

**BENCHMARKING OF LOCAL PRODUCTION SYSTEMS IN EASTERN EUROPE
AND UKRAINE/**

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Introduction

The economic crisis and consequent numerous social, economic and political problems had increased regional disparities in all countries, without exception, and require for the search of possible ways of their neutralizing. The main task of modern public policy should be launching of innovative development of the national economy. In this regard, creation of innovative local productive systems could be considered as the suitable instrument in terms of selecting the proper strategy for socio-economic development and balanced government support, that will successfully adapt the stakeholders to the new market conditions.

Thus, the main purpose of current paper is to conduct the comparative analysis of local productive systems' preconditions and activities in the countries of Eastern Europe. In the theoretical paragraph, the concept and structure of LPS will be considered and their role for innovative advancing is discussed. The paper will illustrate the preconditions for LPS development according to the 3-star approach of European Cluster Observatory. The peculiarities of national LPS-supporting policies will be compared also for Eastern European countries. Besides the LPS initiatives in the selected countries (Poland, Slovakia, Ukraine) will be investigated more detailly.

Theoretical backgrounds

Local production systems (LPS) could be defined as the territorial agglomerations of economic, political and social agents focusing on a specific set of the economic activities, mutually connected, albeit incipient and with general innovative orientation (Lishchynskyy, 2016).

Thus, LPS are structures, which combine the best features of agglomeration economies acting globally. However, it should be noted that "LPS" is not a canonic term – in Eastern European countries it's different analogues are used, most common of them is "cluster" (see Table 1).

Regardless from the tittle, the LPS are exploiting the general benefits of territorial concentration, in particular the lower transport costs, the scale effects in production, the proximity of firms engaged into similar or interconnected activities and other gravity forces that leads to the formation of the agglomeration. But in spite of traditional forms of agglomeration (such as metropolitan areas or industrial districts), the LPS have clear cooperation links (along with competition) between its members and innovative focus.

The traditional forms of agglomeration are gradually losing their comparative advantages. Being rather "clumsy" structures, they are not always able to response on the rapid changes in the global environment, especially in light of the recent crisis events. The later unfavorable situation at the energy market has led to the suspension of the huge number of industrial facilities which set the poverty line population of many monoindustrial mining or steel cities.

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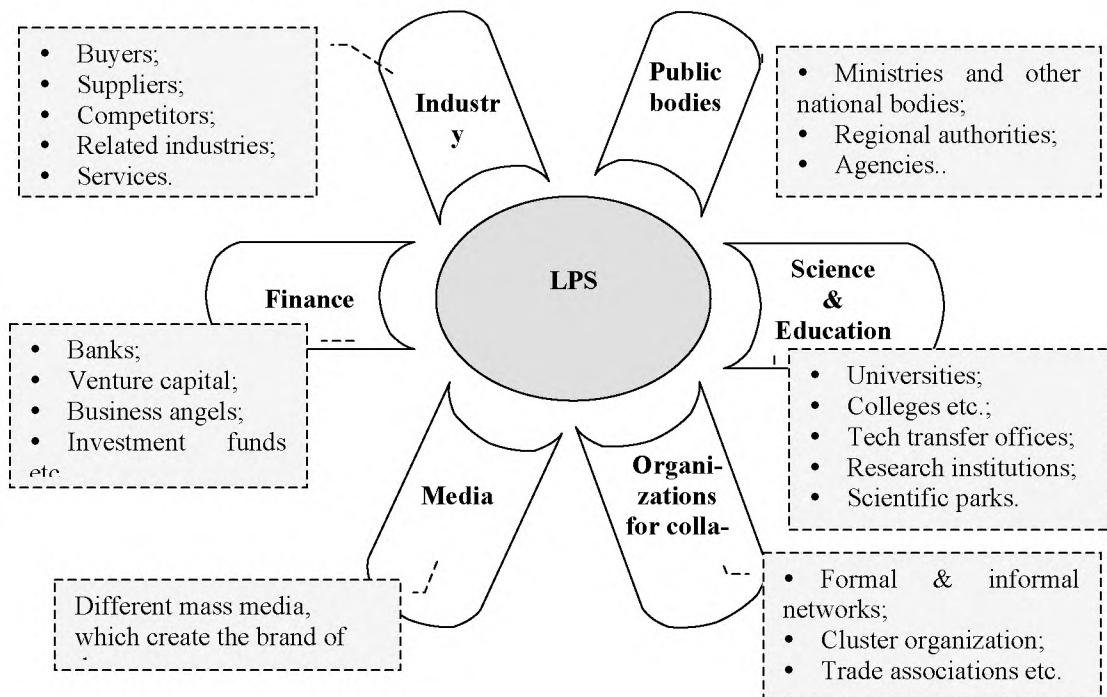
Table 1. Terms or phrases used to describe local production systems in some Eastern European states

