

## GOLDEN VALLEY – NEIGHBORHOOD OF SIBIU, ALBA COUNTY

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**Abstract:** *Golden Valley is an young neighborhood, being the last district built during the communist period between 1982-1986. Although it is not big nor with a special architecture, this sector of the city attracts with some features that take it out of anonymity. Built at the edge of the Dumbrava forest, far from the noise of the center or the pollution from the industrial areas, this part of the city was and remains a marginal neighborhood, for collective constructions.*

*From a morphological point of view, it was built on the bridge of the third terrace of Cibin, at an altitude of 455 - 460 m, in an area with a maximum suitability of relief for constructions, without risk of water erosion of the soil.*

*Urban morphology is represented by a modern urbanism, with free, airy and green spaces between the blocks with a continuous and regular tissue, geometrical.*

*The last district built by the communists and the smaller as size, stands still in the top districts in the country, according to a study made by Storia.ro. The agency D&D Research 2017, ranks it 1st in the country in terms of tranquility and services of transportation and also as 3rd in the country, 1st in the city, in terms of air quality. This part of the city is with the best access to recreational facilities such as green areas, sports and cultural facilities.*

**Keywords:** *Sibiu, neighborhood, urban, morphology, topography*

### 1. Introduction

Sibiu, one of the most beautiful cities in Transylvania, was born over centuries, gradually transforming from a rural settlement around a place of worship into a fortified fortress, then into a medieval city and then to it becomes what it is today, a modern contemporary city.

The municipality of Sibiu, from a geographical point of view, belongs to the Sibiu Delve at the morphological and structural contact with the Cindrel mountains, the Secaş Plateau and the Hârtibaci Plateau, being located at the intersection of the parallel of 45°48' north latitude with the meridian of 24°09' east longitude. (Fig.1)

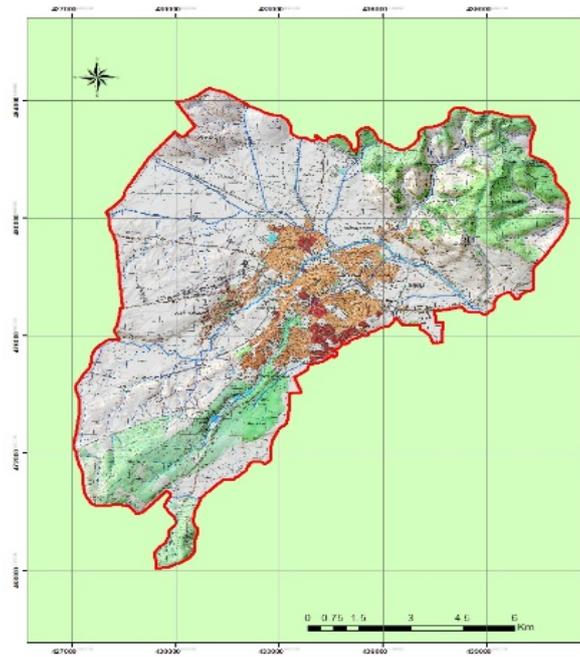


Fig.1 Topographic map of Sibiu

Spatial distribution, shape and size of the settlement are influenced by morphological and morphometric relief by typology of landforms, altimetry, slope, landscape fragmentation, the slopes exposure, etc. (Fig.2)

