

SOCIO-DEMOGRAPHIC CHANGES IN THE DYNAMICS OF SMALL TOWNS IN ROMANIA

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Abstract

The cities from Eastern Europe have experienced profound changes in socio-economic terms after the change of political regime in 1989. On the one hand, the demographic decline, along with a series of other factors, has led to a profound economic decline. The objective of the study is represented by the territorial diagnosis in a small town marked by profound transformations. The study area is the municipality of Adjud, located in eastern Romania, with a population of under 20,000 inhabitants. The methods used consist of field observations, the processing of statistical data and specific indicators to characterise the socio-economic changes registered after 1990. The results include demographic and economic analyses, as well as correlations between indicators, providing an overview of this small town with a poorly diversified economy.

Key words: territorial changes, demographic decline, Eastern Europe, economic activities

Introduction

Research on territorial dynamics in Romania reveals, in the long term, an increase in regional disparities. Residential spaces expanded after 1990, but with significant inequalities and deficiencies, especially in rural areas, in terms of services offered, access to utilities. Changes in urban dynamics in the post-communist period, reflected in changes in real estate markets, economic policies and social transformations, highlighted the complex interaction between economic development, tourism and territorial inequalities, requiring differentiated policies to improve living conditions (Zaman et al. 2013; Vîrdol et al. 2015; Cehan et al. 2019; Lăzărescu et al. 2020). Territorial inequalities are strongly related to demographic imbalances in that industrial development, infrastructure, and better living conditions have driven internal migration or even external migration (Andersen et al. 2020; Lăzărescu et al. 2020).

Economic disparities in Romania are evident across several development regions, with lower wages despite GDP growth in the North-East, North-West, South-East, South-Muntenia and South-West Oltenia regions. These aspects make Romania a country of labour migration in search of better-paid jobs (Fina et al. 2023). Economic development in Romania is highly uneven, with regions such as Bucharest-Ilfov experiencing higher economic growth than other areas. This concentration of economic activities in certain regions leads to pronounced socio-economic disparities. Rural areas face challenges such as inadequate infrastructure, limited economic opportunities and insufficient social services, which exacerbate the effects of demographic imbalances (Surd et al. 2011; Goschin, 2015). An important demographic policy measure is also adapting to labour market needs to prepare the workforce and reduce emigration (Chivu et al. 2020; Barišić et al. 2024). Labour migration in Romania is driven by many socio-economic disparities, low wages, lack of employment opportunities and high unemployment rates, leading to a significant emigration of young men. This migration has led to a labour shortage and economic restructuring challenges. The objective of the study is represented by the territorial diagnosis in a small town marked by profound transformations. The study area represents the municipality of Adjud with a population of under 20,000 inhabitants, located in the east of Romania.

Materials and Methods

Study area

Adjud municipality is located in the northern part of Vrancea county at the intersection of the parallel of 46°10' lat. N and the meridian of 27°17' long. E and borders the following localities: north - Sascut and Tătăraști localities in Bacău county, Homocea locality (east) and Ploscuțeni locality (southeast) in Vrancea county, Poiana locality (Galați county), Pufești locality (southwest), Ruginești locality (west) in Vrancea county and Urechești locality (Bacău county). It is an important city connecting the E85 (DN2) and DN11A (Bârlad - Adjud - Onești) roads (Fig. 1).