Country	Terms or phrases used to describe LPS
Bulgaria	Клъстери, Свързани производства, Гроздове, Промислени
Czech Republic	Klastr
Latvia	Klāsteris, puduris
Lithuania	Klasteris, Žinių ekonomikos branduolys, Integruotas
Poland	Klaster, grono, sieć współpracy/sieć współpracy pomiędzy sektorem nauki, samorządami i przedsiębiorcami, lokalny system produkcji, kompleks przemysłowy
Romania	Entitati din infrastructura de inovare si transfer
Slovakia	Klahsteln
Slovenia	Mreže, grozdi
Ukraine	Кластери, локальні виробничі системи, територіальні виробничі комплекси

Source: authors' modification of Europe INNOVA (2008)

Therefore, during the last decades the new alliances emerge. Such kind of knowledge generating centers may have various structures, as LPS include not only manufacturing structures, but also a wide range of social, scientific research, financial institutions, infrastructure, etc. (see Figure 1) that create a complex essential for the socio-economic development of the region.

Figure 1. Environment of LPS



Source: author's modification of Sölvell (2009)

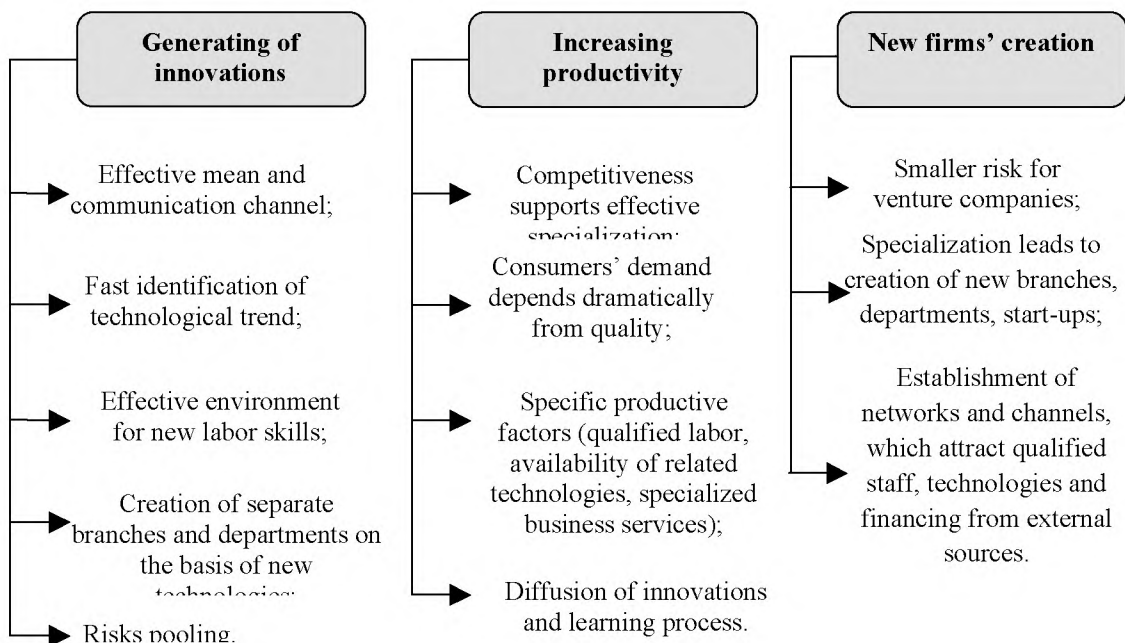
In addition to the stakeholders indicated in Figure 1, various supporting institutions are often created with the main task to promote the emerging new agglomerative formations (including typical local production systems) and the establishment of cooperation within the existing ones (the so-called facilitators).

As marked in Lyzun (2015), Savelyev et al. (2015), the technological parks play rather often the role of facilitator. Indeed, the local production systems based on technological parks have a number of advantages, the main of them can be classified into three groups (Figure 2): generation of innovation, productivity growth, the creation of new start-ups and new manufacturers.

