# NUMBER, DENSITY AND GEOGRAPHICAL DISTRIBUTION OF THE POPULATION IN THE MUNICIPALITY OF GOSTIVAR

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#### **Abstract**

This paper deals with the number, density and distribution of the population of the municipality of Gostivar, compared to that of Upper Polog. Particular attention is paid to the analysis of the process of changes in the number and density of the population during the period 1948-2020, at the municipal and regional level. The study aims to identify the growth rates of population and density in the municipality of Gostivar and Upper Polog. Population is the main factor of development and progress of any country. But even it itself changes and develops depending on natural, social and economic conditions. So, the population is the bearer of economic and social development, of the general development of the state or its specific regions, but it can not be studied in isolation, separated from the space where it is located and from the economic and social development in general. On the contrary, population, area and development are organically linked and interdependent, so they should be studied in an integrated way. Population is one of the main factors influencing socio-economic development. Demographic development is assessed as a complex process, which depends on economic, social, socio-psychological factors, etc. Population development is a complex process, in which both quantitative (number) and qualitative (structures) changes occur at family, community, settlement, region, state, levels, etc.

Keywords: population, density, municipality, region.

### 1. Introduction

The Municipality of Gostivar is one of the largest urban municipalities and is located in the northwestern part of the Republic of North Macedonia. It lies in the part of Upper Polog, in the basin of the river Vardar, on both sides, while in the settlement Vërtok is the source of this river, which is the largest river in North Macedonia. The western part is characterized by high mountain massifs, such as Mount Nicipur (2,194 m) and Mount Sharr (2,748 m), in the south Mount Ahishtë (Bukovi)) (1,528 m), in the southeast the mountain Çelloica (1,840 m) and in east Dry Mountain (1,748 m). According to the absolute altitude, this municipality is among the municipalities that have higher values than the national average. It lies in the east-west direction. It is bordered on the north by Rastelica in Kosovo and the municipalities of Vrapciste and Bogovinje, on the east by the municipality of Makedonski Brod, on the southeast and south by the municipalities of Kichevo and Mavrovo-Rostusha, and on the west by Bushtran and neighboring Albania. It has a convenient geographical position and good traffic connections, as the E-852 highway passes through its central part. This municipality, together with the municipality of Tetovo and several other municipalities in the western part of the Republic of North Macedonia, lies in one of the most fertile plains not only in North Macedonia, but also beyond. The municipality of Gostivar is characterized by a relatively good population and very dynamic demographic developments. In this context, the study of the population is of great importance for the economic and social development of the municipality, the region and the state. The creation and expansion of economic production capacities that affect the increase of living standards, depends on the number of population, the dynamics of its growth, territorial distribution, etc.

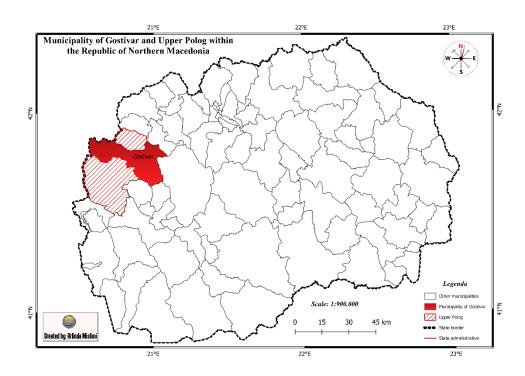


Fig 1. Municipality of Gostivar and Upper Polog within the Republic of North Macedonia

## 2. Population Number

The municipality of Gostivar stands out from other municipalities in North Macedonia for its demographic and social features, as well as for its numerical population dynamics. The first official censuses of North Macedonia were conducted in 1921 and 1931, but population data are incomplete and biased. For the population number in the municipality of Gostivar there are more official data from the censuses of 1948, 1953, 1961, 1971, 1981, 1994 and 2002. For it there are also data according to the estimates of 2014 and 2020. Whereas, only for the city of Gostivar there are even earlier data on the number of population, more precisely there are data from 1874 onwards. Based on the existing data on the population for both the municipality of Gostivar and the region of Upper Polog, it can be seen that the population has increased continuously, although in some periods of time the migration process has been quite pronounced. In every country, as well as in the municipality of Gostivar, the population is of great importance for economic development. For this reason, an important segment is the number of population, because through it is determined the number of people who are the main factor and irreplaceable for any economic development, respectively are the main carriers of production and consumption of material goods.

