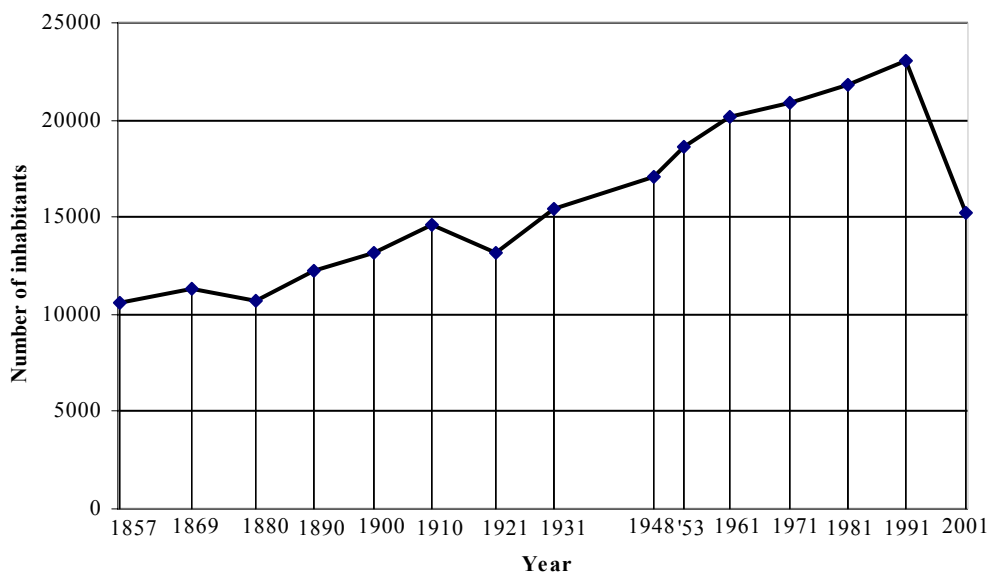


Fig. 1 Population trend of the Town of Knin from 1857 to 2001  
 Sl. 1. Kretanje broja stanovnika Grada Knina 1857.-2001.

Since 1960's, Croatia has been characterized by increasing differences in development between urban and rural areas. Migrations from rural areas to towns have intensified and population is mostly concentrated in towns, particularly in macroregional centers, while the rural areas are depopulating to a great extent. Through emigration, these areas lose almost the whole of their natural increase and a part of their population base (FRIGANOVIĆ, ŽIVIĆ, 1994). Similar situation was in the area of the Town of Knin until 1991, because most of the settlements were either depopulating or having a small increase. Only one settlement, Knin, which was an important traffic and industrial center, had a constant population growth.

However, the most significant demographic changes in the second half of the 20<sup>th</sup> century were recorded in the last intercensal period. The war in Croatia, along with its negative consequences and processes, only accelerated the existing negative demographic processes and economic trends (ŽIVIĆ, 2001). Compared to many other municipality centers, Knin was, nevertheless, able to slow down the depopulation processes due to its economic power and importance. However, the five-year occupation of this area caused mass migrations and completely destroyed its economy, because most of the companies are in bankruptcy.

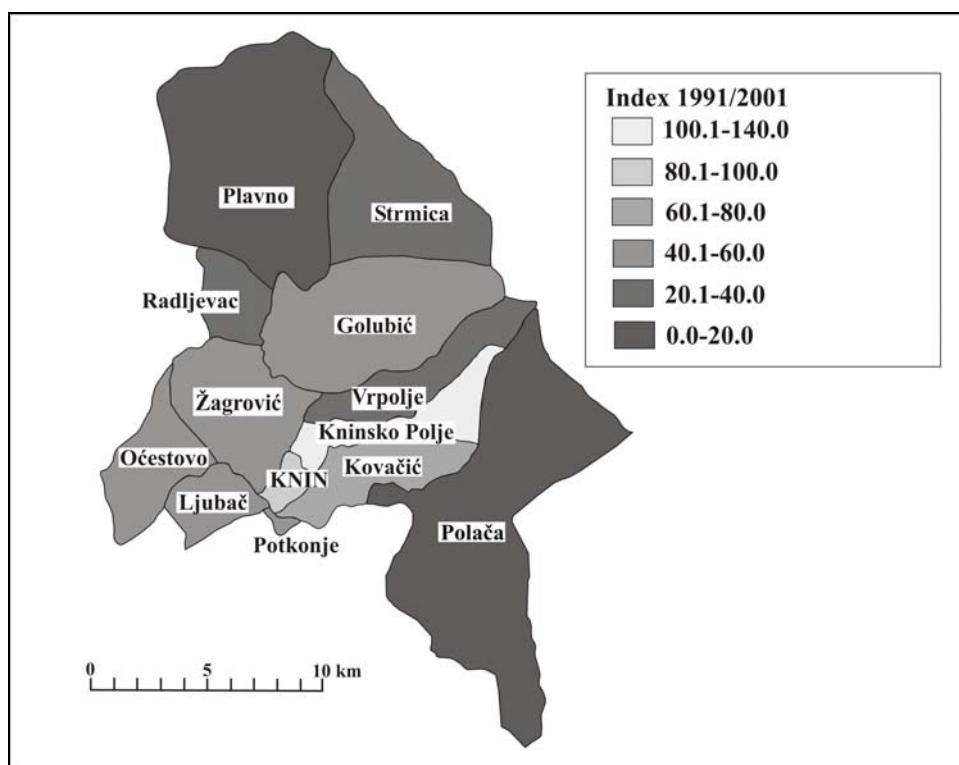


Fig. 2 Population trend index in the settlements of the Town of Knin in intercensal period 1991/2001

Sl. 2. Indeks promjene broja stanovnika Grada Knina po naseljima 1991./2001.