The innovations generated by the technological parks are often not related to the main activity of the local production system, leading to the creation of the new technological departments or even companies. Newly established firms may have the form of joint ventures and belong to the parent company, but often they became the independent competitors towards their initiators.

The innovations affect the localization of production because they stimulate the economic and social growth. Florida (2002) argues that firms and workers tend to migrate to the centers of the knowledge creation. There is also an inverse relationship – the localization due to the territorial proximity of the cluster’s members, creates the favorable conditions for the transfer of knowledge (close professional contacts, “kitchen effect” etc.) that influence on the innovation intensity.

Figure 2. Advantages of LPS built on the technoparks’ basis



Source: Lyzun (2015)

The localization is a prerequisite for the further diversification by means of the economy of scale. In less populated areas there is usually a closer relationship between the social and economic elements resulting in the considerable homogeneity of the system. In contrast, the effect of the love of variety always attracts the new producers and consumers by expanding the boundaries of these local production systems.

Preconditions and LPS-supporting policy in Eastern Europe

The concept of the LPS development is relatively new for Eastern Europe. However, at the period of socialism rather similar idea of “spatial manufacturing complex” was popular, the theoretical basis of which was developed by M. Koloskovskiy in the 1930s (Golikov, 2009: 28). According to his definition, a spatial manufacturing complex “is an economically integrated,

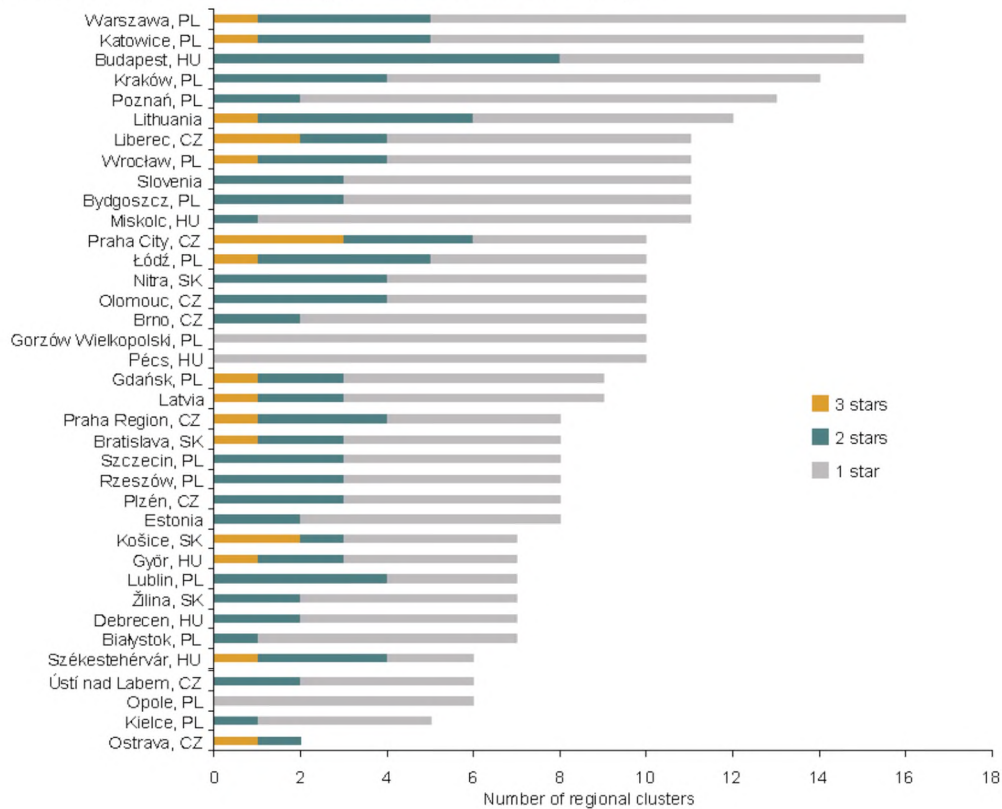
interconnected and interdependent association of various sectors of the economy that emerged and developed in a particular area". Thus, it is rather a Marshallian type of agglomeration's definition.

