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## **Innovative integration relations opportunity for development of Polish agribusiness and increase competitiveness of the economy**

### INTRODUCTION

The transformations in the economic, social, political and cultural spheres generate new mechanisms of a specific order which is commonly identified with the globalization process. One of its elements is the phenomenon of regional integration which can largely determine the shape of world order and will certainly affect the course of development processes of many countries and regions. Transformations taking place in the economic sphere are characterized by unique dynamics. Fast intense changes are visible in most national economies and regions, and their consequence is the shape of the modern global economy [Gabryś, 2006, p. 11].

Integration relations in agribusiness determine the formation of market conditions for activities of farms, businesses and other economic entities. Properly functioning, as well as emerging integration structures found in the economy constitute one of the essential elements of its dynamic expansion, especially in the era of globalization. Among integration relations may be mentioned, among other things, both the processes occurring between agricultural producers (horizontal integration), agriculture and the food industry (vertical integration), as well as innovative forms of integration relations (agro-industrial clusters).

The primary objective of this paper is to present the concept, principles of operation and the benefits of efficiently functioning innovative integration relations which are the cluster structures. This study attempts to assess the impact

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of the above mentioned forms of relations on regional and local development, indicate the conditions for development of these relations in the face of ongoing globalization processes, as well as their impact on the growth of innovation and competitiveness of the economy. Due to the multifaceted problems taken, as well as the limited volume of the article, the focus is mainly on some issues related to clustering. Considerations supported by the results of their own research, conducted in the province of Podkarpackie. A survey conducted in 2013 among 500 farmers engaged in agricultural production and in 2014 among 200 leading food industry companies involved in processing meat, milk, cereals and fruit and vegetables within the framework of the research project funded by the National Science Centre (DEC-2011/01/D/HS4/03911).

#### THE ESSENCE OF INNOVATIVE INTEGRATION RELATIONS

Due to the fact that the definitions of cluster in different sections and references have already been presented many times in the available literature on the subject, focused solely on the review of the concept of clustering and on the benefits resulting from functioning of such structures.

The concept of clusters represents a new approach to the issues related the competitiveness of enterprises. The progress made in recent decades in understanding of the problems of competitiveness of enterprises, both from a theoretical perspective, as well as from the perspective of economic practice, allowed development of system solutions tailored to the specificity of modern economy. The concept that has gained a particular importance in this area in recent years is a cluster and cluster-based development policy or cluster-oriented policy whose essential elements or even complete solutions were introduced by most OECD countries [Brodzicki, Szultka, 2002].

Clusters as specific structures of relations may arise in virtually every sector of economy – both in industry and services, in sectors of advanced technology as well as in sectors of traditional technology. They can be distinguished by varied levels of innovation and technological progress and at the same time they can use different strategies and shape the prospects of their own development.

#### ADVANTAGES AND DETERMINANTS OF FUNCTIONING OF CLUSTER STRUCTURES

Enterprises in the cluster can use the internal connections and areas common to all of them. Promotion and marketing of products and services, conducting, realization and financing of research and commercial projects, legal and financial advice may be realized within the combined initiatives. It optimizes not only the

level of costs, but it brings an increase in the credibility of individual companies towards external business partners. The cluster gives the company a more ideal market image since it is the first guarantor of the quality represented by the company. Enterprises in clusters partially take over the image borrowed from their partners. This is one of an important aspect of creating more added value by the cluster as a sum of many enterprises [Rundo, 2013, p. 57–58].

The cluster structure therefore brings measurable benefits as a form of cooperation between enterprises and the benefits include [Baran, Kłos, p. 316]:

- increased productivity of activity,
- economies of scale,
- reduction of costs of transactions, transportation, technical infrastructure,
- specialization, due to critical mass of entities specializing in a particular field,
- specialization of factors, i.e. labour market, sources of research and development, technology, financing mechanisms,
- access to information on changes of the market and technology,
- access to skilled labour ,
- the ability to more easily adapt and respond to changes in the environment,
- learning process through joint search of activities and innovative solutions,
- the use of complementary elements and synergies between the companies.

The main area of activity of the enterprise, which is significantly affected by its membership in a cluster, is innovation. Cluster structures create and enable the use of pro-growth conditions for running activity [Kozak, 2009, p. 15]. Innovation in clusters is supported by greater ease of reaching potential sources of information on innovation, it becomes easier to identify technological trends, the combination of competences accelerates the expansion of enterprises and products. A higher rate of growth results from a better access to seed capital and venture capital, sophisticated risk management tools, a greater strength of a cluster. The efficiency of activity results from specialization and competition, as well as from the access to specialized resources [Andersson, 2004; Rundo, 2013, p. 57–58].

#### THE IMPACT OF CLUSTER STRUCTURES FOR REGIONAL DEVELOPMENT

An advantageous influence of the cluster structures on the surrounding economy is connected with many diverse factors. A cluster is a place in resources of which there are special production factors. The most important among them are knowledge (and the innovations which are the results of it) and a high-quality human capital. Clusters positively influence the appearance of new economic entities in the region and the creation of the culture of innovation and entrepreneurship. A cluster is an attractive place of localization for the foreign direct investments (FDI) and an attractive labour market for the qualified workers what, additionally, increases its competitiveness [Dzierżanowski et al., 2011, p. 27–28].

