

## MONOGRAPHIC ANALYSIS OF THE DENSUȘ COMMUNE, HUNEDOARA COUNTY

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***Abstract.** The authors of the paper make a presentation of the natural resources of Densuș commune, starting with its location on the map of Romania and the map of Hunedoara county and continuing with the analysis of natural, demographic, economic, socio-cultural and ecological resources. The main methods used in the research are the analysis and diagnosis of the rural space, observation, and graphic processing. The study ends with the main conclusions drawn from the analysis.*

**Key words:** *analysis, rural monograph, Densuș, rural space*

### INTRODUCTION

The production of a monographic analysis of a locality is an important fact for the life of a community, but also for national history. The historian, researcher, student and teacher must analyse unwritten historical sources, as well as books, studies, articles and periodicals, and study oral testimonies that can provide information about the customs and popular traditions of the locality in question, whether they have been preserved or not. [4,15]

The monograph of a locality is useful because the vast majority of localities in Romania (especially villages) have never been studied in a monographic sense. There are monographs, but they are either very few or they are written without respecting the scientific rules of documentation and writing. [16]

The monograph of a locality is a very complex research [14], which has to include all the areas of the life of this commune, which is based on a titanic work and a long time; therefore, in this paper, the authors will outline a monographic analysis of the commune Densuș, Hunedoara County.

### MATERIAL AND METHOD

The main methods used in this research are the method of analysis and diagnosis of rural areas (multi-criteria analysis), analysis and synthesis, observation, data collection and processing, and data interpretation. The multi-criteria analysis of Densuș is based on seven criteria: physical-geographical, demographic, economic, housing, technical, social and environmental.

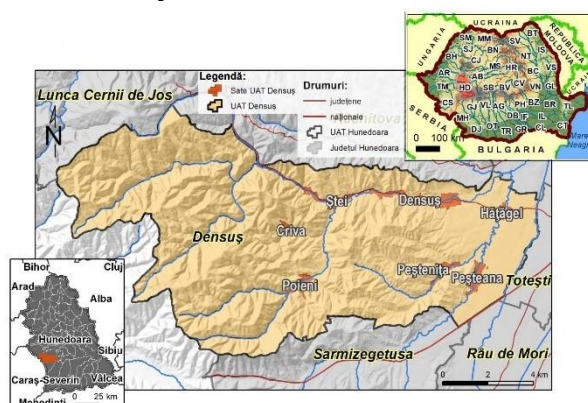
### RESEARCH RESULTS

- **Densuș commune natural environment analysis**

**Brief history.** The history of Densuș is linked to the church of Saint Nicholas. The church was built near Ulpia Traiana Sarmisegetusa, the former capital of Roman Dacia, and the monument can still be seen on the left bank of the Galbene River. Some researches show that the first ruins of the church date back to the beginning of 301, but the current construction dates back to the 12th-13th centuries. The village of Densuș was documented in the last half of the 14th century. [3,6]

**Location and administrative aspects.** The commune Densuș is situated in the western part of Hunedoara County, in Hațeg Depression, about 57 km away from the town Deva and 13 km away from Hațeg. [13] The territory of the commune borders in the north

the communes Lunca Cernii de Jos, Răchitova and General Berthelot, in the east the communes Totești and Rîu de Mori, in the south the communes Sarmisegetusa and Bucova, belonging to Caraș-Severin County. [6]



**Figure 1 Location of Densuș commune, Hunedoara county and surrounding villages**

Its geographical position, in a depressed area, makes it easily accessible. The commune Densuș is crossed by the national road DN68 Totești-Hățeg and by the county road DJ 687 Densuș-Totești, which is modernised and asphalted. On this road, the distance to the town of Hățeg is 18 km. [11]

The villages are connected by paved communal roads, except for the road to Lunca Cernii de Jos. Poieni is the village furthest from the centre of the commune. ( tab.1)

