

The development of Silesian Wood Cluster LLC as a result of cooperation between enterprises in the wood industry, public administration and research and development institutions

ADRIANNA PAROŃ¹⁾, KATARZYNA SYRYTCZYK²⁾

¹⁾Department of Economic Policy and Regional Research Faculty of Economics The Academy of Management and Administration in Opole

²⁾Department of Logistics and Management Faculty of Economics The Academy of Management and Administration in Opole

Abstract: *The development of Silesian Wood Cluster LLC as a result of cooperation between enterprises in the wood industry, public administration and research institutions.* The business clusters are businesses operating in the same geographical area, interconnected with e.g. specialized suppliers and service providers present in the country or in the region. The aim of clustering is the increase of the efficiency of those businesses so that they can gain a competitive advantage in the market. Clusters are connected with institutions such as universities and trade associations. In the development and modernization process in clusters there are also involved governments and self-government units. Public administration units establish programs to support the development of clusters, involving the development of bottom up initiatives by strengthening cooperation between businesses, and the development of networks of business support institutions and research and development sector, and also at the same time, they support the top-down initiatives through the development of the institutional environment that offers services linked to the needs and challenges of companies. In the article there is presented research on the Silesian Wood Cluster, which was established in 2007 as a bottom up initiative of entrepreneurs from the wood industry operating in the Opolskie Voivodeship, and which primary aim is to strengthen competitiveness by creating the right climate for cooperation between companies of the wood industry, undertaking joint initiatives, mutual exchange of experiences and the development of closer cooperation.

Keywords: wood industry, business cluster, the Silesian Wood Cluster LLC

INTRODUCTION

M.E. Porter defines clusters as: “geographic concentrations of interconnected companies, specialized suppliers, service providers, firms in related industries, and associated institutions (for example, universities, standards agencies, trade associations) in a particular field that compete but also cooperate¹⁾”. In the meaning of this article the understanding of clustering is as the process of associating the wood industry operating in the same geographical area. Common location allows fast transfer of information and ability to learn from each other. According to geographic concentration it is also possible to use common means of production, what can and should reduce the cost of production. Nowadays, there is belief that the “geographical clustering of industrial activity within particular locales provides the basis for their economic prosperity and growth”²⁾.

CLUSTERS IN POLAND – COOPERATION BETWEEN ENTERPRISES, PUBLIC ADMINISTRATION AND RESEARCH INSTITUTIONS

It is noticeable that clusters in Poland have different forms of action. Clusters may occur in formal and informal cooperative relations (value chain), thematic connections (such as training or research activities), they also differ in size (from a few to dozens of companies

¹⁾ M. E., PORTER, 1998: Clusters and competition: new agendas for companies, governments, and institutions, [in:] M.E. PORTER (Ed.) On Competition. Harvard Business Review Books, Cambridge, MA.; 197–198.

²⁾ G.M. SPENCER, T. VINODRAI, M.S. GERTLER, D.A. WOLFE, July 2010: Do Clusters Make a Difference? Defining and Assessing their Economic Performance, Regional Studies, Vol. 44.6; p. 698.

and institutions)³. Surveys and analyzes conducted by the Institute for Market Economics, pointed to insufficient and incomplete shape of the potential of the Polish clusters. Research conducted in 2008 showed that most clusters were established by the associations (47.1%), academic institutions (23.5%), science and technology parks (17.7%), trading companies (11.8%) and by the agencies (5.9%)⁴. Institutions that are involved in the emergence process of new clusters are listed in Table 1.

Tab. 1 Public and private institutions in Poland involved in supporting clusters

Type of institution	Examples
government institutions	The Ministry of Economy The Ministry of Regional Development The Ministry of Science and Higher Education Polish Agency for Enterprise Development
regional and local institutions	local self-government units
academic institutions	Technology Parks Technology Transfer Centers Institute for Market Economics Center for Social and Economic Research
NGOs	Business Incubators Business associations Business Centers Chamber of Handicrafts

The bottom up, independent initiative itself is not enough for good functioning of the cluster. The process of clustering should begin also with adequate facilities. According to R. Voyer, it should be noted:⁵

- A strong link between companies and their business environment, taking into account also the business and technological facilities;
- Geographical proximity of the entities forming the cluster (companies, research and development centers, academic institutions, financial institutions and others), affecting the development of the whole region;
- The number of entities in the structure of the cluster – the more companies, employees, specialized institutions, the greater the self-sufficiency of the cluster. This structure does not require the purchase of products or services from outside, thus less is the risk of escaping the benefits of innovative activity.

