

GEODEMOGRAPHIC CHARACTERISTICS OF MUREȘ DEFILE

G. B. TOFAN¹

ABSTRACT. – **Geodemographic Characteristics of Mureș Defile.** This study begins with a short introduction regarding the exact limits of this area, which extends on a 38 km stretch between Vâgani (component of the Town of Toplița) and Bistra Mureșului (component of Deda), in order to have a unitary perspective on this area, situated on the contact line between the volcanic massifs of Căliman (to the north) and Gurghiu (to the south). As required for every study concerning geodemographic characteristics, an analysis of the evolution of the number of inhabitants was presented, followed by complex issues on population quality (structure) (gender, age, habitat, professions, ethnic groups and religions), with interpretations, and graphical and cartographical representations for more than a century and a half (1850-2011). Alongside defining the concrete limits (east and west), the study brings another novel element, which is establishing the surface area for the entire area (26.17 km²), together with the four compartments (Vâgani-Ciobotani, Stânceni, Lunca Bradului and Răstolița), numbers which allowed for more thorough calculations, in terms of population territorial distribution.

Keywords: *small depressions, defile, population quality, Mureș.*

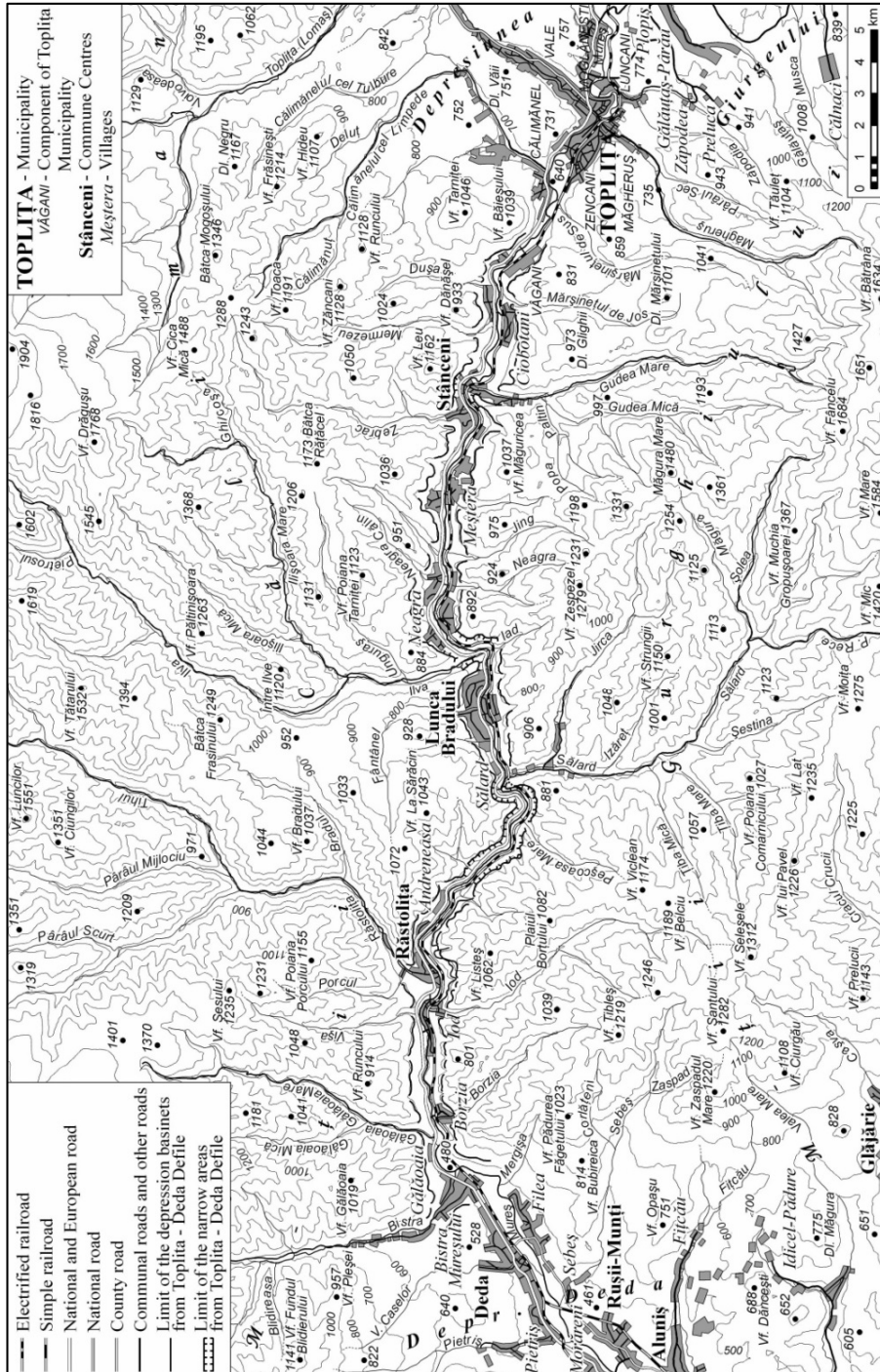
1. INTRODUCTION

As any classic study, emphasizing the main geodemographic components of any territory, implies a wide perspective on the following issues: *evolution of the number of inhabitants, territorial distribution of population, as well as population structure (quality)* (gender, age group, habitat, professions, ethnic groups and religion).

I will begin with some aspects regarding the limits of the defile. I considered that the most pertinent view, as well as the most justified and close to reality, is that the defile starts at Vâgani (component of Toplița) and ends at Bistra Mureșului, thus having 38 km in length.

That is why, in the study at hand, I will also include the two settlements situated at the defile's extremities (more precisely two parts of them, Vâgani și Bistra Mureșului), which belong to other major relief forms (to the east, Toplița, Giurgeu Depression, the northern compartment, Toplița-Subcetate Plateau), to the west Deda, part of Reghin Hills, and Vălenii de Mureș Depression (Deda-Porcești), from Transilvanian Depression.

