# THE ANALYSIS OF THE URBAN STRUCTURE COMPONENTS: A CASE STUDY FOCUSED ON THE ROLE OF THE INDUSTRIAL ACTIVITIES IN THE SPATIAL RESTRUCTURING IN LUGOJ ON THE POST-SOCIALIST PERIOD

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Abstract: With a remarkable inheritance on the industrial field, the municipality of Lugoj has supported in time many changes regarding this economic sector. The contemporary physiognomy of its landscape, directly or indirectly illustrates the influences, imprints or certain particularities of many economic systems from the old guilds of handicrafts to the capitalist one, as well as, to the communist one and, finally, up to the system of transition and to the market economy system, representative for the Postsocialist period from Romania. All these ones have contributed to the structuring and restructuring process of the urban space from functional, dynamic and physiognomic perspective. This paper, an integrant part of a larger scientific report, wants to present in a synthetic mode but also objective, the role which the industrial activities had on the urban restructuring process in order to readjust to the new economic mechanisms of the Post-socialist period. At the same time, equally, on the paper are presented peculiar aspects of the industrial sector once with the adherence of Romania to European Union, the functional specific of it and the spatial planning of the urban space from Lugoj in the contemporary period.

**Keywords:** urban restructuring, industrial activities post-socialist period, municipality of Lugoj

#### **1. INTRODUCTION**

The contemporary profile of the industrial activities from Lugoj is generated by many factors which have influenced in time this economic sector at the local level of the town. A very important role is assumed by the specific traditions of this place generated by the old guilds of craftsmen from Lugoj. The natural environment through the complementary of the relief forms provided raw materials for the construction materials industry and, also, for the light and food ones. The industrial field of the town has been influenced by many important factors. The first one is represented by the old traditions in the processing of some local resources (the clay for the materials in the constructions activities, the leaves of mulberry tree in growing the silk worms and the natural silk production, the produces from agriculture for the processing in food industry etc). Some industrial branches reveal an age for more than one hundred years while other ones are appearing in the contemporary period in connection with the local specific of the community. The second factor is represented by the totalitarian communist regime which promoted in time a planned economy which marked not only the municipality of Lugoj, but more of that, all the urban settlements from Romania.

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Thus, in Lugoj appeared new industrial branches and the landscape of it supported major changes through the construction of larges industrial platforms which would comprises big industrial units, especially with large consumption of electric power. After 1990, a period of major regress appeared in the industrial sector of the town as an outcome of the greater trends of its adaptation to the new formed conditions of the transition to the market economy.

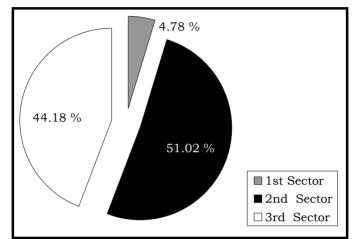


Fig. 1 The structure of the labor force on the main economic sectors from Lugoj

The new direct foreign investments, the restructuring process of the industrial sector and the readjustment of the urban sit to the new economic trends of evolution would contribute to the economic development of the town. Some industrial branches disappear and in this urban settlement appear new other ones; a part of the productive units would be closed while the new ones absorb the free labor force issued by the old structures. With a percentage of occupied population in industry about 51, 02% (figure 1) the municipality of Lugoj is preserving its industrial function with all its regress registered after 1990 in this sector of economic activities.<sup>1</sup> Also, it is obvious that the occupied population in agriculture has decreased favoring in this way the tertiary sector which registered close values as the industrial one. However the last one is still predominant in the labor force absorption in town and in its proximity.<sup>2</sup> In Lugoj the prevalent industrial branches are linked by the field of the machinery construction, of the spares part, of the wooden industry and, finally, by the light and food industry. To these ones join firms with new profiles as electronic and electro-technical ones. Also, to the existed productive units joined new other ones, these being integrated in a great and appreciate concerns well known at international level (Jucu, 2004). This fact represents an outcome of the major trends of the marketization, a specific attribute of the contemporary Neo-liberal Trend<sup>3</sup>.