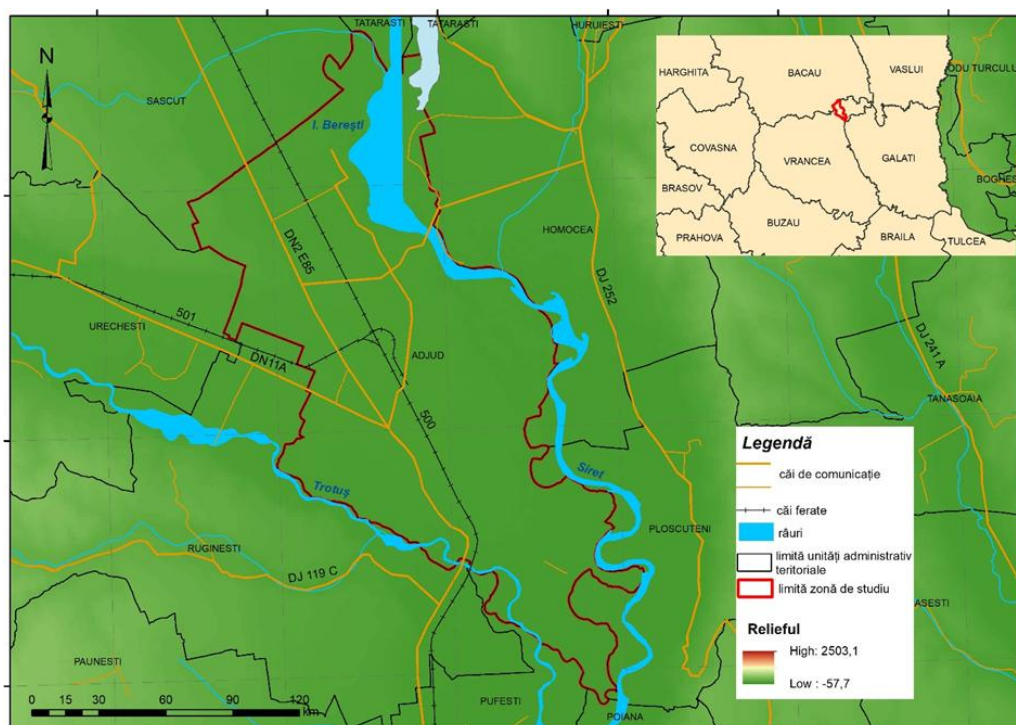


Fig. 1: The physical and geographical position of the municipality of Adjud

The research methods used in the development of this article are based on the use of already established methods (documentation, analysis) and the combination with modern analysis methods (GIS method, cartographic interpretation and analysis). To achieve demographic dynamics, a database was created from the National Institute of Statistics – Tempo Online containing data on social structure (population and demographic structure, natural population movement and migratory population movement) for the period 1990-2023. Territorial dynamics involved GIS analysis and processing of vector data images obtained from the Copernicus database, analysed and processed using the ArcGIS program.

Socio-demographic changes and territorial dynamics of Adjud municipality

In the municipality of Adjud, a continuous decrease in population is observed. The highest number of inhabitants was recorded in 1997 (21,213 inhabitants) and subsequently followed the same continuous downward trend, so that in 2023 the population of the municipality of Adjud reached 19,443 inhabitants. During the analysed period, The population of the municipality on the Trotuș River decreased by 1,169 inhabitants. According to INS data on the evolution of the number of arrivals and departures from the municipality of Adjud, there is a clear increase in departures (656 people) compared to the number of arrivals (637 people) since 1990. It is worth noting that the number of people who left is much higher compared to the number of arrivals; we can deduce socio-economic vulnerabilities (lack of jobs, low salaries, difficulty finding a job). Secondly, there are increases in the number of arrivals in the municipality: The first wave, from 1993 to 1995, saw 492 arrivals, as people moved from villages to the city. The second wave is related to Romania's integration into the EU (some people from the Republic of Moldova used Romania as a transit country to reach the EU more

easily) and the economic crisis of 2008 when many residents were forced to return to the country as the demand for labor in the countries assimilating migrants decreased (Stanculescu and Stoiciu, 2012). The general trend of internal migration reveals a low number of arrivals and a high number of departures that affect the demographic profile of the municipality in the long term. (Fig. 2).

Analysing the dynamics of land use and cover from 1990 to 2018, we can observe several changes in territorial dynamics that have modified the geographical landscape. Beach, meadow, and dune areas in the Siret riverbed were transformed into secondary pastures.