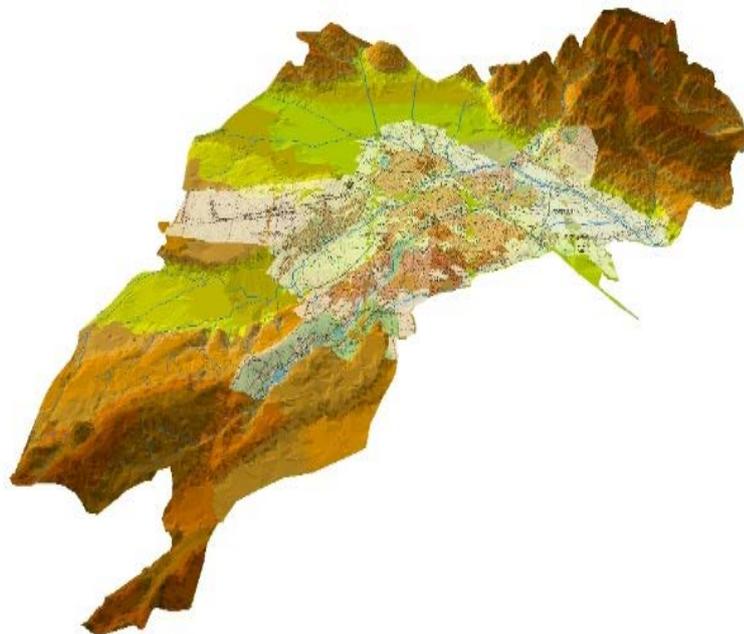


Fig.2 - 3D map of the city of Sibiu

The site to be analyzed is Golden Valley a neighborhood (fig.1), located at a distance of 3.4 km from the city center, in the southwest of Sibiu, being delimited by Dumbrava Forest, Trinkbach brook, Poplăcii Path and Theodor Mihaly streets. It is the last communist district, it is the smallest, most marginal collective construction district of the city before 1989, located at the edge of the forest just 1km away from the city's Zoo.



Fig.3 Neighborhood Golden Valley

During communism, the blocks were symbols of egalitarian housing policy, the houses were built without concern for the comfort of the people, without green spaces and without social spaces. What is special about this neighborhood is the urban planning (11 streets and 64 blocks) and the built area. Even if in 1985 when the construction started it was like a satellite city, bordering Sibiu, not being connected to the city by any important artery, it has now become a residential neighborhood, a small territorial administrative unit, closely connected to both the city center and the marginal areas, industrial, commercial and leisure.

Following the economic development of Sibiu in recent years, a new lifestyle and consumption, resulted in an urban expansion, by expanding the built space, especially the living space. Demand for living space it is also reflected in the architecture of the city, which begins to resemble the period of industrial and demographic boom of the 1960s of the communist period. It goes from spacious apartments of over 100 m to small apartments and studios that do not exceed 50 square meters, which is reminiscent of communist bedroom blocks. The effects of the new residential boom, without a definite long-term urban project, with - crowded blocks without green spaces, parking lots or playgrounds for children, shops, schools, etc., are increasingly felt on the real estate market. The price of a new apartment is lower than that of an old one from the communist period. Based on this we analyzed the suitability of living in a communist neighborhood, in this case Golden Valley, one of the most expensive in Sibiu.

## 2. Materials and Methods

In order to highlight the surfaces suitable for the development of constructive systems, Overlay analysis was used, a specific GIS technique, which combines different thematic layers resulting in new information from a new thematic field, conditioned by an imposed logic, the technique being used to obtain quantitative data.

The areas suitable or less suitable for constructions in Sibiu, from the point of view of relief were highlighted following the analysis of morphometric parameters (hypsometry, slope, slope orientation, depth of fragmentation, density of fragmentation), framing them in 2 classes of suitability for constructions, marked from 1 to 2, with 1 being suitable areas with medium suitability and 2 areas not suitable and with minimum suitability.

The working methodology was based on the analysis of morphometric parameters (hypsometry, slope, slope orientation, fragmentation depth, fragmentation density) which had as finality the realization of thematic maps. The next step was to reclassify the layers into two classes of construction suitability and the Overlay technique performed spatial analysis, using a raster, vector and derivative database to obtain a digital model of the suitability of construction relief.

The morphology of the relief inscribed in the Golden Valley district is characterized by morphometric features that indicate both the geological influences and the modeling conditions. From a morphogenetic point of view, the neighborhood overlaps the third terrace of Cibin, (fig.2) being built on its bridge having an altimetry of 455-460 m, the altitude increasing slightly from North-East to South-West.