Only after the liberation of this area in 1995, a part of the exiled population started returning, but at the same time a lot of people, mostly Croats, from other parts of Croatia and from Bosnia and Herzegovina immigrated to this area. In comparison to 1991, the total number of inhabitants in the Town of Knin in 2001 reduced by 44 per cent. Nevertheless, it is necessary to point out that the decrease was mostly caused by war activities in that area and, to a lesser extent, by changes in census methodology (see Notes on methodology). In this period, Knin, as the largest and the most important center of Šibenik hinterland, recorded a 10 per cent decrease. The biggest decrease was registered in peripheral settlements, which were among the biggest settlements before the war – Polača (-91.6 per cent), Plavno (-84.5 per cent) and Strmica (-79.9 per cent), and only one settlement recorded population increase in 2001 (Kninsko Polje, 31.0 per cent). The results of the analysis show that depopulation was less intensive in the settlements nearer to the municipality center, which means that Knin has retained its role as the most important center in this area, so the population mostly inhabited Knin and the surrounding area after the war (Fig. 2). For example, the exiled Croats from the surrounding area, particularly from Kijevo, did not return to their rebuilt homes, but they stayed in Knin.

Immigration after the Homeland War did not compensate completely the population losses, but the intensity of immigration is best presented by the fact that, according to 2001 census, 72.8 per cent of the population immigrated to the Town of Knin, and only 27.2 per cent of them have been living there since birth (Popis stanovništva, kućanstava i stanova 31. ožujka 2001.). As much as one third of the population living in the Town of Knin came from Bosnia and Herzegovina. We can assume that most of the immigrants came in the period from 1995 to 2001. In comparison, in 1971 about 62.0 per cent of the population in the Town of Knin was living there since birth and only 4.6 per cent of the population immigrated from other republics of former Yugoslavia, which means that most of the in-migrants came from the same municipality (i.e. former Knin Municipality that comprised 42 settlements) or from some other municipality in Croatia.

### **Natural population change**

Natural population change is one of the basic determinants of age-sex structure of the population, so it is necessary to present dominant trends in natural population change prior to making an age-sex structure analysis. If we compare natural population change before and after the Homeland War, it is evident that the number of births declined – in the period from 1985 to 1990 the average annual number of births was 311.8, and after the war 195.2 (Tab. 2). At the same time, natural increase was doubly reduced, primarily due to the decline in number of births. It is obvious that the reduced number of births in post-war period was the result of population decline, but if we compare the number of children born and the total population in these two periods, it is obvious that this indicator did not change significantly. Before the war, the birth rate was around 13.0 per thousand, and after the war 10.0 per thousand.

Tab. 2 Natural population change of the Town of Knin in the periods 1985-1990 and 1998-2002

Tab. 2. Prirodno kretanje Grada Knina 1985.-1990. i 1998.-2002.

Year	Births	Deaths	Natural increase
1985	338	190	148
1986	303	176	127
1987	325	173	152
1988	315	187	128
1989	286	177	109
1990	304	182	122
1998	225	124	101
1999	221	139	82
2000	197	118	79
2001	164	151	13
2002	169	134	35

Sources: Tablogrami Državnog zavoda za statistiku

Of course, this general preview of the natural population change of the Town of Knin cannot provide an insight into differences in natural population change between the settlements, so this requires more thorough analysis at the level of settlements. If we take into consideration the average annual natural population change before the war, from 1985 to 1990, only four settlements had natural decrease (Ljubač, Očestovo, Plavno and Radljevac), but after the war the number of settlements with natural increase advanced to twelve. So, all settlements, except Knin, had a negative natural population change (Tab. 3). The average number of births decreased by 37.4 per cent, the number of deaths by 26.3 per cent, and the natural population change by 52.6 per cent. The only settlement with an increased number of births and natural increase was Knin, while the others experienced natural depopulation.

In some settlements the intensity of natural depopulation is so strong that no baby was born for years. For instance, from 1998 to 2002 in four settlements (Ljubač, Očestovo, Polača and Radljevac) not a single birth was registered, and in three other settlements (Plavno, Potkonje and Strmica) only one to three births were registered in that period. So, these seven settlements had less than one birth a year, and, out of the total annual number of births, almost 90 per cent are recorded in Knin.

When analyzing natural population change, one should also take into consideration another important factor of future reproduction, and that is fertility. The indicator considered here is general fertility rate

$$\left[ f = \frac{N}{P_{f(15-49)}} \times 100 \right]$$

(f = general fertility rate; N = live births in a given year;  $P_{f(15-49)}$  = women aged 15-49).

General fertility rate in Croatia in 2001 was 3.79, in Šibenik-Knin County 3.86, and in the Town of Knin 4.62. However, if a detailed analysis is made, i.e. the analysis on the level of settlements, the differences are considerable – general fertility rate in Knin was 4.95, and in other settlements 3.13. So, the only settlement that had a favorable natural population change and potential for future reproduction is Knin, while the others were on the verge of extinction.

Tab. 3 Average annual number of births, deaths and natural increase/decrease in the settlements of the Town of Knin in the periods 1985-1990 and 1998-2002

*Tab. 3. Prosječan godišnji broj rođenih, umrlih i prirodna promjena po naseljima Grada Knina 1985.-1990. i 1998.-2002.*

Settlement	1985-1990			1998-2002		
	Births	Deaths	Natural increase/decrease	Births	Deaths	Natural increase/decrease
Golubić	18.7	18.0	0.7	5.2	12.6	-7.4
Knin	164.8	58.2	106.7	174.4	65.6	108.8
Kninsko Polje	15.5	7.5	8.0	4.4	8.0	-3.6
Kovačić	17.5	13.8	3.7	2.4	9.4	-7.0
Ljubač	2.2	2.3	-0.2	0.0	1.8	-1.8
Očestovo	4.0	8.5	-4.5	0.0	3.4	-3.4
Plavno	19.8	21.0	-1.2	0.2	6.2	-6.0
Polaća	15.7	15.2	0.5	0.0	3.2	-3.2
Potkonje	3.5	2.3	1.2	0.6	2.4	-1.8
Radljevac	3.8	4.8	-1.0	0.0	1.8	-1.8
Strmica	18.2	12.5	5.7	0.2	5.8	-5.6
Vrpolje	7.5	6.8	0.7	2.8	4.0	-1.2
Žagrović	20.5	9.8	10.7	5.0	9.0	-4.0
<b>Total</b>	<b>311.7</b>	<b>180.8</b>	<b>130.8</b>	<b>195.2</b>	<b>133.2</b>	<b>62.0</b>

Sources: Tablogrami Državnog zavoda za statistiku

### Age and sex composition

Age and sex composition is important for the contemporary and future development of the population and economic development of a country, since it defines crucial contingents of the population for biological reproduction and indicates available labor force (WERTHEIMER-BALETIĆ, 1999). The changes of age and sex composition are under a direct influence of migrations and natural population change (primarily birth rate). Birth and death rates have a long-term effect on age structure, but at the same time, the age structure influences the level of fertility and death rates. Migrations can cause imbalance in age and sex composition in both emigrational and immigrational areas, but they also have some far-reaching effects. Namely, migratory movements mostly include people aged 20-40, who make up the narrow fertile and labour cohort.