**Table 1**

**Distance from the commune residence**

No. Crt	Village component	Distance from the commune residence (Km)
01	Densuș	-
2	Peșteana	4
3	Peștenița	5
4	Hățăgel	3
5	Ștei	6
6	Poieni	10
7	Criva	8

Source: Own processing after Urban Planning Service Densuș City Hall, 2022 [9]

• **Natural resources analysis**

**The relief.** The study area is located at the foot of the Poiana Ruscăi Mountains in the northwest, bordering the Hățeg depression in the southeast. The relief of the commune is dominated by high altitudes above 1000 m, corresponding to high hills or mountainous areas, mostly forested, as well as by low areas with altitudes between 400-500 m and below 400 m, found in the depression area.

The highest peaks found in Densuș commune correspond to the piedmont hills or mountain areas, which are part of the area dominated by the Poiana Ruscai Mountains: Ocoalelor Peak (1093.9 meters), Ferigosului Peak (1045.5 meters) and Cireșului Peak (1004.6 meters).

The lowest altitudes are found in the villages of Peșteana and Hățăgel, and the highest altitudes are in the villages of Poieni and Criva at the contact with the Poiana Ruscăi Mountains.[2]

**Climate.** The Densuș commune has a temperate-continental climate with submontane characteristics. Frost days occur towards the end of October and at the latest at the end of April.

The climate of the study area is characterized by mild winters and long and warm summers, it can be said that autumn also maintains its presence for several months before the first frost, spring is relatively short with transitions from cold to warm seasons and vice versa.

The average precipitation regime is quite rich, approx. 600-650 mm/year, with rain falling in July and August, and heavy downpours dominated by heavy thunderstorms or hail, characteristic of mountain areas.

The annual temperature recorded at the Păclișa weather station is about 10.7 °C. In the area of Densuș, the annual temperature is much lower due to the influence of the mountainous area. The analysis shows that July has the highest temperatures of 20.1 °C, and the lowest in January with -2.4 °C, resulting in a thermal amplitude of 22.5 °C.[2]

Table 2

Average monthly temperatures at the Păclișa weather station (1980-2002)

Months	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	Annual
Temperature (°C)	-2.4	-1.2	4.5	9.3	13.7	17	20.1	18.1	14.5	9.4	4.2	1.5	10.7

Source Păclișa meteorological station [8]

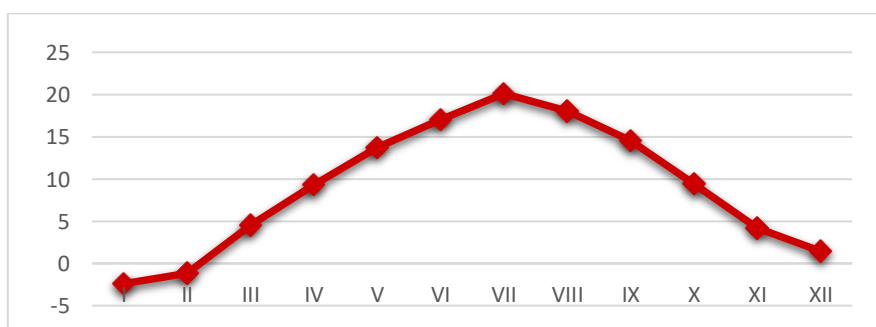


Figure 2 Average monthly temperatures at the Păclișa weather station (1980-2002)

Data source: Păclișa meteorological station, 1980-2002 [8]

Of all the seasons, the highest rainfall is recorded in summer (93.4 mm in July), with twice as much in winter. The lowest rainfall, of course, is in winter (27.9 mm in February).