¹ Babeș-Bolyai University, Faculty of Geography, 400006, Cluj-Napoca, Romania,
e-mail: george.tofan@ubbcluj.ro



This sector is the largest piercing valley of the volcanic range, where, due to the alternation between lavas with pyroclastites and confluences, there are many narrow sectors, with steep slopes, with numerous alluvial cones made of volcanic boulders, plus a series of enlargements, which favoured the emergence of depressions: Văgani-Ciobotani, Stânceni, Lunca Bradului and Răstolița.

The settlements found in the defile, major centers of logging industry, are situated at the mouths of Mureș' tributaries: Deda and Bistra Mureșului, on Bistra River; Răstolița on Răstoliței Valley; Lunca Bradului on Ilvei Valley, Stânceni on Zebracului Valley and Gudea Valley, while Toplița on Topliței Valley and Măgheruș.

2. POPULATION EVOLUTION

Toplița-Deda Defile, during 1850-2011 period, registered a 322.0% increase in population, from 1 582 inhabitants in 1850 to 6675 in 2011, taking into consideration solely the settlements found in the defile.

In the first 60 years, population increased to 5458 inhabitants, in 1910, dropping to 4220 in 1930 due to the First World War, corroborated with a drastic decrease in births caused by many men leaving for war.

If we compare the censuses of 1910 and 1930, we observe a population regress from 2133 inhabitants to 1735 inhabitants, at Stânceni, and 907 inhabitants to 820 inhabitants, in Răstolița, while Lunca Bradului experienced a population increase from 1552 inhabitants to 1665 inhabitants due to the development of rafting, railways and roads, and especially due to the establishment of a logging mill, leading to the emergence of seven hamlets: Bradul, Fântânele, Ilva, Andrineasa, Jirca, Sălardul and Luncani, which were later integrated in other settlements (Neagra and Sălard).

After 1930, the defile's population increases once again, registering 5860 inhabitants, in 1941, respectively 6244 inhabitants in 1956, with significant increases solely in Răstolița, where population doubles, from 820 inhabitants (1930) to 1614 inhabitants (1956), while in Stânceni and Lunca Bradului, the largest number of inhabitants being registered only in 1941, followed by a population decrease due to the start of the Second World War, in conjunction with other factors (drought, famine, the emergence of communism, etc).

Starting in 1956, a series of hamlets were declared villages (Meștera, Neagra, Sălard, Gălăoaia, Răstolița, Bistra Mureșului), and due to the fact that, in 1956, Toplița became a town, more rural areas were integrated, such as Văgani.

The increasing population trend lasted until 1977, 7842 locuitori, Stânceni and Răstolița communes still having positive growth rates (5.4% and 9.6%), as well as Bistra Mureșului (21%), while Lunca Bradului lost population, with a negative rate of -0.5% and -0.7% in Văgani.

From 1977 onwards, the microregion's population began to decrease, especially in 2002 (7296 inhabitants), followed by a pronounced decrease, as, at the last census of 2011, population numbering only 6675 inhabitants, due to well known causes (low birth rate and increased mortality, unemployment, forcing young people to find work in Toplița or Reghin).

Consequently, population dynamics became negative, for most settlements from the defile (Stânceni -25.1%, Lunca Bradului -24.8%, Vâgani -21.1%, Bistra Mureşului -14.0%), with an atypical situation found in Răstolița, with a population growth of 463 inhabitants in 1992 in comparison to 1977, due to population immigration towards the construction sites of the hydroelectrical complex found here (V. Mara, 2004).

Table 1**Population evolution in Toplița-Deda Defile in the 1850-1956 interval**

No.	Settlement	1850	1880	1900	1910	1930	1941	1956
1	Vâgani ¹	-	-	-	-	-	-	-
2	Stânceni Commune	972	1369	1615	2133	1735	1998	1774
	Ciobotani	-	-	-	541 ²	-	-	362
	Stânceni	972	1369	1615	2133	1735	1998	1110
	Meștera	-	-	-	-	-	-	302 ³
3	Lunca Bradului Commune	246	657	946	1552	1665	2462	1917
	Neagra	-	-	-	104 ⁴	-	-	477 ⁵
	Lunca Bradului	246	657	946	1552	1665	2462	1322
	Sălard	-	-	-	-	-	-	118 ⁶
4	Răstolița Commune	364	429	560	907	820	1400	1614
	Andreneasa	-	-	-	522 ⁷	-	-	59
	Iod	-	-	-	300 ⁸	-	-	505
	Borzia	-	-	-	98 ⁹	-	-	103
	Gălăoaia	24	-	-	116	-	-	56 ¹⁰
	Răstolița	340	429 ¹¹	560	907	820	1400	891 ¹²
5	Bistra Mureşului	-	-	-	866 ¹³	-	-	939 ¹⁴
TOTAL		1582	2455	3121	5458	4220	5860	6244

¹ Component of the Town of Toplița, Harghita County, since 1956.

² Hamlet that used to belong to Toplița, since 10th January 1956 belonging to Stânceni.

³ Declared village, separately registered, until 10th January 1956 hamlet of Stânceni, Stânceni Commune.

⁴ Hamlet of Stânceni, Stânceni Commune.

⁵ Declared village, separately registered, until 10th January 1956 hamlet of Stânceni, Stânceni Commune.

⁶ Sălard, declared village, separately registered; until 10th January 1956 hamlet of Lunca Bradului, Lunca Bradului Commune.

⁷ Hamlet of Lunca Bradului, Lunca Bradului Commune.

⁸ Hamlet of Filea, Deda Commune.

⁹ Hamlet of Filea, Deda Commune.

¹⁰ Gălăoaia, declared village, separately registered, until 10th January 1956 hamlet of Răstolița, Răstolița Commune.

¹¹ Registered together with Gălăoaia hamlet.

¹² Declared village, separately registered since 10th January 1956.

¹³ Registered together with a part of Deda village.

¹⁴ Declared village, registered separately since 10th January 1956.

Construction for the Răstolița complex began immediately after the 1989 events, after which works significantly decreased, due to sporadic financing. This issue is reflected in the evolution of the settlement's population, having a descending trend (from 2325 inhabitants in 1992 to 2053 inhabitants in 2011).