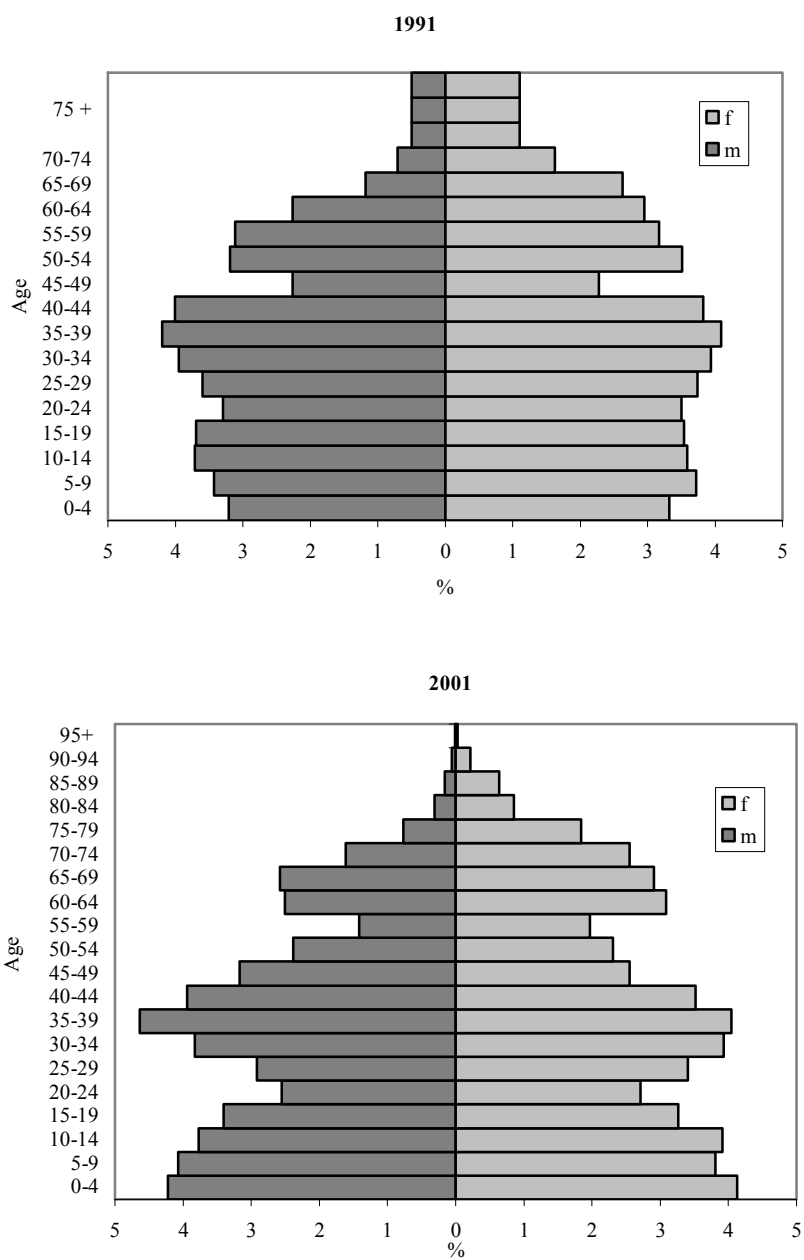


Fig. 3 Population pyramids of the Town of Knin in 1991 and 2001  
 Sl. 3. Dobno-spolna struktura stanovništva Grada Knina 1991. i 2001.

As it has been stated previously, the area of the Town of Knin experienced substantial demographic changes in the last intercensal period, but in spite of the emigration, the age structure did not deteriorate moreover, it improved in some respects (Fig. 3). Immigration after the war was the most prominent driving force of the changes in age and sex composition. In comparison to 1991, the share of population aged 30-45 increased in 2001 and that was precisely the most mobile population group, which immigrated after the war.

The base of the pyramid is expanded, and the increased share of children aged 0-9 is the result of the immigration of whole families after the war and increased birth rate in the last several years. At the same time, the share of population in childbearing age, particularly aged 20-29, is reduced and that is bound to have negative effects on present birth rates. Nevertheless, increased birth rates are to be expected in the next ten-odd years when the above-mentioned increased number of children enter the childbearing age, of course, if the other preconditions that influence the birth rates be favorable.

However, the analysis of age and sex composition should also be done at the level of settlements, because then we can see that there are considerable differences between them. Namely, the only settlement with improved age and sex composition is Knin, while that composition in other settlements deteriorated (Fig. 4). The differences in age and sex composition between Knin and other settlements within the Town of Knin are the best indicator of differential dynamics of demographic development and the indicator of demographic future of this area. In Knin, there is an increased share of children aged 0-14 and adults aged 30-44, but there is a reduction of the population in the narrow childbearing age (20-29). Notwithstanding, the age and sex composition in Knin is relatively favorable. On the other hand, the analysis of age and sex composition in other settlements shows drastic reduction of young and adult population and simultaneous increase of elderly population. Considering the extremely low share of children aged 0-9, it is evident that these settlements are threatened by extinction.

