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USE OF LOCAL RESOURCES AND SUSTAINABLE DEVELOPMENT PROSPECTS IN NĂDRAG COMMUNE, TIMIȘ COUNTY

MĂNESCU CAMELIA[1], BRAD IOAN[1], MERCE IULIANA[1], SICOE-MURG OANA[1], PASCARIU ANKA[1]

[1]University of Life Sciences "King Mihai I" from Timisoara, Faculty of Management and Rural Tourism, Timisoara, Romania

Abstract: *The sustainable development of rural communities depends on their capacity to harness endogenous resources while maintaining a balance between economic, social, and environmental objectives. This study analyzes the development potential of the Nădrag commune, in Timiș County, by examining its natural setting, demographic trends, economic activities, infrastructure, and opportunities for economic diversification. The research uses documentary analysis, descriptive statistics, temporal comparison, direct observation, and SWOT analysis. The results indicate a reduction in population, concomitant with demographic aging, the existence of valuable local resources such as forest resources, meadows, mountain landscapes and local heritage that offer opportunities for ecotourism, animal husbandry, local products and rural entrepreneurship, but their exploitation is limited by depopulation, accessibility and insufficient economic diversification. Consequently, the study proposes integrated local development strategies focusing on infrastructure, low-impact tourism, the growth of small enterprises, and heritage conservation. The study highlights the need to correlate investments with community resources and needs*

• Introduction

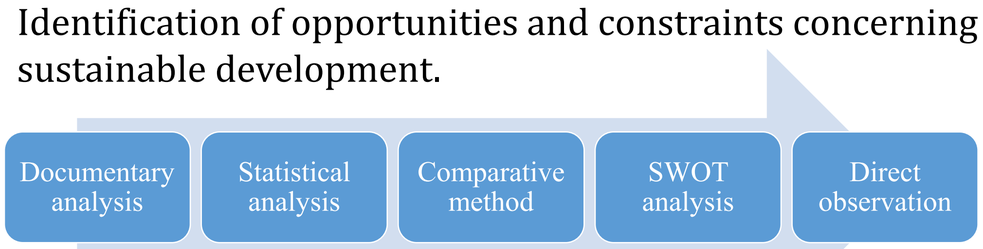
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The purpose of the research is to analyse the development potential of Nădrag commune.

• Material and method

- Case study applied to Nădrag commune, Timiș County.
- Integrated analysis of natural, demographic, economic and social resources.
- Identification of opportunities and constraints concerning sustainable development.



• Results and discussions

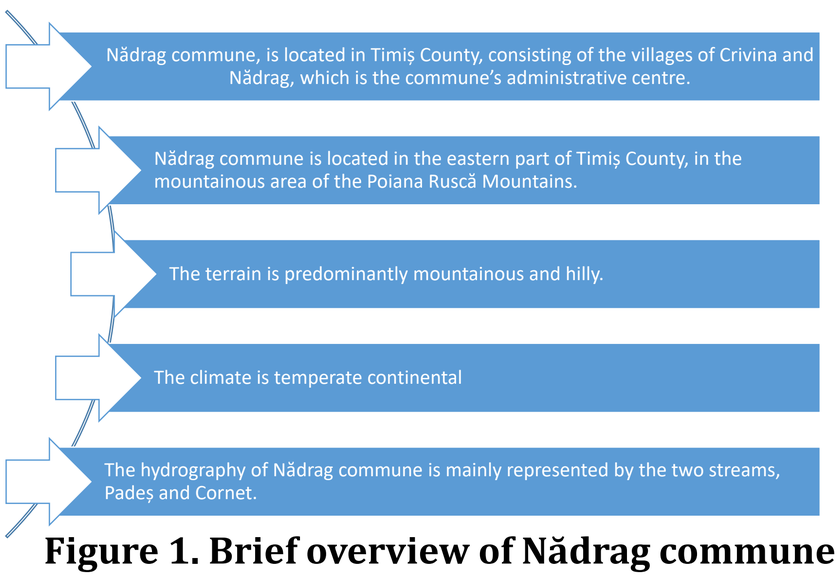


Figure 1. Brief overview of Nădrag commune

The figure 2 highlights the downward trend in the population of Nădrag commune, caused by population ageing and migration than overnight stays; the analysis does not identify the individual reasons for shorter stays.