The results of the study on the state of cooperation between Polish entrepreneurs, the sphere of science, and the business environment say that there is a weak relationship between those elements. The necessity of cooperation was identified in the strategic document “Strategy for increasing the innovativeness of the economy for the years 2007 – 2013” . There are signs that fear related to cooperation is still bounded with a lack of confidence ahead of the competition – business partner.⁶

³ L. PALMEN, M. BARON, 2008: Przewodnik dla animatorów inicjatyw klastrowych Polsce, Warszawa, p. 32, [in:] <http://www.pi.gov.pl/>

⁴ J. HOŁUB-IWAN, M. MAŁACHOWSKA, 2008: Rozwój klastrów w Polsce. Raport z badań, Szczecin, p. 17. [in:] <http://www.fundusze-strukturalne.gov.pl/NR/rdonlyres/5898AF7D-5835-415B-B375-029AC9D166D6/49755/8RozwjklastrwwPolsce.pdf>

⁵ M. KOZAK, Feb.2009: Klastry – wyzwanie dla rozwoju MŚP w Polsce, „e-mentor” no. 1 (28), p. 15 [in:] www.e-mentor.edu.pl

⁶ Kierunki zwiększania innowacyjności gospodarki na lata 2007- 2013, 19 August 2006: Ministerstwo Gospodarki Departament Rozwoju Gospodarki, Warszawa, p.79- 80, [in:] <http://www.mg.gov.pl/Gospodarka/Innowacyjnosc/Polityka+innowacyjnosci/innowacyjnosc+gospodarki+2007+2013>

In the wood industry in Poland, there are now several clusters that have similar tasks and realize similar objectives, and they are:

- Furniture Cluster of Wielkopolska Voivodeship (Wielkopolski Klaster Meblarski, <http://klastermeblarski.warp.org.pl>);
- Polish Wood Cluster (Polski Klaster Drzewny, <http://www.polish-wood-cluster.pl/>);
- Wood and Furniture Cluster of Zachodniopomorskie Voivodeship (Zachodniopomorski Klaster Drzewno – Meblarski, <http://drewno.rsi.org.pl/>);
- Silesian Wood Cluster (Śląski Klaster Drzewny, <http://www.slaskiklasterdrzewny.pl>);
- Wood Cluster of Lubelskie Voivodeship (Klaster Lubelskie Drewno, <http://www.lubelskiedrewno.eu>);
- North-Eastern Innovative Wood Cluster in Podlaskie Voivodeship (Północno-Wschodni Innowacyjny Klaster Drzewny);
- Association of Furniture Cluster Elbląg (Klaster Mebel Elbląg, www.klastermebel.pl);
- Wood Cluster – SIDE CLUSTER (Klaster Drzewny SIDE CLUSTER, <http://www.side-cluster.pl>);
- Klaster Producentów Okien i Drzwi Mazurskie Okna, <http://mazurskieokna.pl>);
- Lubawski Cluster Furniture Store (www.cech.lubawa.pl), Meble Lubawa.

SILESIA WOOD CLUSTER

Silesian Wood Cluster operates in Opolskie Voivodeship. In the region of Opole, the leading role is played by companies engaged in production of: finished metal products (18%), wood and cork products (12.5%), food products (11%) and furniture (9%)⁷. According to the study carried out in 2011: 14% of respondents were engaged in cluster initiatives, almost 7% resigned from such participation and more than 13% did not take into account such possibility of cooperation⁸. The respondents emphasized the ability to increase its competitiveness in the region as one of the most important benefit of the existence of clusters. Participation in cluster initiatives is to increase the availability of innovation and to improve the competitiveness of their participants. Companies can cooperate with each other and compete at the same time – which is a kind of phenomenon in relation to the activities of companies. However, the respondents spoke negatively about the support of cluster initiatives by the public administration⁹. The research pointed out the difficulties in creating and functioning of clusters: a practical lack of cooperation with the scientific community, the lack of a development strategy, and the lack of perceived support from public authorities and local governments¹⁰.

The research presented in this article is on the Silesian Wood Cluster. The cluster emerged on 2nd March 2007, as a bottom up initiative of entrepreneurs from the wood sector in the Opolskie Voivodeship. It emerged on the basis of the Silesian Carpenter Club, which was part of the Chamber of Commerce “Silesia”. The organizers wanted to expand cooperation through the establishment of joint economic initiatives, to develop cooperation and exchange of experiences. Their aim was to strengthen the competitiveness in the region and beyond. The next stage of development of the cluster was the creation of a company

⁷ J. SŁODCZYK, E. SZAFRANIEC, 2011: Przestrzenne możliwości rozwoju klastrów w województwie opolskim. Ocena ekspercka, [in:] Uwarunkowania i możliwości rozwoju klastrów i inicjatyw klastrowych w województwie opolskim. Ocena ekspercka, W. DUCZMAL (Ed.), W. POTWORA (Ed.), Vol. 3, Opole, p. 157- 158.