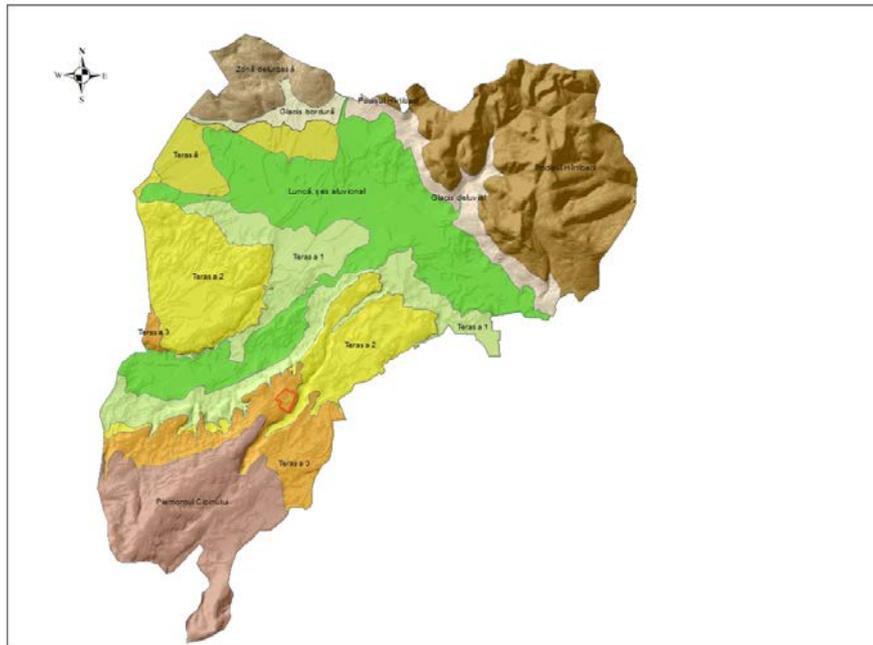


Fig.4 Framed in Territory

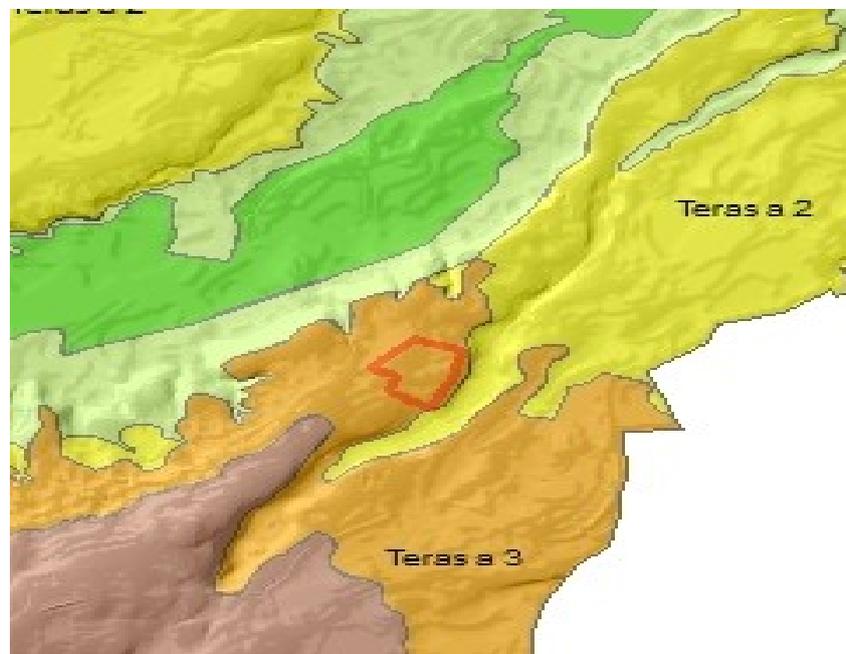


Fig.5 Levels of Relief

To the southeast, the boundary of the built space is naturally barred from the front of the terrace that connects the second and third terraces of Cibin. The Golden Valley (Trinkbach) shaped the bridge of the second terrace, and the clay-clay substrate of the terrace led to the presence of an aquifer of the surface. (Fig.6,7)