Indeed, economic policy of the Soviet Union in the mid- 1960s, which included planning of the economic development based on the spatial principle, has got many points in common with modern cluster approach. For example, the Office of Tractor and Agricultural Machinery of Kharkiv public farm complex, in addition to traditional vertically integrated production, includes also technical schools, colleges, and specialized design institutes. Similar associations were observed in chemical, textile, paper and wood processing, construction materials industries, etc. However, it is not correct to equate a LPS and a SMC, because the second one is much broader term, which covers both LPS and industrial districts, which are common regional concentrations of certain industry without any clear innovation and cooperation focus. Besides, implementation in the conditions of centralized economy is rather different from the market one.

The preconditions for LPS development we would assess in this paper using the 3-star approach of European Cluster Observatory. According to the methodology a number perspectives are important to evaluate whether the presence of employment in specific industries belonging to a cluster category within a given region reaches sufficient 'specialized critical mass' to develop the type of spill-overs and linkages that create positive economic effects. The evaluation criteria (the 'stars') are: size (more than 15,000 employees at a location); specialization (a region is more specialized in a specific LPS category than the overall economy across all regions, i.e. specialization quotient of more than 1.75) and dominance (a LPS accounts for a larger share of a region's overall employment – 7% or more).

According to the analysis conducted by Ketels and Sölvell (2006) to find out the number of regional LPS that have gained stars across all NUTS-2 regions of Eastern Europe, Warsaw (Poland) tops the list, gaining stars from 16 regional LPS while Ostrava (Czech Republic) comes at the bottom with just 2 regional LPS meeting any of the star benchmarks (Figure 3). The average number of stars achieved by any of these regional LPS gives a sense of the level of concentration in a region's economy activity. Prague City (Czech Republic), Székestehérvár (Hungary), Košice (Slovak Republic), Prague Region (Czech Republic), and Łódz (Poland) register the highest number of stars per LPS for regions with at least five clusters meeting one of the star benchmarks, indicating a relatively high concentration of cluster activity within a few regional LPS.

Figure 3. LPS portfolio strength across Eastern Europe



Source: European Cluster Observatory

Eastern European countries are having different national policies and institutions relevant for LPS development, adding further context to the data on actual LPS presence and LPS-relevant business environment conditions. Some of them (not all) have official explicit national LPS-supporting policy that could be implemented at national or regional levels using top-down or bottom-up approaches or their combination. Table 2 aims to summarize existing political strategies among the Eastern European countries.

LPS initiatives in selected Eastern European countries

Poland

As it was marked in the Table above, cluster policy in Poland is part of the national Reform Programme 2020, issued by the Ministry of Economy. Cluster references were first made at the policy level in the country in the “Strategy for Increasing the Innovativeness of the Economy, 2007-2013” in 2006, with goals of supporting joint networking activities in order to build-up and strengthen the innovation infrastructure in the country.

There is a huge interest in the government to link cluster policy with “Special Economic Zones” development policy. It is believed that with this linkage, a stronger framework for innovation will be put in place, with an infrastructure that will enable better regional competitiveness and innovation. At the national level, cluster policies are rather implicit with some instruments (mainly funding instruments) applied by the national government which promote the establishment of clusters in all the Polish regions (Barsoumian et al., 2011).

Table 2. Comparative analysis of LPS-supported policies in Eastern Europe

Country	Year of launching	Precision	Level of implementation	Type	Responsible institution
Bulgaria	2004	Not explicit	National	Sectoral	Ministry of Economy
Czech Republic	2005	Explicit (in the frames of innovation policy)	National	Horizontal	Ministry of Industry and Trade
Estonia	2006	Explicit (in the frames of innovation policy)	National	Horizontal	Ministry of Economic affairs and Communication
Hungary	2007	Explicit	National	Horizontal	Ministry of Economy
Latvia	2005	Explicit	National	Sectoral	Ministry of Economics – Department of Entrepreneurship and Industry
Lithuania	2008	Explicit (in the frames of innovation policy)	National	Sectoral	Ministry of Economy
Poland	2006	Explicit (part of Reform Programme 2020)	National / Regional	Horizontal	Ministry of Economy
Romania	2010	Not explicit (integrated within industrial policy)	National	Bottom up	Ministry of Economy Trade and Business Environment
Slovakia	2005-2009	Not explicit	N/A	N/A	N/A
Slovenia	1999 No longer in place	Not explicit now	National	Sectoral	Ministry of Economy
Ukraine	N/A	Not explicit	N/A	Bottom up	N/A

Source: authors' compilation based on Barsoumian et al. (2011), European Cluster Observatory

At the end of 2015 Polish Agency for Enterprise Development (PARP) identified more than 130 LPS in Poland, which are defined as specific collaboration forms involving geographically concentrated institutions and organizations, mainly enterprises operating in the same or related industries.

