

**Romanian Review on Political Geography**

**UNIVERSITATEA DIN ORADEA**

**Revista Română  
de  
Geografie Politică**

**Anul XIV nr. 2  
2012**



**Editura Universității din Oradea**



**REVISTA ROMÂNĂ DE GEOGRAFIE POLITICĂ**  
**Romanian Review on Political Geography**  
**Year XIV, no. 1, May 2012**

Editor-in-Chief:

Alexandru ILIE, University of Oradea, Romania

Associate Editors:

Voicu BODOCAN, "Babeş-Bolyai" University of Cluj-Napoca, Romania

Milan BUFON, "Primorska" University of Koper, Slovenia

Jan WENDT, University of Gdansk, Poland

Scientific Committee:

Silviu COSTACHIE, University of Bucharest, Romania

Remus CREANĂ, West University of Timișoara, Romania

Olivier DEHOORNE, University of the French Antilles and Guyana, France

Anton GOSAR, "Primorska" University of Koper, Slovenia

Ioan HORGA, University of Oradea, Romania

Ioan IANOȘ, University of Bucharest, Romania

Comeliu IAȘU, "Al. I. Cuza" University of Iași, Romania

Vladimir KOLOSSOV, Russian Academy of Science, Russia

Gheorghe MAHARA, University of Oradea, Romania

Ionel MUNTELE, "Al. I. Cuza" University of Iași, Romania

Silviu NEGUȘ, Academy of Economical Studies of Bucharest, Romania

John OLOUGHLIN, University of Colorado at Boulder, U.S.A.

Ronan PADDISON, University of Glasgow, United Kingdom

Grigori POP, University "Babeş-Bolyai" of Cluj-Napoca, Romania

Lia POP, University of Oradea, Romania

Nicolae POPA, West University of Timișoara, Romania

Stéphane ROSIÈRE, University of Reims Champagne-Ardenne, France

André-Louis SANGUIN, University of Paris-Sorbonne, France

Radu ȘTEFĂNĂ, Romanian Academy, Institute of Geography, Romania

István SÜLI-ZAKAR, University of Debrecen, Hungary

Alexandru UNGUREANU - Romanian Academy Member, "Al. I. Cuza" University of Iași, Romania

Luca ZARRILLI, "G. D'Annunzio" University, Chieti-Pescara, Italy

Assistant Editor

Vasile GRAMA, University of Oradea, Romania

Technical Editor:

Marius STUPARIU, University of Oradea, Romania

Foreign Language Supervisor:

Corina TÂMBULEA, University of Oradea, Romania

Secretary On-line Version:

Itefana BAIAS, University of Oradea, Romania

Grigore HERMAN, University of Oradea, Romania

**The content of the published material falls under the authors' responsibility exclusively.**  
The manuscripts and exchange reviews, as well as any correspondence will be sent on the address of the Editorial Office.

Address of the Editorial Office:

Universitatea din Oradea, Departamentul de Geografie, Turism și Amenajarea Teritoriului

Str. Universității, nr. 1, 410087 Oradea, România

Tel./fax: 0040.259.408.475, e-mail: [rrgp.uoradea@vahoo.ro](mailto:rrgp.uoradea@vahoo.ro), <http://rrgp.uoradea.ro>

The review is issued under the aegis and with the support  
of the University of Oradea, The Territorial Studies and Analyses Centre  
and the IGU - Commission on Political Geography

## CONTENTS

THE ABOLITION OF THE NUCLEAR WEAPONS. A GEOPOLITICAL AND GEOSTRATEGIC PROBLEM IN THE LAST FIVE DECADES Remus PRĂVĂLIE (Art#142101-247).....	143
DISTRIBUTION OF MILITARY EXPENDITURES AND OIL REVENUES INTO THE ARABIC SPACE - GEOGRAPHY OF MANDATORY CORRELATIONS Cezar TECLEAN (Art# 142102-246).....	155
THE MILITARY ROLE OF SOME GATE Ioan D. ARCA (Art# 142103-249).....	164
CORRIDORS IN THE WESTERN BALKANS AND THE HUNGARIAN EXIT TO THE SEA Norbert PAP, Péter REMÉNYI, Andor VÉGH (Art#142104-254).....	176
THE GEOGRAPHICAL ORGANIZATION OF PLAIN BIRDA-MORAVIA AS REFLECTED ON THE MAPS FROM THE HABSBURG AND CONTEMPORARY PERIOD Raluca COVACI (Art# 142105-250).....	189
URBAN REGENERATION IN THE CONTEXT OF CURRENT URBAN DEVELOPMENT POLICIES IN ROMANIA. CASE STUDY: TEI CITY (BIHOR COUNTY, ROMANIA) Luminița FILIMON, Valentin NEMEȘ, Paul OLĂRU (Art# 142106-252).....	200
THE LOBBY ACTIVITY OF LARGE CORPORATIONS Gheorghe HURDUZEU, Liviu Bogdan VLAD, Raluca HURDUZEU, Gheorghe VLASCEANU (Art#142107-251).....	211
<u>THE INDUSTRIAL SECTOR OF TRANSCARPATIA AND ITS COMPARISON WITH THE NORTHERN GREAT PLAIN REGION OF HUNGARY</u> Gyula FODOR, István D. MOLNÁR, Lajos KURUCZ (Art# 142108-253).....	219
THE RIGHTS OF INDIGENOUS SLOVENE MINORITIES: RE-INTEGRATION AND DEVELOPMENT IN BORDER REGIONS Matjaz KLEMENCIC (Art# 142109-255).....	232
TERRITORIAL DESIGN OPTIMIZATION MODEL AT NUTS 2 LEVEL IN ROMANIA Alexandru ILIEȘ, Jan WENDT (Art#142110-256).....	250

**THE INDUSTRIAL SECTOR OF TRANSCARPATIA  
AND ITS COMPARISON  
WITH THE NORTHERN GREAT PLAIN REGION OF HUNGARY**

**Gyula FODOR**

Ferenc Rákóczi II Transcarpathian Hungarian College,  
6 Kossuth square, 90200 Beregszász, Transcarpatina, Ukraine, e-mail: [gyula-fodor@rambler.ru](mailto:gyula-fodor@rambler.ru)