By analysing the data from table 2, we observe that, during 1966-2011, most villages of the four communes registered a significant drop in inhabitants (Sălărd -67.6%, Stânceni -30.2%, Neagra -24.3%, Văgani -21.7%, Andreneasa -21.6%, Iod -21.6%, Lunca Bradului -20.7%, Meștera -12.8%, Ciobotani -6.7%), while only three villages gained population (Răstolița, 45.4%; Gălăoia, 22.7%; Bistra Mureșului, 3.9%).

Source: the 1850, 1880, 1900, 1910, 1930, 1941, 1956 censuses;

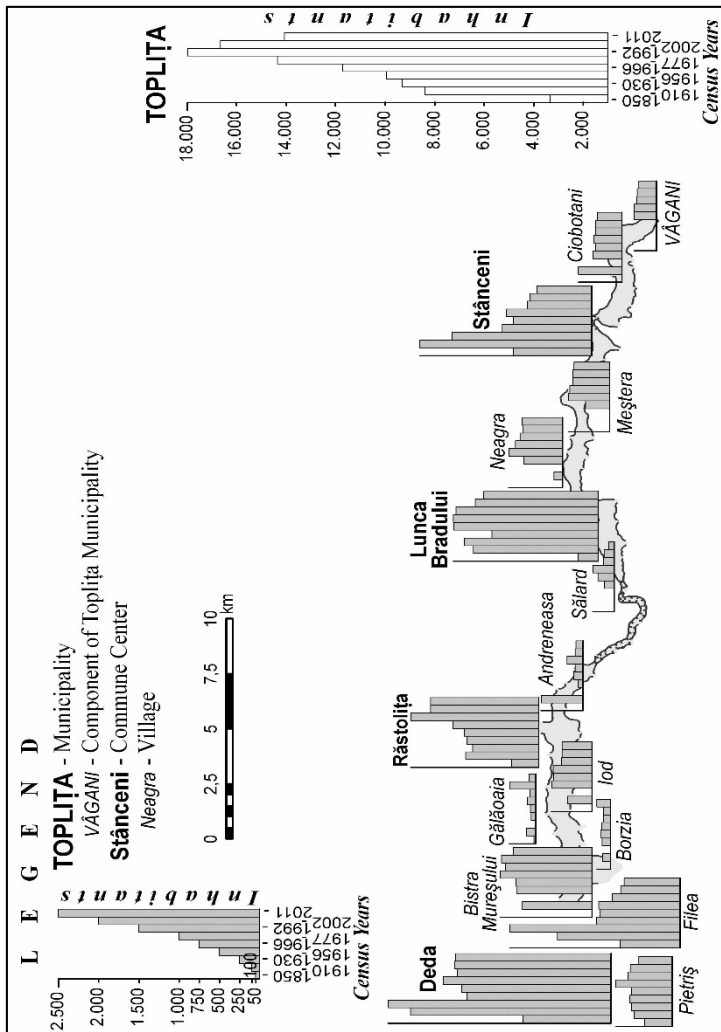


Fig. 2. The population of Mureș at the 1850, 1910, 1930, 1956, 1966, 1977, 1992, 2002 and 2011 censuses.

Table 2

**Population evolution in Toplița-Deda Defile
during 1966-2011**

No.	Settlement	1966	1977	1992	2002	2011
1	Vâgani	281	279	249	241	220
2	Stânceni Commune	1812	1911	1592	1547	1430
	Ciobotani	327	351	329	324	305
	Stânceni	977	1065	804	766	682
	Meștera	508	495	459	457	443
3	Lunca Bradului Commune	2665	2650	2431	2150	1992
	Neagra	666	584	528	495	504
	Lunca Bradului	1795	1801	1768	1530	1422
	Sălard	204	264	135	125	66
4	Răstolița Commune	1699	1862	2325	2230	2053
	Andreneasa	111	97	197	95	87
	Iod	477	485	381	376	374
	Borzia	122	110	85	91	169
	Gălăoaia	66	105	74	326	81
	Răstolița	923	1065	1588	1342	1342
5	Bistra Mureșului	943	1140	1079	1128	980
TOTAL		7400	7842	7676	7296	6675

Source: 1966, 1977, 1992, 2002, 2011 censuses

3. TERRITORIAL DISTRIBUTION OF POPULATION

The general density of the three administrative units (Stânceni, Lunca Bradului and Răstolița) decreased from 8.4 inhabitants/km² in 2002 to 7.8 loc/km² in 2011.

The biggest density can be found in Stânceni, 11.5 inhabitants/km², followed by Răstolița with 7.7 loc/km² and Lunca Bradului with 6.4 loc/km², as this rural settlement has a relatively small population (1992 inhabitants) compared to its administrative territory (310 km²).

After using GIS to calculate the surface area of the entire defile, 26.17 km² to be more exact, the population density was also determined for 2011, reaching a relatively high value of 255.0 inhabitants/km². Settlements are situated along Mureș River, as well as at its confluence with streams that flow from Căliman and Gurghiu mountains.

There are significant changes, if we compare the population of the four depressions (in 2011) to the surface of their territory, resulting the following situation: 106.0 inhabitants/km² in Vâgani-Ciobotani Depression (its surface area being 4.95 km²), 208.0 inhabitants /km² in Stânceni (5.41 km²), 687.0 inhabitants /km² in Lunca Bradului Depression (2.90 km²) and 265.1 inhabitants /km² in Răstolița (11.44 km²).

4. POPULATION STRUCTURE

The presentation of this indicator involves, like in any other geodemographic study, the analysis of its quality, expressed as follows: gender, age groups, habitat, profession, ethnic background and religion.

4.1. Population structure in terms of gender

For the last three censuses, in the area at hand, there were no significant oscillations, male population experiencing a slight increase, with values of 50.3% (1992), 50.5% (2002) and 51.6% (2011).

At urban level, only one settlement was analysed, a component of the Town of Toplița (Văgani), also with a higher percentage of men (54.2% in 1992, 54.3% in 2002, followed a slight decrease to 53.2% in 2011, which means a greater feminisation of the urban environment, with 46.8%, compared to 45.7% in 2002.