The analysis of age structure reveals that the share of young and elderly population increased, while the share of adult population reduced in comparison to 1991 (Tab. 4). The share of young population in 2001 (23.9 per cent) was well above the state average (17.1 per cent) and the average of Šibenik-Knin County (16.9 per cent). Simultaneously, the share of adult and elderly population was below state (adults 67.2 per cent, elderly 15.7 per cent) and county average (adults 63.6 per cent, elderly 19.5 per cent). But, such age composition is only seemingly favorable, because the differences among the settlements are considerable, and the only settlement with real prospects for future positive demographic development is Knin. So, the favorable age structure of the Town of Knin is primarily the result of favorable demographic situation in Knin. In as much as eight settlements the share of young population (aged 0-14) is below 10 per cent so, considering the high percentage of elderly population it is evident that the process of aging is in its advanced stage and that the survival of these settlements is questionable.

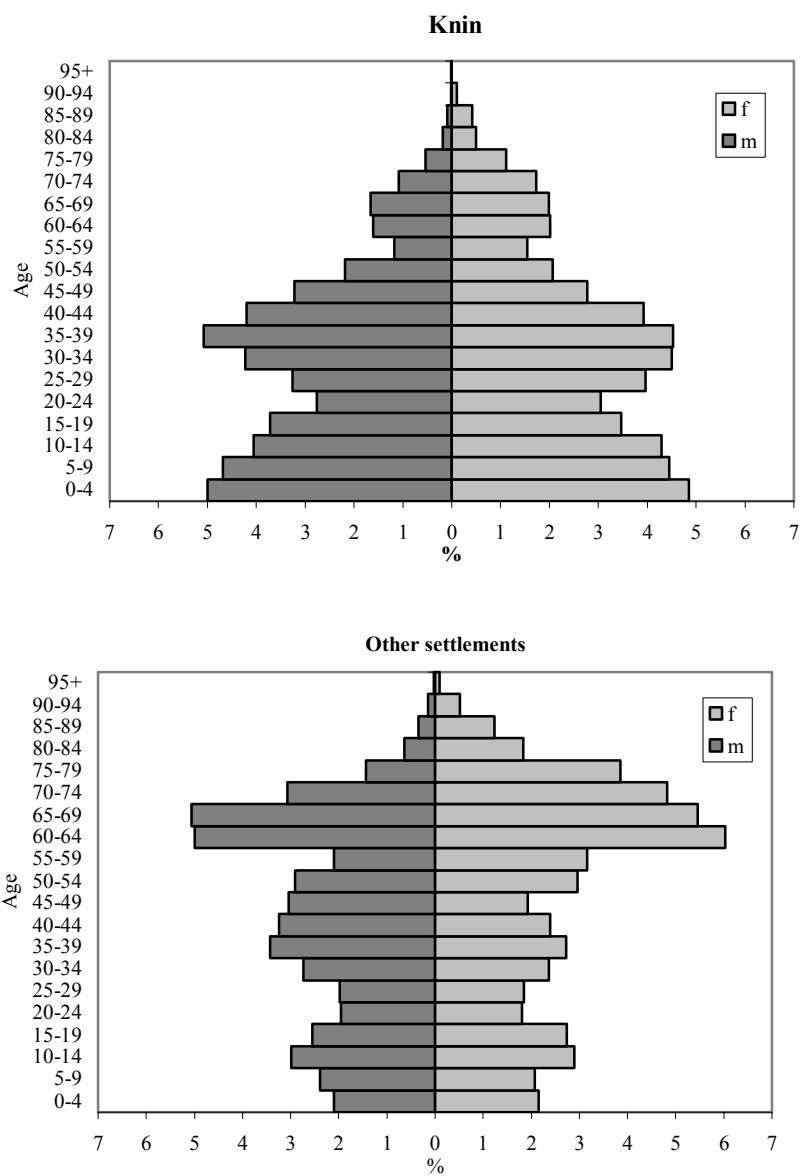


Fig. 4 Population pyramids of Knin and of other settlements in 2001  
 Sl. 4. Dobno-spolna struktura stanovništva naselja Knin i ostalih naselja 2001.

Tab. 4 Age structure of the Town of Knin in 1991 and 2001

Tab. 4. Dobna struktura stanovništva Grada Knina 1991. i 2001.

Settlement	1991			2001		
	0-14	15-64	65+	0-14	15-64	65+
Golubić	18.2	63.5	18.3	14.0	59.5	26.5
Knin	23.1	70.4	6.5	27.3	63.3	9.4
Kninsko Polje	26.5	65.0	8.6	22.9	63.2	13.8
Kovačić	24.2	65.6	10.1	22.8	60.0	17.2
Ljubač	22.1	52.3	25.6	5.7	48.3	46.0
Očestovo	13.4	64.7	21.9	5.7	45.3	49.1
Plavno	15.2	66.7	18.1	2.6	42.3	55.1
Polača	16.6	68.6	14.8	3.0	52.2	44.8
Potkonje	16.7	64.1	19.3	4.7	50.6	44.7
Radljevac	12.3	67.2	20.5	5.7	43.8	50.5
Strmica	19.3	64.9	15.9	4.1	53.2	42.7
Vrpolje	20.2	64.3	15.5	6.9	58.6	34.5
Žagrović	19.6	67.4	13.0	17.0	59.4	23.6
<b>Total</b>	<b>21.0</b>	<b>68.1</b>	<b>10.9</b>	<b>23.9</b>	<b>61.5</b>	<b>14.5</b>

Sources: Popis stanovništva, domaćinstava, stanova i poljoprivrednih gospodarstava, 31.ožujak 1991., Stanovništvo prema spolu i starosti po naseljima, Dokumentacija 882, RZS, Zagreb, 1994.

Popis stanovništva, kućanstava i stanova 31. ožujka 2001., Državni zavod za statistiku, <http://www.dzs.hr/Hrv/Popis%202001/popis20001.htm>

Considering the age composition, we can distinguish several characteristic types. However, there are several classifications of age composition, but the one taken into consideration here is the UN classification, which distinguishes three types of population on the basis of their age composition. The most significant indicator in this classification is the share of the population aged 65 and above, so the three basic types are: young population (share of the elderly population is up to four per cent), adult population (share of the elderly is between four and seven per cent) and finally, the old population (share of the elderly is above seven per cent) (WERTHEIMER-BALETIĆ, 1999). Applying this classification to the age composition of the Town of Knin, we come to the conclusion that its population is old in all settlements and in general. In as much as seven settlements (Ljubač, Očestovo, Plavno, Polača, Potkonje, Radljevac and Strmica) the share of the elderly is extremely high (above 44 per cent) and it is clear that such age composition has direct negative effects on future demographic and economic development of this area.