**Soils.** 73% of the largest area of Densuș consists of acid brown soils belonging to the cambisol class, located in the southwestern part of the commune. These soils are formed on acidic, weakly mineralised rocks, but favour the development of beech, spruce or beech and spruce forests at altitudes above 700 m.[2]

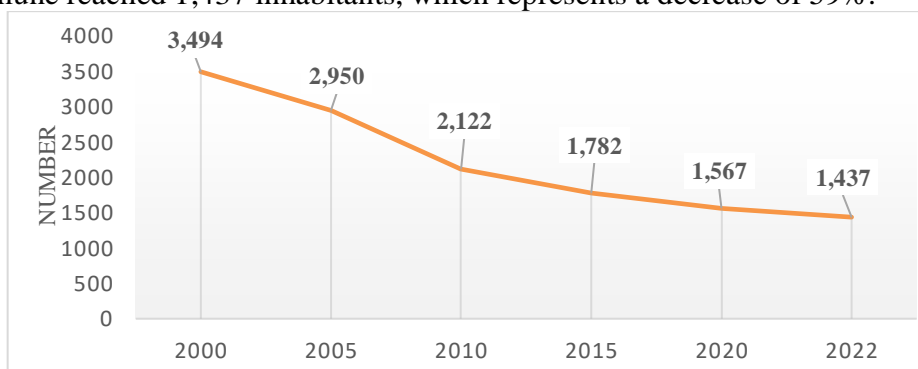
**Hydrography.** The hydrographic network of the commune is quite rich. The commune is crossed by the Galbena River with its tributaries (Ciumața, Fierului, Poieni, Zeicani, Floruș, Zlatina and Hobîței) and by Râu Mare. The Galbena River flows through the villages of Ștei and Densuș and is formed by the confluence of two tributaries: the Lacuri River and the Poieni River. The presence of high-quality groundwater has favoured the use of its properties and the needs of the people for domestic purposes, water supply in most of the villages is made by wells. It can be said that the relationship between the habitat units and the hydrographic network is good since most of the settlements are located along the valleys.[5]

**Vegetation.** The main wood species that cover the entire area of the municipality are beech, ash, oak, hornbeam, birch and forest hair, and as hardwoods, we also find conifers: pine and spruce. In the coniferous forests, there is vegetation represented by thuja. The herbaceous flora consists of hawthorn and species of clover, and in the higher areas, there is a species of anemone. [5]

**The fauna.** The fauna, which has led to a great interest in hunting in the forests surrounding the commune, is concentrated in the mountain units: wolf, wild boar, deer, and roe deer. Many lynxes have been found in the very dense forests, but crossed by man. [1] Several birds are also found in the commune: the southern eagle, the raven, the woodpecker, the black crow, the pheasant, the stork, the hawk, the owl, and the crow. [6] As for the hydrographic network, fish species such as clean, trout and apple fish are found here.

**Demographic resource analysis**

*Population development.* According to the statistical data available, the villages of Densuș commune have been experiencing a decrease in population. If in 2000 the population of the commune was 3,494 inhabitants, of which the highest number was in the residents of the commune (809) and the lowest in the village Criva (198), in 2022 the total population of the commune reached 1,437 inhabitants, which represents a decrease of 59%.

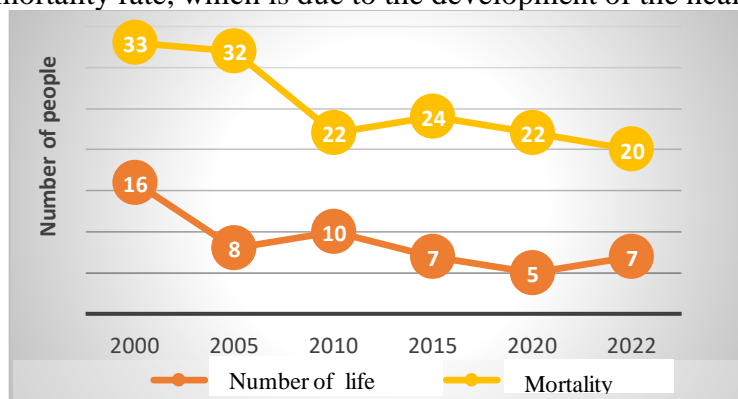


**Figure 3 Population evolution in Densuș from 2000 to 2022**

Source: Own processing after tempo online, 2022 [12]

*Natural population surplus.* **The number of life births in Densuș has decreased drastically, since in 2000 there were 16 newborns, while in 2022 there was a decrease in the number of live births, i.e. 7 live births. The migration of the population to the city, but also European countries, in search of a better life, are the main causes that led to the decrease in the population of the commune Densuș.**

According to the analysis by year, the mortality rate in the municipality of Densuș is constant, varying between 33, 24 and 20 deaths from 2000 to 2022. In 2022, there is a decrease in the mortality rate, which is due to the development of the health system.