Table 3

**Population structure per gender in Mureș Defile
(1992, 2002 and 2011 censuses)**

Years	1992	%	2002	%	2011	%
Total	7676	100	7296	100	6675	100
Male	3863	50.3	3685	50.5	3446	51.6
Female	3813	49.7	3611	49.5	3229	48.4
Urban	249	100	241	100	220	100
Male	135	54.2	131	54.3	117	53.2
Female	114	45.8	110	45.7	103	46.8
Rural	7427	100	7055	100	6455	100
Male	3728	50.2	3554	50.3	3329	51.5
Female	3699	49.8	3501	49.7	3126	48.5

When it comes to rural areas, this analysis took the following settlements into consideration: Stânceni, Lunca Bradului, Răstolița and Bistra Mureșului village (Deda Commune), where one can observe the same growth tendency of male population, due to the area's economic trends (logging and animal husbandry), the maximum being attained in 2011 with 51.5%, while women reached a percentage of 48.5%.

A suggestive indicator was employed to represent the male/female ratio -*the femininity index*, with a decrease from 98.7 women/100 men in 1992 to 93.7 women/100 men in 2011.

For each commune, during the analysed period, we have the following situation: in Stânceni (98.0 women/100 men in 1992, 99.3 W/100 M in 2002 and 96.1 W/100 M in 2011), Lunca Bradului (98.7 W/100 M in 1992, 98.3 W/100 M in 2002 and 94.0 W/100 M in 2011), Răstolița (99.0 W/100 M in 1992, 94.5 W/100 M in 2002 and 88.7 W/100 M in 2011) and Bistra Mureșului (Deda commune), where the femininity index reached values of more than 100 women/100 men (102.4 W/100 M in 1992, 105.8 W/100 M in 2002 and 102.0 W/100 M in 2011).

4.2. Population structure per age groups

Represents one of the most important indicators of population „quality”, due to its demographic and social-economic implications.

For emphasizing the evolution of this geodemographic component, corresponding to 1850-2011, three representative threshold moments were chosen, that is 1992, where all the settlements from the area were taken into account, including the component of Toplița, Vâgani, and Bistra Mureșului village, belonging to Deda village, while for 2002, age groups were analysed in rural areas only, and 2011, for which population structure was analysed for the entire territory (with the exception of Bistra Mureșului).

Table 4

The main population age groups in Mureș Defile, in 1992, 2002 and 2011

Years	Category	Total population	0-19 years	%	20-59 years	%	60 years and over	%
1992	Total							
	Total	7676	2643	34.5	3822	49.8	1211	15.7
	Male	3863	1300	33.6	2009	52.0	554	14.4
	Female	3813	1343	35.3	1813	47.5	657	17.2
	Urban							
	Total	249	76	30.5	128	51.5	45	18.0
	Male	135	45	33.3	67	49.7	23	17.0
	Female	114	31	27.2	61	53.5	22	19.3
	Rural							
	Total	7427	2567	34.5	3694	49.8	1166	15.7
	Male	3728	1255	33.7	1942	52.1	531	14.2
	Female	3699	1312	35.5	1752	47.4	635	17.1
2002	Rural							
	Total	7055	1962	27.8	3757	53.2	1336	19.0
	Male	3554	1006	28.3	1946	54.7	602	17.0
	Female	3501	956	27.3	1811	51.7	734	21.0
2011 ¹⁵	Total							
	Total	5927	1319	22.2	3392	57.3	1216	20.5
	Male	3068	710	23.1	1821	59.4	537	17.5
	Female	2859	609	21.3	1571	55.0	679	23.7
	Urban							
	Total	220	45	20.5	130	59.0	45	20.5
	Male	117	21	18.0	76	65.0	20	17.0
	Female	103	24	23.3	54	52.4	25	24.3
	Rural							
	Total	5707	1274	22.3	3262	57.2	171	20.5
	Male	2951	689	23.3	1745	59.4	517	17.5
	Female	2756	585	21.3	1517	55.0	654	23.7

¹⁵ For rural areas, the stable population of 1st January 2011, at communal level, was taken into account.

The percentage of the *young population group* (0-19) for the entire defile, in 1992, was 34.5%, after which in 2011, it dropped to 22.2% out of a total of 5927 inhabitants. In the case of settlements, in 1992, the percentage of young people was close to the 30.1-37.0% range, the highest frequency being found in Răstolița (37.0%) and Lunca Bradului (36.0%), the lowest in Stânceni (30.1%). In 2002, census data allowed for a presentation of age group from rural areas only, situation in which young people held 27.8% of the total 7055 inhabitants. At settlement level, we have the following situation: Stânceni (24.7%), Lunca Bradului (27.6%), Bistra Mureșului (28.6%) and Răstolița (29.7%).

19 years later, the decrease in young population accelerated, so that, in 2011, the highest values can be found in Stânceni (26.6%), Lunca Bradului (24.0%), Răstolița (21.9%) and Vâgani with only 20.5%.

Adult population (20-59 years) registered, in 1992, a 51.5% in urban areas out of the total of 249 inhabitants of Vâgani, and 49.8% in rural areas out of the total of 7427 inhabitants. The three settlements have a balanced situation, its frequency being around 49%, Lunca Bradului (48.9%), Răstolița (49.5%), Bistra Mureșului (48.4%), while in Stânceni and Vâgani, adults had over 50% (52.2% and 51.4%).

In 2002, in rural areas, out of the total of 7055 inhabitants, adults held 53.2%, (higher than in 1992, 49.8%), 54.7% being male (out of 3554 people), while 51.7% are female (out of a total of 3501 people).

In 2011, if we sum up the population, with the exception of Bistra Mureșului, adults were more numerous than 19 years ago, that is 57.3%.

Senior population (≥ 60 years) roughly follows the regional and national trend, in 1992 having the lowest values with 15.7%, and in 2011 the highest, with 20.5%.

After almost two decades, following the evolution of this age group, one can see an acceleration of the population aging process, in all settlements with the exception of Vâgani, where the same number of senior citizens was registered both in 1992 and in 2011 (45 people), while in the other three settlements, using statistical data that emphasize age groups for the stable population of 1st January 2011, there have been considerable increases (Stânceni 17.6% in 1992 and 24.1% in 2011; Lunca Bradului 15.1% in 1992 and 19.9% in 2011; Răstolița 13.4% in 1992 and 18.5% in 2011).