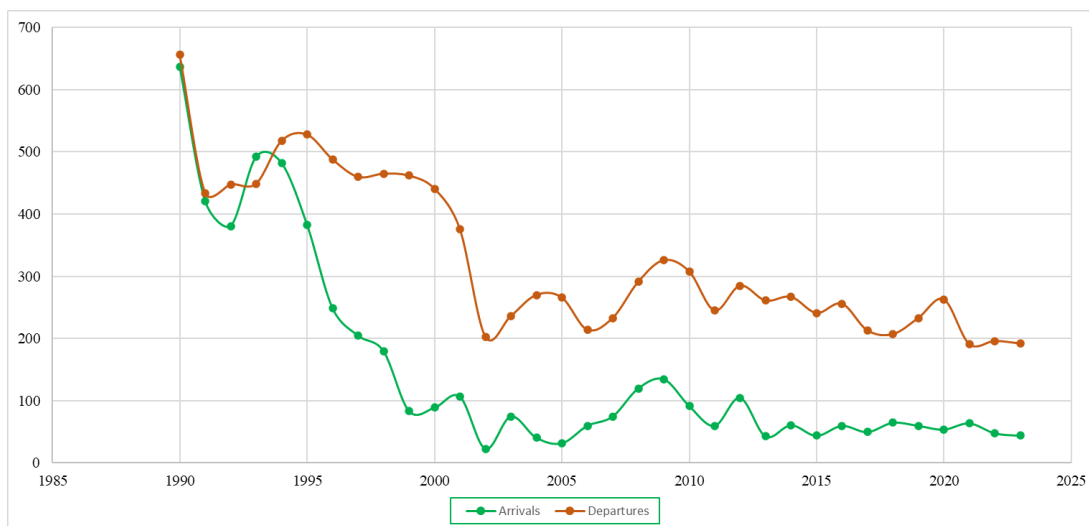


Fig. 2: Dynamics of migratory flows arrivals/departures in the municipality of Adjud 1990 - 2023

Urbanisation/Industrialisation is present after the 2000s, when certain areas of arable land were replaced by the emergence of commercial/industrial units (Fig. 3). Wetlands (swamps) were transformed into predominantly agricultural lands and secondary pastures. Natural grasslands were converted into mineral extraction areas, secondary pastures, and predominantly agricultural lands mixed with natural vegetation. It is noted that five level 1 categories (CLC classification) are individualised, namely artificial surfaces, agricultural surfaces, forests and semi-natural areas, wetlands and water bodies. The decrease in the surface area of watercourses from 10 ha in 1990 to 6.8 ha in 2018 is noticeable. In 1990, we can identify urban spaces and rural spaces (403 ha), which increased by 2018 to 521 ha (the entry of certain agricultural areas into the built-up areas of the localities). The southwest, east, and northeast parts are flanked by the Trotuș and Siret rivers, covering 10.5 ha. In 2018, approximately 50.4% of the total area of the Adjud municipality was occupied by non-irrigated arable land, a decrease from 51.3% in 1990.

Around the municipality of Adjud and its component localities, a distribution of industrial and commercial units is observed in an increasing trend as a result of urbanisation, from 85 ha in 1990 to 132 ha in 2018 (Figure 3a-e). The significant increase is observed starting in 2006. The southern and eastern parts of the territory of the municipality of Adjud are occupied by agricultural areas: vineyards (85 ha) in stagnation during the period 1990-2018. Secondary pastures with an increasing trend from 146 ha in 1990 to 962 ha in 2006. Agricultural lands mixed with natural vegetation register a significant increase from 7 ha in 1990 to 182 ha in 2012.

Discussion

The analysis of demographic dynamics in the municipality of Adjud highlighted structural changes in terms of the evolution of the number of inhabitants. The first aspect highlighted is the decrease in the number of inhabitants between 1990 and 2023, as well as in the main demographic indicators (birth rate, mortality), an aspect noted by previous research (Muntele et al., 2021; Stângaciu and Harja, 2024).

Economic factors (low income, living expenses, lack of a stable job), socio-cultural factors (women's economic independence, the precarious economic situation of young families), political factors (the pro-natalist policy of the communist period that led to a forced increase in the birth rate and after 1990 there was a sudden decrease) influence the evolution of the birth rate. The changes in the structure of the territorial dynamics of the municipality of Adjud were quite reduced after 1990, this fact being also highlighted by the analysis of CORINE land cover data.