**Figure 4 Change in birth and death rates between 2000 and 2022**

Source: Author's calculations based on online tempo, 2022 [12]

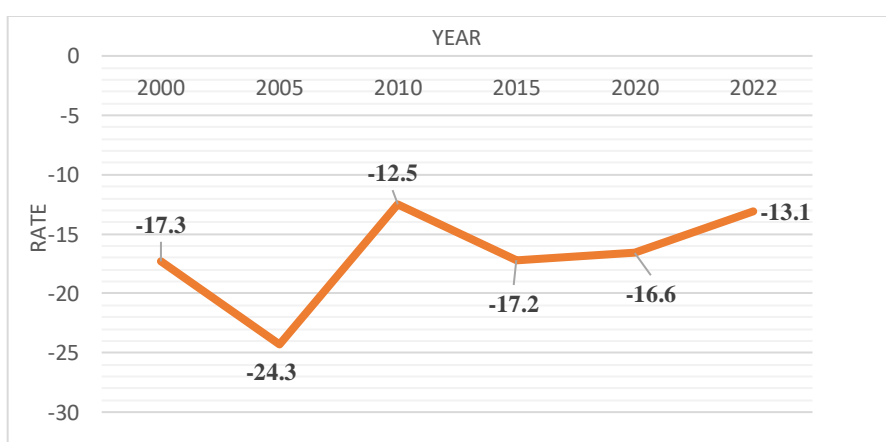
From a demographic point of view, the natural balance of the municipality was negative. According to the 2000 census data, the balance was -17.3‰ and in 2022 it was -13.1‰, due to the ageing of the population and the high number of deaths and illnesses in the countryside.

**Table 1**

**The natural balance of Densuș commune**

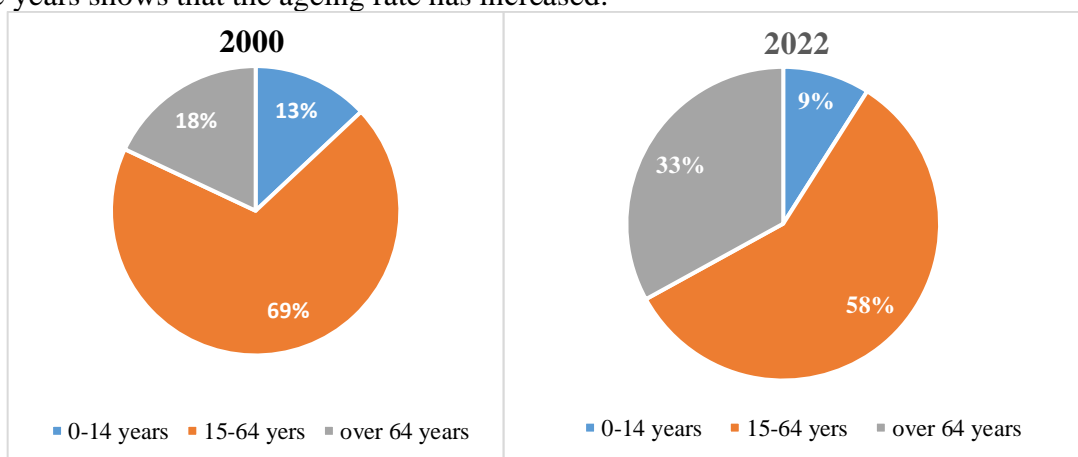
Year	2000	2005	2010	2015	2020	2022
<b>N (‰)</b>	16,5	8,2	10,3	7,6	5,5	7,6
<b>M (‰)</b>	33,8	32,5	22,8	24,8	22,1	20,7
<b>Bdn (‰)</b>	-17,3	-24,3	-12,5	-17,2	-16,6	-13,1

