

# FORMING AGRO INDUSTRIES CLUSTERS FOR REACHING COMPETITIVENESS OF UKRAINIAN AGRO INDUSTRIAL SECTOR

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## ABSTRACT

The article deals with the theoretical principles of forming the Agro Industries clusters in the context of the innovative aspect. Being one of Ukraine's major sources of economic revenue, the country's agro industrial sector proved, at the same time, to be perhaps the most vulnerable branch of economy in the times of political and social turbulence. While the state is searching for ways of strengthening its positions in the global market, its agricultural potential to a considerable extent remains both under- and misused. In recent years, the cluster approach has become a key instrument of municipal economic policies for the leading industrialized countries. Utilizing the experience of other European countries, with regards to making agriculture more sustainable and competitive in the modern world, the author describes the ways of applying these practices against the background of Ukrainian agribusiness system. Proposed within this study is innovative research, presented as adaptation policy measures, for clustering Ukrainian agribusiness and the structure of corn production cluster in Ukraine. Also proposed are basic elements of government policy for supporting the development of agriculture. In addition, ways of creating the Agro Industries clusters are described. The advantages of forming clusters and possibility of the cluster approach in the organization and management of Agro Industries operations are considered.

**Keywords:** Agro Industries cluster, clustering, cluster approach, organization of cluster, Ukrainian agribusiness system.

## PROBLEM DEFINITION

The cluster development of the country's economy is one of the characteristic features of a modern innovative economy. The growing amount of research in the world shows that the geographical closeness of corresponding economic types of activity gives an opportunity for reaching a higher level of productivity and innovation. Clusters, that are located in a direct proximity in a certain economic industry, are the eventual producers, suppliers of raw material, service providers, research laboratories, educational establishments and other institutions. They are also important stimulating factors of a regional economy's development. From this information, we can conclude that clusters are the basic problem of this research.

## ANALYSIS OF RECENT RESEARCH AND PUBLICATIONS

The processes of clustering and forming clusters were investigated by many native and foreign scientists, in particular: M. Porter, N. Mikula, P. Belenskyi, S. Sokolenko, O. Tyshchenko, O. Annenkova, Z. Herasymchuk, M. Kropyvka, Zh. Minhaleva, P. Sabluk, S. Tkacheva, V. Tolkovanova, M. Voinarenko, H. Shumska, and I. Bakushevych. Scientists considered insufficient financial and infrastructural support of scientifically-innovative activity as basic factors that prevent the innovative

development of the agrarian sector from Ukraine needs to explore new systems of management that already successfully operate around the globe.

## FORMULATION OF THE OBJECTIVES OF ARTICLE

The purpose of this research to ground the theoretical principle to establish the importance of innovative clusters, particularly the agrarian clusters. Additionally, its purpose was to describe the stages of forming the agrarian clusters, determine their participants, analyze the directions of forming the agrarian clusters, and to find out their possibilities.

## PRESENTATION OF KEY RESEARCH FINDINGS

Current realities that agrarian enterprises are facing today, indicate the importance of their functioning based on the innovative model. Therefore, in our opinion, forming clusters comes forward as an important instrument for providing steady development of rural territories.

The notion "cluster" is a word of the English origin that means a unity of several homogeneous elements, which we can consider as an independent unit that owns certain properties. In 1990, Michael Porter became the first to present the notion "cluster" in economic

literature. According to Porter’s interpretation, a cluster is groups of interdependent companies, specialized service suppliers, firms in concrete spheres, concentrated according to a geographic region, and organizations connected with their activity (i.e., universities, agencies in standardization, and trade associations), which compete but at the same time conduct mutual work (Porter, 2005).

Forming innovative clusters is a possibility for modern Ukraine. It will stimulate the economy effectively to reach a new level of world relations in the

field of management. Our interpretation of innovative cluster differs from traditional understanding. We consider it as cooperation and active collaboration among enterprises, organizations, establishments (public and private sectors), the government and local authorities, and educational and scientific establishments. It is aimed at creating innovations in a certain region to substantially improve both a structure and quality of production, as well as the social sphere on the whole, by means of creative thinking and the economy of knowledge. (See Table 1)

**Table 1.** The Principles of Forming Clusters

Principles		Essence of principle
Principles aimed at taking into consideration the innovative aspect and creative economy	Priorities of human intellect	The innovative cluster consists of research and educational establishments that are the locomotives of modern “economy of knowledge” realization. Furthermore, a priority role belongs to the scientists, who produce innovative decisions, ideas, and foods.
	Innovativeness	It envisages the appearance of an innovative effect and competitive advantages in a transfrontal region. It opens itself, in mutual carrying requirements, to the level of technological innovativeness of all cluster participants.
	Stimulation of innovative processes	It lies in encouragement of scientists to create new innovative ideas and decisions.
	Expediency of innovative ideas	It stipulates the demand on certain innovations. In other words, actuality of creating the “innovation by request” that will be used.
	Complexity	It envisages the application of the innovative approach at all stages of the innovative process, namely from appearance of an idea to its introduction.
	Commercialization	It lies in the application of modern legal methods of commercializing innovative achievements and their perfection with the aim of simplification patent procedures.