<sup>&</sup>lt;sup>1</sup> Voiculescu, Sorina, (2004), Orașele din Câmpia de Vest. Structuri și funcționalități urbane, Editura Universității de Vest din Timișoara, Timișoara

<sup>&</sup>lt;sup>2</sup>Details regarding the provenience of the labor force from Lugoj and the particularities focused on the town attraction for the labor force are included in Jucu, I. S., (2004), Aspecte privind zona de influență a municipiului Lugoj (Aspects concerning the sphere of influence of the municipality of Lugoj), în Comunicări de Geografie, Vol. VII, Editura Universității din București, pp. 355-362

<sup>&</sup>lt;sup>3</sup> Attribute identified by Brenner, N. and Theodore, N., (2005), *Neoliberalism and the urban condition*, in *City*, vol. 9, nr. 1, 2005, Routledge

# 2. THE INDUSTRIAL BRANCHES OF THE TOWN FROM TRADITION TO POST-SOCIALIST REALITY

Some of the industrial branches of the municipality of Lugoj present old and continuous traditions. Their presence on the urban space at a certain time, or on the contrary, their disappearance favoring the individualization of new other ones illustrate the adaptation and the readjustment of the local industrial system to the specific conditions such as natural, historical, social, cultural, economic and politic ones, all those directly influencing the evolution of this town in time, in order to answer to the all the requirements of the market economy. So, old traditions are preserved by the industry of the materials of construction through the brick factory of Jacob Muschong which is dated on 1888. The textiles industry dates on 1869 when in Lugoj is attested a weaving with 80 looms. Also, at that time in town is founded a systematic mill. The electric power industry would have an important role in the urban development once with the appearance in 1899 of the Electric Plant. The textiles units registered a progressive and strongly evolution in the beginning of the 20th Century, once with the setting out of the Natural Silk Spinning on 1904 and Ungaria de Sud Weaving on 1907. Both ones represent the basis for the future development of the whole industrial sector in the field of textiles from Lugoj. In 1910 here appeared the block factory and later is founded a new industrial unit specialized in the materials for construction profile called Cărămidăria lugojeană de vapori (The brick factory from Lugoj based on the steams). However, all these ones are the main productive units<sup>4</sup> which would be represented the basis of the local urban functional profile in the industrial field.

From diachronic point of view, the status of the industrial profile from Lugoj on 1971 was presenting as follows: the textiles industry which was producing cotton textures, in this industrial branch being engaged over 3700 employees; the unit of exploitation and industrialization of wood with 1440 employees; the brick factory called Mondial with 770 employees; the factory of blocks with 520 employees; the natural silk spinning with 325 employees; 9 Mai factory with 290 employees and Timişul unit with 925 employees (according to *Localitățile Județului Timiş – Timiş County Localities*, 1971, p. 43).

In 1984 the profile of the industrial sector from Lugoj was comprising the industry of machinery construction and metal working, the faience industry, the textiles industry, the food industry and other minor several branches (according to Geografia României - The Geography of Romanaia, vol. II, 1984). Compared to 1971 the industry field have been more diversified through the appearance of new specific units for the communist regime which personalized the urban space from Timisoara Highway where a new representative industrial area appeared. So, here have been founded industrial units as I.U.R.T. and I.U.P.S. which would produce equipment for lifting and carrying, equipments from metal and spare parts. These ones would be strongly restructured after 1990, once with the new economic trends oriented to the market economy. This industrial platform would hosted, through the restructuring process of the old units, other new ones founded as an outcome of the presence of the foreign investments in the urban space. Regarding the investment process, the period between 1990 and 2000 reflect a constant volume of investments. Between 1990 and 1996 is remarked a strong economic instability and a higher country risk in Romania which limited the investments fluxes, while between 1997 and 2000 the segment of the investments is stimulated

<sup>&</sup>lt;sup>4</sup> According to Luchescu, Gh., Lăzărescu, V., 1994, p. 17

by the perspective of their rhythm (Guran - Nica, 2002). According to many detailed studies focused on the direct foreign investments made in Romania, the municipality of Lugoj is classified in the category of the small and medium towns with the relevance of the economic potential at the zonal and county level in which the foreign investments was higher than 10 millions \$, more exactly 15,9 millions  $$^5$ . The biggest investments of the town in 1997 were especially German.<sup>6</sup> In 2006, the most important investments on the town were represented by the following industrial societies<sup>7</sup>:

- **S.C.** *Mondial* **S.A.** which continues the tradition of more than one hundred years in the field of materials of construction; it is founded in 1981 and from 1996 become part of the Villeroy & Boch Multinational Concern, these one being more older than the whole European process of industrialization; it has a seniority of over 250 years basing on a competitive logistic in the production of the sanitary objects and equipments; on 2004 the firm had a turnover of 122,461,846 lei, a joint stock of 17,009,998 lei, a profit of 40,073,915 lei and an effective of 886 employees<sup>8</sup> being one of the biggest firm of the town.