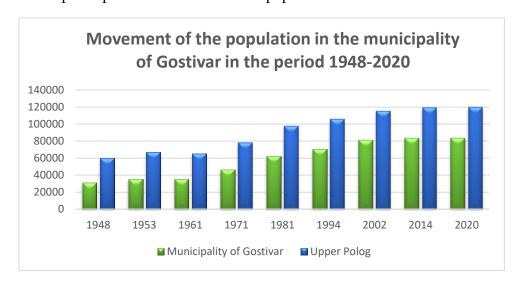
**Table 1.** Movement of the population in the municipality of Gostivar in the period 1948-2020 compared to that of the Upper Polog (%)

Years	1948	1953	1961	1971	1981	1994	2002	2014 <sup>1</sup>	2020
Municip.of	31.337	35.084	35.156	46.793	62.435	70.737	81.037	83.239	83.591
Gostivar	51,98	52,14	53,90	71,74	64,17	66,82	70,43	69,91	69,67
Upper	60.289	67.283	65.225	78.225	97.298	105.860	115.054	119.301	119.966
Polog	100	100	100	100	100	100	100	100	100

Source: State Statistical Office of the Republic of Macedonia, 1948-2020

<sup>&</sup>lt;sup>1</sup>Ibid, polulation estimate in 2011

The municipality of Gostivar in 1948 had 31,337 inhabitants, which then in future registrations will increase and in 2002 will have 81,037 inhabitants. Also after 2002 the number of population in this municipality has increased and this is seen in the estimates made in 2014 and 2020. This municipality in 2014 had 83,239 inhabitants, while in 2020 it has 83,591 inhabitants. During the period 1948-2020 the number of population in this municipality has increased by 51,902 inhabitants or by approximately 1.6 times. Such a large increase in population in the municipality of Gostivar is due to the high natural increase, which before 1982 was more than 20 ‰, while in the period 1982-1986 it was 19.1 ‰. The Municipality of Gostivar in terms of population is one of the largest municipality in the Upper Polog and is ranked in the group of largest municipalities in the Republic of Macedonia. This municipality in 1948 participated with 51.98% in the total population of Upper Polog, while in 2020 it participates with 69.67% of the population.



**Graph 1.** Movement of the population in the municipality of Gostivar in the period 1948-2020 compared to that of the Upper Polog

## 3. Population Density In The Municipality Of Gostivar

The average population density in the municipality of Gostivar has changed during the period 1948-2020, it has increased with the increase of the total population.

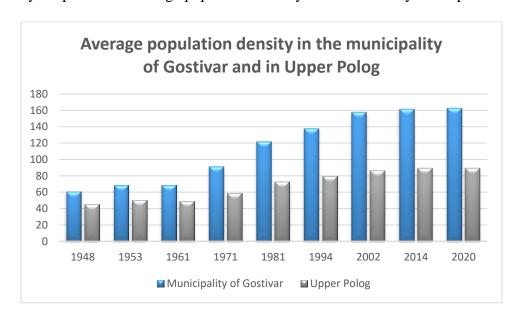
Table 2. Average population density in the municipality of Gostivar and in the Upper Polog in the period 1948-2020

Average population density expressed in p / km <sup>2</sup>										
Years	1948	1953	1961	1971	1981	1994	2002	2014	2020	
Municip.of Gostivar	61,0	68,3	68,5	91,1	121,6	137,8	157,8	161.7	162.9	
Upper Polog	45,2	50,4	48,9	58,6	72,9	79,3	86,2	89.2	89.5	

Source: State Statistical Office of the Republic of Macedonia, (1948-2020)