Scientists give different interpretations of the notion “Agro Industries Cluster”. In particular, Bohdanova (2013) suggested interpreting the Agro Industries Cluster as an innovatively directed, territory localized, integrated structure with the elements of network organization. Furthermore, it is organized on the basis of agricultural production and embraces different spheres of the Agro Industries Complex (AIC) that are included in the technological chain of creating surplus value.

Gryadov (2009) described the Agro Industries Cluster

as a territorial connection of organizations, bound by productive-sale activity, whose purpose is to increase competitiveness of products and to awaken investment activity in relation to a food branch sub complex. Argo Industry Cluster is like an association of organizations in different spheres of activity, in the only reproductive circle, from the raw material production to the realization of the prepared products, including all stages of production; the result of which must be the receiving of synergistically effect (Gryadov, 2009, p. 75).

The participants of the Agro Industries Cluster can be: (a) direct agricultural enterprises (suppliers of raw material), (b) enterprises of agricultural engineering (suppliers of equipment), (c) the processing food industry, (d) Agro Industries integrated complexes (corporations),

(e) consulting organizations, (f) scientific institutes, (g) educational establishments,

(h) legislative institutes, (i) government bodies, and (j) financial institutes.

Cluster development, as a factor in the increase of national and regional competitiveness of separate Agro Industries and agribusiness, in general, may be a characteristic feature of a modern innovative economy.

For a more detailed look at clusters, Figure 1 shows the forming of the Agro Industries Clusters.

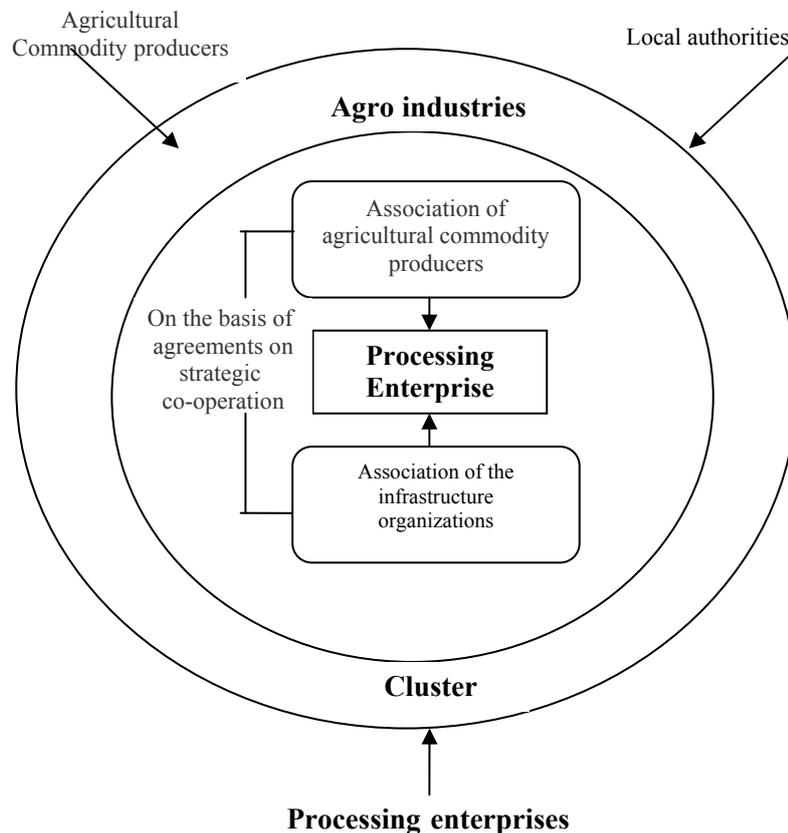


Figure 1. Forming of the Agro Industries Clusters

From the viewpoint of the national economy, the impact of a cluster’s functioning can be assessed by the number of jobs created. This figure also shows an increase in the proportion of the middle class, providing an additional argument in favor of the expansion process of clustering. In addition, new jobs related to the establishment and operation of a cluster, reduce the amount of unemployment payments derived from the state budget.

Taking into consideration the research presented thus far, we can make a conclusion about subaddactiveness within cluster formations (e.g., coproduction of various products, results in cheaper costs than separate production).

To calculate the effect, subaddactiveness can be offered using the sole-production approach in analysis of the company.

