INFRASTRUCTURE PROVISION OF THE AGRARIAN MARKET IN THE GLOBALIZED ENVIRONMENT

Olga Vyshnevska¹, Olena Kaliuzhna², Inna Irtyshcheva³

Abstract. The main results of the research, which consist in determining the essence and features of the infrastructure provision of the agrarian market in the globalized environment, are formed. The priority of approaches in the development of logistics activities in the context of guaranteeing food security of regions and countries of the world is determined. The essence of the logistical process, strengthening the influence of the global market on the quality of agrarian products, is determined. The influence of the infrastructure provision of the agrarian market on the competitive positions of commodity producers is generalized, advantages and disadvantages in development are determined. The essence of informational logistics, its influence on the development of infrastructure provision of agricultural products market, satisfaction of consumers’ needs is investigated. The urgency of the introduction of e-commerce, which allows commodity producers to combine marketing activities with optimization of advertising costs, to ensure the efficiency and convenience of carrying out operations for the sale of agricultural products, its transportation, manage all logistics processes. It is proved that improvement of the infrastructure provision of the agrarian market of the world countries that adapts to the global market should be based on the dissemination of information opportunities, and the interaction of all participants in the process of selling agricultural products on an e-commerce basis, i.e. on cooperation of the network of producers, banking institutions, Internet providers, supermarket chains, processing enterprises, including export-oriented agricultural products, as well as regional representatives of state authorities. The combination of actions and systematical implementation of the logistical approach will reduce the level of information, production, business risks, as well as significantly increase the export opportunities of producers of agrarian products, especially in the context of the urgency of the issue of ensuring food security of the world, its regions and countries. It is stipulated that in the global market the solution of a problem should have a wide range of actions that should be directed at the ordering of economic, social and environmental interests of the world society. It is proved that improvement of the infrastructure provision of the agrarian market should be a matter of food safety and availability, considering the need to level out obvious and hidden hunger, and not only the spread of innovative technologies of production and the receipt of super-profits.

Key words: globalization, global processes, global market, electronic commerce, competitive advantages, logistics activities, infrastructure objects, market participants’ interests, food security.

JEL Classification: F01, F63, O18

1. Introduction

Globalization processes stimulated the process of forming the global market, which greatly increased the need to increase the competitive position of commodity producers. Competitive positions of commodity producers, especially agrarian products, have a close connection and dependence on the process of food security formation of individual states, regions of the world. The urgent need is to ensure the food security of the global world, which prompts the need to regulate the infrastructure provision of the agrarian market in all continents and regions of the world. Increasing the competitive position of agrarian products in the global market requires a clear and balanced policy in export-import relations, commodity and transport flows, food quality, and information support.

The competitiveness of agrarian products should be considered not only from the standpoint of its value, but also in quality, safety, environmental friendliness. Most countries of the world focused on increasing the production capacities of organic agricultural production in order to increase the competitive position in the global
environment, but the infrastructure maintenance of individual segments of the market remains a significant factor. It is the infrastructure support of the market that allows the supply of products in the required volumes and the corresponding quality from the producers to the consumer. The issue has particular relevance in the context of guaranteeing the market access of the necessary range of agrarian products, considering the specifics of regions of the world, mentality.

In order to increase the competitive position of producers of agrarian products, innovative technologies are used in the production, harvesting, storage, transportation, processing and sale, which is confirmed by the experience of companies that fill the market with agrarian products globally. Infrastructure provision of such processes is associated with significant financial burden, as it requires the creation of a coherent system of interaction between production and consumption, which prompts the need for integrated measures in the development of infrastructure objects of the agrarian market.

Taking into account the peculiarities of the infrastructure provision of the agrarian market, there is a need for further research, the identification of causal relationships and the substantiation of mutually agreed actions that will enable commodity producers to adapt to the conditions of the global market and to guarantee the food security of the states and regions of the world. The system of interconnections necessitates a detailed assessment of the infrastructure elements in order to find and substantiate the directions of forming effective levers of influence on the development of the market of agrarian products considering globalization transformations. The urgency of the assessment of trends in the development of the market of agrarian products, taking into account globalization changes and trends, and the improvement of infrastructure elements, is connected with the need to increase the competitive position of commodity producers in the global market, including logistic basis.