The analysis of the age composition of the population also includes employing certain analytical indicators, which can determine the level of population aging and dynamics of demographic processes, particularly the mean age, aging index and dependency ratio. There is a positive correlation between the mean age of the population and share of the elderly – as the mean age increases, so does the share of the elderly, and it is considered that the aging process has begun when the mean age is above 30 (WERTHEIMER-BALETIĆ, 1999). The mean age in the Town of Knin between 1991 and 2001 did not change significantly moreover, it remained almost at the same level, but

there are observable changes at the level of settlements (Tab. 5). The only settlement with lower mean age is Knin, which is in accordance with rejuvenated age composition recorded after the war. In the rest of the settlements the mean age increased, in some by more than 15 years. The situation is particularly difficult in Ljubač, Očestovo, Plavno, Polača, Potkonje, Radljevac, Strmica and Vrpolje where the mean age is above 50.

Tab. 5 Mean age, aging index and dependency ratio in the Town of Knin, by settlements in 1991 and 2001

Tab. 5. *Prosječna starost, indeks starenja i koeficijent dobne ovisnosti stanovništva Grada Knina po naseljima 1991. i 2001.*

Settlement	1991			2001		
	Mean age	Aging index	Dependency ratio	Mean age	Aging index	Dependency ratio
Golubić	40.8	100.4	57.5	47.0	190.1	68.0
Knin	33.0	28.3	42.1	31.7	34.5	58.1
Kninsko Polje	32.7	32.4	54.0	35.1	60.2	58.1
Kovačić	34.8	41.8	52.4	37.4	75.4	66.6
Ljubač	41.2	115.8	91.1	58.2	800.0	107.1
Očestovo	44.6	163.0	54.5	58.8	866.7	120.8
Plavno	42.0	119.1	49.9	62.5	2085.7	136.6
Polača	38.7	89.3	45.9	58.0	1500.0	91.4
Potkonje	41.9	115.6	56.1	59.9	950.0	97.7
Radljevac	43.9	166.7	48.8	59.4	883.3	128.3
Strmica	39.6	82.3	54.2	56.9	1036.4	88.0
Vrpolje	38.6	76.7	55.5	51.2	500.0	70.6
Žagrović	37.0	66.7	48.3	43.8	139.1	68.3
<b>Total</b>	<b>35.9</b>	<b>52.1</b>	<b>46.8</b>	<b>35.6</b>	<b>60.8</b>	<b>62.5</b>

Sources: Popis stanovništva, domaćinstava, stanova i poljoprivrednih gospodarstava, 31.ožujak 1991., Stanovništvo prema spolu i starosti po naseljima, Dokumentacija 882, RZS, Zagreb, 1994. Popis stanovništva, kućanstava i stanova 31. ožujka 2001., Državni zavod za statistiku, <http://www.dzs.hr/Hrv/Popis%202001/popis20001.htm>

The aging index is the ratio between elderly and young population and when it exceeds 40%, the process of aging has begun (ROSSET, 1968). As for the Town of Knin, this process had already begun in 1991, and only two settlements were below the critical value (Knin and Kninsko Polje). Even then, in the half of the settlements there were more elderly people than the young. After the war the situation only worsened, so that in only three out of thirteen settlements (Knin, Kninsko Polje and Kovačić) there were more young people than the old. In the rest of the settlements the aging index is very high, in Plavno, for example, on each person aged 0-14 there are about twenty people over 65.

Dependency ratio is the ratio of the economically dependent part of the population to the productive part; arbitrarily defined as the ratio of the elderly (ages 65 and older) plus the young (under age 15) to the population in the "working ages" (ages 15-64). This indicator is important for investigating the changes that occur in the structure

of the labour force under the influence of changes in age structure. In comparison to 1991, dependency ratio in 2001 increased in all settlements, mainly as the result of decreased number of people in working ages and increased number of the elderly. The only exception among the settlements is Knin, where the increased dependency ratio is also the result of increased number of young people. So, as the life span and share of the elderly increase, there is more pressure on the productive part of the population, and this, along with high unemployment, poses the most serious developmental problem of this area.

### Educational structure

In comparison to 1991, the educational structure of the Town of Knin in 2001 improved mostly; the share of population without education and with a few grades of elementary school reduced (with the exception of negligible increase of population with 1-3 grades of elementary school), while the share of population with secondary education increased by almost 10 per cent (Fig. 5). At the same time, the share of population with higher and high education reduced.

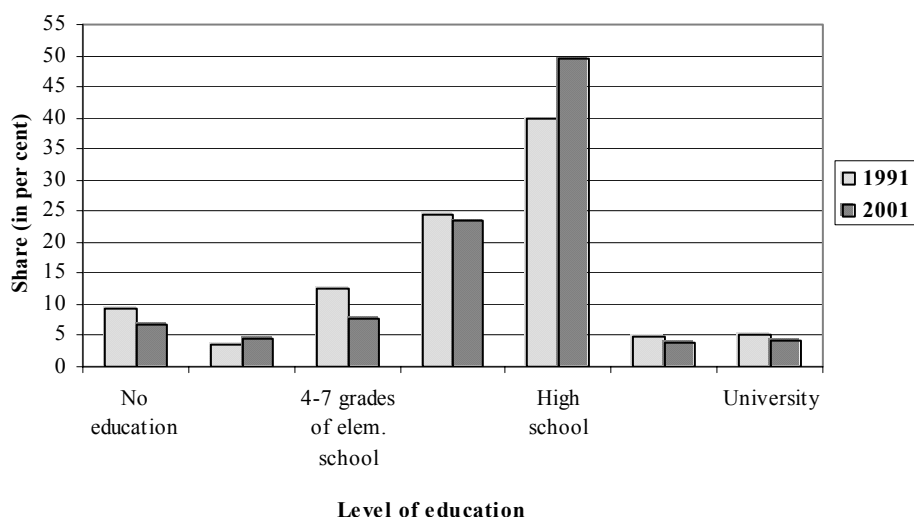


Fig. 5 Level of education in the Town of Knin in 1991 and 2001  
 Sl. 5. Obrazovna struktura Grada Knina 1991. i 2001.