- **S.C.** Inter – Spitzen S.A. represents one from the first investment from the town which promoted the Greenfield activities; it starts in 1996 and produces textiles accessories for many important brands from the whole world; of its production over 95% is destined for the extern markets, the unit having 550 employees and unfurling continuous programs of the local labor force integration in its production structures; the turnover of it in 2004 summed about 9 103 119 lei, the profit was about 45,912 lei,<sup>9</sup> and the capitals of the firms was in 2007 about 178,018,600 lei.<sup>10</sup>

- **S.C. Werzalit Lemn Tech SCS. S.A.** is specialized in the production of the ply-woods for the industry of furniture being one of the world's leaders in the production of the molded elements from woodchips; the positive evolution of the firm is represented by the continuous increase of the number of its employees (5 on 2000 and 260 on 2007).<sup>11</sup>

- **S.C. Rieker S.A.** produces shoes for the Romanian and foreign markets having branches in many countries from Europe.

- **S.C.** Schieffer Industries Romania S.A. produces components and equipments for the industry of automobiles; its produces have a higher degree of quality in connection with the requests of the international market.

- **S.C. Hella Lighting Romania S.A.** is also an important producer of the components for the industry of automobiles; it produces pieces, equipments and systems for the technology of illumination; the number of its employees and its turnover is progressive increasing till 2007.

- **S.C.** *Noar by Honneywell* **S.A.** produces electronic security systems and it has 650 employees.

- **S.C.** Autoliv S.A. is a Swedish company being an international leader on the international market of the produces for the security of the automobiles and other types of vehicles; it is the most recent big unit from the town.

<sup>&</sup>lt;sup>5</sup> Guran – Nica, Liliana, (2002), Investiții străine directe și dezvoltarea sistemului de așezări din România, Editura Tehnică, București, p. 111

<sup>&</sup>lt;sup>6</sup> Idem, p. 93

<sup>7</sup> According to the City Hall from Lugoj

<sup>&</sup>lt;sup>8</sup> According to the General Directorate of Public Finances Timiş, Timişoara, 2004, 2009

<sup>&</sup>lt;sup>9</sup> According to www.totalfirme.com accessed in May 2009

<sup>&</sup>lt;sup>10</sup> According to the General Directorate of Public Finances Timiş, Timişoara, 2004, 2009

<sup>&</sup>lt;sup>11</sup> According to www.totalfirme.com accessed in May 2009

#### 3. THE CONTEMPORARY INDUSTRIAL AREAS FROM LUGOJ

The productive units from the municipality of Lugoj are grouped in industrial areas and platforms which are situated, generally, on the fringe of the urban space. From the point of view of the terrain surface, extension, built area and the potential of the terrain occupancy per area, we can remark that the most extended industrial platform is represented by the Industrial Area on Buziasului Road, followed by the one situated on Timisoarei Highway; the last place of the hierarchy is assumed by the industrial area located on the Oloşagului Road (table 1). The mode in which the industrial areas structure the urban space of the municipality of Lugoj is illustrated by the figure 2. It is obvious that all these ones are situated on the urban fringe but nowadays, due to the appearance of the small and medium units on the central urban space appear in a punctual way many firms with industrial profiles, generally with lower number of employees. Regarding the future trends of the industrial sector of the municipality of Lugoj, a general glance focused on the evolution of the industrial areas is lawful. Thus, the industrial area on the Timisoarei Highway offers many opportunities for extension for all investors interested by this economic field of the town. The future investments can be realized on a terrain surface of 61 ha in Greenfield mode.