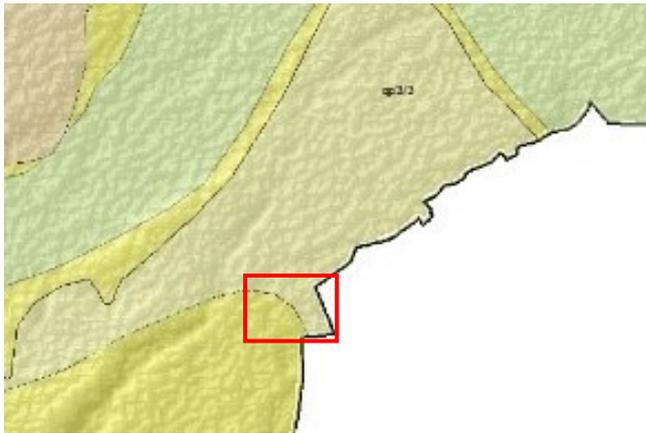


Fig.6 Lithology of the Golden Valley area

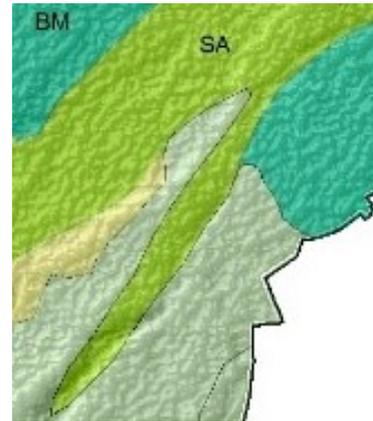


Fig.7 Golden Valley Area Soils

Gradient is reduced (Fig.8) slopes have a slight degree of tilt between 0-3 degrees and the orientation of the slopes are predominantly south-eastern exposure, which favors construction and human activities.

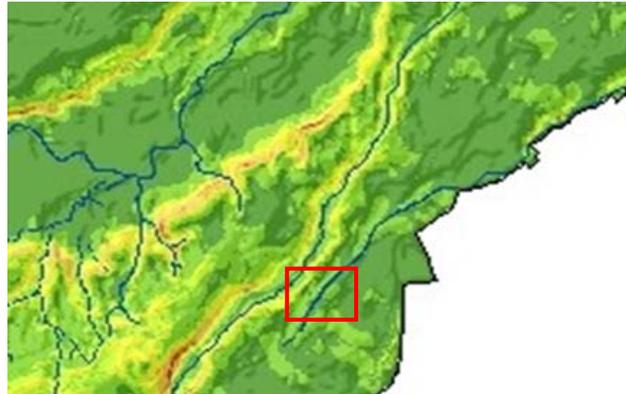


Fig.8 Gradients Relief

The fragmentation density (fig.9) and the fragmentation depth (fig.10) are reduced, with values between 0.5-1 km / km<sup>2</sup> and 22-43 m / kmp respectively, indicating that the geomorphological processes (floods, landslides, collapses, torrential erosion, etc.) are invasive.