All identified LPS have in total almost 6,000 participating entities of which enterprises account for 78%. The largest number of LPS are active in the following sectors: ICT, energy/renewable energy and construction, as well as in healthcare. Significant number of clusters represent metal industry, production technologies, tourism and business services.

In order to achieve the goals of LPS policy outlined by the Polish Cluster Policy Group (in Polish legislation LPS are mainly named as “clusters”, though term “LPS” is rather common in research papers), in 2014 the PARP, in collaboration with the Ministry of Economy and external experts, developed a set of criteria and drafted procedures for appointing Key National Clusters. The methodology was based on the desk research of available national and international sources

to propose criteria and validation requirements which eventually underwent consultation with ministries, institutions and the general public.

The profile of a Key National Cluster (see the list of them in Table 3) resulted from combination of expectations towards the best clusters in different states, especially European, and the actual performance of Polish clusters.

Criteria address the following aspects:

- (1) Cluster size and structure (number of participants, especially SME and large companies);
- (2) Employment;
- (3) Joint activities of cluster participants and internal collaboration;
- (4) Geographical concentration of cluster participants;
- (5) Cluster specialization;
- (6) R&D;
- (7) Innovation performance;
- (8) Resources (physical, human, financial, etc.);
- (9) Presence of the cluster and its companies in foreign markets;
- (10) National and international visibility of the cluster;
- (11) Cluster coordination services and management (Source: Polish Innovation Portal).

Table 3. List of Key National Clusters in Poland

	Cluster name	Industry	Name of the cluster organisation (coordinator)	Location of the cluster coordinator	Status valid until
1	Aviation Valley	aviation	Stowarzyszenie Grupy Przedsiębiorców Przemysłu Lotniczego "Dolina Lotnicza"	Rzeszow	30.09.2018
2	Polish Aluminium Cluster	metal casting	City Consulting Institute Sp. z O.O.	Katowice	30.09.2018
3	Mazovia ICT Cluster	ICT	Stowarzyszenie Rozwoju Społeczno-Gospodarczego "Wiedza"	Warsaw	30.09.2018
4	Interizon	ICT	Fundacja Interizon	Gdansk	30.09.2018
5	Eastern Construction Cluster	construction	Polskie Stowarzyszenie Doradcze i Konsultingowe	Bialystok	30.09.2018
6	Metal Processing Cluster	manufacturing of machines, devices and tools for industrial use	Centrum Promocji Innowacji i Rozwoju	Bialystok	30.09.2018
7	Green Chemistry West Pomeranian Chemical Cluster	chemical industry	Stowarzyszenie Zachodniopomorski Klaster Chemiczny "Zielona Chemia"	Szczecin	30.09.2018

Source: Polish Innovation Portal

Despite the fact that Poland's interest in the implementation of cluster initiatives and cluster formation constantly and dynamically grow, today there are barriers connected with the clustering of Economy of Poland. They are: low level of confidence among entrepreneurs and the lack of desire to create cooperation between firms that is connected with the probability that

the ideas can be stolen; lack of regional and local policies to support industrial clusters; financial barriers (including high taxes on association); lack of traditions of dynamic entrepreneurship.

Slovakia

There is no explicit LPS policy in Slovakia. However, there are references to LPS formation in other types of policies. LPS are mentioned as important policy instruments to increase competitiveness and innovation of enterprises in the Slovak economy. These can be found in the Innovation Strategy for the Slovak Republic for years 2007 – 2013 for example (Barsoumian et al., 2011).

The LPS in Slovakia have been formed either spontaneously using specific features, potential or sources of regions or have been formed around multinational firms (usually they also represent the most important source of FDI for the hosting region, as well for the Slovak economy as a whole), which decided to do investments in Slovakia (e.g. automotive LPS in Trnava, Bratislava and Žilina region). Their business activities have attracted a lot of other firms, especially sub-contractors firms, as a part of their own value chain.