As can be seen in table no.2, the average population density in the municipality of Gostivar is higher than that of Upper Polog during the entire analyzed period 1948-2020. Towards the end of this period the difference in the average population density between the municipality of Gostivar and the micro-region of Upper Polog has become even greater, namely the average population density in the municipality of Gostivar is almost twice as

large as that of the micro-region of Upper Polog. In the municipality of Gostivar in 1948 the average population density was 61.0 p/km², in 1981 it was 121.6 p/km², in 2002 it was 157.8 p/km² and in 2020 it reaches 162.9 p/km². In this analyzed period the average population density has increased by 100.7 p/km² or by 1.6 times.



Graph 2. Average population density in the municipality of Gostivar and in Upper Polog

It is important to note that throughout the period 1948-2020, the average population density in the municipality of Gostivar has been higher than that of the Upper Polog micro-region. In 1948, while the municipality of Gostivar had an average population density of 61.0 p/km², in the micro-region of Upper Polog it was 45.2 p/km². So, the municipality of Gostivar in 1948 had an average population density higher by 15.8 p/km² than the micro-region of Upper Polog. However in 2020, while in the municipality of Gostivar the average population density has reached 162.9 p/km², in the micro-region of Upper Polog it has reached 89.5 p/km². So, in 2020 the municipality of Gostivar had an average population density higher for 72.5 p/km² than the micro-region of Upper Polog. The municipality of Gostivar with an average population density of 162.9 p/km² is ranked in the group of densely populated municipalities and it exceeds the republican average which is about 80 p/km².

# 4. Movement of the Population in The City Of Gostivar

The city of Gostivar has been and is the largest settlement in the territory of the municipality of Gostivar and is the only urban settlement in this municipality and also in Upper Polog. The population of this city has changed during the period 1948-2020, respectively it has increased. The increase in population is mainly due to the high natural increase and the settlement of the rural population in this city.

**Table 3.** Movement of the population in the city of Gostivar in the period 1948-2020 and participation in the total population of the municipality of Gostivar

Years	1948	1953	1961	1971	1981	1994	2002	2020
City of	7.832	9.509	12.787	19.467	27.726	32.926	35.847	/2
Gostivar	24,99	27,10	36,37	41,60	44,41	46,55	44,24	/
Municip. of	31.337	35.084	35.156	46.793	62.435	70.737	81.037	83.591
Gostivar	100	100	100	100	100	100	100	100

Source: State Statistical Office of the Republic of Macedonia, (1948-2020)

The city of Gostivar in the past has been the largest settlement in the territory of the municipality of Gostivar and continues to be still the largest settlement with population in this municipality. In 1874 this city had about 2,000 inhabitants, while towards the end of the XIX century it had 3,735 inhabitants. The official censuses made during the period 1948-2002 by the State Statistical Office of Macedonia have produced more accurate data on the number of population in the city of Gostivar. This city in 1948 had 7,832 inhabitants, while in 2002 the population reached 35,847 inhabitants. So Gostivar from a small town in 2002 is a medium town. During the period 1948-2002 the number of population in this city has increased by 28,015 inhabitants or by 3.6 times, so we have almost quadrupled the population.

# 5. Movement of Rural Population Number

In the territory of the municipality of Gostivar there are 36 rural settlements (villages), of which 32 villages are inhabited and 4 villages are uninhabited. Uninhabited villages in this municipality are: Kryqi i Mitros, Strezimiri, Shtirovica and Reçi. Half of the villages are scattered in the foothills of Sharr Mountain and Dry Mountain, while the other half of them are located in hilly-mountainous areas such as the villages: Koritë, Qafë, Strajanë, Jellovcë e Epërme, Padalishtë, Gjonovicë e Epërme, Jellovcë e Poshtme, Kunovë, Peçkovë, Tërnovë, Lumi i Hekurtë, Simnica, Reçanë, Leshnica, Kryqi i Mitros, Strezimir, Shtirovica and Reçë. In the lowland and lowland areas the villages are large, while those found in the hilly-mountainous areas are small. Another characteristic of them is that they are distinguished by the extent of the neighborhoods, respectively the villages located in the lowland and foothills are of dense type, while those located in the hilly-mountainous areas are of scattered type. The rural area of the municipality of Gostivar is characterized by a large number of villages, respectively 36 villages, where most of them or more precisely 15 villages are large in terms of population, respectively they have more than 800 inhabitants, while 5 villages are medium and have 301-800 inhabitants, while 12 villages have 1-300 inhabitants. While only 4 villages of this municipality have no inhabitants, so they are uninhabited.