Un the post-socialist period					
Nr.	Industrial Area	Labor	Terrain	Built	The territory
crt.		force	surface	area	occupancy average (%)
1	Drumul Buziaşului	3200	82,90 ha	58,7 ha	70,81
2	Calea Timişoarei	6500	56,54 ha	19,56 ha	34,59
3	Drumul Herendeştiului	1200	57,43 ha	3,60 ha	6,27
4	Drumul Făgetului	2500	29,40 ha	3,5 ha	11,90
5	Zona Triaj CFR	2000	37,17 ha	5,3 ha	14,26
6	Drumul Oloşagului	4000	20,0 ha	3,9 ha	19,50

Table 1. The main characteristics of the industrial areas from Lugoj on the post-socialist period<sup>12</sup>

Source: The City Hall from Lugoj, Genaral Urbanistic Plan from Lugoj

The access is favorable and easy straight from the European Highway E 70, a certain and considerable strength being the construction of the rounding belt road estimated to be finalized and, also, functional on 2010 and, at the same time, by the Freeway from the 4<sup>th</sup> Pan European Corridor which will by situated at a distance about 10 kilometers away by this industrial area. It disposes by the all required utilities (electric power, gas, water supply, complexes services for telecommunications, sewage etc). Also, it is situated in the proximity of a custom point, nearby the residential areas (1,2 km away), at a distance from the railway station about 3 km and 55 km away by the international airport from Timişoara.

The future industrial area is able to absorb about 15 000 employees in an economic environment with an unemployment average of 5 - 6%.<sup>13</sup> Also, it can polarize the free labor force from the rural settlements situated in the surrounding area of the town. Throughout its industrial traditions, by the main strengths, advantages and opportunities offered by the geographical position of

<sup>13</sup> According to Town Hall of Municipality of Lugoj, 2008

<sup>&</sup>lt;sup>12</sup> Idem, p. 18. The labor force and other characteristics of it and about the specific of the industrial areas are detailed în Jucu, I. S., (2004), *Culturalitate şi spațiu. Aspecte ale organizării spațiului urban în municipiul Lugoj*, în Anale, Seria Economică, nr. 6, 2004, Universitatea Europeană Drăgan, Facultatea de Ştiințe Economice, Editura Dacia Europa Nova, Lugoj, pp. 105 - 109

the town and by the multiple conveniences generated by the spatial features of the town, the municipality of Lugoj disposes by many favorable conditions for future investments in the industrial sector of it and, more of that, in the tertiary one, ensuring in this way the increase of the qualitative living mode in this urban space from Romania.

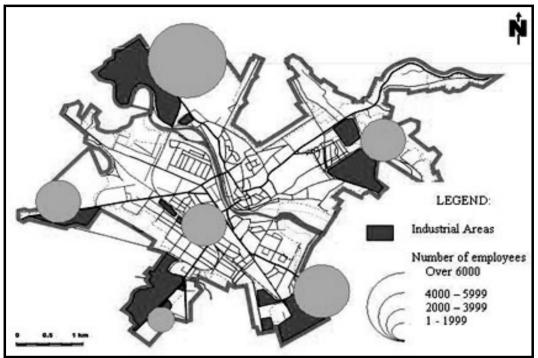


Fig. 2. The location of the industrial areas on the urban space of Lugoj and the share of the employees

## 4. CONSEQUENCES OF THE COMMUNIST INHERITANCE IN THE LOCAL ECONOMIC LIFE: DEINDUSTRIALIZATION AND REINDUSTRIALIZATION IN MUNICIPALITY OF LUGOJ

The fall of the totalitarian communist regime determines the appearance of new conditions regarding the social, economic and cultural evolution of the municipality of Lugoj. On this new background, the industrial sector of the town would support many changes, which will generate social implications with a strong impact to the urban population; these ones would materialize on the rate of unemployment, on the living standards and the quality of life and, also, on the adaptation process to the new formed premises of the local and community development. The large industrial units founded before 1990 starts to reflect a doubtful functionality and a low competitiveness on the national market. Thus, in town, at the same of the whole Romanian level, is outlining a new phase of industrial de-structuring which is unfurling with different emphasizes inducing a drastic reduction of the industrial activities.

The origin of this process is situated on the false process of the industrialization promoted on the old communist period.<sup>14</sup> On this background

<sup>&</sup>lt;sup>14</sup> Ianoş, I., 2004, p. 26.

the industrial function of the town registers a distinct dynamic being notable through its particular shares and dynamics.<sup>15</sup> Therefore, Ianos, (2004, p. 27), considers that ,,the industrial de-structuring far exceeds the speed of the alternative activities development and the creating process of the new urban structures, which constitutes a drag on the way of the revitalization of industry and of the economic activities and, also, in the revitalization of the industrial function." At the same time, the author states that in Romania the deindustrialization process is rather synonymous with the closing process of the industrial units, phenomenon produced also in Lugoj after 1990. For example, such a situation is typical for the Natural Silk Spinning which through its failure also determines the disappearance of some old traditions which would offer uniqueness to the economic landscape of the town. It is only one from many similar situations, particular for the period of the economic transition of the town in its efforts to connect to the functionality of the market economy. Generally, the town followed the same specific trajectory of evolution of the Romanian space with particular trends.