Most of LPS have character of technological, tourism or knowledge alliances. In the recent years, a formation of LPS in the creative industries has been observed, too. In the case of these LPS, Bratislava region takes an important role. It is one of the leading European regions from the point of view of concentration of employment in the creative industry. Approximately more than 5% of workers are employed in this sector that indicates a significant specialization. In addition, about 46% of all businesses in the creative industries are located in Bratislava region and approximately 91% directly in Bratislava. Currently, as the most perspective sectors of the creative industry are considered design and software programming (Ministerstvo hospodárstva Slovenskej republiky, 2013, p. 27).

LPS, unlike other associations in Slovakia, may not be formally established (as a legal form) and they are also able to operate on an informal basis. In case of Slovakia, the special legislation on business alliances does not exist, even the Slovak legislation does not know the term “LPS” or “cluster”. Thereby the LPS in Slovakia, if the firms engaged want to organize themselves formally, have to choose their legal forms within the already existing legislation. Based on it, the LPS organizations have a form of *interest association of legal persons* or *civil association*, which are registered in the *Register of Interest Associations of Legal Persons* or in the *Evidence of Civil Association* and they govern priority by the Civil Code and by the Act on the association of citizens. However, the legislation of these associations is general and does not take into account any specifics of LPS initiatives (Kramárová et al., 2014).

The legally existing cluster organizations in Slovakia (including both active and inactive acting initiatives) are listed in the table below (Table 4). Mainly, they operate in the fields of automotive industry, IT technologies, electronic industry, energetic industry (the most important industries from the point of view of FDI of the Slovak Republic, logically for the hosting region, too) and tourism.

Table 4. LPS initiatives in Slovakia

Official name of cluster (in Slovak)	Region	Year of foundation	Official name of cluster (in Slovak)	Region	Year of foundation
BITERAP	Kosice Region	2004	Klaster Smolenice	Trnava Region	2010
Automobilovy klaster Slovensko	Trnava Region	2007	Klaster cestovneho ruchu Kosice Turizmus	Kosice Region	2010
Kosice IT Valley	Kosice Region	2007	Stavebnicky klaster Slovenska	Trnava Region	2010
ABC - Academic Business Cluster	Bratislava Region	2007	Klaster HOREHRONIE zdruzenie cestovneho ruchu	Banska Bystrica Region	2011
Z@aict	Zilina Region	2008	Energeticky klaster Presovskeho kraja	Presov Region	2012
Zdruzenie cestovneho ruchu Balnea	Banska Bystrica Region	2008	Klaster pre podporu inovativnych a zelenych technology	Trnava Region	2012
1. slovensky strojarcky klaster	Banska Bystrica Region	2008	Klaster TOPOECANY	Nitra Region	2012
Elektrotechnicky klaster - zapadne Slovensko	Trnava Region	2008	Narodny energeticky klaster NEK	Bratislava Region	2012
Klaster cestovneho ruchu - zapadne Slovensko	Trnava Region	2008	KITech klaster inovacnych technology pre nakladanie s prasnymi anorganickymi odpadmi	Trencin Region	2012
Klaster LIPTOV - zdruzenie cestovneho ruchu	Zilina Region	2008	Klaster MONOCRYSTAL	Zilina Region	2013
Energeticky klaster - zapadne Slovensko	Trnava Region	2009	Slovak IT klaster	Trencin Region	2013
Klaster TURIEC - zdruzenie cestovneho ruchu	Zilina Region	2009	Trnavsko-myjavsky strojarcky klaster	Trnava Region	2013
Slovensky plastikarsky klaster	Nitra Region	2009	Klaster pre akumulacie energie z OZE	Nitra Region	2013
Klaster ORAVA	Zilina Region	2009	1. spissky klaster	Kosice Region	2014
Dunajsky vedomostny klaster	Bratislava Region	2010	Klaster Huculska magistrala	Banska Bystrica Region	2014
Energeticky klaster CENTROPE	Trnava Region	2010	EMOCITY - Klaster pre elektromobilitu a smart city	Bratislava Region	2014
Klaster AT+R	Kosice Region	2010	Potravinarsky klaster	Nitra Region	2014
Klaster pohranicnych hradov	Banska Bystrica Region	2010	Zeleznicny dopravný klaster	Presov Region	2014

Source: Kramárová et al. (2014). *The Cluster Initiatives (No. 0902966)*. International Institute of Social and Economic Sciences.