We denote as  $C(q)$  the total costs of the firm to produce  $q$  items. Let  $C(q)$  be the minimum cost set of resources that will allow producing  $q$  units. We suppose

that the cost function is doubly differentiated, except in the case of zero output (Buda, 2013).

$$C(q) = \begin{cases} F + \int_0^q C'(x)dx \\ 0 \end{cases} \quad (1)$$

where  $F$  - fixed costs of production.

Marginal cost is strictly decreasing if  $C'(q) < 0$  for all possible  $q$ . An average consumption is strictly decreasing at all  $q_1$  and  $q_2$ , and inequality takes place.

$$\frac{C(q_2)}{q_2} < \frac{C(q_1)}{q_1} \quad (2)$$

Thus, the cost function is strictly subadductive if for any set of products, the inequality takes place.

$$\sum_{i=1}^n C(q_i) > C\left(\sum_{i=1}^n q_i\right) \quad (3)$$

Thus, the formation of a cluster is mathematically possible to establish the existence of the subadductive phenomenon. Therefore, a cluster can be defined as a sectoral or geographical concentration of enterprises which achieves the effect of “foreign savings” due to the interaction with suppliers (raw materials, components) and the establishment of a specialized firm.

A key element in the creation of a network is the trust of its members to each other, which is achieved through exchanging and exploring the possibilities involved.

In a simplified form, the process of interaction can be presented in two versions: the experimental method and the incremental method. The experimental method involves the spontaneous formation of the cluster. This step-by-step method involves the low-risk beginning interactions with local business through pilot projects, particularly in the agricultural sector. As confidence in a future is increased, cluster members begin a gradual shift towards riskier projects. The formation of a cluster of networked companies usually has five stages:

1. Agitation and motivation of potential participants.
2. Development of an overall strategy.
3. A pilot project.
4. Establishment of a strategic project.
5. Self-regulation.

Summarizing the experience of current cluster systems in 11 countries, UNIDO has allowed experts to develop a generalized concept of institutional policies to support business communications networks. The operation of these networks will result in improvements in the labor market areas by preserving existing jobs and creating new jobs as a result of the formed cluster. This confirms the conclusion about the effective role of agro-industrial clusters in the employment of Agro Industrial regions.

Despite the growing interest in new production systems and the measures aimed at improving the competitiveness of Ukraine and its individual regions-- particularly in the development of agriculture-- the number of farms in Ukraine clusters increases slowly. This is due to several factors: (a) the lack of a legal definition of “cluster” and its varieties, (b) the lack of sufficient information to ensure the establishment and functioning of clusters in Ukraine, (c) little interest of to SMEs (small and middle enterprises) in creating large production systems, (d) little experience of functioning clusters in Ukraine, and (e) a lack of investors due to the unattractiveness of the investment regions.

Important aspects of the problem of cluster structures

are clustering level economies (i.e., national, regional, and micro-levels) of developed countries. The study of international experience with clusters indicates that in developed countries, most clusters are created at the regional level. Regional level examples include: Austria, the UK, Germany, Denmark, Spain, Italy, Canada, the Netherlands, the USA, Finland, Sweden and Switzerland. Micro-level clusters operate in Poland, as well as in the UK, Germany, Denmark, Finland, and Switzerland. Clusters at the national level function in Austria, Canada, and the Netherlands (see Table 2) (“The concept,” 2008).

The EU’s experience shows that clustering is a prerequisite for improving the competitiveness of the regional economy and the states.

The economy of Finland is fully clusterized; it has identified 9 clusters. The economy of the Netherlands is divided into 20 “mega-clusters”, to which the innovation policy of the state has been determined. There are 29 functioning clusters in Denmark, involving 40% of all enterprises in the country and providing 60 % of exports. In Austria, there are 25 cross-border clusters with Germany, Italy, Switzerland, Hungary. Additionally, Austria has activated ties with France and Britain. In Germany, established industrial clusters in Slovenia adopted the strategy of increased competitiveness of industry, a program of national development clusters. About 60 international, regional, national, non-governmental organizations united in the European Cluster Alliance, which operates on the basis of the European Cluster Memorandum.

The government also paid special attention to a cluster model of economic development. In particular, the concept of long-term socio-economic development of Russia in 2020 has been provided for the formation of new centers of economic and social development. This is based on the development of energy and transport infrastructure and the creation of a network of territorial-industrial clusters.

We believe that Ukraine should involve international experience to support the development of clusters and cluster initiatives, including the ones in agriculture.

Consider more promising adaptation measures for clustering the Ukrainian agribusiness using Table 3 (“The concept,” 2008).