In 2011, the *demographic dependency rate* had a value of 74.7%, the *population aging rate* highlighted the acceleration of this phenomenon, while the *young population pressure* (0-19 years) indicated 108.2%, and the *elderly population pressure* (over 65 years) was lower, at 92.2%.

By calculating these indicators one can clearly observe the high dependency of young and old people on the adult population, due to first two high percentages.

4.3. Population structure per habitat

This category structure can be traced back to 1956, when Vâgani became part of the Town of Toplița. Even though the population of this settlement belongs to the urban, from an economic-social point of view we can clearly say that it belongs to the rural, a situation also found in the other settlements (Călimănel, Măgheruș, Zencani, Luncani, Moglănești, Vale and Secu) embedded in the urban settlement mentioned before.

Therefore, in 1966, urban population, taking into account the current organisation of Toplița, registered 3.8% (281 inhabitants), while the rest of 96.2% was found in the three communes and Bistra Mureșului village, totalling 7119 inhabitants, while, in 1992 the urban/rural ratio was 3.2/96.8% (out of 7 676 inhabitants), reaching 3.3/96.7% in 2011 (6 675 inhabitants).

4.4. The population's professional structure

In the past, the main activity of the people living in this area, alongside sheepherding, was rafting, every settlement supplying significant amounts of timber, an activity which developed especially starting in the second half of the 19th century, when, in 1856, a group of Italian craftsmen, from South Tirol, regularized the course of Mureș River, and after the establishment of rafting companies in Reghin (1865) and Târgu Mureș (1877) (G. Gociman, 1928). Stânceni was one of the most important rafting centres of the area, also hosting several hydraulic saw mills, which attracted workers from neighbouring villages, as well as famous woodcraftsmen from Transylvania Plain and Apuseni Mountains.

The construction of railways led to a decrease in this activity, and, as an alternative, several logging mills were established at Lunca Bradului, Răstolița and Bistra Mureșului.

Returning to the analysis of this structure category which reflects the activities that take place in this area, one can observe that it registers significant changes from one period to another in relation to the social-economic evolution.

To highlight them, statistical information from 1992 and 2002 was used (only for rural settlements from Mureș County).

In 1992, active population registered 40.0% (2975 inhabitants) out of a total of 7427 inhabitants of the three communes and Bistra Mureșului village, 28.4% being employed in agriculture (844 people), 41.5% in industry (1233 people) and 24.6% (732 people) in the service sector, while the percentage of people searching for a first job is 5.5% (166 people).

A decade later, in 2002, there was a decrease in active percentage with only 34.3% (2425 people) of the total rural population of the defile 7 055 inhabitants.

Their distribution per activity sectors is as follows: 23.3% (566 people) in agriculture, 32.0% (774) in industry, 26.2% (635) in services and 18.5% (450) unemployed.

At settlement level, for the two moments taken into account (1992 and 2002), we emphasize the decrease in actives in Răstolița from 37.0% (862 people) in 1992 to 28.8% (643 people) in 2002, due to the decrease in primary activities and the increase in unemployment, as follows: 31.0% in 1992 and 9.8% in 2002 (agriculture, forestry, logging and game industry), while the secondary sector increased from 39.5% in 1992 to 46.3% in 2002 (mainly in constructions, due to the activities from the hydroelectrical complex).

Lunca Bradului also experienced the same decrease from 38.2% active people in 1992 to 32.7% in 2002, due to the insolvency of the logging company (49.9% in 1992 and only 18.4% in 2002), a situation that can also be found in Bistra Mureșului (24.3% in 1992 and 3.0% in 2002). The situation was further exacerbated by layoffs in the transportation sector (mainly railroads) and telecommunications, following the introduction of digital phone services (16.0% in 1992 and 6.1% in 2002, at Lunca Bradului and 8.1% in 1992 and 6.7% in 2002).

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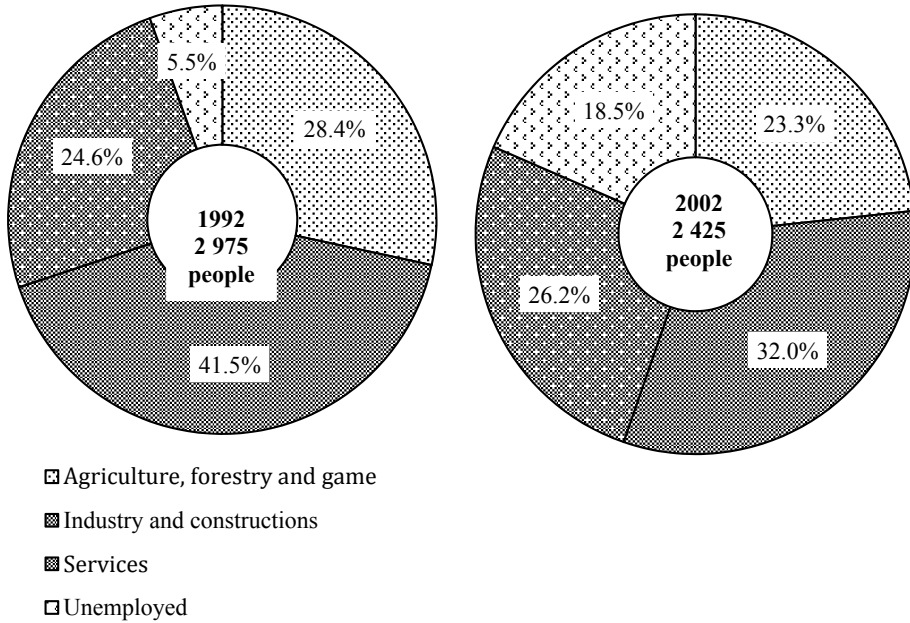


Fig. 3.The professional structure of the population from Mureș Defile, in 1992 and 2002.