Ukraine

In spite of absolute absence of political support⁹, some LPS still managed to be developed in Ukraine. The first attempts to create the clusters began in 1998. Nowadays there are above two dozen of LPS at the territory of Ukraine. The main of them are presented in Table 5. As it is seen, the area of their location is rather limited – the lion's share of all clusters function in 3 regions (Khmelnyskyi, Ivano-Frankivsk and Kharkiv), which necessitates the active development of the regional economic policy in this area.

The first efforts to create LPS in Ukraine (in national practice they are traditionally called “clusters”) were made by enthusiasts of science and business in the mid-1990s. They had created in Khmelnytskyi region the Association “Podillia Pershyi” (“Podillia the First”) headed by the rector of the Podillia National University Radomir Silin. The "Godfather" of Khmelnytskyi cluster project was an American businessperson Wolfgang Price, who was in Ukraine as a volunteer of "Peace Corps". He managed not only to spark with his idea the working group of local economists and managers, but also to involve technical assistance of the World Bank. By 2005 the Association contributed to the formation of five clusters: construction, clothing and food – in Khmelnytskyi, food and tourism – in Kamianets-Podilskyi. In addition, a green tourism business network was created based on several small businesses in the village Hrytsiv (PPA official website; Borseková et al., 2016).

Table 5. The main LPS in Ukraine

Region	LPS title and sector
Khmelnyskyi	<ul style="list-style-type: none"> ❖ Khmelnytskyi construction cluster; ❖ Khmelnytskyi sewing cluster; ❖ Khmelnytskyi touristic cluster; ❖ Kamianets-Podilsk touristic cluster; ❖ Cluster of the eco-agrotourism in Grytsive, Shepetivka district “Amulet”; ❖ Fruit cluster «Podilsk apple».
Ivano-Frankivsk	<ul style="list-style-type: none"> ❖ Cluster “Suziria” (manufacturing of souvenirs) ; ❖ Cluster “Manufacturing of ethnic products Prykarpattia” (manufacture products from sheep's wool) .
Kharkiv	<ul style="list-style-type: none"> ❖ Cluster of swine breeding and meat products; ❖ Cluster in the Euroregion “Slobozhanshchyna”
Cherkasy	❖ Cluster of green tourism and ethnic products
Rivne	❖ Cluster of wood Rokytne district
Kyiv	❖ Cluster “Slavutych” (attending Chornobyl nuclear station area)
Kherson	❖ Transport-logistics cluster «Southern gateway of Ukraine»
Poltava	❖ Cluster of ecological clean baby food based on organic farming
Odesa	❖ Cluster of organic farming and green tourism in Danube region
Poltava	❖ Cluster “Gogol’s places in Poltava”

Source: Lishchynskyy (2016)

⁹ There is no even legal definition of LPS, though the term is used in several laws (in national practice, the LPS are named as “clusters”)

Summarizing the above mentioned it should be noted that the various agglomerative and innovative structures in Ukraine are at the early stages of its formation and their effectiveness is far from optimal. Particularly the challenging is regulatory and legal framework, which should create favorable conditions for cooperation of business, government, science, education, civil society groups within the LPS. The term “LPS”/“cluster” is rather common in a variety of the government programs, but still there is no even legal definition of it. The Laws of Ukraine "On the innovation activity", "On scientific and technical activity", "On priority directions of the innovative activity in Ukraine", "On special investment and innovation of technology parks" should be adapted in accordance with the practice of European Union.

The first steps towards the development of the cluster strategies have already being done by the national Government. In October 19, 2010 the Ministry of Economy of Ukraine has developed a decree “On the establishment of the Working Group on the cluster development in Ukraine.” However, the proposed initiatives of the created working group, unfortunately, have not found a real support at the national level yet.

Conclusions

Benchmarking of world practices and the development of regional growth strategy on the basis of LPS can guarantee not only the survival of traditional heavy industrial centers in Eastern Europe, but also ensure favorable conditions for emerging small and medium enterprises, which can be competitive in national and world markets.

In general, it should be noted that various agglomeration and innovation structures in Eastern Europe are at the early stages of their formation and their effectiveness is usually far from optimal. Particularly, one of the biggest challenges is the improvement of the regulatory and legal framework for most of the considered countries. It should create favorable conditions for the cooperation of businesses, government, science, education, and civil society groups within the clusters.