**István D. MOLNÁR**

Ferenc Rákóczi II Transcarpathian Hungarian College,  
6 Kossuth square, 90200 Beregszász, Transcarpatina, Ukraine, e-mail: [istvan-molnar@rambler.ru](mailto:istvan-molnar@rambler.ru)

**Lajos KURUCZ**

University of Debrecen,  
1 Egyetem, 4032 Debrecen, Hungary, e-mail: [debfoldraiz@gmail.com](mailto:debfoldraiz@gmail.com)

**Abstract:** Transcarpathia is one of the 25 administrative units of the Ukraine. Till the recent times it has remained a peripheral region of the country, as being situated very far from the economic centres of Central and Eastern Ukraine. But nowadays, in the changing and transforming Europe it has some remarkable advantages as to the possibilities of economic development. Firstly, Transcarpathia borders on four different foreign countries (Hungary, Slovakia, Romania and Poland) which are now all members of the European Union. This fact is very promising from the point of view of the present and future cross-border cooperations between Transcarpathia and the borderside regions of these states, especially the Northern Great Plain region of Hungary. Secondly, the region is getting an increasing share of foreign investments arriving in the Ukraine, the main target of which is the developing industrial sector of Transcarpathia. That's why it deserves a further and more thorough examination.

**Key words:** raw materials, heavy industry, light industry, branches of production, industrial export

\* \* \* \* \*

**INTRODUCTION**

Despite its potentially favourable economic conditions, the Transcarpathian region now plays only a minor role in the social and economic life of the Ukraine. Being the second smallest region of the country, Transcarpatina occupies one of the bottom positions on grounds of population number, the value production of the service and agricultural sector or the

amount of industrial output. On the other hand it takes up a "distinguished" place in the unemployment ranking list<sup>1</sup>. Some optimism can only be caused by the fact, that a constantly increasing proportion of the foreign investments in the Ukraine arrives in Transcarpathia, mainly in the industrial sector of the region. Mostly due to this in 2010 Transcarpathia occupied the first position according to the growth of the industrial production in the country (Table I).

Table I. The place of Transcarpathia among the regions of the Ukraine

(Source: Transcarpathian Regional Statistical Yearbooks, 2003-2011)

Index	2003	2004	2005	2006	2007	2008	2009	2010	2011
	position								
Area	24.	24.	24.	24.	24.	24.	24.	24.	24.
Number of the present population	18.	17.	17.	17.	17.	17.	17.	17.	17.
Unemployment rate	9.	11.	11.	12.	11.	11.	9.	11.	10.
Average monthly earnings	17.	16.	16.	15.	17.	17.	17.	17.	22.
Volume of the industrial production	24.	nd.	nd.	nd.	nd.	nd.	23.	24.	24.
Growth of the industrial production compared to the previous year	1.	3.	16.	2.	4.	10.	27.	1.	21.
Production of consumer goods	22.	nd.	nd.	nd.	nd.	nd.	nd.	nd.	nd.
Gross agricultural product	24.	24.	25.	24.	23.	19.	24.	24.	25.
Direct foreign investments during the year	6.	6.	8.	10.	13.	.	14.	13.	15.
Services	25.	18.	20.	21.	21.	20.	21.	21.	21.
Human development index	3.	4.	6.	7.	8.	9.	12.	8.	nd.

Industry plays an important role in the economic structure of Transcarpathia, though the region has a share of only less than 1 per cent of the industrial production of the Ukraine. (24<sup>th</sup> position among the 25 major administrative units of the country). The factories of Transcarpathia produce more than half of the region's GDP, while they give work only to 12,7 per cent of all the employees. In the middle and in the end of the 1990's the general economic crisis deepened and there was a decrease in industrial production, but in the last 10-15 years the industry of Transcarpathia is showing an increasing tendency again. (Figure 1).

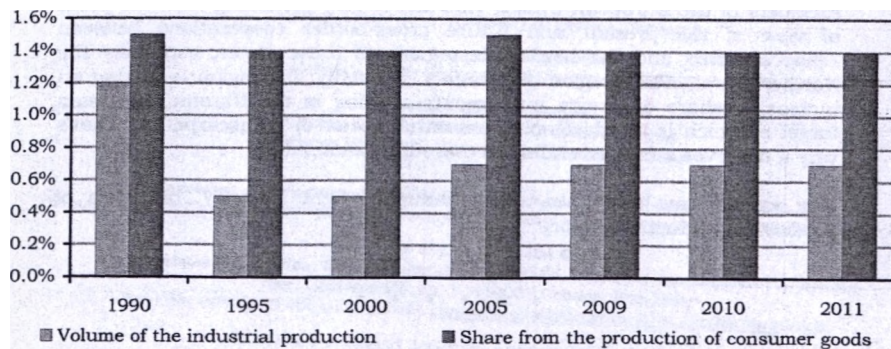


Figure 1. The role of Transcarpathia in the economy of the Ukraine (1990-2011)

(own editing, based on the data of the Transcarpathian Regional Statistical Yearbooks, 2000-2011)

<sup>1</sup> Transcarpathian Regional Statistical Yearbook 2011, Transcarpathian Regional Bureau of Statistics, Ungvár, 2012, 30

**LATEST GEOGRAPHICAL CHANGES IN THE INDUSTRY OF  
TRANSCARPATIA**

As for the development of the industrial sector in general Transcarpathia has favourable conditions, because the amounts of the industrial labour force, the agricultural and silvicultural raw materials and non-metallic mineral resources are sufficient. On the other hand numerous kinds of fuel and basic industrial raw materials are missing in the region. Due to this Transcarpathia is dominated by the labour-intensive branches of industry which don't require too much raw materials. The changing of the sectoral structure of the industry is shown in Table 2.