The presence and activity of industrial centres bring three fundamental positive changes for the region in which the cluster is located [*Klastry – w kierunku...*]:

1. acceleration of the pace of economic growth – energetic clusters, becoming the engine of growth, contribute to the local GDP, the wealth of society, stimulate economic situation;
2. improvement of conditions for development of companies and enterprise – cluster companies have better access to knowledge and innovation, other companies providing specialized services, suppliers and all business facilities (such as consultancy, aid, law institutions), and even to a better, now consisting of selected experts, labour market;
3. increase of innovation – clusters favour innovation since they have the possibility of close and constant cooperation with R&D sector; also important is the intra-cluster competition which forces levelling up and mobilizes weaker participants of the relation to raise their level.

The third of said effects is especially important since innovation is the key to success in the present increasingly competitive market. Entities which have the courage to implement new technologies and apply solutions unknown so far quickly gain a competitive advantage and become the vanguard of business setting trends and directions of development.

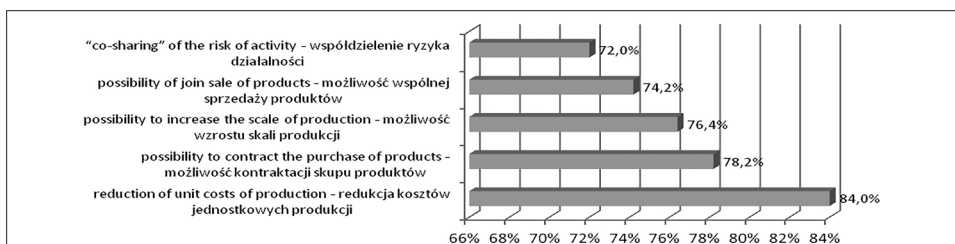
It is worth noticing that the entities within the cluster take advantage of the permeating of various regional systems: economic, social and institutional systems. The elements such as the reputation, mutual trust, common ground for discussion, significantly facilitate conducting a business. The flow of knowledge within a cluster is dependent on the trust between the partners. Due to the promotion of cross-link and cooperation, the cluster initiatives develop over time the numerous norms, institutions, networks between the members, which facilitate the activity within the cluster and do not disturb the rules of the market competitiveness [Chorób, Chorób, 2015, p. 47–49; European Commission, 2007; Rosa, 2008, p. 76].

#### THE IMPORTANCE OF CLUSTERS FOR EXPANSION AND COMPETITIVENESS OF THE RESPONDENTS

The prospect of the possible benefits of cluster structures for companies and regions are encouraged potential participants to engage in the development of this structure. Working together, you can rationalize internal processes in companies and institutions, benefit from the synergy between the partners together to draw from the resources and infrastructure to share and consequently minimize the risk of the activities pursued and primarily to generate profits by changing the approach to competitors [Koszarek, 2011, p. 9–10].

Particular attention in this space, due to the undertaken issues, was paid to the opinion of agricultural producers on the awareness of the benefits and the

willingness to participate in the existing or initiate new cluster structures. Among the five main advantages (Fig. 1), which encourage agricultural producers to enter into cluster structures were mainly: reduction of unit costs of production, the possibility of contracting the purchase of products, the ability to increase the scale of production and joint sale of products and sharing the business risk.

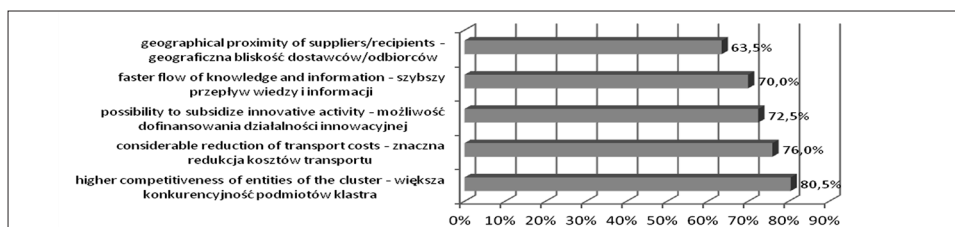


**Fig. 1. Benefits from functioning of clusters encouraging entering into the cluster structure according to the opinion of agricultural producers (acc. to scale of importance)<sup>2</sup>**

Source: The author’s elaboration on the basis of surveys.

In the case of entities in food processing, participation in an integrated system sometimes forces the associated companies to undertake many resolute and concrete actions. Similarly to the farm, the integrating unit aims at achieving its own objectives which in this case also are of joint nature.

An extremely important issue are the advantages resulting from functioning of clusters which encourage potential participants (individual enterprises) to come into their structure and to derive measurable benefits from this. Among the five main values (Fig. 2) which encourage the representatives of processing companies to enter into cluster structures were: increased competitiveness of cluster entities, a significant reduction in transport costs, the possibility of subsidizing of innovative activity, a faster flow of knowledge and information and the geographical proximity of suppliers/customers.