**Table 2.** International Experience of Clustering

Country	Clustering Features
Great Britain and Northern Ireland	<p>Purpose: To reduce the lag in productivity and significant disparities in productivity levels between different regions of the state.</p> <p>Measures:</p> <ul style="list-style-type: none"> <li>• A Practical Guide to Cluster Development, which composed feasibility of the mechanism and features of clusters.</li> <li>• Formed a steering group for the development of clusters, which operates under the Cabinet of Ministers.</li> <li>• Published a book on competitiveness “Our competitive future: Building the knowledge - based economy” (1998).</li> <li>• Create a map of the clusters with identification of 154 clusters from 8 to 18 in each region, depending on the geographic location, the development and specialization of each region.</li> </ul>
Sweden	<p>Purpose: To stimulate innovation and development in all regions.</p> <p>Measures:</p> <ul style="list-style-type: none"> <li>• Program Vinnvax t, the world’s best example of the innovative development-based clusters.</li> <li>• Program Visanu (strengthening clusters regardless of their location, based on the dissemination of knowledge, the creation of favorable conditions clustering).</li> <li>• The regional cluster program (incentive initiatives clustering, export, marketing development and cooperation with scientific research institutions).</li> </ul>
Japan	<p>Purpose: boosting business activity, increased competitiveness.</p> <p>Measures:</p> <ul style="list-style-type: none"> <li>• Twenty programs to create a database of clustering.</li> <li>• A Regional Bureau of Economy, Trade and Industry (RBETI), that works directly with small and medium-sized businesses.</li> <li>• Encourage the expansion of clusters in the direction of cooperation with universities to create new business venture.</li> </ul>
Austria	<p>Purpose: To unite the efforts of the economy to adapt after accession to the European Union (EU).</p> <p>Measures:</p> <ul style="list-style-type: none"> <li>• Strategic program development through training, qualifications, and placement of marketing clusters.</li> <li>• Provide specific support to SMEs.</li> <li>• Programs to enhance the motivation of participants’ clusters and their qualifications.</li> </ul>
Norway	<p>Purpose: To implement the program of innovation development.</p> <p>Measures:</p> <ul style="list-style-type: none"> <li>• Investing in the development of innovation centers in educational institutions and research centers, reception centers as clusters, identification of problems and their solutions (62 clusters).</li> <li>• Location of business parks abroad as a way of expanding production and impact studies of new areas of investment.</li> <li>• Separation of the Department of Cluster Development under the Cabinet of Ministers.</li> </ul>
Portugal	<p>Purpose: To improve the competitiveness of the national economy.</p> <p>Measures:</p> <ul style="list-style-type: none"> <li>• Development of a national plan of action (analysis of existing clusters and regions to determine their specialization entrepreneurs).</li> <li>• The creation of cross-border clusters.</li> </ul>

**Table 3.** Adaptation Policy measures for clustering Ukrainian agribusiness

№	Perspective Measures
1	Start the process of clustering of research specialization AIC (actual individual consumption) by region, the main criterion for determining the distribution, and on this basis to map clusters of Ukraine. Another important step is to develop an approach enhancing competitiveness as a priority in a market economy, emphasizing its importance and identifying opportunities for change in the way leadership presides in the sector.
2	To borrow and adapt the program for the development of innovation. This is the basis for structural changes, incentives, and motivation to implement new initiatives within clusters of agriculture, development of marketing, and logistics for them; determining export as a promising area of cooperation.
3	Create a bureau or other structure to attract SMEs, aid for adaptation in the new environment of cooperation, promoting the ideas of clustering among small producers as a basis for forming new regional clusters.
4	Write a program to enhance the motivation of participants, their interest in clustering and in the future. Provide training to improve the skills of employees to overcome the major problems in the field.
5	Establish collaboration with educational and research centers as sources of information and innovative software. Include them in clusters to formalize cooperation with them.
6	Develop the Ukrainian counterpart of the National Action Plan for agriculture, which will contain a description of specialization of each region and the strategy for the future.

In Ukraine, the existing legal documents on the principles of the state agricultural policy do not provide regulation of agricultural activity clusters. In particular, in the Law of Ukraine agricultural clusters are not mentioned. For example, the law states “On the Fundamentals of State Agricultural Policy for the period up to 2015” (“Government,” 2005) and “state target program of development of the Ukrainian village for the period up to 2015” (“Approva,” 2007). Only the draft Law of Ukraine “On Agriculture” stipulates that agriculture can form inter-farm organizational and administrative structure in the form of self-management cooperative business associations and cluster of regional cooperation in the organizational and legal forms of companies and associations.

However, support for cluster development is one of the priorities of regional policy, including in the agricultural sector. Development of agricultural clusters has become one of the most important areas of development strategies in many regions (Bill, 2011). Examples include:

- Sumy Region Development Strategy, which is the basis for the economic development of the region, the development of agribusiness clusters aimed at forming a closed high-tech Agro Industries production, and the creation of environmentally friendly competitive products.
- Dnepropetrovsk Region Agriculture Cluster will develop the most promising areas for the region (i.e., pig, poultry, fruit and vegetables) to facilitate the development of modern processing and to create products with high added value that will

increase its exports.