Table 2. The division of the industrial sector of Transcarpathia by branches  
(Source: Transcarpathian Regional Statistical Yearbooks, 2000-2011)

Industrial branch	Share from the industrial production of the region, per cent					
	2000	2003	2006	2009	2010	2011
Mining industry	3.7	1.7	1.3	1.0	1.3	1.1
Food industry and processing of the agricultural products	22.6	20.8	14.9	15.1	13.8	12.1
Light industry	9.5	7.9	5.4	5.6	4.7	4.1
Forest and wood-working industry	19.0	13.8	5.2	4.6	3.8	5.0
Chemical industry and oil refining	2.5	5.5	2.8	7.2	7.4	7.1
Engineering industry	6.0	25.6	48.0	38.5	43.9	46.3
Power generation	15.2	9.4	12.0	18.0	16.7	16.8
Other	21.5	15.3	10.4	10.0	8.4	7.5
Industry in total	100.0	100.0	100.0	100.0	100.0	100.0

As it is seen from the table, since the turn of the millennium the proportion of most industrial branches in Transcarpathia is stagnating or decreasing. The only exception is the engineering industry, which shows a spectacular production increasing in this period. This is the branch, towards which remarkable foreign capital investments are directed. For example, the Ungvár electric motor and cable factory produces different cable bundles by a German investment for such important multinacional companies as the Bosch or the Opel. All the more, in the village of Tizzasalamon, located in the very west of Transcarpathia, the Skoda company has opened up a car assembly plant. All this, of course, has seriously revived the attention of the home investors too<sup>2</sup>.

Thus, the most important industrial branch of Transcarpathia is the engineering industry, which has a fairly complicated structure. Its plants are producing mainly electric motors, metal- and wood-working equipment, TV sets, machinery for distribution of natural gas, gas meters and, of course, cars. (Table 3). The largest factories of the branch are the Ungvár Electric Motor Works, the Munkács and Beregszász Precision Instrument Factory, the Kölcsény Machine-Tool Factory, the Ilosva Factory of Electromechanics, the Munkács, Nagyszőlős, Szolyva, Ökörmez and Volóc affiliated companies of the Lemberg "Elektron" concern<sup>3</sup>.

Till the year 2001 the main importance in the engineering industry belonged to the electronics and electric engineering branch (72,5 per cent in the total value production in 2001), but in the last six years the leadership has been

<sup>2</sup> Fodor, *Kárpátalja iparféldrajzának változásai az ezredforduló óta eltelt id. szakban*. In: „Regionális átalakulás a Kárpát-medencében” Pécs, 2006, 111

<sup>3</sup> . V. Zastavetska - . I. Zastavetskiy - I. L. Ditchuk - D. V. Tkach, *Heohrafiya Zakarpatskoyi oblasti* 'i, Ternopil, 1996, 66

taken over by the car-manufacturing, which had a share of 71 per cent in the total value production in. This happened unanimously due to appearance of the Skoda company in Transcarpatina, which, as we mentioned above, has opened up a large car assembly plant near Tiszasalamon, not far from the town of Csap<sup>4</sup>.

**Table 3.** The most important products of the Transcarpathian engineering industry

(Source: Transcarpathian Regional Statistical Yearbooks, 2000-2010)

Product denomination	2000	2003	2004	2005	2006	2007	2008	2009	2010
Electric motors (1000 pieces)	103,4	109,5	88,8	110,0	92,2	82,7	55,8	55,6	46,1
Gas meters (pieces)	4688	4729	2667	2545	1489	1348	791	1106	nd.
Radiators, convectors (1000 pieces)	nd.	25,5	52,6	103,6	93,7	97,3	131,5	92,3	95,5

The forest and wood-working industry was created on the basis of formerly rich forest reserves of Transcarpathia. The most important lumbering centres are now located in the eastern part of the region, while the wood-working plants are found all over it. The production scale of the branch is headed by the sawn timber, plywood, different kinds of parquet and furniture, but the formation of output indices of the separate product groups was quite dissimilar in the last few years. For example, a clear increase is seen in the production of sawdust plates (*Table IV.*). A remarkable production fluctuation is noticeable in case of many wood-working products, what is primarily due to the unstability of the local market and the changeability of the demands<sup>5</sup>.

**Table 4.** The main products of the forest and wood-working industry in Transcarpathia

(Source: Transcarpathian Regional Statistical Yearbooks, 2000-2010)

Product denomination	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Sawn timber (1000 m <sup>3</sup> )	207,8	236,1	234,4	256,9	378,7	326,2	256,7	251,4	213,1	168,7
Sticked plywood (1000 m <sup>3</sup> )	9,7	8,8	9,3	7,4	7,3	6,8	7,0	1,7	0,7	0,5
Compressed sawdust plates (1000 m <sup>3</sup> )	0,4	-	-	4,0	-	33,5	-	15,9	64,2	24,4
Parquet (1000 m <sup>2</sup> )	36,1	30,6	80,7	61,0	78,7	48,6	54,2	16,6	37,9	12,5

The share of the most important branches from the total value production of forest and wood-working industry shows serious changes in the post-millennium period. The most remarkable shift in the balance has been in favour of sawing industry, which now gives more than 4/5th of the total value production. Meanwhile the proportion of all the other branches is stagnating or decreasing<sup>6</sup>.

The biggest forestry companies are found in Ratio, Huszt, Szolyva, Királymez (Uszty-Csorna), K rösmez and Perecseny (*see Figure 2.*) Many of their plants and factories are scattered about in the settlements of the foothills

<sup>4</sup> *Transcarpathian Regional Statistical Yearbook, 2003*, Transcarpathian Regional Bureau of Statistics, Ungvár, 2004, 141

<sup>5</sup> Fodor, *Ipar*. In: Kárpátalja. Régiómonográfia, Pécs-Budapest, 2009, 309

Fodor, *Ipar*. In: Kárpátalja. Régiómonográfia, Pécs-Budapest, 2009, 309



or mountain regions. The largest wood-working plants are located in Taracköz and Tiszaújlak, while the most important furniture factories are settled in Munkács and Técs 7. In addition to these, a big plywood and furniture factory is found in Ungvár, whereas the important in all-Ukraine relation wood-chemical plants are in Nagybocksó, Perecseny and Szolyva. The latter ones process the secondary products of the wood-working industry thus producing methanol, charcoal, synthetic resin, acetic acid, different solvents, camphor etc. The most unique in the whole Ukraine is the Munkács Ski Factory, which, among others, supplies the Ukrainian national skiing and biathlon team with world-famous skis<sup>8</sup>.