⁸ A. PAROŃ, A. USTRZYCKI, 2011: Warunki i możliwości rozwoju klastrów w województwie opolskim. Badania sondażowe w sektorze przedsiębiorstw, W. DUCZMAL (Ed.), W. POTWORA (Ed.), Vol. 5, Opole, p. 31- 34.

⁹ Ibidem, p. 108.

¹⁰ Ibidem, p. 217.

Silesia Wood Cluster LLC, in September 2008. Its main task was to create groups of: purchasing, sales, export, import and conduct the investment activities. During the next period of activity, the tasks that concerned all participants were developed: to conduct a large-scale campaign promoting wood as a human friendly material; to optimize the production in companies that its objective is to joint implementation of large economic projects – the development of specialized companies; to create a common brand; to implement modern technological solutions and implementing new products; to optimize technological processes in companies inside the cluster; to obtain external funding; to develop professional skills of business owners and their employees through trainings, seminars, lectures and readings; to organize trade fairs, exhibitions, to promote the cluster companies and also to seek new markets; to organize study trips, trade missions and cooperative exchanges; to lobby on local and regional decision makers; to coordinate of sales and purchases¹¹.

RESULTS

This study analyzes the extent of realization of the tasks of Silesian Wood Cluster. The national and international agreements were also described. Status of implementation of these actions is presented in Table 2.

Tab. 2 The realization of tasks of the Silesian Wood Cluster. (Source: self-study based on the Silesian Wood Cluster materials)

Task implementation	International agreements	National agreements
Conducting a campaign promoting wood as a human friendly material	Agreements with the major industry clusters in Austria and the Czech Republic	Agreement with Opolskie Centre for Economy Development – organizational support, promotion of cluster’s companies during the trade fairs. Preparation of the “Passive House” with the full offer of cluster companies.
Optimization of production in companies in order to joint implementation of large economic projects – development of specialized companies	It is planned to create a product under one common brand. It is planned to open points of sales abroad to increase sales in the cluster.	The company's activity is focused on the preparation common large projects in Poland and abroad. Cluster is preparing to create groups of production (common pool of finance for sharing, benefit from the construction of a common brand, negotiating prices, etc.).
Creating a common brand	There are outlined plans to reach foreign markets	Participation in the exhibitions and trade fairs events. It is planned to prepare the offer under the same name (under one brand – work in progress) and produce jointly by the members of the cluster.
Transfer of modern technology and knowledge	Study visits to the old European Union countries to get acquainted with the achievements of European companies, especially from Austria and Germany (special contact with the Institute of Wood Technology in Dresden, Germany).	Enter into contracts with business support institutions and research units: Opole University of Technology, Building Research Institute in Warsaw, Opole Science and Technology Park. Opening up to the demand of the Technical University of Częstochowa (building technology research projects).
Improving technological processes in companies within the cluster	Does not apply	The participants of the cluster are prepared to open a joint production lines with the use of modern technologies in the field of woodworking. Participants are encouraging to use Thermo Wood.
Attracting external funding	Does not apply	Project “Thermo Wood Parquet – an

¹¹ <http://www.igsilesia.pl/slaski-klaster-drzewny.html>

		innovative product” received funding within the Opolskie Voivodeship Regional Operational Programme 1.3.2. “Investing in Innovation”. Another ongoing project is “Passport to Export” – a plan for reaching “East” with the trade offer.
Development of professional skills of business owners and their employees	No projects	The Chamber of Commerce is organizing training courses.
Organization of trade fairs visits, exhibitions and promoting the achievements of companies within the cluster.	Only a strong cluster will be able to appear at international trade fairs.	Silesian Wood Cluster presented Thermo Wood Parquet – an innovative product at Budma trade fairs in Poznań. Exhibitions of range of products “for house” are planned.

In 2013, the Silesian Wood Cluster LLC consists of 51 entities including 14 company's shareholders, self-government units (Marshal Office of the Opolskie Voivodeship, Olesno Powiat, Chrzastowice Municipality), business support institutions and research units (Opole University of Technology, Building Research Institute in Warsaw, Opole Science and Technology Park). Inside the cluster there are manufacturers of joinery (windows, doors, stairs), manufacture of furniture, and wooden houses in skeletal structure, sawmills, manufacturers of various types of wood products and wood accessories, as well as trade companies supplying the wood sector in raw materials for the production of joinery. In the assessment of the dynamics of the cluster, it should be noted that there are held continuing discussions with potential stakeholders and their number is growing rapidly. Using the concepts describing the phase of development of the cluster, it should be noted that the Silesian Wood Cluster is in the phase of bottom-up growing initiative. Undisputed success of the cluster is good co-operation with the public administration at the stage of formation of the cluster, cooperation between the companies within it, and a good contact with research centers. Companies see the need to participate in such an initiative as this is the only way to create a strong group corresponding to large international corporations to compete with them on the Polish and foreign markets. Such awareness compels the activities of acquiring EU funding and innovative thinking in the field of brand building, technology development and expanding markets.