Table 5
The professional structure of the population from Mureș Defile,
at the 1992 și 2002 censuses

Settlements	Years	Inhabitants	Active population	%	Agriculture, forestry and game	%	Industry and constructions	%	Services	%	Unemployed	%
Stânceni	1992	1592	655	41.1	123	18.7	294	44.8	190	29.0	48	7.5
	2002	1547	633	40.9	190	30.0	219	34.6	164	26.0	60	9.4
Lunca Bradului	1992	2431	929	38.2	157	17.0	444	47.8	268	28.8	60	6.4
	2002	2150	704	32.8	116	16.4	171	24.3	172	24.5	245	34.8
Răstolița	1992	2325	862	37.0	267	31.0	341	39.5	199	23.0	55	6.5
	2002	2230	643	28.8	63	9.8	298	46.3	183	28.4	99	15.5
Bistra Mureșului	1992	1079	529	49.0	297	56.2	154	29.1	75	14.2	3	0.5
	2002	1128	445	39.4	197	44.3	86	19.3	116	26.0	46	10.4

Stânceni Commune has an active population percentage which did not change in any significant manner in the selected time frame, being 41.1% in 1992 (1 592 people) and 40.9% in 2002 (1 547 people).

The percentage of people employed in *agriculture, forestry and game*, was 28.4% in 1992 and 23.3% in 2002, at rural level, the lowest values of 1992 being found in Lunca Bradului (16.9%) and Stânceni (18.7%), while the lowest values of 2002 were the ones in Răstolița (9.8%) and Lunca Bradului (16.4%).

The secondary sector (*industry and constructions*) employed more people in 1992, with a total of 1233 people (41.5%), registering solely 774 people in 2002 (31.9%), due to massive restructurings in logging industry, and frequent interruptions in constructions for the Răstolița hydroelectric complex, the highest percentage being found in Lunca Bradului 47.8% in 1992, and in Stânceni ten years later, as many remained as loggers, and workers in the mineral water bottling industry.

The *service and other unidentified services* sector held 30.1% of the total number of actives in 1992 (2 975 people), the highest values being found in Lunca Bradului (46.6%) and Răstolița (39.5%), while in Stânceni (37.6%) and Bistra Mureșului (17.5%), the percentages were lower. In 2002, compared to the active population (2425 people), the analysed sector registered 43.8% in Răstolița, an above average value being found solely in Lunca Bradului (59.2%), while a below average value in Bistra Mureșului (36.4%) and Stânceni (35.3%).

Without going into detail, in 2002, in the 44.7% value, found at the level of the entire analysed rural area, most are those who are looking for a job (18.5%), the largest number of unemployed being registered in Lunca Bradului 34.8% (245 people), followed by those in trade (7.3%), transports and communications (7.0%), public administration (3.9%), education (3.0%), health and social services (1.0%) etc.

At the 2002 census, there was a high percentage of *inactive population*, registering 65.6% (4630 people), 30.8% (1429 people) are pensioners, 25.5% (1175 people) were students, 22.7% (1050 persoane) householders, 16.3% (755 people) being cared for by other people, 3.6% (167 people) fitted in other categories and 1.1% (54 persoane) being cared for by the State or by private enterprises.

The largest number of inactives was found in Răstolița (1587 people), primarily students with 25.5%, and Lunca Bradului (1446 people), where pensioners registered 34.6%, while the lowest values could be found in Stânceni (914 people) and Bistra Mureșului (683 people).

4.5. Population's ethnic structure

In order to follow the ethnic structure of the population from the settlements found in Mureș Defile, four crucial threshold moments were chosen, from a period of more than a century and a half, 161 years (1850-2011), that is 1850, 1930, 1992 and 2011, which shows that *Romanians* were always a majority, between 92.2% (in 1850), followed by a gradual decrease: 60.4% in 1930, then an increase, reaching 81.5% in 1992, and 83.3% in 2011.

Presenting the population structure in terms of habitat has only been possible since 1966, when in urban, in Văgani, Romanians held a majority of 92.2%, while during 1977-2002, they revolved the value of 95.0%. Following the distribution of population at administrative-territorial level, allows us to see that in 1850 all settlements had over 90% (90.8% in Stânceni, 94.3% in Lunca Bradului and 94.8% in Răstolița), while in 1930, due to a gradual increase in the percentage of Hungarians in this area, Romanians did not manage to exceed 70%, the highest percentage being found in Stânceni (69.7%), while Lunca Bradului and Răstolița held the lowest, with just over 50%.

Table 6

Population's ethnic structure in Mureș Defile, in 1910

Year	Categorie	Total	Romanians		Hungarians		Germans		Jews		Gypsies		Other ethnic groups and undeclared	
			AV	RV	AV	RV	AV	RV	AV	RV	AV	RV	AV	RV
1850	Total	1582	1459	92.2	78	5.0	1	0.1	-	-	44	2.7	-	-
	Stânceni	972	882	90.8	75	7.7	-	-	-	-	15	1.5	-	-
	Lunca Bradului	246	232	94.3	-	-	-	-	-	-	14	5.7	-	-
	Răstolița	364	345	94.8	3	0.8	1	0.2	-	-	15	4.2	-	-
1930	Total	4220	2548	60.4	1154	27.3	84	2.0	295	7.0	88	2.0	51	1.3
	Stânceni	1735	1210	69.7	468	27.0	7	0.4	34	2.0	11	0.6	5	0.3
	Lunca Bradului	1665	896	53.8	489	29.4	61	3.6	175	10.5	19	1.1	25	1.6
	Răstolița	820	442	54.0	197	24.0	16	2.0	86	10.4	58	7.0	21	2.6
1992	Total	7676	6260	81.5	1290	16.8	-	-	-	-	121	1.6	5	0.1
	Văgani	249	237	95.2	12	4.8	-	-	-	-	-	-	-	-
	Stânceni	1592	1284	80.7	297	18.6	-	-	-	-	11	0.7	-	-
	Lunca Bradului	2431	1893	77.8	456	18.8	-	-	-	-	82	3.4	-	-
	Răstolița	2325	1854	79.8	452	19.5	-	-	-	-	15	0.6	4	0.1
	Bistra Mureșului	1079	992	92.0	73	6.7	-	-	-	-	13	1.2	1	0.1
2011	Total	5475	4560	83.3	804	14.7	11	0.2	-	-	97	1.7	3	0.1
	Stânceni	1430	1211	84.7	216	15.1	-	-	-	-	-	-	3	0.2
	Lunca Bradului	1992	1628	81.7	266	13.3	1	0.2	-	-	97	4.8	-	-
	Răstolița	2053	1721	83.8	322	15.7	10	0.5	-	-	-	-	-	-

AV = absolute values; RV = relative values.