**Fig. 2. The advantages of functioning of clusters encouraging the entry into the cluster structure in the opinion of representatives of processing companies (according to scale of validity)<sup>3</sup>**

Source: The author’s elaboration on the basis of surveys.

<sup>2</sup> The data do not sum up to 100% because the respondents could choose a few answers.

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## RECAPITULATION AND CONCLUSIONS

The benefits that are achieved in the region through the operation of clusters can be read analyzing the development objectives of individual clusters. Some of these objectives include the so-called. general purposes – usually carried out – while others are taken less frequently or not at all are actualized. From this point of view it is easy to see that not every region benefits will be identical. Their scope and the number will be a matter of individual local environment. Discussing the regional aspect of the benefits, you should also pay attention to the important issue, which is the region's sustainable development. For companies and organizations clustered sustainable development means associating economic, ecological and social to achieve a satisfactory result for the business and social environment and the natural environment [Każmierski].

Presented advantages flowing from properly functioning clusters, encourage potential participants (including agricultural producers, representatives of processing companies) to participate in this type of structures. The accession of the innovative integration relationships can provide accurate premise and the chance to develop Polish agribusiness, especially in the era of globalization. Operation and expansion of these relations should be a key element of competitiveness and intensifying the development of not only individual entities, but also regions. It is worth noticing that a properly functioning clusters impact on creating a culture of innovation and entrepreneurship in the context of increasing innovation across the economy, may also be a stimulant of many positive changes, especially towards the development of advanced integration processes in the food industry.

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### *Summary*

The main objective of this paper is to present the concepts, principles of operation and the benefits of effective functioning of innovative integration links, which are the structure of the cluster. The study attempts to evaluate the impact of these forms of links to regional and local development, indicate the conditions for the development of these compounds in the context of the processes of globalization, as well as their impact on the growth of innovation and competitiveness of the economy. Due to the multifaceted problems taken, as well as the limited volume of the article, the focus is mainly on some issues related to clustering. Considerations supported by the results of own research, conducted in the province of Podkarpackie. The surveyed farmers indicated the main factors encouraging them to enter into the structure of the cluster, i.e.: a reduction of unit costs of production, the possibility of contracting the purchase of products, the ability to increase the scale of production and joint sales and shared business risks. While the representatives of processing companies among the assets to encourage the accession exchanged the following: greater competitiveness cluster entities, a significant reduction in transport costs, the possibility of co-financing of innovative activity, faster flow of information and knowledge and geographical proximity to suppliers/customers. Operation and expansion of these relations should be a key element of competitiveness and intensifying the development of not only individual entities or regions, but also the entire economy.

*Keywords:* links integration, innovation, clustering, competition, competitiveness

### **Innowacyjne powiązania integracyjne szansą rozwoju polskiego agrobiznesu oraz wzrostu konkurencyjności gospodarki**

#### *Streszczenie*

Głównym celem niniejszego opracowania jest prezentacja koncepcji, zasad funkcjonowania oraz korzyści płynących z efektywnie funkcjonujących innowacyjnych powiązań integracyjnych, jakimi są struktury klastrów. W opracowaniu podjęto próbę oceny wpływu tych form powiązań na rozwój regionalny i lokalny, wskazania uwarunkowań rozwoju tych związków w kontekście zacho-

dzących procesów globalizacji, jak też ich oddziaływanie na wzrost innowacyjności i konkurencyjności gospodarki. Z uwagi na wieloaspektowość podjętej problematyki oraz ograniczoną objętość artykułu skupiono się głównie tylko na niektórych kwestiach dotyczących klasteringu. Rozważania poparto wynikami badań własnych przeprowadzonych na obszarze województwa podkarpackiego. Ankietowani producenci rolni wskazali główne czynniki zachęcające ich do wejścia w struktury klastrowe, tj. redukcję kosztów jednostkowych produkcji, możliwość kontraktacji skupu produktów, możliwość wzrostu skali produkcji i wspólnej sprzedaży produktów oraz współdzielenie ryzyka działalności. Natomiast przedstawiciele firm przetwórczych wśród walorów zachęcających do akcesji wymienili następujące: większą konkurencyjność podmiotów klastra, znaczną redukcję kosztów transportu, możliwość dofinansowania działalności innowacyjnej, szybszy przepływ wiedzy i informacji oraz geograficzną bliskość dostawców/odbiorców. Zaprezentowane walory płynące z prawidłowo funkcjonujących klastrów zachęcają potencjalnych uczestników (w tym: producentów rolnych, przedstawicieli firm przetwórczych) do udziału w tego typu strukturach. Akcesja w innowacyjnych powiązaniach integracyjnych może stanowić trafną przesłankę i szansę rozwoju polskiego agrobiznesu, szczególnie w dobie globalizacji. Funkcjonowanie i ekspansja tych powiązań winny stanowić kluczowy element wzrostu konkurencyjności i intensyfikowania rozwoju nie tylko poszczególnych podmiotów czy regionów, ale również całej gospodarki.

*Słowa kluczowe:* powiązania integracyjne, innowacje, klastering, kooperacja, konkurencyjność

JEL: F15, O31, D41, R11, L20, F43