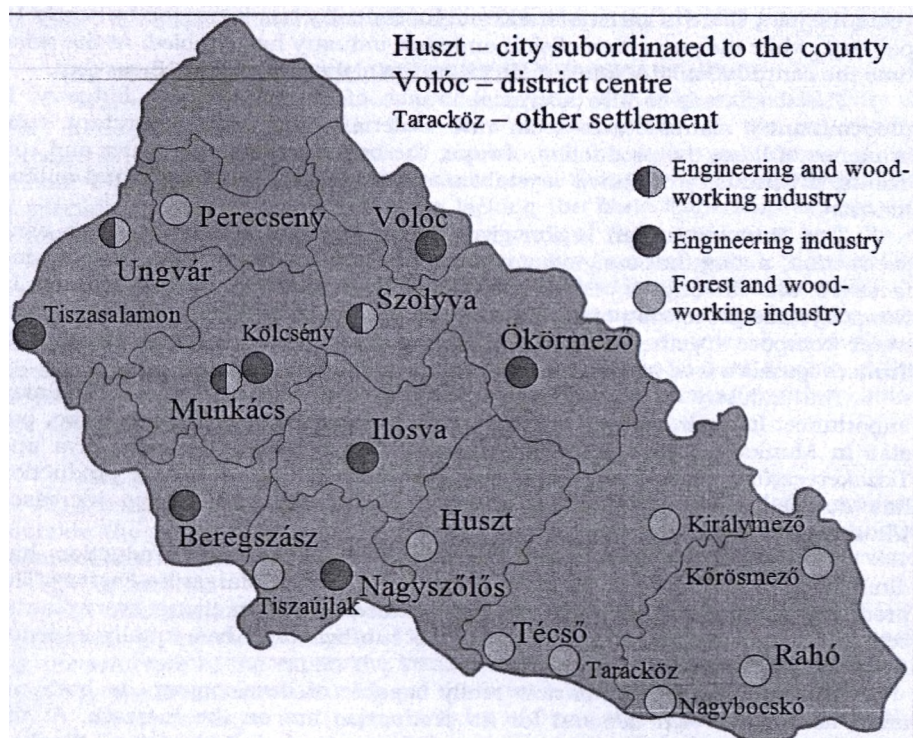


Figure 2. The main centres of the engineering and forest industry in Transcarpathia  
(own editing, based on O. V. Zastavetska et al., 1996.)

The light industry of Transcarpathia develops predominantly on the basis of the local raw materials (animal skins and fur, wool) and imported textile bases. Its most important branch is the garment trade with the biggest centres in Munkács, Nagyszőlős, Perecseny and Beregszász<sup>9</sup>. The last town's traditional garment trade has been reorganized in the last 15 years involving Italian capital

<sup>7</sup> O. V. Zastavetska - I. Zastavetskiy - I. L. Ditchuk - D. V. Tkach, op. cit., 66

<sup>8</sup> Fodor, *Kárpátalja iparféldrajzának változásai az ezredforduló óta eltelt id szakban*. In: "Regionális átalakulás a Kárpát-medencében" Pécs, 2006, 116

<sup>9</sup> Fodor, *Ipar*. In: *Kárpátalja. Régiómonográfia*, Pécs-Budapest, 2009, 313



(for instance, that of the Benetton company). The plants of the boot and shoe industry are also located in the western part of Transcarpatina, the most important ones are in Ungvár, Nagyszőlős and Tiszaújlak. Among the other units of light industry the Ungvár and Szerednye textile factory or the Kőrösmező artificial fur factory are worth mentioning. Formerly, internationally famous products were manufactured in the Huszt Hat Factory, though the production is now paused from financial reasons<sup>10</sup>.

It is important to note, that in Transcarpatina such traditional branches of the light industry are found, as making of different kinds of homespun (Nagybereg, Beregszász, Rahó, Kőrösmező), or manufacturing of wooden souvenirs (Nagybocskó, Huszt, Técs etc.)

The most remarkable change within the light industry is, that in the last few years the joint share of garment trade and fur industry has increased by nearly 10 per cent, while the proportion of skin and shoe industry has doubled. At the same time the contribution of textile industry has diminished by almost 15 per cent.

The food trade is also a crucial branch of Transcarpathia's industry. It predominantly manufactures local raw materials. The most important sub-branches of it are the production of wine, the bottling of mineral water and soft drinks, the industry of tinned vegetables and fruits, the dairy, meat and milling industry.

The Transcarpathian region gives nearly the half of the Ukraine's wine production, noting that a significant part of it goes for export. The biggest wine factories are in Ungvár, Beregszász, Szerednye and Ilosva (see *Figure 3*). Nowadays the processing of spirits and soft drinks plus the bottling of mineral water compose together more than 50 per cent of the value production of Transcarpathia's food industry.

The industry of tinned vegetables and fruits is also of all-Ukrainian importance. Its main centres are in Ungvár, Beregszász and Szerednye too, but also in Munkács, Técs, Visk, Nagybocskó, Nagybereszna, Tiszapéterfalva and Tiszakeresztúr<sup>11</sup>. The share of this sub-branch from the total value production has doubled since the millennium, what is mainly due to the increased Ukrainian demand.

During the last few years the vegetable oil and fat production has diminished to its fractions. Its main plant is the Ungvár Margarine Factory. The producing units of the dairy and meat trade can be found in almost every district centre, though the proportion of these two sub-branches has equally lessened since the millennium<sup>12</sup>.