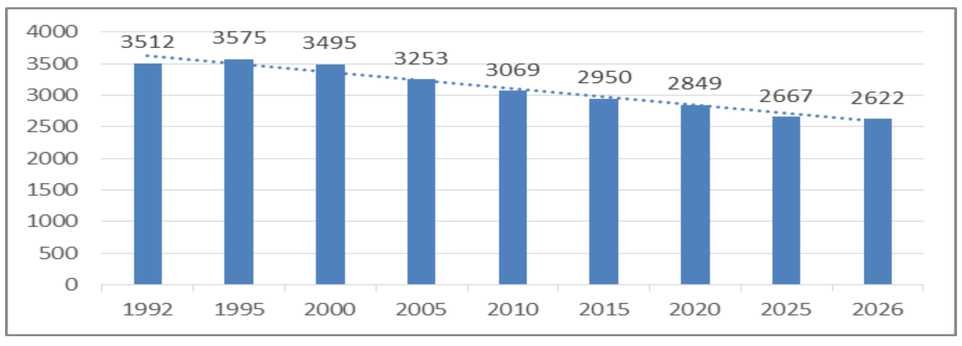


Figure 2. Population trends in Nădrag commune

The population of Nădrag commune is predominantly adult, while the high proportion of people aged over 65 and the low number of young people highlight the process of population ageing (figure 3).

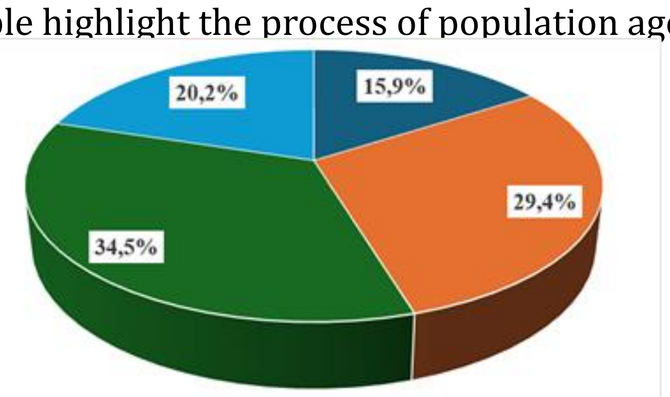


Figure 3. Distribution of overnight stays in the top ten ATUs in 2025 (% of the total for the 19 ATUs analysed).

In Nădrag commune, non-agricultural land accounts for the dominant share (95.3%), while agricultural land represents only 4.7% of the total area. This situation is determined by the predominantly hilly and mountainous terrain, which favours wooded areas, pastures and hayfields over land intended for agricultural crops.

Furthermore, the paper presents the dwellings and way of life in the commune of Nădrag, as well as an analysis of its sociocultural resources.

Following this multi-criteria analysis, a SWOT analysis for the commune of Nădrag was prepared - figure 4.

Strengths	Weaknesses
• Favourable climatic conditions; • Existing natural gas network; • Skilled workforce; • Modernised road infrastructure; • Easy access to the main regional and national transport routes.	• Declining population and population ageing. • Young people migrating to urban centres or abroad. • Lack of accommodation and developed tourism infrastructure. • Absence of a motorway or a direct connection to the high-speed transport network. • Outdated equipment and technology in certain economic sectors. • Limited access to financial and banking services.
Opportunities	**Threats**
• Accessing European funds for infrastructure and local economic development. • Developing agritourism, ecotourism and mountain tourism. • Using natural and cultural heritage for tourism. • Modernising communications infrastructure and digitalising public services. • Supporting local entrepreneurship and small and medium-sized enterprises. • Developing wood-processing and agri-food processing activities.	• Continued depopulation and a shrinking active population. • Climate change and more frequent extreme weather events. • Risk of flooding and degradation of the natural environment. • Reduced investment in rural areas. • Competition from more developed tourist destinations. • Degradation of built and cultural heritage owing to a lack of conservation funds.

Figure 4. SWOT analysis of Nădrag commune

Through the SWOT analysis, the main strategic directions for the sustainable development of Nădrag commune have been identified: - Development of tourism - Modernization of agriculture - Sustainable utilization of forest resources - Modernization of infrastructure and Environmental protection.

• Conclusions

The analysis of the natural setting highlighted that the locality has valuable natural heritage, characterised by extensive forest land, high biodiversity, water resources and an attractive mountain landscape.

The demographic research results highlighted negative trends characteristic of most rural communities in Romania.

In conclusion, Nădrag commune has natural and cultural resources capable of supporting a process of sustainable development.