Source: Own processing after tempo online, 2022 [12]



**Figure 5 Natural balance of Densuș commune in the period 2000-2022**

*Population structure.* Regarding the structure of the population by main age groups in the period 2000-2022, the largest age group is 15-64 years. The lowest values are recorded for the age group 0-4 years, which is 14% in 2000 and 9% in 2022. A comparison between the years shows that the ageing rate has increased.

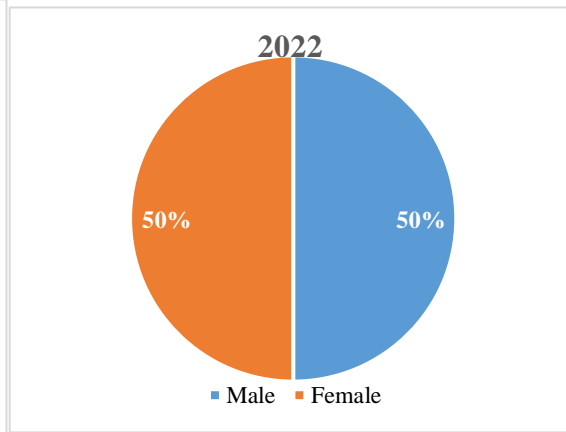
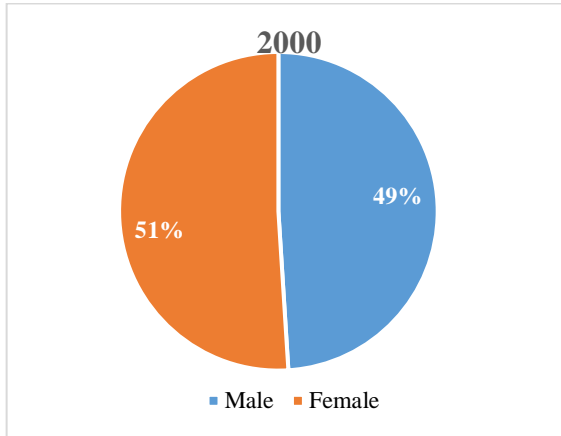


**Figure 6 Age structure 2000**

**Figure 7 Age structure 2022**

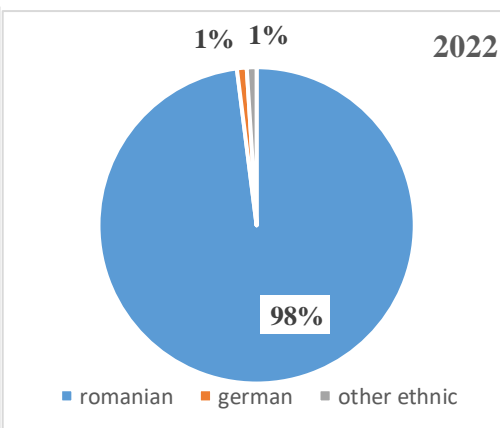
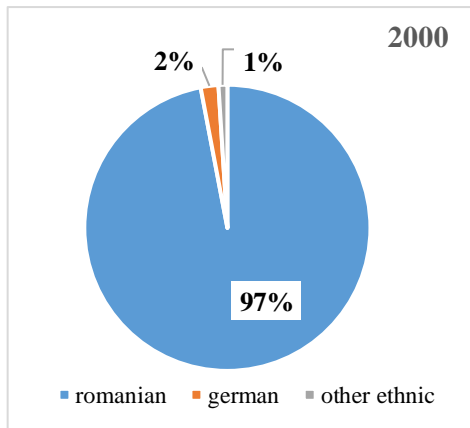
Source: Author's calculations based on online tempo, 2022 [12]

According to the graphs below, the gender structure is quite similar, with a very small difference in 2000, when the female population was 51% and the male 49%. In 2022, the two sexes will be equally represented.



