RELIEF RESTRICTIVENESS OF SMALL TOWNS URBAN DEVELOPMENT. CASE STUDY: MARGHITA

Nemeş Valentin*, Serac Corina*

*University of Oradea, Faculty of Geography, Tourism and Sport, 1 Universită□ii, Oradea, Romania, e-mail: nemes_vali@yahoo.com
*University of Oradea, Faculty of Geography, Tourism and Sport, 1 Universită□ii, Oradea, Romania, e-mail: corinaserac@yahoo.com

Abstract

This study analyses the morphologic circumstances which determined the primary placement of the town, on the one hand, and the relationship between landforms, urban extension, street network, spatial integration and future development of the town, on the other hand.

Marghita holds a privileged geographical position in the Bihor county, easily accessible both by road and railway on the areal giving it a bimodal character. Motorway construction will directly influence the growth of city due to the access to section 3C.

Key words: urban development, small towns, restrictiveness, relief.

INTRODUCTION

Urbanization or urban drift (Roussel, 1970) is a natural growth of urban areas as a result of global change (Alpopi, 2005). Urbanization means a process of intense development and growth of existing cities in an accelerated rate of the number of cities and urban population, which is based on socio-economic and political development of the country (Candea, 2001).

Urbanization, or the shift of population from rural to urban environments, is typically a transitory process. It moves populations from traditional rural environments with informal political and economic institutions to the relative anonymity and more formal institutions of urban settings. That in itself requires institutional development within a country. It spatially separates families, particularly intergenerationally as the young migrate to cities and the old stay behind (Henderson, 2005).

The city of Marghita is located in north-eastern part of Bihor County, at a distance of 60 kilometers from the county seat, Oradea, at 30 km from the Hungarian border and near the limits of the county of Sălaj, respectively Satu Mare (Nemes, 2010).

Regarding the positioning of city of Marghita in relation with the Barcău hydrographical basin the following can be outlined: it is located in the northern part of Barcău corridor, at the contact with Viisoara Hills (Pop, 2005), on the left of the stream of Eger at the confluence of the river Barcău with Eger (Posea, 1997), side at an altitude of 135-140 m. The surface area

of the city Marghita overlaps Marghita Hills (High Plain of Marghita) Toglaciului Hills, Barcău Corridor and of Buduslăului Plain (Nemes, 2010).

MATERIAL AND METHOD

In preparation of this material have been harmoniously combined classical geographic research methods (observation, description, analysis of land) and specific methods of spatial analysis (geomorphological mapping, GIS, 3D analysis of geomorphological profile). As background maps was used the topographic maps Marghita section at 1: 25,000 scale, orthophotomaps, the Land Use Plan of Marghita (PUG, 2005) processed in special software which allow the graphical representation of the dynamics of expansion of urban systems updated with field observations.

RESULTS AND DISSCUSIONS

Specifically, the city administrative area overlaps Toglaciului Hills, and Plain Corridor Barcau Buduslau.

Except the eastern extremity, Marghita overlap the space located at the west of crystal peaks, known as "marginal piedmont hills", with a hilly aspect, broad valleys, but often subdued terraces and slopes subjected to an intense process of glacis phenomena.

Divergent ridges descend westward from 380 m to 200 m altitude. Between Crasna and Santau, the peaks are more oriented to the north and in the Marghitei hills, the main peak, with a length of about 20 km and a width between 0.4 to 7.4 km, is oriented from east to west. The hill interfluve decreases from 370 m in the east at 207 m near Marghita.

Marghita extended in the early stages especially on the eastern and western part of the urban nucleus and less to the north, along the main road, exploiting the most favorable terrain, of terraces.

The maximum extension was done on account of this type of relief (Nemes, 2011).

Due to rapid economic development in recent decades, the city could no longer maintain in the old geomorphological framework, so construction was placed on the surface of the floodplain. During the communist period in the floodplain surface was located a neighborhood with apartment buildings, the dominant regime GF +3, the most severely affected by excess water and subsidence etc. In the alluvial plain in south-western part was located an industrial units and warehouses, leading to elongation of the urban nucleus in this direction (Petrea, 1998).