- Competitiveness Strategy of Donbass, which is a priority, particularly, the development of a cluster of agricultural and food industry, in the long run contribute to the effective realization of the potential of Donetsk Region in agriculture, the creation of a competitive food industry. Today the region has conducted research and cluster analysis phase began implementation of recommendations;
- Strategy of economic and social development of the AIC 2011 – 2020 (actual individual consumption), which envisages formation within 3-5 years of competitive clusters in health resorts and tourism industry, agriculture, the food industry in the region, the engineering and shipbuilding industries, and energy. In addition, special attention is paid to the formation of inter-regional strategy clusters that are able to form the basis of post-crisis growth.
- Strategy for socio-economic development of Chernihiv oblast until 2015, which provides for the formation of integrated regional infrastructure and production facilities based cluster mechanism of small business development for production and engineering and supply-side characteristics, using the advantages of the territorial division of labor based on competitive specialized regional production sectors (engineering and metallurgy, forestry, processing industries, etc.).
- Strategy of economic and social development of the Kherson region by 2015, in which the key objectives of agricultural production (e.g.,

increasing its capacity and efficiency) refers to the creation of Agro Industries research cluster on the basis of regional agroindustrial center.

- Strategy of economic and social development of Volyn Region 2004-2015, which is among the tasks of production and transport infrastructure in rural areas, is aimed at improving the competitiveness of the agricultural sector and agro-defined formation of clusters.
- Regional development strategy Transcarpathian Region up to 2015, which, among other things, the formation of strategic development area included the integration of executive authorities, local government, and the business community for the establishment and functioning of cluster systems for industry and functional priorities of social and economic development region (i.e., engineering and instrument making, woodworking industry, tourism and recreation, and agriculture sectors, the energy sector, and eco-industrial activity).
- Regional Development Strategy of Zaporozhian Region up to 2015, which defines the support of existing associations in the cluster, including innovation and technology cluster "AGROBOOM" and the National Cluster "new machines".

Because of the lack of legal regulation in cluster creation. cluster recognition is a self-governing process of economic enterprises that is preventing the spread of it existing and developing new, specialized programs based on state support. As a result, in Ukraine there are only a few examples of the practical establishment and operation of agricultural clusters, which are mostly initiated and produced based on the experience borrowed from the international practice of cluster development.

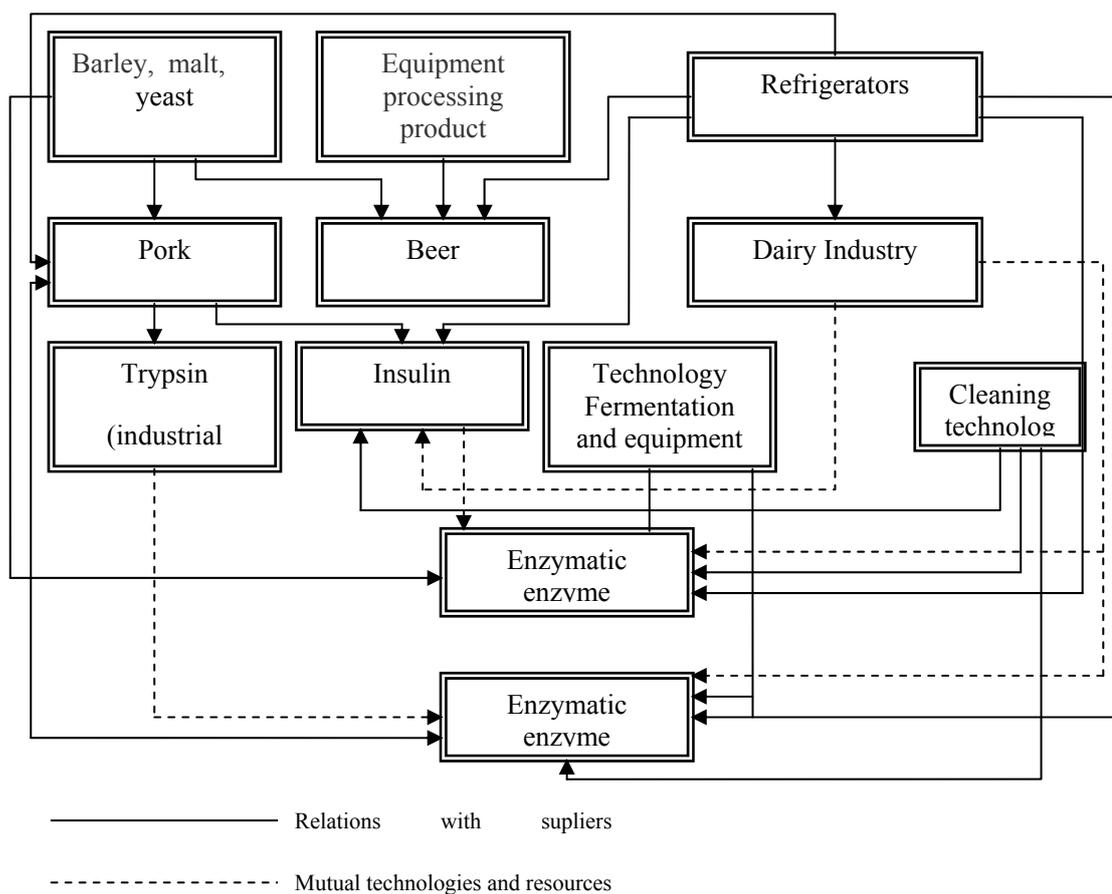
Examples of agricultural clusters in Ukraine include:

- In the town of Nartsiv of Shepetovskiy District of Khmel'nitsky Region in 2002 a cluster of rural green tourism "Charm" was created, which brings together 10 agro-houses taking in tourists who wish to relax in the countryside.
- Since 2007, in the Poltava area, a project cluster of manufacturers of environmentally safe products exists. This cluster focuses on working out procedures for the inspection and control of the production of environmentally safe products. Participants who implement environmental technologies in their sector are able to obtain a certificate of the Center for Consumer Safety Environmental conditions of the Inspectorate of the economy. The objective of the inspection is to control the use of banned chemicals, genetically modified seeds, growth factors, and others. Certified companies assisted in the sale of products at prices higher than the market. Some businesses

have started an international certification process and received help in implementing their products abroad.

- In 2009, the Chernivtsi Region created Ukrainian-Romanian's "First agricultural cluster" of growing fruits and berries. A horticulture development was created, with the main task of creating interaction between manufacturers, inspectors, certifiers, transporters and consumers. Business Cluster aims to: (a) increase the innovation of agricultural activities to improve the investment climate for industries within the cluster; (b) develop a mechanism to support innovation activities of enterprises and regional and local authorities, (c) create training specialized personnel for agriculture field, (d) saturate of the Ukrainian market with safe fruits, safe products, and (e) increase sales of berries and mushrooms in Western Europe.
- In 2009, Rivne Region established agro-innovation cluster "Agro-innovations", founded by four government bodies, research organizations, three higher education institutions, five manufacturing plants of Rivne, and three innovative service structures and institutions. The purpose of this cluster is to unite efforts, coordination, and implementation of joint action on issues of development and innovation in agriculture within the Rivne Region.
- Also in Rivne the cluster "natural milk" was created in the field of dairy farming. This cluster was founded by seven farms in the Rivne, Ternopil, and Lviv Regions,. Cluster "natural milk" is a form of consulting, organizational, and informational cooperation of producers of raw natural milk, It was developed to exchange information, protect the interests of milk producers and consumers of dairy products, and improve the mechanisms of market relations in the dairy industry.
- In 2011, in the Vinnytsia region under the Support to Sustainable Regional Development (SSRD), and funded by the EU, a food processing cluster was established. The activity helps to create a cluster in a network farm within cooperative structures and builds partnerships between producers and processors of agricultural products.

According to international experience, the most effective way to unite the various sectors within the area of Agro Industries production is the mechanism of vertical integration within the cluster. One of the best examples is the experience of Denmark, which shows the international competitiveness of the economy on the proper combination of the cluster within the national agricultural enterprises and manufacturing (see Figure 2).



**Figure 2.** Cluster structure in agriculture and processing industry in the economy of Denmark

Note: Adapted from Buda T.Y. (2003), Establishment of Agro Industries Clusters as a way of reducing tension in the labor market, *All-Ukrainian Scientific-Industrial Innovative Economy: Demography, Employment and Social and Economic Policy*, 2, 169 - 176.

The basis for providing employment in an agroindustrial region may be clustering of agro-industrial production. In other words, the creation of industrial clusters around the grain-processing sub-sector agricultural production activities which require creating new jobs and maintaining existing jobs. The structure of the cluster around the grain processing enterprises should include producers of cereals, grain elevators, flour mills, feed mills, bread-baking complexes, research and banking institutions (See Figure 3). The role of public authorities in the structure of clusters at the local level is to provide equal opportunities for everyone involved. This will reduce the disparities that may arise between producers and processors of raw materials as well as promote the development of priority sectors and economic activities in the community.