Large villages are distinguished by better infrastructural, economic and social development, while the opposite occurs in medium and small villages, so in them there is very poor infrastructural, economic and social development. One such thing that happens in medium and small villages is the small number of population, which as we know the population is the main factor that directly affects the economic and social development. Small villages, but also some of the medium villages, are involved in the depopulation process, which has the effect of further reducing the population. The intensive depopulation process has affected that today the villages of Kryqi i Mitros, Shtirovica, Strezimir and Reçë have no inhabitants, while the villages of Jellovcë e

<sup>&</sup>lt;sup>2</sup> The reason for not registering the population since 2002 is that there is no official number for it

Poshtme, Gjonovicë e Epërme, Fshati i Thatë, Brodecë, Qafë, Leshnica and Jellovcë e Epërme have no more than 10 inhabitants.

Table 4. Name, altitude, area and number of inhabitants of the settlements of the municipality of Gostivar (2002)

Name of residence	Sea level	Area (km²)	Population
Gostivari (city)	530	7,4	35.847
Çegrani	498	21,6	6.748
Debreshi	615	10,0	4.847
Forina	500	11,0	4.652
Banjica e Epërme	585	12,9	4.423
Banjica e Poshtme	543	12,9	4.356
Çajla	520	18,2	3.070
Balin Doll (Lugu i Ballit)	560	4,0	2.501
Belëvishti (Bellovishti)	580	8,9	2.267
Zdunja	590	3,2	2.140
Raveni	640	4,3	1.615
Vërtoku	645	10,9	1.127
Reçani	740	9,9	1.054
Sërmnova	670	17,8	1.039
Turku i Vogël	600	1,4	1.013
Llakëvica	540	12,5	994
Padëlishta	840	16,9	721
Korita	1.420	31,7	675
Therra (Tërnova)	920	19,5	539
Simnica	720	13,1	430
Strajani	1.100	8,3	307
Gjonovica e Poshtme	680	3,2	242
Tumçevishti	490	3,2	235
Lumi i Hekurtë (Zhelezna Reka)	960	26,2	98
Peçkova	930	11,2	48
Kunova	960	9,5	11
Jellovca e Poshtme	960	11,4	10
Gjonovica e Epërme	810	14,3	8
Fshati i Thatë (Sushica)	625	10,8	8
Brodeci	-	-	7
Qafa	1 440	10,4	5
Leshnica	700	35,4	3
Jellovca e Epërme	1.220	35,4	2
Kryqi i Mitros (Mitroj Kërsti) <sup>3</sup>	840	4,0	0
Strezimiri	-	-	0
Shtirovica	-	-	0
Reçi	-	-	0

Source: Панов, М. Селата во Република Македонија, Скопје

Characteristic for most of the villages of the municipality of Gostivar is that after the '80s of the XX century, the change of their physiognomy and function. Recently, the largest villages are distinguished by a very good network of road infrastructure, water supply, fecal sewerage, electricity, fixed and mobile telephony, internet,

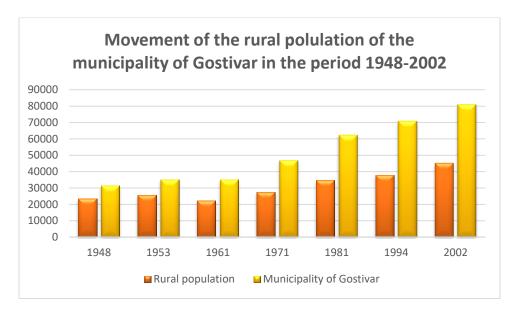
<sup>&</sup>lt;sup>3</sup>The villages Kryqi i Mitros, Strezimir, Shtirovica and Reçi are villages that in the 2002 census have no inhabitants, so they are depopulated villages

as well as good economic and social development. In the larger villages, which have more than 2,000 inhabitants, there are ambulances, post offices, sports halls, stadiums and squares which are well arranged.