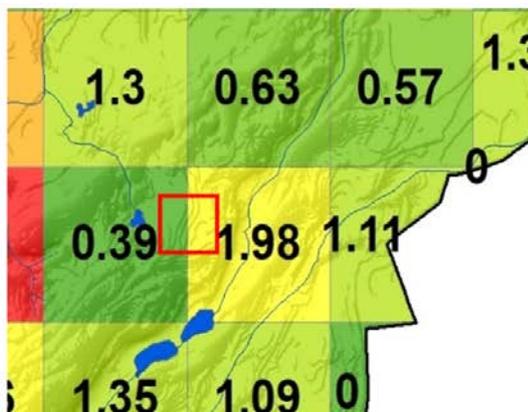


Fig.9 Fragmentation Density

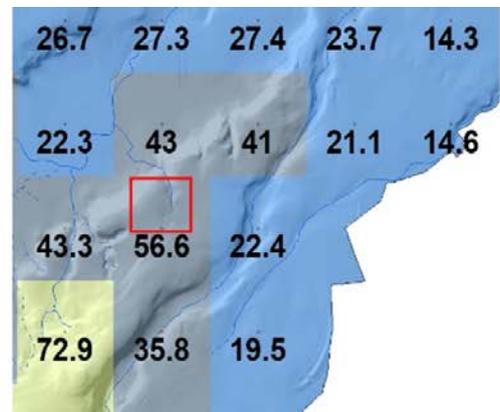


Fig.10 Depth of Fragmentation

### 3. Results and Discussion

The analysis of morphometric parameters allowed the identification of areas of suitability for constructions through cartographic representation - GIS techniques. Consequently, the Valea Aurie neighborhood overlaps with areas suitable for construction. (Fig.11, Fig.12)

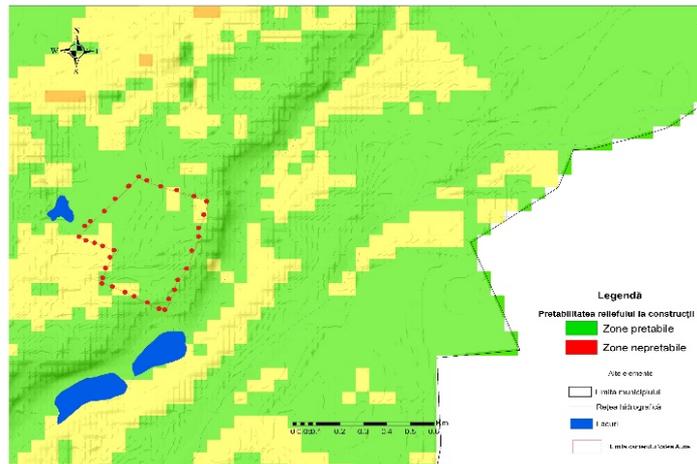


Fig.11 Suitability of relief for constructions



Fig.12 Validation of the suitability of the relief for constructions. Golden Valley

Neighborhood history is fairly recent, being a young neighborhood, built between 1982-1986, but the past is related to the transformation of the area 300 years ago in Forest Grove, the old mill, hut - restaurant and swimming pool with cold water. In 1745 the powder mill was moved to the Dumbrava forest near Seviș, in 1753 a paper mill was built and in 1770 the Schreyer Mill was completed and leased. In 1910 the swimming pool (bath) from

Schreyer's mill opens (as a result of the inauguration of the water pipe brought from the alpine area), in 1915 the lakes from Dumbrava are finished and the tram line to the new inn from Dumbrava Sibiului is inaugurated . (E. Sigerus)

The name of the neighborhood is quite uncertain. The stories of the inhabitants are mostly related around the chalet in the south of the neighborhood, the Golden Valley chalet, a place with great demand in the 70s and 80s, known today more by the elderly. It was built around the 70's, replacing the old cottage - restaurant Goldthal. Other stories related to the name of the district seem to come either from the wonderful landscape left by the yellow leaves of the trees in mid-autumn, or from the yellow flowers in the valley, or from the yellow clay soil in the area or due to the southern orientation of the bathing slopes, in the sunlight.

From an urban point of view, the neighborhood is characterized by a modern urbanism, built according to a well-established plan, with a continuous and regular fabric, geometrized with a rectangular shape. (Fig.13)



Fig.13 Golden Valley District

In the next image you can see the relationship with the land on the right course of the Trinkbach creek, but also the fact that it stopped urban development, the relationship with them is possible only through the two bridges. The presence of the brook course not only clearly delimited the neighborhood, but also provided a geographical barrier, blocking development.

The communist period offered a forced urban development, so all the streets are oriented in parallel and perpendicular directions, you can see the placement of the blocks of flats and the maintenance of the related street plot.

All the urban islands within the neighborhood maintain an equal distance inside the road axes, creating wide, well-defined, airy spaces and green spaces that intersperse the urban islands.