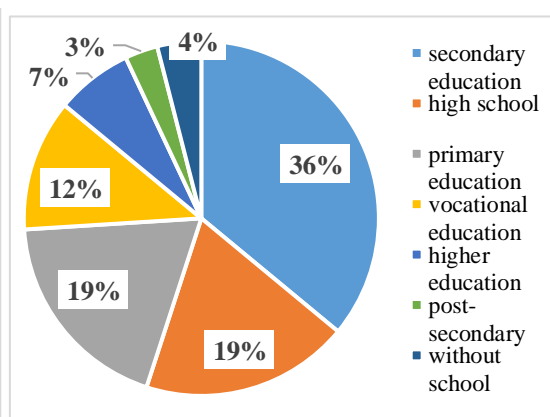
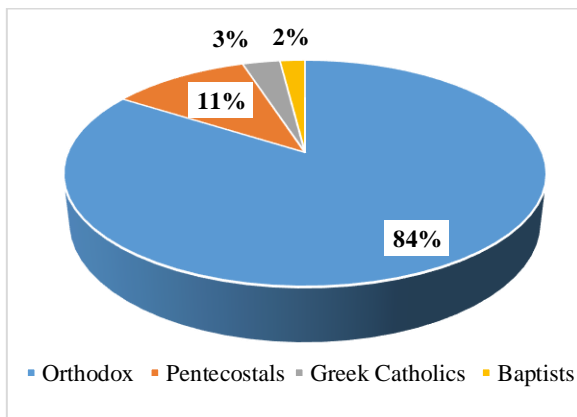
**Figure 8 Population Structure by Sex in 2000** **Figure 9 Population Structure by Sex in 2022**  
 Source: Own processing based on online tempo, 2022 [12]

In 2000, the total population of the commune was 97% Romanian, and in 2022, the share reached 98%, followed by 1% of German origin and 1% of other ethnic origin.



**Figure 10 Ethnic structure in 2000** **Figure 11 Ethnic structure in 2022**  
 Source: Own processing based on online tempo, 2022 [12]

According to the denominational structure, the majority of the inhabitants of Densuş are Orthodox (84%), followed by Pentecostals (11%), Greek Catholics (3%) and the fewest, Baptists (3%).

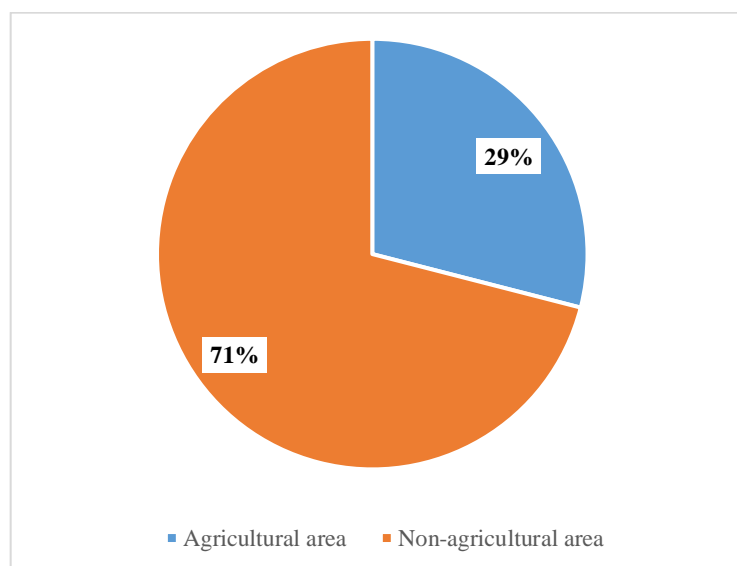


**Figure 12 Denominational structure of the Population, 2022** **Figure 13 Educational attainment of the population, 2022**  
 Source: Authors' calculations based on online tempo, 2022 [12]

According to the latest census, secondary education is the most important level of education with 36% of the total population of 1451, followed by primary education with 19% and vocational education with 12%.