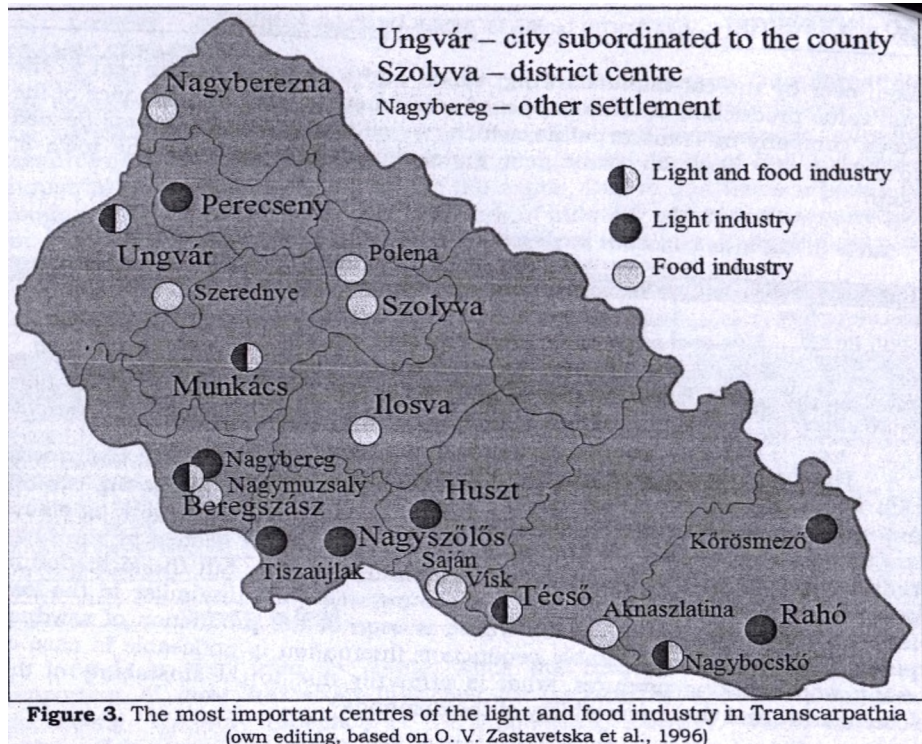
The milling industry is now really capable of development, as both the inner and the foreign demand for its production are on the increase. At the moment it gives more than 10 per cent of the total value production of the food industry. On the whole, its plants are divided evenly in the region.

Among the other sub-branches of the food industry we must mention the Beregszász Tobacco Fermenting Factory, the Munkács Sweets Factory and, of course, the mineral water bottling plants that are of all-Ukrainian importance (Szolyva, Polena, Saján, Nagymuzsaly).

<sup>10</sup> Fodor, *Kárpátalja iparföldrajzának változásai az ezredforduló óta eltelt időkben*. In: „Regionális átalakulás a Kárpát-medencében” Pécs, 2006, 116

<sup>11</sup> O. V. Zastavetska- . I. Zastavetskiy -I. L. Ditchuk - D. V. Tkach, op. cit., 67

<sup>12</sup> Fodor, *Kárpátalja iparföldrajzának változásai az ezredforduló óta eltelt időkben*. In: „Regionális átalakulás a Kárpát-medencében” Pécs, 2006, 118



Transcarpathia's industry of building materials is mainly based on the local non-metallic mineral resources. One circle of activity of the branch is the mining of different building materials (marble, dolomite, andesite, limestone, sand) and the other is to produce various walling and roofing materials, structures of reinforced concrete etc. The main settling factor for this branch is the closeness of the consumers, thus its biggest plants are the Ungvár, Munkács and Nagyszőlös factories of reinforced concrete structures and also the Munkács and Tiszaújlak asphalt factories.

The chemical industry is represented mainly by the companies of household chemistry, which, among others, are found in Ungvár and Ilosva<sup>13</sup>. Besides these, we must mention the Ungvár Pharmaceutical Factory and the plants producing plastic products in Nagyszőlös and Majdánka (see Figure 4.)

For a long time the fuel industry in Transcarpathia was only represented by the petty brown coal mining not far from the village of Ilonca. By now the exploitation of the local mines has actually been ceased as the high cost-price and the out-of-date mining technology made it unprofitable. At the same time, promising natural gas fields are opened up in several different parts of the region, which can play a remarkable part in satisfying Transcarpathia's fuel needs in the future. The biggest deposits are believed to be at the fields near Aknaszlatina and Oroszkomoróc.

<sup>13</sup> O. V. Zastavetska - I. Zastavetskiy - I. L. Ditchuk - D. V. Tkach, op. cit., 68

The development of the power-generating industry so far is not satisfactory, only a few little hydroelectric power stations have been built in the region. The biggest of them is the Talabor-Nagyág power station, that has been built on the left bank of the river Nagyág, but for driving its turbines the water of the close Talabor river is also used. The major part of Transcarpathia's power needs is covered by the high-tension lines starting out from the Burstin and Dobrotvir thermal power stations in Western Ukraine. The region is also crossed by a transit power line which connects the Ukrainian Vinnyca and the Hungarian Albertirsa<sup>14</sup>.

As a conclusion we can say, that the settling of the industry in Transcarpatina takes place according to several spatial characteristics. Many multi-branchal industrial centres are formed in the region, such as Ungvár, Munkács, Nagyszőlős, Beregszász, Ilosva, Szolyva, Huszt, where the engineering, forest and wood-working, light and food industries are equally well-developed. Besides them also there are many specialized industrial centres, which are characterised only by one or two branches of industry (for instance, the salt-mining in Aknaszlatina, the wood-chemical and light industry in Nagybocksó or the wood-working in Taracköz).