At a 81 year interval, one can observe the resurgence of Romanians, with values over 80%, the highest value being registered in Văgani (95.2% in 1992, urban area), while in Bistra Mureșului, in 1992, Romanians registered 92.0%.

Hungarians had the lowest percentages at the 1850 census (5.0%), reaching higher percentages in 1930 (27.3%), followed by a decrease to 16.8% in 1992, and 14.7% in 2011. The Hungarian ethnicity had higher values in Lunca Bradului (29.4%), followed by Stânceni (27.0%) and Răstolița (24.0%), in 1930, while in 1992, the order was reversed: Răstolița (19.5%) and Lunca Bradului (18.8%), and in 2011, Răstolița (15.7%) and Stânceni (15.1%).

When it comes to *Germans* and their presence in the area, the censuses register their stronger presence in 1930, with 2.0%, especially in Lunca Bradului (3.6%) and Răstolița (2.0%), followed by a continuous drop, which resulted in them being present solely in Răstolița (0.5%, 10 people) in 2011.

The *Jewish population* faced the same situation, since in 1930 they were relatively numerous (7.0%), mainly in Lunca Bradului (10.5%) and Răstolița (10.4%), while, at the last two censuses, there was no one representing this ethnicity.

In the analysed period, *Gypsies* registered a maximum in 1992 (1.6%, 121 people), mainly concentrated in Lunca Bradului (3.4%), followed by a steady increase, reaching a percentage of 4.8% just 19 years later, this time found solely in Lunca Bradului commune.

Other ethnicities and those undeclared registered insignificant values during the period at hand, with 1.3% in 1930, and 0.1% in 1992 and 2011.

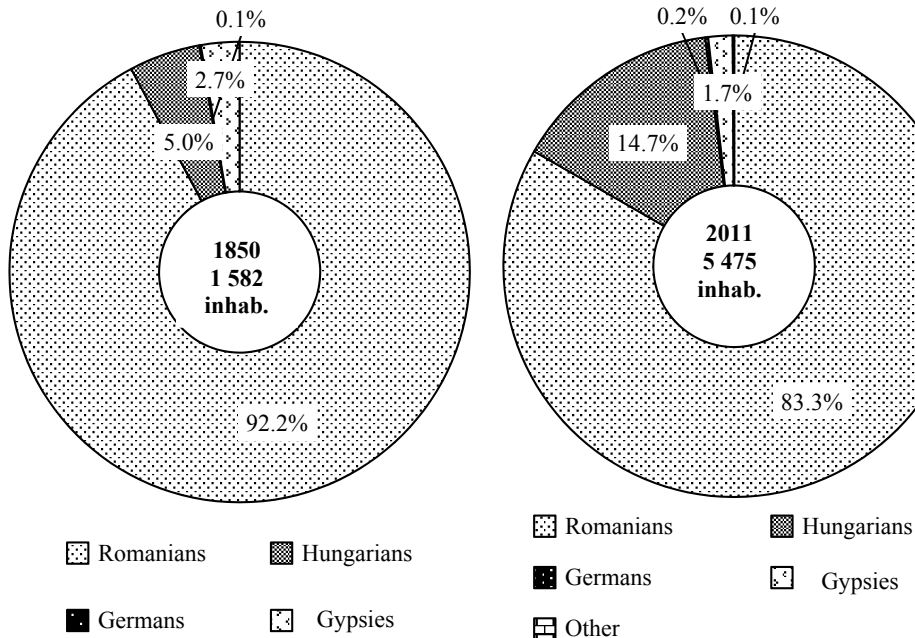


Fig. 4. The ethnic structure of population in Mureș Defile.

4.6. Population's religious structure

In order to emphasize the religious structure of the settlements found in Mureș Defile, four threshold moments were chosen, 1850, 1930, 1992 and 2011, which were also used in the ethnic structure analysis, as there is a strong connection between these two types of structures.

Therefore, I would like to point out the special situation found during the analysis of the ethnic structure. This means that here we have an exception from the structural-religious modifications imposed by the social-political evolution.

In 1850, there was a very low percentage of *Greek-Catholic* followers (0.4%), Romanians being mostly *Orthodox* (94.3%), in Lunca Bradului the percentage of this religion being 100%, followed by *Roman-Catholics* (3.2%), *Reformed* (2.1%) and *Greek-Catholics* (0.4%).

Table 7

The religious structure of Mureș Defile's population, in 1850, 1930, 1992 and 2011

Years	Settlement	Total population	Orthodox	%	Greek-Catholic	%	Roman-Catholic	%	Reformed	%	O.r. N.r. Und.	%
1850	Total	1582	1492	94.3	6	0.4	50	3.2	34	2.1	-	-
	Stânceni	972	886	91.2	6	0.6	50	5.2	30	3.0	-	-
	Lunca Bradului	246	246	100.0	-	-	-	-	-	-	-	-
	Răstolița	364	360	98.9	-	-	-	-	4	1.1	-	-
1930	Total	4220	2362	56.0	282	6.7	778	18.4	444	10.5	354	8.4
	Stânceni	1735	1167	67.3	51	3.0	359	20.7	121	7.0	37	2.0
	Lunca Bradului	1665	696	41.8	218	13.1	304	18.2	238	14.3	209	12.6
	Răstolița	820	499	60.8	13	1.7	115	14.0	85	10.3	108	13.2
1992	Total	7676	6158	80.2	13	0.2	744	9.8	527	6.8	234	3.0
	Văgani	249	227	91.2	-	-	10	4.0	-	-	12	4.8
	Stânceni	1592	1230	77.2	1	0.4	280	17.5	28	1.7	53	3.2
	Lunca Bradului	2431	1937	79.7	8	0.3	286	11.7	144	6.0	56	2.3
	Răstolița	2325	1814	78.0	3	0.1	140	6.0	335	14.4	33	1.5
	Bistra Mureșului	1079	950	88.0	1	0.1	28	2.6	20	1.8	80	7.5
2011	Total	5475	4517	82.6	17	0.3	441	8.0	343	6.3	157	2.8
	Stânceni	1430	1162	81.3	4	0.3	191	13.3	17	1.1	56	4.0
	Lunca Bradului	1992	1710	85.8	7	0.3	167	8.5	75	3.7	33	1.7
	Răstolița	2053	1645	80.1	6	0.3	83	4.0	251	12.2	68	3.4

O.r. = Other religion; N.r. = No religion; Und. = Undeclared.