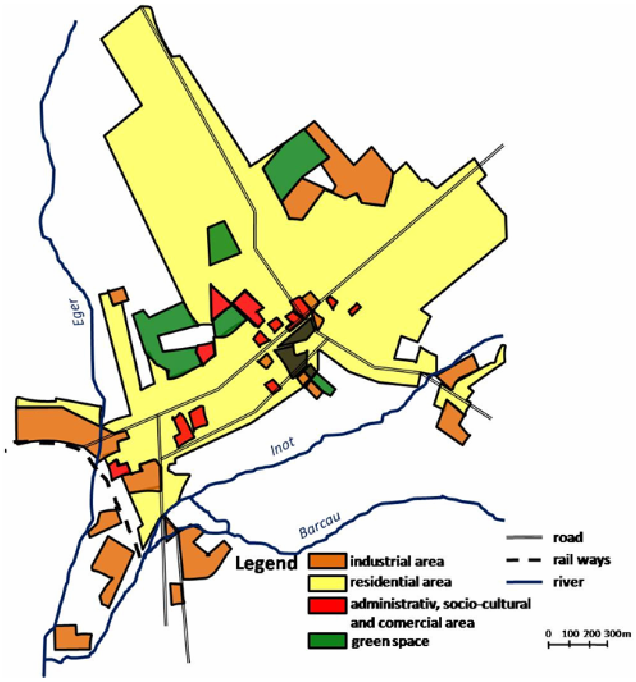

Fig. 1 Functional zoning in Marghita (Nemes, 2010)

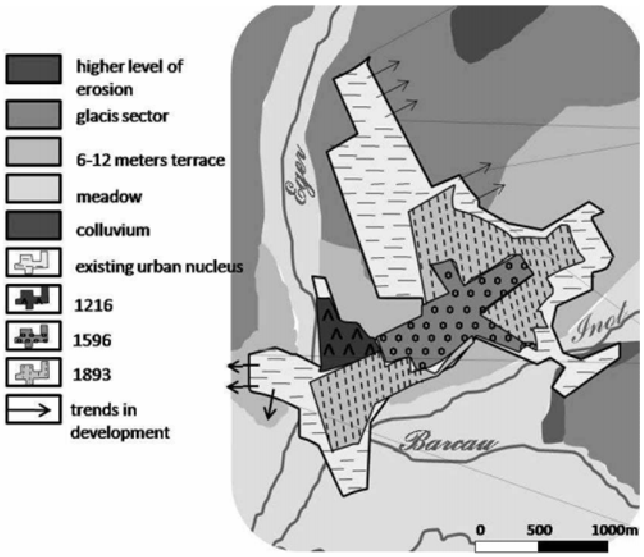

Fig. 2 Marghita. Urban Development and current trends of development (Nemes, 2011)

Current built area occupies various forms of relief, with implications for urban physiognomy. On the hearth there is a general power of 35 m. The surface occupied by the city register an habitat energy about 35 m. Most of

the city overlap terrace 6-12 m. The city great extension, the low horizontal fragmentation, the low landscape energy, has facilitated the development of this type of compact core on this type of surface. Although the most important potential for urbanization is owned on terrace 6-12 m occurs on trends extending into the glacis of the eastern part of the city.

The street and more instead symbolize the city's primary function, interaction and urbanity. If the street knows such permanence is that it presents advantages that make this combined system. The position of a street in the mesh-network status and influence its width, its adaptation to flow, its tenure, the greater or lesser attendance or commercial vitality.

CONCLUSIONS

Relief restrictiveness in the urban sprawl of Marghita city is highlighted in the area occupied by meadows, besides the risk of flooding, another risk is given by the contact with groundwater of construction foundation and finnaly the positioning of the city in a subsidence area is a factor of development limiting.

In the entire built-up area the relief restrictiveness is insignificant and punctualy can manifests limitations duet o the actual geomorphologycal processes.

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