**Rural economic activities.**The dominant socio-economic function of Densuș commune is agriculture and forestry.

*Agriculture and forestry.* **Of the total area of the administrative territory, the agricultural area, which belongs to the land structure of the area, is 3972 ha, i.e. 29%, and the non-agricultural area is 9640 ha, i.e. 71%.**



**Figure 14 Structure of the land base in 2022**

*Data source: Internal processing based on online tempo, 2022 [12]*

In the highest areas of the commune, there are natural grasslands, with low productivity, used only for grazing. Most of the pastures and orchards are located in Peșteniței Valley and Valea Lupului, while in the southern part, where it is warmer and brighter, there are orchards of fruit trees, namely plums, walnuts, cherries, apples and sour cherries. [3]

Crops are cultivated all over the area, but especially in the villages Poieni, Criva and Ștei, where the main crops are maize, wheat and alfalfa. Arable land is located in the eastern part of the commune, where the soil is fertile and facilitates the growth of crops.

In terms of land use, the largest area is occupied by forests, as shown on the map above, in the central western part. Deciduous forests can be found in almost all the localities of the commune, and coniferous forests in the highest areas, the Poiana Ruscă Mountains.

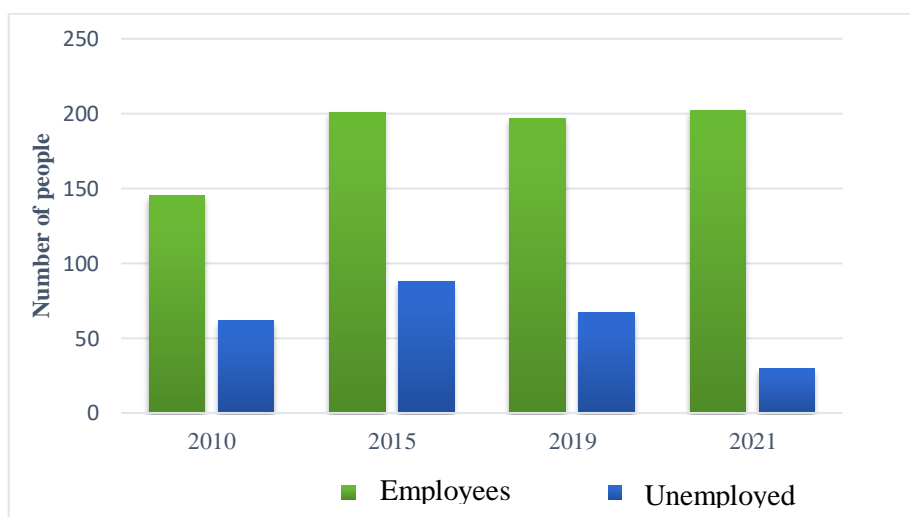
Forestry is an important economic resource, as it provides employment for the inhabitants of the commune and is the main factor for the economic development of the area.

According to the Agricultural Register of Densuș City Hall, in 2022 the largest cultivated area is maize, which represents 45% of the total area, followed by potatoes at 20%, wheat at 17%, fodder plants at 15% and oleaginous plants (rape) with 3%.

*The industry.* **Since 2010, the commune Densuș has been distinguished from an economic point of view by the establishment of ADO farms with a mixed agricultural specialisation, focused on livestock and vegetables, operating in the village Peșteană. At the same time, in 2015, the milk factory was opened, whose products are supplied under the same brand, ADO. The quality of all the products is guaranteed by an analytical laboratory and they can be sold in the 5 ADO shops in the county.**

The commercial sector is characterised by the presence of two mixed stores, which aim to obtain all the products necessary to satisfy the needs of the human community in optimal conditions: S.C. MESTECANEAN S.R.L. and S.C. LA DOI PAȘI S.R.L.