Changes in educational structure of the population alter the qualification and employment structures. The analysis of the educational structure of the settlements within the Town of Knin shows that there were no significant changes between 1991 and 2001 – most of the population in these settlements finished high school. According to 1991 census, there was only one settlement where most of the population was without any education (Radljevac, 27.5 per cent), and in 2001 there were two such settlements (Plavno 36.3 per cent, Radljevac 24.2 per cent). Most of the poorly educated are above 65 years of age, so it is to be expected that in time this structure will improve, particularly

considering the fact that almost 20 per cent of the population still goes to school or university.

There are considerable differences between the level of education achieved by men and women in the Town of Knin – women are generally less educated than men, which can be supported by the fact that in 2001 as much as 88.7 per cent of the population without education were women. In addition, most of the population with low level of education were women. Such disparity is the result of former long-term investment in the education of the male population, while the women were often predestined to become housewives or perhaps to attend only a few grades of elementary school. However, in time this educational disparity reduced and today almost the same number of men and women in the Town of Knin attend schools and universities. Similar results occur in the analysis of the literacy of the population. Namely, according to 2001 census, 4.1 per cent of the population aged over 10 was illiterate, and 92.7 per cent of them were women. Most of the illiterates were over 65 years of age, and since there are almost no illiterates in younger age groups, it can be expected that their share will decline significantly in time.

### **Ethnic composition**

The most striking changes in population structures of the Town of Knin between 1991 and 2001 can be observed in ethnic composition, and these changes occurred under the direct influence of war, i.e. war and post-war migrations. Until 1981 the ethnic composition did not change much; there were approximately 15 per cent of Croats and about 82 per cent of Serbs (Tab. 6). After that the share of Croats and Serbs reduced, because in 1981 census there was an increased number of people who declared themselves as "Yugoslavs", which was the case in whole Croatia, not just here. After that short-lived trend, in 1991 the share of Serbs increased to 85.5 per cent, while the share of Croats reduced to 10.3 per cent. The main reason for the decrease in number of Croats was their more intensive emigration from this area (NEJAŠMIĆ, 1992).

As the war began and the Serbs occupied this area at the beginning of 1990's, the Croats were forced to emigrate, which caused the first significant changes in ethnic composition of the population. On the other hand, after the war and liberation of this area in 1995 many Croats returned. In addition, a number of Croats immigrated to this area from Bosnia and Herzegovina, and in only a few years the ethnic composition experienced radical changes again. According to 2001 census the Croats comprise 76.5 per cent of the population, and Serbs 20.8 per cent (Fig. 6). The share of other ethnic groups in the whole period is almost negligible.

Unfortunately, the data on ethnic composition from 2001 census was published only at the level of towns/municipalities therefore, it is not possible to make an analysis and comparison with 1991 on the level of settlements. Such analysis was possible only until 1991. In the whole period from 1880 to 1991 the Croats were the majority in only two settlements – Potkonje and Vrpolje. The censuses taken in 1921 and 1931 did not record the ethnic composition of the population at the level of settlements, so the Croats were officially the majority in Knin until 1910. From the first post-war census in 1948 until 1991 the Serbs made the majority of the population in Knin.

Tab. 6 Ethnic composition of the Town of Knin from 1880 to 2001 (in per cent)

Tab. 6. Narodnosna struktura Grada Knina 1880.-2001. (u %)

Year	Croats	Serbs	Others and unknown
1880	15.1	82.3	2.6
1890	14.5	84.5	1.0
1900	14.3	83.5	2.2
1910	14.4	84.2	1.5
1948	14.6	84.7	0.7
1953	14.5	84.1	1.5
1961	15.3	82.1	2.6
1971	15.2	80.7	4.1
1981	11.3	72.8	15.9
1991	10.3	85.5	4.2
2001	76.5	20.8	2.7

Sources: Narodnosni i vjerski sastav stanovništva Hrvatske 1880.-1991., po naseljima (priredili Jakov Gelo, Ivan Crkvenčić, Mladen Klemenčić), Državni zavod za statistiku Republike Hrvatske, Zagreb, 1998.

Popis stanovništva, kućanstava i stanova 31. ožujka 2001., Državni zavod za statistiku, <http://www.dzs.hr/Hrv/Popis%202001/popis20001.htm>

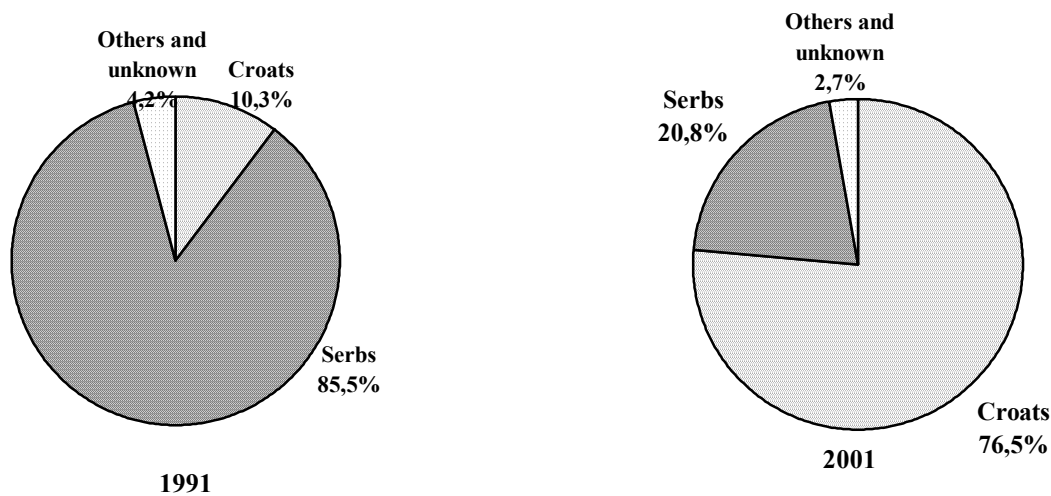


Fig. 6 Ethnic composition of the Town of Knin in 1991 and 2001

Sl. 6. Narodnosna struktura Grada Knina 1991. i 2001.