2. Scientific approaches to infrastructural support of the agricultural market in the globalization environment

The study of the market processes is associated with an assessment of a wide range of factors that, in the global market, are closely interrelated and interdependent. Infrastructural peculiarities of the agrarian market are determined by processes and phenomena that change approaches in time and space to the conduct of activities by commodity producers and all other market participants in order to obtain appropriate economic interests.

Market research, infrastructure features of the agrarian market, logistics processes, and the identification of causal relationships between processes and phenomena in the global environment require the use of general and special research methods. During the research, the authors used the method of scientific abstraction, logical and historical method, analytical grouping, which allowed to study, generalize and form their own vision of the infrastructure support taking into account the characteristics of the market of agrarian products. In order to identify causal relationships, the authors used the historical method, the logical method, the method of scientific abstraction, the systematic method, which allowed to generalize the influence of globalization factors on the peculiarities of the infrastructure provision of the agricultural products market, development of logistic activity.

The assessment of the market, the market position of commodity producers, their competitive advantages and disadvantages should be complemented by non-formalized research methods. They allow to identify priorities in the development of the agrarian business and the direction of improving the infrastructure provision. The consistency in conducting the research allows to determine the priority of the implementation of measures to minimize threats of internal and external nature, including food security.

The urgency of the research is closely linked to the need to implement systematic actions to improve the infrastructure provision of the agrarian market and guarantee the food security of individual regions, countries of the world. Priority in scientific research is the necessity of development and practical implementation of the directions of improving the infrastructure provision of the agrarian market, taking into account the tendencies towards the growth of the level of import dependence, which creates risks in guaranteeing food security of some countries of the world. And, on the contrary, it is stipulated by the profits of other countries of the world, which are the main exporters of agrarian products in the global market (the USA, Canada, Brazil, Argentina, China, the European Union countries).

The system of interconnections stipulates the necessity of detailing the infrastructure elements in order to find and substantiate the directions of formation of effective levers of influence on the development of the market of agrarian products taking into account globalization tendencies, market opportunities of commodity producers in the global market, logistic processes. The urgency of the research is due to the high level of dependence of the process of formation of export-import opportunities on the infrastructural provision of the global agrarian market. Which priority directions will guarantee the food security of the world, its regions, individual states for the long term, especially the states that have been dependent on the import of agrarian products?

The researches of many scientists are devoted to the market, market positions, market mechanisms, features of the market infrastructure, globalization, globalization

Conducted studies show that the essence of the concept of “market”, its components and features are interpreted in a wide range. Thus, J. Robinson (1986) and M. Friedman (1996) characterize the market as a set of socio-economic relations that penetrate all spheres of public life, and the market itself, through its own laws and mechanisms, induces the interaction of its participants. Some authors consider the market from the standpoint of institutional theory. D. Nort characterizes the market as a system of institutions, some of which increase efficiency, while others encourage it to decline (Nort, 1997 and 2010). Hayek F. considers the category of “market” to socio-economic institutions, which covers the traditional elements of any institution, as well as the norms and mechanisms governing the specific relationship between them. It is the market that allows the most complete and effective use of information that is broadened between individual participants (Hayek, 2011).

Gritsenko A. interprets the market infrastructure as a system, which is a set of elements that ensure uninterrupted multi-level functioning of economic interactions, interaction of subjects of market economy and regulate the flow of commodity-cash flows (Gritsenko, 1998).

It is determined that the majority of studies related to the essence of the market were conducted in the 1990s and 2000s, which testifies to the urgency of the issue that is transforming in time and space, and market mechanisms need to be adapted to globalization changes, requirements of the global market and further research in the context of the infrastructure provision of individual segments of the market, including the agrarian market. Market infrastructure is regarded by most scholars as the foundation, basis, aggregate industries and activities that serve the economy, individual production, social sphere.