Eight decades later, in 1930, the total population of 4220 inhabitants was 56% Orthodox, followed by Roman-Catholics (18.4%) and Reformed (10.5%), these last two religions being represented mostly by Hungarians, while Greek-Catholics had only 6.7%, and 354 people belonged to other religions (303 Jewish, 40 Evangelicals, 9 Penticostals and two Unitarians).

The situation from the 1992 and 2011 censuses did not yield significant changes from the one in 1930, for the entire area, Orthodox followers being 80.2% in 1992 and 82.6% in 2011, followed by Roman-Catholics with 9.8% in 1992 and 8.0% in 2011, Reformed with 6.8% in 1992 and 6.3% in 2011, while Greek-Catholics held values below 1% (0.2% in 1992 and 0.3% in 2011).

For the same period of time (1992-2011), *the category of other religions* held only seven Unitarians, after which a low number of neoprotestant followers were registered: *Penticostals* 101 in 1992 (52 in Bistra Mureşului, 24 in Răstoliţa, 19 in Lunca Bradului, 5 in Stânceni and one in Văgani) and 73 in 2011 (64 in Răstoliţa, five in Stânceni and four in Lunca Bradului), *Baptists* 44 in 1992 (17 in Lunca Bradului, 14 in Stânceni, eight in Văgani and five in Bistra Mureşului) and 19 in 2011 (12 in Lunca Bradului and seven in Stânceni), 38 *Seventh-day Adventists* in 1992 (20 in Stânceni, 16 in Lunca Bradului and two in Răstoliţa), and 34 in 2011 (19 in Stânceni, 13 in Lunca Bradului and two in Răstoliţa), *other religions, no religion, atheists and undeclared* with 44 in 1992 and 31 in 2011.

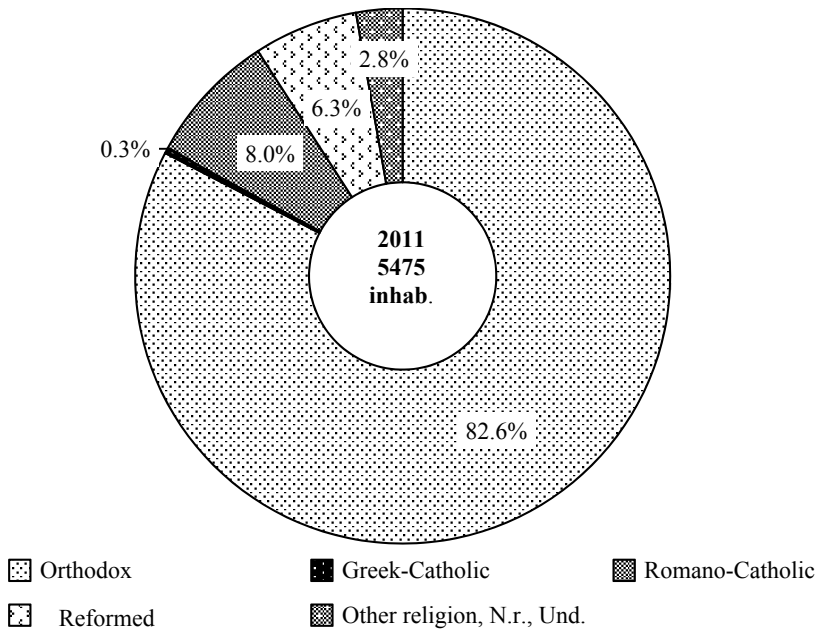


Fig. 5. The religious structure of Mureş Defile's population, in 2011.

5. CONCLUSIONS

In regards to the numerical evolution of population, depending on the demographic processes involved, we have four intervals for the 1850-2011 time frame: the first, 1850-1910, when population increased more than three times, the largest being in 1910 (5458 people), followed by 1910-1930, when the first demographic decrease takes place, -1238 inhabitants, with an annual negative trend of -62 inhabitants, with a -22.6% trend for the entire period. The third period, 1941-1977, is characterised by a demographic growth (1982 people), due to a positive natural and migration growth, while the last period, 1992-2011, defined by the so-called „*demographic erosion*”, characterised by a continuous decrease, with approximately 1000 inhabitants, especially due to low birth rates and high mortality rates, plus outmigration, leading to a descending evolutionary curve (tables 1 and 2). The territorial distribution of population was analysed at administrative level, having values between 6.4-11.5 inhabitants/km², as well as for the entire territory, where one can observe significant changes, with values between 106.0-687.0 inhabitants/km².

In terms of the population structure per gender, for the three census moments that were taken into account (table 3), there is a slightly higher percentage of males (50.3% in 1992, 50.5% in 2002 and 51.6% in 2011). The second category of structures, age groups (table 4), presented for the last period, show a decrease tendency for young people (0-19 years) from 34.5% in 1992 to 22.2% in 2011, and an increase of adults (20-59 years) from 49.8% in 1992 to 57.3% in 2011, as well as of elderly people (≥ 60 years) from 15.7% in 1992 to 20.5% in 2011.

The third structure category, professional, emphasizes the same trends that can be found at regional and national levels, which is a decrease in actives, from 2975 people, in 1992 to 2425 people in 2002, due to layoffs and lack of employment opportunities (table 5).

The ethnic structure was presented for the following threshold moments (1850, 1930, 1992 și 2011), with a Romanian majority (92.2% in 1850, and 83.3% in 2011), followed by Hungarians (5.0% in 1992 and 14.7% in 2011) and Gypsies (2.7% in 1992 and 1.7% in 2011), data that can be found in table 6.

The last analysis of this study is on religious structure (presented in detail in table 7), which brings forth an atypical case, that is few Greek-Catholic followers (0.4% in 1850, 0.3% in 2011), Romanians being mostly Orthodox (94.3% in 1850 and 82.6% in 2011), while Hungarians and Gypsies are Roman-Catholics (3.2% in 1850 and 8.0% in 2011) and Reformed (2.1% in 1850 and 6.3% in 2011).

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