REFERENCES

1. HOŁUB-IWAN J., MAŁACHOWSKA M. 2008: Rozwój klastrów w Polsce. Raport z badań, Szczecin, p. 17. [in:] <http://www.fundusze-strukturalne.gov.pl/NR/rdonlyres/5898AF7D-5835-415B-B375-029AC9D166D6/49755/8RozwjklastrwwPolsce.pdf>
2. <http://www.igsilesia.pl/slaski-klaster-drzewny.html>
3. Kierunki zwiększania innowacyjności gospodarki na lata 2007- 2013, Ministerstwo Gospodarki Departament Rozwoju Gospodarki, Warszawa, 19 August 2006, p.79- 80, [in:] <http://www.mg.gov.pl/Gospodarka/Innowacyjnosc/Polityka+innowacyjnosc/innowacyjnosc+gospodarki+2007+2013>
4. KOZAK M. 2009: Klastry – wyzwanie dla rozwoju MŚP w Polsce, „e-mentor” no. 1 (28), p. 15 [in:] www.e-mentor.edu.pl
5. PALMEN L., BARON M. 2008: Przewodnik dla animatorów inicjatyw klastrowych w Polsce, Warszawa, p. 32, [in:] <http://www.pi.gov.pl/>

6. PAROŃ A., USTRZYCKI A. 2011: Warunki i możliwości rozwoju klastrów w województwie opolskim. Badania sondażowe w sektorze przedsiębiorstw, DUCZMALW. (Ed.), POTWORA W. (Ed.), Vol. 5, Opole, p. 31- 34.
7. PORTER M. E. 1998: Clusters and competition: new agendas for companies, governments, and institutions, [in:] M.E. PORTER (Ed.) On Competition. Harvard Business Review Books, Cambridge, MA.; 197–198.
8. SŁODCZYK J., SZAFRANIEC E. 2011: Przestrzenne możliwości rozwoju klastrów w województwie opolski. Ocena ekspercka, [in:] Uwarunkowania i możliwości rozwoju klastrów i inicjatyw klastrowych w województwie opolskim. Ocena ekspercka, DUCZMAL W. (Ed.), POTWORA W. (Ed.), Vol. 3, Opole, p. 157- 158.
9. SPENCER G.M., VINODRAI T., GERTLER M.S., WOLFE D.A. 2010: Do Clusters Make a Difference? Defining and Assessing their Economic Performance, Regional Studies, Vol. 44.6; 698.

Streszczenie: *Rozwój Śląskiego Klastra Drzewnego jako efekt współpracy przedsiębiorstw branży drzewnej, administracji publicznej oraz instytucji naukowych.* W klastrach koncentrują się firmy działające na tym samym geograficznym obszarze, wzajemnie powiązane branżowo, z np. wyspecjalizowanymi dostawcami czy usługodawcami obecnymi w kraju lub w danym regionie. Celem tworzenia klastrów jest wzrost wydajności skupionych wewnątrz nich firm, by mogły one osiągnąć przewagę konkurencyjną na rynku. Klastry powiązane są z takimi instytucjami jak uczelnie czy stowarzyszenia branżowe. W rozwój i modernizację klastrów są także zaangażowane rządy oraz samorządy. Jednostki administracji publicznej tworzą programy wspierające rozwój klastrów, które zakładają rozwijanie inicjatyw oddolnych poprzez wzmacnianie współpracy pomiędzy podmiotami gospodarczymi oraz rozwijanie sieci współpracy z otoczeniem biznesu i sektorem badawczo-rozwojowym, oraz jednocześnie zakładają one wspieranie inicjatyw odgórnych poprzez rozwijanie otoczenia instytucjonalnego oferującego usługi dostosowane do potrzeb i wyzwań przedsiębiorstw. Prezentowane w artykule badania dotyczą Śląskiego Klastra Drzewnego, który powstał w 2007 roku jako oddolna inicjatywa przedsiębiorców z branży drzewnej działających na terenie województwa opolskiego, a którego nadrzędnym celem jest wzmocnienie konkurencyjności poprzez stworzenie odpowiedniego klimatu do współpracy firm z branży drzewnej, podejmowania wspólnych inicjatyw gospodarczych, wzajemnej wymiany doświadczeń oraz rozwinięcia bliższej współpracy.

Corresponding author:

Adrianna Paroń
 Niedziałkowskiego 18,
 45-085, Opole,
 Poland
 e-mail: aparon783@gmail.com
 phone: +48 77 402-19-29

Katarzyna Wiktoria Syrytczyk
 Niedziałkowskiego 18,
 45-085, Opole,
 Poland
 e-mail: k.syrytczyk@poczta.wszia.opole.pl
 phone: +48 77 402-19-29