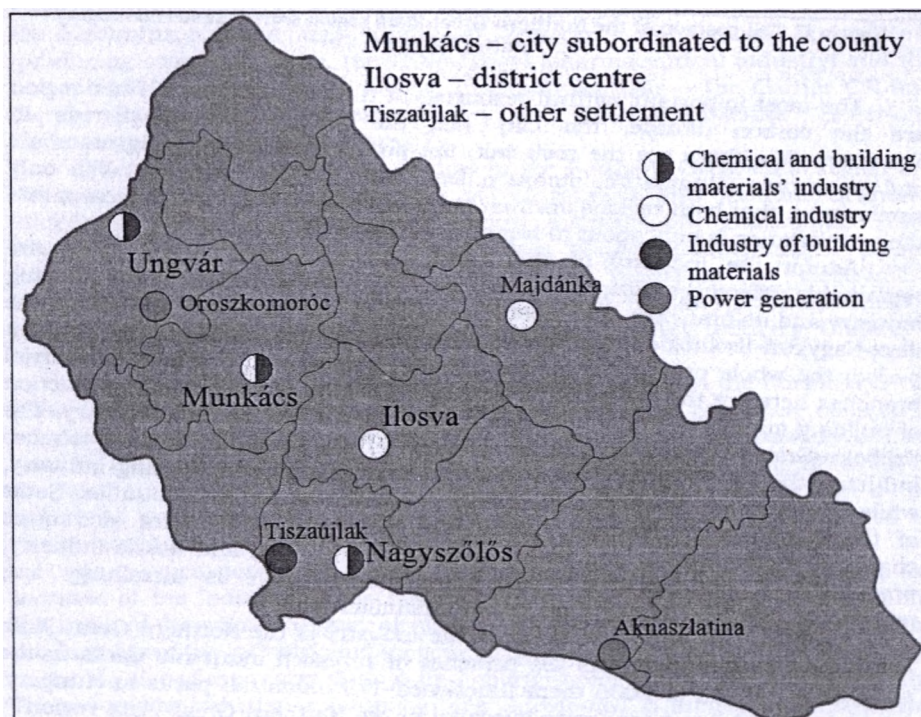


Figure 4. The main centres of the chemical trade, the industry of building materials and the power generation in Transcarpatina (own editing, based on O. V. Zastavetska et al., 1996)

<sup>14</sup> Fodor, *Ipar*. In: Kárpátalja. Régiómonográfia, Pécs-Budapest, 2009, 312

#### INDUSTRIAL ENTERPRISES IN TRANSCARPATHIA

In the last two decades the number of companies (also) leading industrial activities has remarkably increased<sup>15</sup>. This became possible first of all thanks to the privatization, which has started right after the change of regime, but a certain role in it was played by the growing unemployment too. That is, a significant part of the long-lastingly unemployed population started an own business under duress, but many of them (lacking the capital and the business experience) have given it up in a short time. Though they are permanently replaced by new and new persons, thus the total number of the companies doesn't decrease. The most private enterprises are registered in the light and food industry, while in the engineering and chemical industries plus in the industry of building materials the state-owned companies are still prevailing.

#### PRODUCTIVITY OF THE INDUSTRY IN TRANSCARPATHIA

Similarly to the other sectors of economy the efficiency and productivity of the industry in the region is low. This is mainly due to the out-of-date production technologies, the lack of capital and the underqualification of the labour force. But it is also an important factor, that the new company-leaders (especially in case of small firms) are lacking the basic leadership experience, thus simply are not able to organize the work of their employees well. As a result, in factories of this kind there are too many "neutral gears", they usually employ more workers than it is needed for the fulfilment of a particular work.

Modern methods of organizing work and the newest technology are only characteristic for one or two prospering companies, that are intensively involving foreign capital. In their branch they have already become market-leaders in the region (for example, the Ungvár Electric Motor Works in manufacturing cables for different transport devices).

#### THE INDUSTRIAL EXPORT IN TRANSCARPATHIA

A remarkable amount of Transcarpathia's industrial production is realized outside the region's borders. Thus, the county maintains intensive economic connections not only with other regions of the Ukraine, but also with several foreign countries.

In 2002 the industrial export of Transcarpathia ran to 1,397,589,000 USD<sup>16</sup>. This meant an increase by roughly 241 million dollars comparing to the previous year. In the structure of the export the leading branches are the light and engineering industry, the metal manufacturing and the forest and wood-working trade (Table 5).

The most important export articles of Transcarpathia's industry are the different kinds of knitwear, clothing and shoes, the furniture, parquet, sawn timber, metal-cutting equipment, electric motors, batteries and accumulators, the mineral water, wine, margarine, salt, tinned vegetables and fruits etc.

In the last ten years Transcarpathia has foreign trade connections with roughly 90 countries of the world. As for the most important trade partners of the region, the first three positions in the field of export are occupied by Hungary, Austria and Germany, and in the field of import - by Austria, the Czech Republic and Hungary.

<sup>15</sup> *Transcarpathian Regional Statistical Yearbook, 2003*, Trans Carpathian Regional Bureau of Statistics, Ungvár, 2004, 134

<sup>16</sup> *Transcarpathian Regional Statistical Yearbook, 2011*, Transcarpathian Regional Bureau of Statistics, Ungvár, 2012, 295

**Table 5.** The division of Transcarpathia's industrial export by branches (2000-2011)  
(Source: Transcarpathian Regional Statistical Yearbooks, 2000-2011)

Branch of industry	Sum of the export (1000 USD)					
	2000	2002	2005	2007	2010	2011
Light industry	62,829	90,342	154,489	182,211	156,543	183,051
Engineering and metalworks	49,806	59,276	206,930	668,921	751,774	906,225
Forest and wood-working industry	45,011	55,909	95,813	47,974	26,296	40,390
Food industry	5,732	8,016	17,970	31,866	19,556	23,308
Chemical industry	1,637	4,488	15,945	27,698	44,458	46,352
Industry of building materials	849	1,189	1,724	2,858	150	596

#### Similarities and differences between the Northern Great Plain region of Hungary and Transcarpathia, including the industrial sector

As it was mentioned earlier, Transcarpathia has a unique geographical position as it borders on four different European countries (Hungary, Slovakia, Romania and Poland), and, of course, on even more areas and regions of theirs. Among those some are very important from the point of view of the economical co-operations in general and co-operations in the fields of industry in particular (e. g. those belonging to the Carpathian Euroregion), while some are potentially very promising in this respect. The Northern Great Plain region of Hungary actually belongs to both classes, as there are several types of co-operations already running in some fields of economy and there are many possible ways of collaboration in many others. That's why this region deserves a more thorough examination from the viewpoint of economic co-operations and industrial export-import opportunities of Transcarpathia.