As it has been stated previously, the changes in ethnic composition occurred as the result of war activities, primarily war and post-war migrations. Unfortunately, it is not possible to tell the exact number of the exiled population during the war or returnees and immigrants after the war, because the authorized institution that deals with the problems of refugees and displaced persons could not provide us the required data. However, we can make an assessment that most of the Croats that lived in Knin before the war (2,372) were exiled during the war, but they mostly returned after the war. On the other hand, many people from Bosnia and Herzegovina, mostly Croats, immigrated to Knin area (about 4,000 of them), but also people from other parts of Croatia (about 3,000 of them). At the same time, more than 80 per cent of Serbs emigrated after the war (about 16,000 of them).

### **Economic composition**

Knin used to be a very important traffic junction with well developed industry, but since the war the economy has experienced a great crisis, because most of the companies are in bankruptcy, the war devastations were considerable, and the economic restructuring is very slow. All this has caused high unemployment rate and unfavorable economic composition of the population. In comparison to 1991, the most important features of economic composition of the population in 2001 were decreased shares of active and supported population and considerable increase of the population with own income (pensions, annuities, scholarships etc.) (Tab. 7). The situation is similar in all settlements; in most of them less than one-third of the population is active, while there are over 40 per cent of people with own incomes (mostly retired persons).

The quantity of economically active population is largely influenced by long-term tendencies in fertility and mortality trends, and migrational components (WERTHEIMER-BALETIĆ, 1999). Considering the present age composition, natural population change and reproductive potential of the settlements within the Town of Knin, it is evident that the existing unfavorable economic composition of the population will only deteriorate, and the only settlements with real chances for more favorable demographic and economic development is Knin.

Population structure according to economic activity can be further analyzed in view of predominant activities and occupation. Such analysis can provide an insight into the composition of the labor force according to activities that are the main source of income for the population. Economic activities are often divided into four main sectors of the economy: primary, secondary, tertiary and quaternary. According to 1991 census, most of the population of the Town of Knin worked in secondary sector, but during the war the industry was completely destroyed, and the reconstruction still has not resulted in significant improvements. As a result, 2001 census data show that the employment in main sectors of economy has changed (Fig. 7).

Share of the persons employed in secondary sector decreased by over 50 per cent, while the employment in quaternary sector almost doubled. Only after we have compared the data from 1991 and 2001 censuses with 1971 census can we see that this area was affected by deagrarization, and then by strong industrialization. Namely, according to 1971 census, the share of the employed persons in primary sector was almost 30 per cent. If we analyze the employment according to activities separately, we can see

that most of the workers were employed in agriculture (29.4 per cent), then in industry and mining (19.9 per cent), and traffic (13.7 per cent). Until the beginning of 1990's, the number of workers in secondary and tertiary sector was increasing due to dynamic development of industry and Knin's importance as a traffic junction. In accordance with this, in 1991 most of the people were employed in industry and mining (36.1 per cent), traffic (18.1 per cent), and trade (9.4 per cent). The war and the following considerable changes in economic development changed the economic composition of the population. Due to decay of industry, in 2001 most of the population (about 80.0 per cent) was employed in tertiary and quaternary sectors, primarily in public administration and defense (21.6 per cent), traffic (15.5 per cent) and trade (13.4). Unfortunately, the 2001 census data on economic activity of the population was published only at the level of counties, towns and municipalities, so it is not possible to make such an analysis on the level of settlements and compare it with 1991 data.

Tab. 7 Population according to activity in the Town of Knin, by settlements in 1991 and 2001

Tab. 7. *Ekonomska aktivnost stanovništva Grada Knina po naseljima 1991. i 2001.*

Settlement	1991*			2001		
	Active population	Persons with own income	Supported	Active population	Persons with own income	Supported
Golubić	37.6	20.8	39.6	31.3	39.9	28.7
Knin	49.3	10.9	38.7	42.3	16.9	40.8
Kninsko Polje	42.2	11.0	44.9	37.5	34.5	28.0
Kovačić	45.5	13.1	38.4	36.3	26.7	37.0
Ljubač	35.5	22.7	41.3	27.6	44.8	27.6
Oćestovo	35.6	29.6	33.9	20.6	61.9	17.5
Plavno	33.4	19.8	41.8	22.9	60.9	16.2
Polača	30.1	13.6	35.7	25.4	50.0	24.6
Potkonje	41.4	11.6	43.9	16.5	63.5	20.0
Radljevac	33.1	13.7	45.2	19.0	66.7	14.3
Strmica	32.5	17.6	39.8	24.3	56.7	19.0
Vrpolje	39.0	15.3	39.0	33.3	44.1	22.5
Žagrović	42.7	16.5	40.0	37.2	32.3	30.6
<b>Total</b>	<b>43.5</b>	<b>13.7</b>	<b>39.1</b>	<b>39.5</b>	<b>23.1</b>	<b>37.3</b>

Sources: Popis stanovništva, domaćinstava, stanova i poljoprivrednih gospodarstava, 31.ožujak 1991., Stanovništvo u zemlji i inozemstvu, po naseljima, dokumentacija 911, RZS, Zagreb, 1996.

Popis stanovništva, kućanstava i stanova 31. ožujka 2001., Državni zavod za statistiku, Zagreb, 2002.

\* The difference to total 100 percent refers to population that works abroad (3.7 per cent).