From an urban point of view, the presence of inner courtyards within each island can also be observed, thus creating an urban order. Normally the development through a planned urbanism in relation to an organic one determines the existence of problems related to traffic, green spaces, lack of mixed functions or necessary public services, but due to the relatively small size of this neighborhood, these problems do not exist.

A problem that needs to be mentioned is the orientation of the buildings in the NE-SW and NW-SE directions, they do not allow natural lighting of all apartments, some of them having openings only to the North. Also, the continuous, uninterrupted and regular street

trams allow the air currents to circulate, thus decreasing the quality of life of the residents. For this reason, the balconies of the blocks of flats being unusable, they were later closed and transformed into interior spaces, modifying the facades of the buildings.

The contradiction of this communist neighborhood is given by the urban plan, a logically structured plan, with streets and sidewalks, playgrounds and recreation areas, with parking lots and commercial spaces on the ground floor of the blocks, totally different from the rest of the neighborhoods appeared in 1970-1989 but especially contradicts the new residential areas, which are intended to be modern, but which were built without clear rules, organic according to the possibilities of each citizen, but without utilities or other facilities. (fig.14)



Fig.14 Golden Valley Map (google maps)

The Valea Aurie neighborhood covers an area of approximately 23.85 hectares and includes 11 streets named after rural localities in the Sibiu area. (Ludoș, Poiana Sibiului, Crinț, etc.), 64 blocks of which 5 blocks with 8 floors, the rest being 4-storey blocks and "villas", there is a school and a kindergarten, an Orthodox church "Descent of the Holy Spirit", post office, bank, library, pharmacies, food and non-food stores, restaurant.

According to a study conducted by Storia.ro and the research agency D&D Research in 2017, Valea Aurie District is on the 9th place in the country with the best access to recreational facilities, namely green spaces, sports and cultural facilities. We remind you that it is located only 1.4 km from the Zoo, 2 km from the Museum, Astra, only 2.5 km from the Sub Arini Park, being crossed by the "Emil Cioran Cycling Route", a bicycle route which connects the Park under Arini with Rășinari.

According to the same study, the neighborhood is on the 1st place in the country in terms of quiet and transport services, having the best connections with both the city center and the peripheral areas so to the center and station buses 5 and 15, to the Promenade Mall, Vasile Aron, Lazaret bus 14, to Terezian bus 16, and to the western industrial area 113 and 116. (Fig.15) Also the bicycle route from Sub Arini park, Valea Aurie, Zoo, Astra Museum and up to Rășinari connects the city and Golden Valley District with recreation and leisure areas, being accompanied by pedestrian alleys.