Thus, the formation of clusters of agro-industrial production have a positive impact on sectoral, territorial, and socio-economic structure of the region's economy. In addition, they will improve the situation in the labor market and provide a significant gain in revenues at all levels of the budget. .

From the standpoint of the national economy,

with the analysis of a functioning cluster, we can assess a number of jobs created. This is a prerequisite for increasing the share of the middle class and serves as an additional argument in favor of the expansion process of clustering.

However, the development of agricultural clusters in Ukraine is complicated by the following factors:

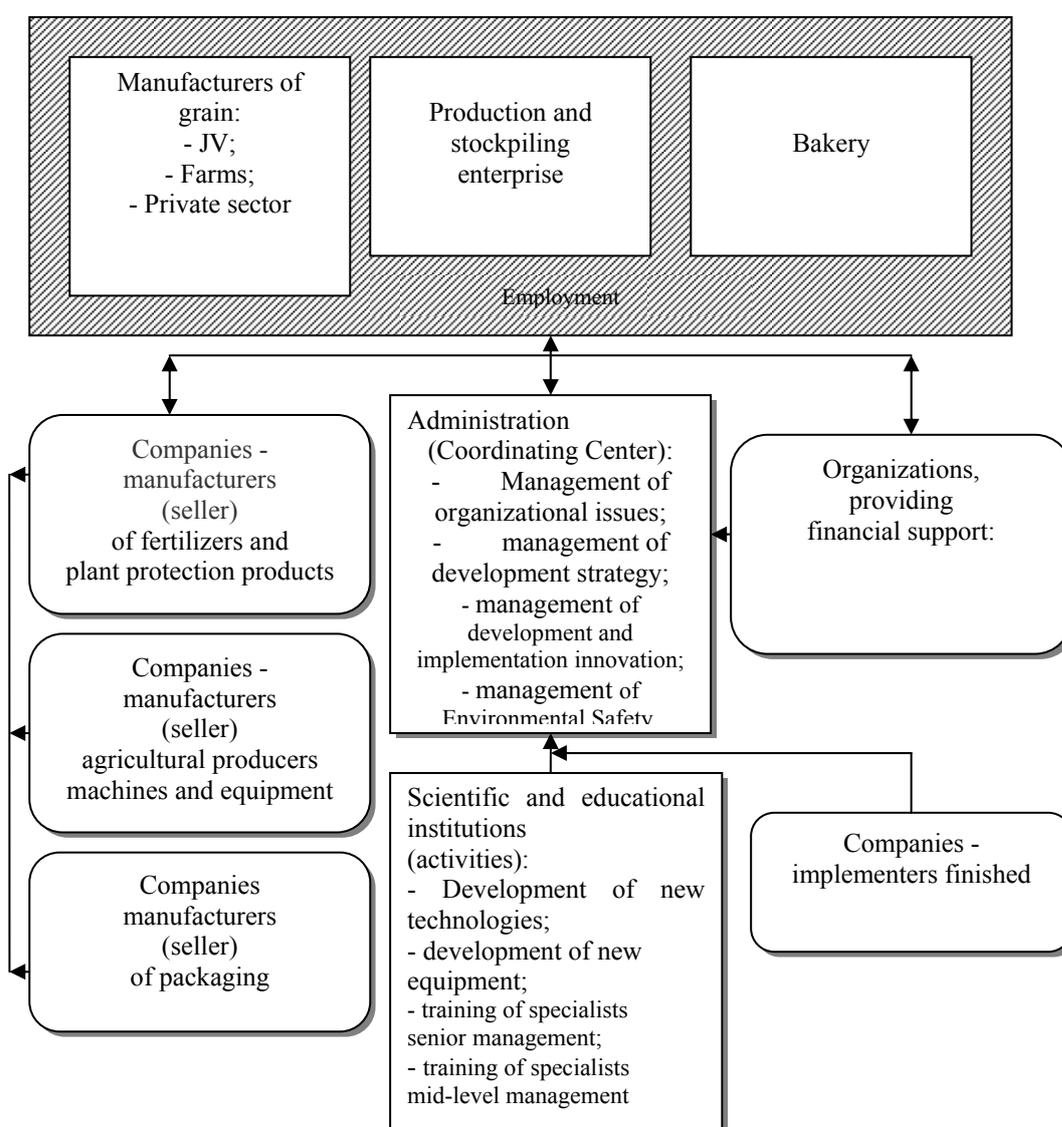
- The imperfection of the legal framework for the functioning of clusters and, consequently, the lack of support cluster initiatives farms from the state.
- Lack of trust between public authorities and business, and between individual companies. In addition, the reluctance of companies to share inside information because of the possibility of abuse and the emergence of a stronger dependence on partners.
- Weakness of existing agrarian clusters due to a low level of competition in the domestic market, the lack of “aggressive” suppliers, and demanding customers.
- The risk of losing the right to receive agricultural subsidies and incentives are now in any industrial or institutional changes (including when entering the

cluster).