The region is situated in the northeastern part of Hungary and borders on the Ukraine, Slovakia and Romania. Its area (17729 square kilometres) is almost one and a half times bigger than that of Transcarpathia (12800 square kilometres) and it plays a more remarkable role for Hungary in nearly every respect than does Transcarpathia for the Ukraine. For example, the Northern Great Plain region makes up 19.1 per cent of the area of Hungary<sup>17</sup>, while Transcarpathia owns only 2.1 per cent of the landmass of the Ukraine. The population of the Northern Great Plain region (1.55 million) is also slightly bigger than the population of Transcarpathia (1.25 million), though it is important to note that the former is made up of three different counties (Szabolcs-Szatmár-Bereg, Hajdú-Bihar and Jász-Nagykun-Szolnok) while Transcarpathia is one county and a region of the Ukraine on its own (Figure 5)

The registered unemployment rate is, surprisingly, higher in the Northern Great Plain region (7,8 per cent) as in Transcarpathia (1,6 per cent), but it is to note that for the latter the high indices of the-hidden unemployment are much characteristic. As for the Northern Great Plain region it can be stated, that the decreasing of places of work due to transformations and structural changes in the economy afflicts more the Szabolcs-Szatmár-Bereg and Hajdú-Bihar counties and less the Jász-Nagykun-Szolnok county of the region<sup>18</sup>.

Unlike Transcarpathia, the Northern Great Plain region is characterized by a great number of towns and cities. While in the former there are only 10 urban settlements, in the latter there 64 ones, which is the most among all the regions of Hungary<sup>19</sup>.

<sup>17</sup> Baranyi, *Az Észak-Alföldi régió bemutatása*. In: Mag kutatás, fejlesztés és környezet, Budapest, 2008/3, 2

<sup>18</sup> Molnár, Péntes, *Kis- és középvárosi foglalkoztatási centrumok az Észak-alföldi Régióban*. In: Kisközségtől az Eurorégióig, Debrecen, 2005, 246

<sup>19</sup> Molnár, Péntes, *Az észak-alföldi városok fejlettségi viszonyai az ezredfordulón*. In: Nagyközségek és kisvárosok a érbén, Szombathely, 2008



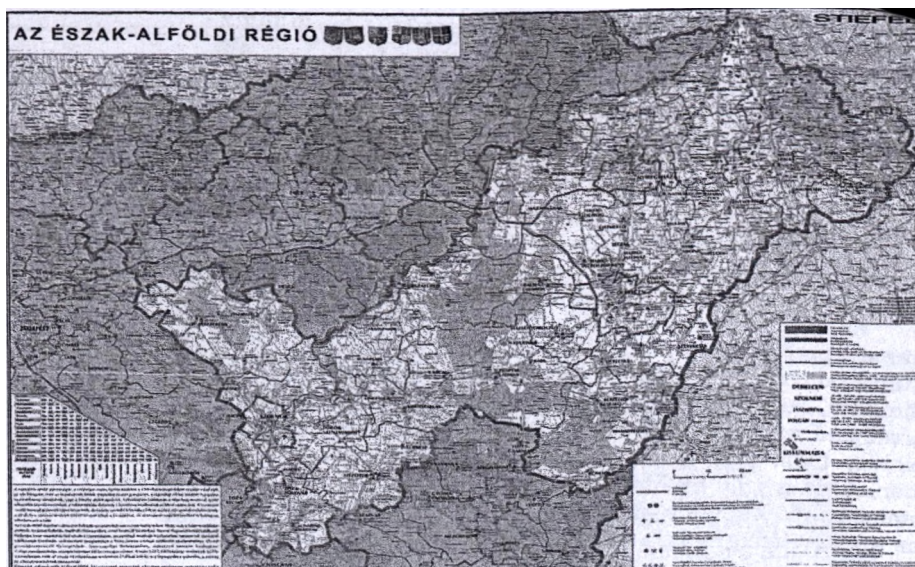


Figure 5. The position of the Northern Great Plain region within Eastern Hungary (Stiefel, 2007)

The most important natural resources of the Northern Great Plain region are the carbon dioxide, the clay and the thermal water, whereas in Transcarpathia these are the rock salt, the brown coal, the building materials and some ores (aluminium, mercury, lead, zinc, copper, gold etc.) The only similarity is, that both regions are rich in natural gas, though in Transcarpathia their exploitation is only about to begin.

As for the industry of the Northern Great Plain region, there are remarkable differences among its three counties by the importance of processing industry and its branches. The most important role in this respect belongs to the Jász-Nagykun-Szolnok county, where (also due to the inheritance of the Socialist period) the whole processing industry is overrepresented. The main industrial branches here are the textile, the clothing and leather industry, the production of building materials, the metallurgy, metalwork and engineering industry. The Szabolcs-Szatmár-Bereg county is famous for its food, drink and tobacco industry, the Hajdú-Bihar county - for its wood, paper and printing industry, while the chemical production is equally characteristic for both counties. Some of these industrial branches, as it was mentioned above, are also quite characteristic for Transcarpathia (e. g. engineering, wood and textile industry, production of building materials), while others (such as metallurgy and metalwork, printing industry) are rather unfamiliar here.

An important difference between the industry of the Northern Great Plain region and Transcarpathia is the presence of so called industrial parks in the former. By the end of 2006 there functioned 179 industrial parks in Hungary, out of which 14,5 per cent were allocated in the Northern Great Plain region<sup>20</sup>.