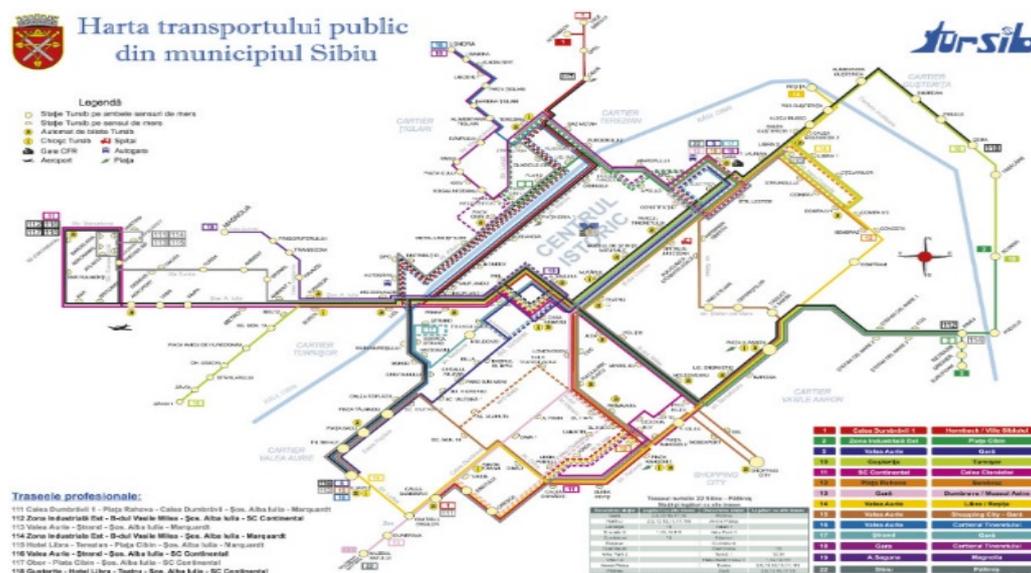


Fig.15 <http://www.tursib.ro/trasee/harta>

#### 4. Conclusions

In conclusion, the Golden Vally District was and will remain a marginal neighborhood of Sibiu, a special landscape in the municipality, through the typical socialist architecture of uniform blocks in combination with a modern and open urban plan, but with minimal possibilities for territorial expansion due to natural dams which constrain it, namely the Dumbrava Forest and the Trinkbach Valley, even if it overlaps with areas suitable for construction.

#### 5. References

1. Benedek , J., *Amenajarea teritoriului și dezvoltarea regională*, Editura Presa Universitară Clujeană, Cluj-Napoca, 2004;
2. Benedek , J., *Amenajarea teritoriului și dezvoltarea regională*, Editura Presa Universitară Clujeană, Cluj-Napoca, 2004;
3. Cocean, P., *Mărginimea Sibiului - Planificare și amenajare teritorială*. Cluj Napoca: Presa Universitară Clujeană, 2009;
4. Cunțan Lucica, *Risk analysis of water erosion of the soil in the Sibiu County Area*, Vol. *Debating globalization. Identity, Nation And Dialog*, Editura Arhipelag XXI Press Tg Mureș, 2017, pp. 453-463;
5. Fabini, H., *Sibiul – evoluția orașului oglindită în reprezentări grafice*, Sibiu, 1983;
6. Irimuș I.A., Petrea D., Rus I., Vescan I., *Morfodinamica versanților în regiunile cu domuri și cute diapire din Depresiunea Transilvaniei*. Vol. „Mediul și dezvoltarea durabilă”, Editura Labirint, Chișinău, R. Moldova, 2009, pp. 90-100;
7. Irimuș, I.A., *Hazarde și riscuri asociate proceselor geomorfologice în aria cutelor diapire din Depresiunea Transilvaniei*. Casa Cărții de Știință, Cluj Napoca, 2006;
8. Niedermaier, P., *Der mittelalterliche Städtebau in Siebenbürgen, im Banat und im Kreischgebiet (Teil I. Die Entwicklung vom Anbeginn bis 1241)*, Arbeitskreis für Siebenbürgische Landeskunde, Heidelberg, 1996;
9. Niedermaier, P., Sigerus, I., *Cronica orașului Sibiu (1100-1929)*, Edit. Imago, Sibiu, 1997, pp.113-114;

10. *Petrea, D., Obiectiv, metodă și cunoaștere geografică, Editura Universității din Oradea, 2005;*
11. *Sandu, M. Culoarul depresionar Sibiu-Apold. București: Academiei Romane, 1998;*
12. *\*\*\* Planul Urbanistic General . Sibiu, 2009;*
13. *\*\*\*Regulament local de urbanism. Sibiu, 2011;*
14. *\*\*\* Județul Sibiu – 1971, Editura Academiei Republicii Socialiste România;*
15. *\*\*\* Planul urbanistic general, 2009-2010;*
16. *\*\*\*„Studiu de fundamentare in domeniul Mediului al planului urbanistic general al municipiului Sibiu 2009”, Universitatea „Lucian Blaga” din Sibiu, Facultatea de Științe, Centrul de cercetări de ecologie aplicată, Sibiu, 2008;*
17. *\*\*\* Sibiu, loc de întâlnire, Plan Urbanistic General al Municipiului Sibiu 2009 – 2019*