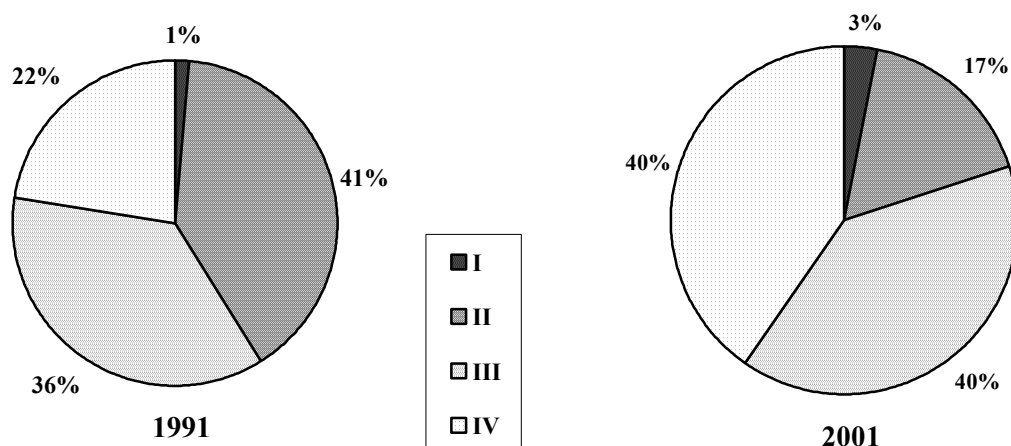


Fig. 7 Economic structure of the population in 1991 and 2001 according to industrial sectors (I = primary, II = secondary, III = tertiary, IV = quaternary)

Sl. 7. *Gospodarska struktura stanovništva 1991. i 2001. prema sektorima djelatnosti (I. = primarni, II. = sekundarni, III. = tercijarni, IV. = kvartarni)*

According to the official data of the Croatian Employment Service, at the end of 2001 the unemployment rate in the Town of Knin was 21.6 per cent, but according to some unofficial estimates the actual unemployment rate is above 50 per cent. Furthermore, more than a half of the unemployed were women. As for the level of education of the unemployed persons, most of them are low-skill workers (43.1 per cent), and then skilled and highly skilled workers (32.9 per cent).

## Conclusion

The Town of Knin, as many other war-affected areas in Croatia, has experienced many social, economic and political changes, which have had a significant impact on population in this area. The area in question includes thirteen settlements with 15,190 inhabitants. In the last intercensal period 1991-2001 the number of inhabitants reduced by 44 per cent. However, the changes do not only refer to the reduction of the number of inhabitants, but also to the changes in population structures. The most significant changes have been recorded in ethnic composition of the population. Namely, during the occupation in the Homeland War, a large part of the population emigrated, and after the war only a part of them returned. Additionally, a significant number of Croats from Bosnia and Herzegovina immigrated to Knin. Before the war only about 10 per cent of the population were Croats, while 86 per cent were Serbs. On the other hand, after the war the share of Croats rose to 76 per cent and the share of Serbs reduced to only 21 per cent.

The changes are also visible in age structure of the population. Namely, since most of the immigrants were young or middle aged, the age structure has somewhat

improved compared to prewar period. However, there are significant differences between the settlements within the Town of Knin; the best indicators are recorded in Knin, which has the best possibilities for future demographic development, while most of the other settlements are threatened by extinction. Today, this area is faced with numerous economic difficulties, and one of the most significant is high unemployment of the population. After the war the economy has experienced a great crisis, particularly due to crash of industry, which had played the most significant role in local economy. Actual revitalization of this area has not begun yet, but this concept should be based on encouraging small entrepreneurs and approving favorable loans.

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Tablogrami Državnog zavoda za statistiku – prirodno kretanje

## SAŽETAK

### **Martin Glamuzina, Željka Šiljković, Nikola Glamuzina: Promjene u demografskim strukturama Grada Knina u međupopisnom razdoblju 1991.-2001. godine**

Grad Knin, je kao i mnoga druga područja u Hrvatskoj koja su bila izravno pogođena ratom 1991.-1995., doživio brojne društvene, gospodarske i političke promjene, koje su znatno utjecale na demografska kretanja na ovom području. U posljednjem međupopisnom razdoblju, od 1991. do 2001. godine, broj stanovnika smanjio se čak za 44%. Osim u brojčanom smanjenju, promjene su vidljive i u strukturama stanovništva. Najznačajnije promjene primjetne su u nacionalnoj strukturi stanovništva. Za vrijeme velikosrpske okupacije 1991.-1995. velik dio hrvatskoga i drugog nesrpskog stanovništva je prognan. Neposredno prije početka i tijekom oslobodilačke akcije "Oluja", također je i najveći dio srpskog stanovništva iselio od čega se samo dio vratio poslije završetka rata. Ujedno je doseljen znatan broj izbjeglih Hrvata iz Bosne i Hercegovine. Time se promijenila i etnička struktura stanovništva. Prije rata udio Hrvata je opao na samo 10% stanovništva, dok je udio Srba porasao na čak 86%. Međutim, već do 2001. udio Hrvata porastao je na 76%, dok je udio Srba pao na 21%.

Promjene su također vidljive i u dobnoj strukturi stanovništva. Naime, budući da se nakon rata doseljavalo uglavnom mlađe stanovništvo i stanovništvo srednjih godina, dobna struktura poboljšana je u odnosu na predratni period. Međutim, velike su razlike između pojedinih naselja unutar granica Grada Knina; najbolje pokazatelje i mogućnosti daljnjeg demografskog razvoja ima naselje Knin, dok većini ostalih naselja prijete izumiranje. Danas se ovaj prostor suočava s brojnim gospodarskim problemima, a jedan je od najvećih visok stupanj nezaposlenosti stanovništva. Nakon rata gospodarstvo je u palo u veliku krizu, posebice zbog propasti industrije, koja je imala značajnu ulogu u ukupnom gospodarstvu ovog kraja. Velik dio poduzeća je pred stečajem, a provođenje stimulativnih mjera za oživljavanje ovog prostora još nije počelo. Koncept revitalizacije uglavnom se temelji na poticanju malog poduzetništva, i to u vidu doškolovanja i odobravanja kredita.