- “Isolation” of science and education of agricultural production (e.g., agricultural customers do not act on the scientific and innovative products and the products of research institutions can not find a buyer among producers).
- Lack of foreign investment and venture capital, which is an important source of clusters in developed countries.
- No single systematic information base of existing and potential clusters, which prevents the creation of public understanding of the benefits of cluster associations and a coherent picture of the

functioning and performance of the existing agricultural clusters in Ukraine .

It is important to develop a regional business environment for public-private partnership that would be based on the business use of favorable climatic, territorial, and economic conditions in the region, including active government support initiatives of producers for the development of social and industrial infrastructure. Government policy for supporting the development of agricultural clusters should facilitate the modernization of the industry, the efficiency of agricultural business, and social development of the regions.



**Figure 3.** The structure of corn production cluster.

Note: Adapted from Buda T.Y. (2003), Establishment of Agro Industries Clusters as a way of reducing tension in the labor market, *All-Ukrainian Scientific-Industrial Innovative Economy: Demography, Employment and Social and Economic Policy*, 2, 169 - 176.

Participating farms in the agricultural cluster are able to remove most urgent elements of economic competition in their relations with processors and other entities with related industries. Formation within the cluster's stable contractual relationships reduces the risk of uncertainty in the prospects for economic activity. However, there are certain manifestations of competition between members of the cluster, which play a positive role in encouraging innovation and maintaining a high level of product quality (Yatsiv, 2012).

## CONCLUSIONS

New ideas and innovation as well as the creation and expansion of new business development strategies are important clusters. Embryonic clusters contain many new and potential entrepreneurs. Investments in clusters are needed for initial capital to finance product development, venture capital for entrepreneurs, and working capital for more mature companies that are expanding.

Government support can be provided through appropriate funding mechanisms to minimize bureaucratic regulation and barriers in accessing these funds. In addition, government policy in supporting the development of agricultural clusters should facilitate the modernization of the industry, the efficiency of agricultural business, and social development of the regions. The main elements of this policy should include:

- Establish, especially at the level of economic legislation, the legal regime of functioning clusters in Ukraine, particularly through the introduction of a legal category "cluster".
- Approve the Resolutions of the Cabinet of Ministers of Ukraine "Concept cluster in Ukraine", developed by the Ministry of Economic Development and Trade of Ukraine and "National Strategy Concept formation and development of cross-border clusters" developed by the Ministry of Regional Development, Construction and Housing and Communal Services of Ukraine;
- Amend paragraph 2 of Article 7 "Measures of stimulation of depressed areas" of the Law of Ukraine "On the promotion of regional development", stating it as follows: "the provision of government support, including financial, small businesses, promoting the formation of infrastructure development business such as business centers, business incubators, innovation centers and consulting, venture capital funds, clusters, etc.".
- Develop the Law of Ukraine "On economic self-governing association in the agri-food sector", aimed at creating the conditions for the formation and development of self-government in the Ukrainian Agricultural and Food Sector and

resolution of legal, economic and social bases of self-formation, and operation of business associations (in particular, including agricultural clusters).

- Develop regional scientific support of agricultural to implement manufacturing advertising, demonstrate advanced scientific research, and promote such developments in production activities of enterprises cluster association.
- The formation of regional and district administrations (based on the orders of the agricultural cluster members), orders of higher education and vocational training specialists in Ukraine, and specialists required profile of their future employment in the structure of the cluster.
- Placing state orders for products with higher quality requirements in an efficient working farm clusters.
- Carry out organizational and economic support initiatives of enterprises and organizations, by a cluster merger of social and industrial infrastructure of the region in which agriculture operates the cluster, creating a comfortable environment for living and recreation of workers.
- Develop websites and create a single database of information on existing regional clusters by regional authorities to inform employers about the benefits of the cluster model of production during the events of enterprise development. Create electronic forms applications for businesses that wish to become members of clusters, thereby eliminating the information vacuum for investors and promoting clusters in domestic and foreign capital;
- Implementing local procedures for issuing permits on "one window" that will speed up licensing procedures (primarily in construction and land acquisition ), make partial funding of the social, industrial, and domestic infrastructure based on public-private partnerships within the agreed the project.

Thus, in the current conditions agro clusters play a leading role in achieving the competitiveness among agricultural enterprises and the agricultural sectors in certain regions and in Ukraine as a whole. Therefore, the challenge for the agricultural economy of Ukraine needs to move from isolated farms to the many different stably existing clusters by expanding and intensifying its activities, increasing its efficiency, and creating a positive trend in the future. With agribusiness clusters in the region we have an opportunity to preserve and strengthen the single economic space in rural areas.

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