Bilorus O.G. notes that it is expedient to refer the following directions to the main directions of global governance: control of threats and prediction of their consequences, stimulation the development of international cooperation and integration, evaluation and forecast the results of the development of global processes, coordination of work on the implementation of global strategies, the creation of international management structures, the prevention of global conflicts and threats, etc. According to the author, the global economy generates global poverty of people in the world (Bilorus, 2001; Bilorus, 2009).

One of the global threats is food problem. Poverty causes global social problems of humanity that requires a comprehensive solution, regulation of the market of agrarian products and access to food.

The authors’ position is to interpret the infrastructure of the agrarian market in a systematic interconnection of resource, production and logistics opportunities of the market participants, who must ensure efficient and ecologically safe functioning of the enterprises, introduction of resource-saving technologies, provide effective interconnections and an appropriate level of business activity, promote quantitative and qualitative increase of production by types, guarantee its safety for consumers. The infrastructural provision of the agrarian market consists of mutually agreed processes that allow obtaining economic (financial), social (food safety), environmental interests (preservation of the natural environment). In the context of combination of economic, social and environmental interests there is a need of introduction or regulation of the infrastructural providing for agricultural market through effective logistics activities of producers at all levels and the widespread use of information technology, including electronic commerce.

3. Current trends in infrastructure provision of the agricultural market

Modern trends in the agrarian business show that commodity producers are actively using innovative approaches in the cultivation, storage and processing of products. The question of effective selling remains to be resolved, which will allow to increase the competitiveness of commodity producers, to ensure the development of the market infrastructure of agrarian products due to the global trends.

The most important basis for the formation of the agrarian market is its structural elements, which are characterized by a variety of channels of sale, forms of sale, intermediaries and buyers, as well as a developed network of service, scientific and information services. That is why the process of forming the agrarian market is considered as a complex integrated category with functional features related to the production,
distribution, exchange and promotion of agrarian products to the consumer.

A fully functioning agricultural market includes a set of components such as: market mechanism, specialized markets, market infrastructure. The peculiarities of changing approaches to the formation and functioning of the market of agrarian products are the growing role of globalization and the transnationalization of the world economy, as well as the growing demands of consumers to the quality of products, their safety, as well as the level of infrastructure provision of the main and auxiliary industries.

Infrastructure development stimulates additional use in the area of material production of individual resources of territories, activates the territorial mobility of factors of production. The growing integration of foreign economic relations influences the nature of the use of infrastructure, the adaptation of its elements to the environment. Its integration role is very important together with the growing role of the food market in the global economy, due to territorial and branch characteristics.

Consequently, external factors, including globalization processes, require changing approaches to the formation and transformation of agricultural market infrastructure, which includes: wholesale food markets; exhibitions; fairs; auctions; tenders; retail trade; agro-industrial groups; banking and insurance institutions; credit unions; agro services; information technologies and means of business communication; system of professional training; enterprises and organizations that perform functions of transportation, storage, standardization, certification, price monitoring; special zones of free enterprise, the level of organization of which depends on the effectiveness of the functioning of the market mechanism.

It is revealed that the infrastructure features of the formation of the market of agrarian products consist of its elements taking into account the specific features of each particular product. A priority factor for the impact on the formation of the agrarian market is the specifics of the collection, storage, transportation of products by species. That is why the process of formation and functioning of the market of agrarian products requires the use of effective tools related to the attraction of technological innovations, which should be directed not only to increase production capacities and increase the level of product safety for consumers, but also to expand the possibilities of selling products with the use of modern approaches, including logistic approach.

Improving the infrastructure of the agrarian market is closely linked to the development of logistics activities. It is the logistical approach in the development of the market of agrarian products that prompts the identification of individual needs of consumers and responds to them, directing the available resources to their quantitative and qualitative satisfaction. The logistic activity allows to provide consumers’ inquiries related to the time, place of availability, quality of agrarian products through appropriate logistics operations.

It is determined that logistic operations with information flows generalize the process of gathering, storing, processing and transmitting information that corresponds to material or service flows. All transactions with financial flows correspond to transactions with information flows. Logistics related to information and financial flows includes collecting, storing and transmitting cargo information, receiving and sending orders, negotiating, entering into contracts, calculating with suppliers, intermediaries and buyers of goods, cargo insurance, customs clearance, acceptance and release of goods from the warehouse, compilation of reports, schedules, development of routes (Oklander, 2004).