So, in post 1990 Romania is outlining some distinct phases as (according to Ianos, 2004, p. 30): a. the period after 1990 characterized by a strongly decline of the industrial activities; the materials for construction industry reduces its production due to the fact that in Romania the intensive built activities are less represented towards the communist period; b. the period of 1991, 1992 and 1993 illustrates the decreasing process of the industrial production and of the industrialization process of the municipality of Lugoj; so, the unemployment phenomenon is accented and the industrial units restructuring is made in two steps, in 1993 and in 1994; c. after 1995, there can be remarked an increase of the industrial production; the process is unfurl slow due to the lack of the financial resources for modernization and for the all connections to the new specific structures of the national market; the unemployment shares are gradually reduced; d. the period between 1997 and 2000 reflects important changes on the economic field because the privatization process is more accented and, also, more emphasized concerning the process of the industrial units restructuring; e. after 2000 the industry knows the same restructuring process being obvious, at the same time, the revitalization of this economic sector in town; the employees on the tertiary sector register a continuous increase due to the fact of the strong development of this field.

Based on these major trends of evolution the municipality of Lugoj, analyzed from the perspective of the regional differences become a town with important decreasing of the employees in industry (25-50%) with complex functions, the services having an important share in the local economic field of it. Also, the town is set on the category of the settlements which partial resisted to the main changes generated by the diminishing process of the industrial activities.<sup>16</sup> Of the deindustrialization process effects on the local level, we can remark: the presence of the unemployment especially concerning the feminine labor force (it is known that this category overcome the masculine one); here are restructured the units with textile profile but also the ones with heavy profile as I.U.R.T., I.U.P.S. and I.R.I.L. etc. the appearance of some nonfunctional industrial areas which generate strong functional and physiognomic contrasts

<sup>&</sup>lt;sup>15</sup> Idem, p. 27.

<sup>16</sup> Ibidem, p. 36

on within the urban space; the conversion of some urban spaces; the development of the tertiary sector which will absorb a part from the free labor force issued from industry; the migration for working abroad.

The national economic context on the conditions of globalization and, on the other hand, the trends of the international marketization would create the premises for development in the conditions of the market economy, due to the direct foreign investments and, also, to the dynamics of the entrepreneurship field. The adaptation of the industrial sector to the specific of market economy was determined by the major foreign investments focused on the industrial field. After 1990, the failure of the largest industrial units was supplied by a revival of this sector due to these activities and, also, due to the appearance of the small and medium units. Generally, their main field of activity are the same with the ones appeared before 1990, due to the local specific traditions of the town. These ones, together with other local factors, will contribute on the locating process of the new industrial privatized units. On the other hand, if we are taking into account the fact that the industry attract industry (Ianos, 1997), this process is really justified The appeared industrial units after 1990 had the major role to continue the preexistent traditions, Lugoj being penetrated by new firms and international brands as Dolce&Gabana, Valentino, Itiere, Rieker, Villeroy&Boch etc. So, here appeared new textile units which absorb the issued labor force by the ex textile units functional before 1990. Of the new firms of the town we can mention S.C. Scholler S.A., S.C. Dunărea Textile S.A., S.C. Filseta S.A. etc. In the shoes field detach S.C. Rosada S.A. and S.C. Schuh Union S.A. The first one is not just the old factory of the blocks, privatized, restructured and adapted to the new economic conditions.