**Table 5.** Movement of the rural population of the municipality of Gostivar in the period 1948-2002 and its participation in the total population of the municipality of Gostivar.

Years	1948	1953	1961	1971	1981	1994	2002
Rural	23.505	25.575	22.369	27.326	34.709	37.811	45.190
population	75,01	72,90	63,63	58,40	55,59	53,45	55,76
Municip.of	31.337	35.084	35.156	46.793	62.435	70.737	81.037
Gostivar	100	100	100	100	100	100	100

Source: State Statistical Office of the Republic of Macedonia, (1948-2002)



**Graph 3.** Movement of the rural population of the municipality of Gostivar in the period 1948-2002 and its participation in the total population of the municipality of Gostivar

In 1948 in all the villages of the municipality of Gostivar lived 23,505 inhabitants, in 1971 lived 27,326 inhabitants and in 2002 lived 45,190 inhabitants. So, during the period 1948-2002, the number of population in the rural area of the municipality of Gostivar has increased by 21,685 inhabitants or by 92.26%, so we have approximately a doubling of the rural population in this municipality. Throughout the analyzed period, the rural population has participated with more than 55% in the total population, respectively that in 1948 participated 75.01%, in 1971 with 58.40% and in 2002 participated share with 55.76% in the total population of the municipality of Gostivar. Quite interesting is the fact that the number of rural population has increased a lot, but on the other hand its share in the total population of the municipality has decreased and its decrease reaches 19.25%. The decrease of the share of the rural population in the total population of the municipality is an indicator of the increase of the urbanization rate that has developed in the municipality during the period 1948-2002. In parallel with the increase of the total population, the population density also increases. This is conditioned by natural conditions, by the natural increase of the population and by the development of the economy.

#### 6. Conclusion

This paper analyzes the number, density and distribution of the population in the municipality of Gostivar in the period 1948-2020, which is important in the process of socio-economic development. The municipality of Gostivar is characterized by relatively good population and very interesting demographic developments. According to official data, the population of the municipality during the period 1948-2020 has grown at a rapid pace, therefore it is 1.6 higher. The population is not evenly distributed throughout the region. The flat part of the Polog plain (the city and the villages around it) is distinguished for the higher population density, while for the lower density, the surrounding mountainous area. In 2020, the population density of the municipality was over 162 inhabitants / km², while in the region of Upper Polog about 90 inhabitants / km².

#### References

- [1]. Skenderi, F.: Albanian population and settlements in Macedonia, "Idris Seferi" Kumanovo, 2006
- [2]. Selmani, A..: Municipalities of the Republic of Macedonia, Skopje, 2006
- [3]. Selmani, A.: Population of Macedonia, Sh.sh.a. Logos-5, Skopje, 2004
- [4]. Hamiti, R.: Number, density and geographical distribution of the population in the Polog region, paper in the journal Acta lingua geographica, Logos-5, Skopje, 2010
- [5]. Hamiti, R.: Demo-social and economic development of the Polog Region (Doctorate), Tirana, 2010
- [6]. Panov, M.: The Villages in the Republic of Macedonia, book II, Skopje, 1993
- [7]. Strategy for cultural development of the municipality of Gostivar 2012-2016, Center for Performing Arts MULTIMEDIA, Skopje, 2012.
- [8]. Investment guide in the municipality of Gostivar, Gostivar, 2008
- [9]. State Statistical Office, census in the Republic of Macedonia in 1948, 1953, 1961, 1971, 1981, 1994, 2002 and data from the population assessment in 2014 and 2020, Skopje
- [10]. www.komunagostivar.gov.