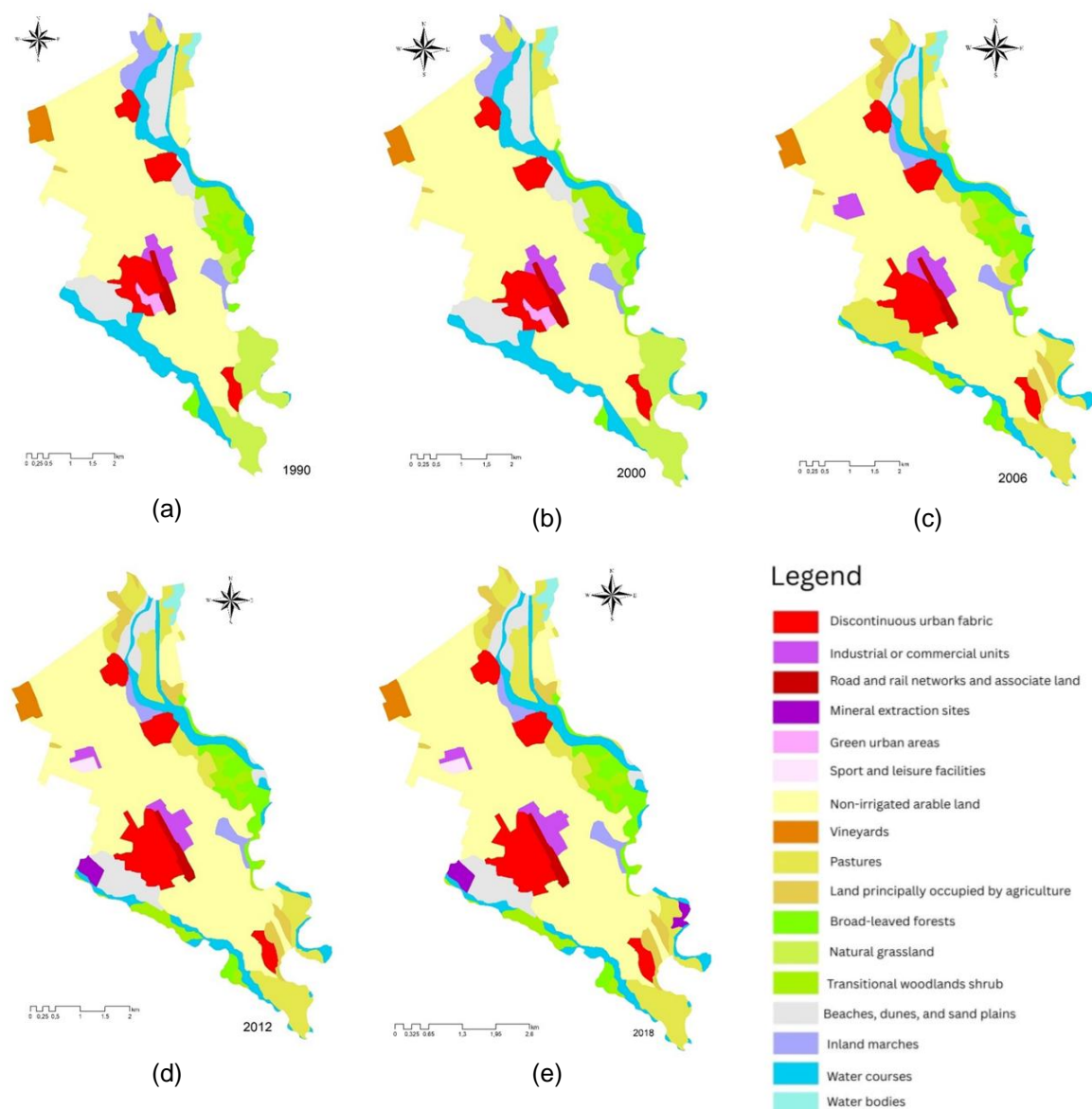


Fig. 3: Analysis of territorial dynamics of Adjud municipality – using Corine Land Cover and Land Uses data. (a) 1990; (b) 2000; (c) 2006; (d) 2012 (e) 2018

An aspect noted following the analysis of territorial dynamics is given by the fact that certain industrial spaces are in continuous degradation and have not undergone improvements, this aspect being determined by the lack of investments and the materialisation of projects. In general, the insufficiency of financial resources leads to the instability of the social system, the educational and health system and which subsequently strongly influences the demographic dynamics and territorial dynamics. (White and Watrel, 2013; Bănică et al. 2020; Eva et al. 2021)

Conclusions

In summary, urban shrinkage, population ageing, and regional disparities influence Adjud city's demographic and territorial dynamics. These trends underscore the need for nuanced urban policies and the prevention of depopulation, demographic ageing, and the migration of young people.

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Souhrn

Východoevropská města prošla po změně politického režimu v roce 1989 hlubokými socioekonomickými změnami. Na jedné straně demografický pokles spolu s řadou dalších faktorů vedl k hlubokému hospodářskému propadu. Cíl studie představuje územní diagnóza v malém městě poznamenaném hlubokými proměnami. Studovanou oblastí je obec Adjud, která se nachází ve východním Rumunsku a má méně než 20 000 obyvatel. Použité metody spočívají v terénním pozorování, zpracování statistických údajů a specifických ukazatelů, které charakterizují socioekonomické změny zaznamenané po roce 1990. Výsledky zahrnují demografické a ekonomické analýzy a korelace mezi ukazateli, které poskytují přehled o tomto malém městě s málo diverzifikovanou ekonomikou.

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