Well represented is the wood industry through the presence of many privatized small and medium successfully and competitive units as S.C. Agache S.R.L., S.C. Werzalit lemn Tech SCS S.A., S.C. Rădulescu S.R.L., S.C. Essia Dimod S.R.L. etc. Within the field of the materials for constructions the old factory Mondial is assumed by the German Concern Villeroy&Boch and in the field of heavy industry through privatization the ex units as I.U.R.T., I.U.P.S. form new societies as S.C. Lugomet S.A and, S.C. Silcom S.A. These last ones preserve the tradition in the heavy industry of the town being in connection with the contemporary requests of the national and international market. A special dynamic is supported by the food industry represented nowadays in town by a great number of firms. As new industrial branches we can remark the industry of electronics and electro-technique produces, represented in town by societies as Autoliv and Novar Electric. If we are taking into account the fact that in 2002 the share of the occupied population in industry was higher was overcoming 50% we can conclude stating that the reindustrialization process was unfurled in a constant rhythm objective contributing to the insurance of an equilibrate dynamics of the town during the all period of transition to the contemporary market economy.

#### **5. CONCLUSIONS**

The transition to the market economy, as specific feature of the postsocialist period from the old communist regime, has generate an extensive process of restructuring, reorganization and rethinking of the main evolution leverages of the local community. The restructuring process has molded both the spatial and functional contexts of the town. From spatial point of view, the industrial activities structured the urban space through the reorganization of the preexistent industrial platforms that belonged to the communist regime (by a complex process of privatization), through the appearance of some new others, and by the individualization of a large number of commercial societies with punctual localization within the urban space of Lugoj. These ones are represented by small and medium units with a considerable role in local development of the town. From functional perspective the restructuring has manifested through the particularities of the dynamics of the societies profiles (some of them preserve the initial profile, other ones adapt it to the new requests of the market and a part of it present new profiles which have not existed in town before 1990. The restructuring process from the outlook of the connection of the local economy to the market one, in the conditions of the worldwide marketization, took into account, directly or indirectly, the traditions of the town grounded in time and, also, by the social economic and cultural inheritance offered to this urban settlement by the political and economical systems sequence performed in time in this particular geographic space.

#### BIBLIOGRAPHY

- BRENNER, N., THEODORE, N., (2005), Neoliberalism and the urban condition, in City, vol. 9, nr. 1, 2005, Routledge.
- GURAN-NICA, Liliana, (2002), Investiții străine directe și dezvoltarea sistemului de așezări din România, Editura Tehnică, București, p. 111.
- IANOȘ, I., (1997), Industria element și factor de presiune în organizarea spațiului, în Analele Universității de Vest din Timișoara, Seria Geografie, vol. VII, Timișoara, pp. 1139-142.
- IANOȘ, I., (2004), Dinamică urbană. Aplicații la orașul și sistemul urban românesc, Editura Tehnică, București.
- JUCU, I.S., (2004 a), Transformări în sectorul industrial în condițiile economiei de piață. Studiu de caz: municipiul Lugoj, în Analele Universității Europene Drăgan din Lugoj, Seria Economică, nr. 5, 2004, Editura Dacia Europa Nova, Lugoj, pp. 91-95.
- JUCU, I.S., (2004 b), Culturalitate și spațiu. Aspecte ale organizării spațiului urban în municipiul Lugoj, în Analele Universității Europene Drăgan din Lugoj, Seria Economică, nr. 6, 2004, Editura Dacia Europa Nova, Lugoj, pp. 105-109.
- JUCU, I.S., (2004), Aspecte privind zona de influență a municipiului Lugoj (Aspects concerning the sphere of influence of the municipality of Lugoj), în Comunicări de Geografie, Vol. VIII, Editura Universității din București, pp. 355-362.
- LUCHESCU, Gh., MUNTEAN, V., LĂZĂRESCU, V., (1994), Spiritualitate lugojeană, Editura Mitropoliei Banatului, Timișoara.
- VOICULESCU, Sorina, (2004), Orașele din Câmpia de Vest. Structuri și funcționalități urbane, Editura Universității de Vest din Timișoara, Timișoara.
- \*\*\* Planul Urbanistic General al Municipiului Lugoj, Primăria Municipiului Lugoj
- \*\*\* Breviar Statistic al Municipiului Lugoj, Direcția Generală de Statistică Timiș, Timișoara
- \*\*\* (2006), Ghidul municipiului Lugoj, Primăria Municipiului Lugoj, Lugoj.
- \*\*\* (2007), Lugoj-Vârșeț. Ghid turistic, Primăria Municipiului Lugoj, S.C. Bistra, Lugoj.

Surse Internet: www.lugojul.ro www.PrimăriaMunicipiuluiLugoj.ro www.Lugojulmeu.ro www.totalfirme.com www.adetim.ro www.TimişCountyDataBase.ro www.cjtimis.ro