The LPS processes in the Eastern Europe evolve primarily in these sectors: agriculture, tourism, business services, construction, food technology, IT and financial services. The most adapted to the clustering of the economy among the considered countries is Hungary. At the moment 150 industrial LPS operate there that unite more than 2,000 companies. Industrial parks have some privileges: infrastructure, reduced tax. Thus, the clusters of Hungary provided 57% of workplaces, 40% of GDP and 18% of the country's exports. The experience of socio-economic transformations in countries of Central and Eastern Europe and in some republics of the former USSR, the practice of implementing cluster initiatives attracts attention in Ukraine.

References

Barsoumian, S., van der Spek, T. and Severin, A. (2011), *Eco-Innovation and National Cluster Policies in Europe. A Qualitative Review*, Greenovate! Europe EEIG for the European Cluster Observatory, Brussels, available at: <http://www.clusterobservatory.eu/index.html> (accessed 24 March 2017).

Borseková, K., Vitálišová, K., Lyzun, M. and Lishchynskyy, I. (2016), “Tourism local production systems in the Central and Eastern European Countries”, *Ekonomika a Spoločnosť: Vedecký Časopis Ekonomickej Fakulty Univerzity Mateja Bela v Banskej Bystrici*, Vol. 17 No. 1, pp. 99–113.

Europe INNOVA. (2008), “Cluster policy in Europe. A brief summary of cluster policies in 31 European countries”, *Scribd*, available at: <https://www.scribd.com/document/53330456/cluster-policy-in-Europe> (accessed 23 March 2017).

European Cluster Observatory. (2017), “Official web-site”, available at: <http://www.clusterobservatory.eu/index.html> (accessed 24 March 2017).

- Florida, R. (2002), *The Rise Of The Creative Class: And How It's Transforming Work, Leisure, Community And Everyday Life*, First Printing edition., Basic Books, Princeton, N.J.
- Golikov A., Kazakova N., Prav Y. (2009), Regionalnaia politika i ekonomicheskoe razvitie: evropeiskiy kontekst, Kharkov: Ekograf, p. 28-29.
- Ketels, C.H.M. and Sölvell, Ö. (2006), *Clusters in the EU-10 New Member Countries*, Report of European Commission, Enterprise and Industry Directorate-General, Brussels, Available at: <http://www.hbs.edu/faculty/Pages/item.aspx?num=22611> (accessed 24 March 2017).
- Kramárová K., Nadányiová M., Kicova E. (2014) The Cluster Initiatives. - 14th International Academic Conference, Malta
- Lishchynskyy, I. (2016), "Spatial concentration of industry and local production systems in Ukraine", *Folia Oeconomica*, Vol. 2 No. 320, pp. 51–63.
- Lyzun, M. (2015), "Technology parks as an element of local production systems' formation", *Functioning of the Local Production Systems in Bulgaria, Poland and Russia. Theoretical and Economic Policy Issues*, Wydawnictwo Uniwersytetu Łódzkiego, available at: (accessed 23 March 2017).
- Ministerstvo Hospodárstva Slovenskej Republiky. (2013) *Schéma na podporu priemyselných klastrových organizácií. (schéma podpory de minimis)*. Available from: https://www.sica.sk/materials/files/inovacie/klastre_dotacie/Schema_klastre_DM-32013_OV_177_2013_z_13_09_2013.pdf [Accessed: 11st November 2014].
- Podillya Pershyi Association (PPA) official web-site [Online]. Available from: <http://www.ppngo.org/>, (accessed 15.6.2015)
- Polish Innovation Portal http://www.pi.gov.pl/eng/chapter_95931.asp
- Savelyev, Y., Kurylyak, V. and Kurylyak, Y. (2015), "Benchmarking of cluster-type local production systems in the world economy and Ukraine", *Functioning of the Local Production Systems in Bulgaria, Poland and Russia. Theoretical and Economic Policy Issues*, Wydawnictwo Uniwersytetu Łódzkiego, available at: (accessed 23 March 2017).
- Sölvell, Ö. (2009), *Clusters: Balancing Evolutionary and Constructive Forces*, Ivory Tower.

Abstract

The paper aims to to conduct the comparative analysis of local productive systems' preconditions and activities in the countries of Eastern Europe. The concept and structure of LPS is considered and their role for innovative advancing is discussed. The paper illustrates the preconditions for LPS development according to the 3-star approach of European Cluster Observatory. The peculiarities of national LPS-supporting policies were compared also for Eastern European countries. Besides the LPS initiatives in the selected countries (Poland, Slovakia, Ukraine) were investigated.

Autonomie locale et développement

Local autonomy and development