**Services.** According to the socio-economic structure and statistics analysed in the period 2010-2021, it can be observed that the number of employees has increased, reaching a number of 202 people working, and the number of unemployed is decreasing. This decrease is due to the appearance of investors on the market and an increase in the number of jobs.



**Figure 15** Trend in the number of employed and unemployed between 2010 and 2021

*Data source: Authors' calculations based on Tempo Online, 2022*

### **Infrastructure of the village and surrounding areas**

Access and transport infrastructure for people and goods

The commune is connected to the town Hățeg by the national road 686 Densuș-Totești in the east and by the national road DN68 Totești-Hățeg. County road 687 (Totești-Densuș) is completely asphalted.

The distance in kilometres between Densuș and the surrounding villages: Densuș-Peșteana= 4 km; Densuș- Peștenița= 5 km; Densuș- Hățegel= 3 km; Densuș- Ștei= 6 km; Densuș- Poieni= 10 km; Densuș- Criva= 8 km.

**Other public infrastructure networks.** From the analysis of the data provided by the Town Hall, it can be seen that the commune has neither drinking water treatment plants nor wastewater treatment plants.

Until 2021 there was no sewerage system in any of the villages, but it was later added.

There are no special areas in the municipality for waste, which often ends up on the platforms of individual households.

The gas network does not exist, but the electricity network is 100%. Households are mostly heated by solid fuel stoves and hot water is provided by electric boilers

### **Presentation of socio-cultural resources**

**Education and training.** In the school year 2021-2022, the commune Densuș operated the secondary school Densuș, to which the kindergarten Densuș and the primary school Peșteană belong, with 9 pupils.

The teaching staff of the school consists of 9 teachers, 2 kindergarten teachers and 3 teachers.

The school has 9 classrooms; 2 laboratories (chemistry-biology and informatics); 17 computers; 1 football pitch.

The conditions in which the schools and kindergartens operate are adequate, and both schools have health permits. They are heated with wood during the cold season. The local administration has minibuses to transport pupils from other surrounding villages.

**Health.** The commune has a dispensary, a doctor's surgery in the Peșteana school and a pharmacy. A family doctor and two nurses work at the dispensary, and 3 nurses work at the school in Peșteana.

For cases requiring specialist care that the dispensary cannot provide, the local hospital in Hațeg is used. About 1400 people are on the list of the family doctor.

**Other public facilities.** The Densuș Town Hall is located in the centre of the commune and controls all the activities of the commune.

- Three municipal libraries, currently hold about 8649 volumes.
- Cultural centres (Densuș, Ștei, Poieni, Hățăgel, Peșteana and Peștenița) with a capacity of 200-300 seats, where cultural and artistic activities are organised.
- The commune of Densuș is enriched by several restaurants, most of them Orthodox. The most famous is the historical monument of the Church of St. Nicholas in Densuș, located on a small plateau above the village of Densuș, which is also a World Heritage Site. [10]
- The Reformed Church of Peșteana is a living testimony to the history of this area, dating from the second half of the 16th century, and is a reminder of the Christians who founded it. The date of construction of the Orthodox Church of Peșteana is unknown; today it has been completely restored, changing not only its external appearance but also its plan and internal structure. The old church has been enlarged and part of an adjoining building has been incorporated into the new one. [7]

## CONCLUSIONS

After the analysis of Densuș, the authors come to the following conclusions

- From a physical-geographical point of view, the commune Densuș benefits from the existence of outstanding natural landscapes, as well as from the presence of historical monuments and religious tourist attractions.
- Regarding the population, there is a demographic trend of ageing, a general decrease in the birth rate and a decrease in the population due to migration;
- Economically, the general standard of living and quality of life in the municipality is relatively low and measures are needed to diversify economic activities.
- The technical and sanitary infrastructure is poorly developed, which discourages potential investors.
- Poor promotion of the cultural heritage, landscape and various tourist routes and attractions.

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