<sup>20</sup> Molnár, *Megújulás vagy csendes vegetálás? Az észak-alföldi kisvárosok feldolgozóipara az ezredfordulón (doktori értekezés)*, Debrecen, 2007, 43

Though this share itself is remarkable (4<sup>th</sup> place among the regions of Hungary), it is to note, that their economic output is generally modest. This is also true in case of the number of enterprises and employees functioning and working within those industrial parks.

In the Northern Great Plain region there are 22 settlements that have at least one industrial park. As for the number of enterprises within the park(s) the most important is Debrecen, by the number of employees working in the park(s) the most significant is Nyíregyháza, while by the volume of income created within the park(s) the leading settlements in the region are Jászfényszaru, Debrecen and Nyíregyháza. In 2006 in the industrial parks of the Northern Great Plain region there functioned 320 enterprises altogether, the most being in Debrecen, Szolnok, Berettyóújfalu, Mátészalka and Nyírbátor. The total number of their employees has reached more than 19000.

The most workers were employed by the industrial parks of Debrecenben, Nyíregyháza, Jászárokszállás, Jászfényszaru and Mátészalka, while the yearly net income of all the parks in the region has equalled to 786 billion forints. The biggest yearly income was registered in Jászfényszaru, Nyíregyháza, Debrecen and Jászárokszállás. In Jászfényszaru the most important is the Samsung enterprise (producing TV sets and monitors), in Nyíregyháza - the Flextronics, the Electrolux and the Jász-Plasztik, in Debrecen - the National Instruments (producing computer parts), the TEVA-Biogal (pharmaceutical industry) and the Daewoo-MGM (engineering industry), in Jászárokszállás — the Carrier CR and Bundy (both producing refrigerators) and the ArvinMeritor Emissions Technologies (producing car-spares) <sup>21</sup>.

Other important industrial centres in the Northern Great Plain region are Jászberény (Electrolux - production of refrigerators and vacuum cleaners), Mátészalka (Zeiss - production of optical instruments), Tiszavasvári (ICN-Alkaloida - pharmaceutical industry), Ebes (Curver-Rubbermaid - plastic industry), Hajdúböszörmény (GE Lightning Tungstram - electronics), Hajdúhadház (Hajdúsági Iparművek - engineering industry), Vásárosnamény (INTERSPAN - wood industry), Martföld (Brau AG - brewing industry, Unilever - food industry) etc.

The productivity of the industry, of course, is higher in the Northern Great Plain region than in Transcarpatina. In the former it has been constantly increasing since 1993 by more than 10 per cent yearly and nowadays often reaches the Western European standards. Another important thing in favour of the Northern Great Plain region's industry is that more than 40 per cent of the industrial production (and much more as in Transcarpathia) is exported to foreign countries.

As a conclusion, we can state that in the last one and a half decades the increase of the industry of the Northern Great Plain region was less dynamic than that of the whole Hungary or most of other regions. This is also true for the productivity of the industry and its general development. On the other hand, due to the big size of the region it plays an important role in the Hungarian industry. The processing industry is somewhat overrepresented in the economic structure of the region, though it is characterized by branches that produce only low added value. Another problem is, that the engineering industry, which is a leading branch concerning the whole Hungary is well-developed only in the Jász-

<sup>21</sup> Molnár, op. cit., 44-45

**Nagykun-Szolnok county. The significance of the industrial parks (that are playing an important role in dynamizing the structural changes in the industry all over the country) is far behind that of in the other regions of Hungary. Only two regional centres (Nyíregyháza and Debrecen) and two smaller towns (Jászfényszaru and Jászórokszállás) are capable of showing Outstanding achievements of their industrial parks. The main reason of the region's modest industrial capacity is the smaller interest of the foreign investors towards the region, its situation hasn't changed a lot in the last two decades.**

#### REFERENCES

- BARANYI, .. (2008), *Az Észak-alföldi régió bemutatása*. In: Mag kutatás, fejlesztés és környezet, Budapest, 2008/3 szám;
- FODOR, G., (2006), *Kárpátalja iparföldrajzának változásai az ezredforduló óta eltelt id szakban*. In: „Regionális átalakulás a Kárpát-medencében” (szerk. Rácz Szilárd), Magyar Regionális Tudományi Társaság, Pécs;
- FODOR, G., (2009) *Ipar*. In: Kárpátalja. Régiómonográfia. Magyar Tudományos Akadémia Regionális Kutatások Központja - Dialóg Campus Kiadó, Pécs-Budapest;
- MOLNÁR E., (2007), *Megújulás vagy csendes vegetálás? Az észak-alföldi kisvárosok feldolgozóipara az ezredfordulón (doktori értekezés)*, Debreceni Egyetem Természettudományi Doktori Tanács, Földtudományi Doktori Iskola, Debrecen;
- MOLNÁR, E., PÉNZES J., (2008), *Az észak-alföldi városok fejlettségi viszonyai az ezredfordulón*. In: Nagyközségek és kisvárosok a térben (szerk. Csapó T. - Kocsis Zs.) Savaria University Press, Szombathely;
- MOLNÁR, E., PÉNZES, J., (2005), *Kis- és középvárosi foglalkoztatási centrumok az Észak-alföldi Régióban*. In: Kisközségt l az Eurorégióig. Prof. Dr. Süli-Zakar István tiszteletére szerzett tanulmányok gy jteménye (szerk. Czimre K.), Didakt Kft. Debrecen;
- Zastavetska, O.V., Zastavetsldy, B.I., Ditchuk, I.L., Tkach, C.V., (1996), *Heohrafiya Zakarpatskoyi oblast'i (The Geography of the Transcarpathian Region)*, Pidruchniki posibniki, Temopil;
- \*\*\* *Transcarpathian Regional Statistical Yearbooks 2000-2012*, Transcarpathian Regional Bureau of Statistics, Ungvár.

Submitted:  
September 18, 2012

Revised:  
November 13, 2012

Accepted:  
November 28, 2012

Published online:  
November 30, 2012