Effective management of information and financial flows enables to optimize costs for producers and ensure the interests of all consumers of agrarian products, including foreign markets. In order to meet consumer requests, the role of information and information flows is important, which can be mutually matched through information logistics. The information logistics ensures the organization of the information flow that accompanies the material flow, and serve as a priority link that connects the process of supplying resources, the process of production, storage, processing, transportation, selling of agricultural products. It is the information logistics that covers the management of all processes of product movement, ensures its selling, the flow of products in the required quantity and quality to the consumer, allows to optimize costs, including through the use of e-commerce.

For products with storage specifics and a limited period of selling, the use of e-commerce is a time requirement. The main advantage of e-commerce is the constant presence of the commodity producer, its products in the range, conditions of sale in the free information access. That is, the commodity producer has a permanent opportunity to have a global presence on the market in on-line mode. That is, the commodity producer has a permanent opportunity to have a global presence at the market in on-line mode and modify (update) the information and be in constant contact with potential partners. Such approach allows to expand the competitors’ capabilities of commodity producers significantly, provide a quick exchange of information. E-commerce allows commodity producers to combine marketing activities with optimization of advertising costs, to ensure the efficiency and convenience of carrying out operations for the sale of products, its transportation, managing all logistics processes. The use of e-commerce allows the commodity producer to be constantly connected with his/her partners, to carry out electronic calculations and conduct operational monitoring of the results of the selling of agrarian products.
E-commerce is a time requirement for economies which adapt themselves to a high level of competition in the global market. The use of e-commerce allows to shorten the period of product sales, to reconcile the needs of producers and consumers and to reduce the number of intermediaries. The use of the Internet technologies provides direct interaction between the producers and the consumer, provides the consumer with a full range of information on the range, quality of agricultural products, prices, storage and transportation conditions. Due to the Internet technologies, the producer has the opportunity to accumulate information about partners, to monitor the implementation process, to identify problem situations and to ensure the leveling of threats based on the analysis of situations.

The experience of e-commerce in the countries of the European Union proves its popularity and effectiveness for all participants (from suppliers of material resources to producers, consumers, banking institutions). Restrictions that have a negative impact on the infrastructure provision of the agrarian market, the possibility of expanding the scope of e-commerce in the agrarian sector of the economies of the countries that adapt to the global market, are the need for a clear regulation of the process of selling agricultural products, protecting the interests of all participants in the process through regulation of legal framework, adherence to business ethics, ensuring a high level of business activity of all participants in the process, improvement of the electronic payment system, distribution of area covered with Internet.

The interaction of all participants involved in the selling of agrarian products on the basis of e-commerce is based on the cooperation of a network of producers, banking institutions, Internet service providers, supermarket chains, processing enterprises, including export-oriented agricultural products, as well as regional representatives of state authorities. The interests of all participants of the process should be consistent with the current legal and regulatory framework, adapted to regional features, international agreements (norms, standards). The coherence of the interests of all participants of the process can be ensured by the functional features of the activity of the trade (commercial and industrial) chambers. It is effective in the process of selling agrarian products to involve Internet providers, insurance companies, banking institutions, organizations for product certification, environmental and public organizations on the basis of partnership. The essence and peculiarities of the interaction of participants in the agrarian market with the use of e-commerce formed by the authors in Table 1.

The main processes that should be covered in the general logistic process are: peculiarities of cultivation (technologies, resources, ecological state of the territory), peculiarities of collection, storage, transportation, processing, marketing of products by species. In order to implement e-commerce, the producer must have the financial capabilities to create an electronic page, e-store, catalogs of products, catalog filling and updating. Possibilities of information accumulation, conducting of operational analysis in the context of individual partners, will allow the owner (leader) to decide on the expediency of expanding the range of agrarian products, to forecast demand and price of product sales in different periods of sales, on different channels of sale, including external ones. Under current conditions, improving infrastructure provision in the formation of the agricultural market has a strong link with a large number of factors. The priority is the issue of product flow to the consumer, with a minimum number of intermediaries, as well as expansion of export opportunities of commodity producers, due to expanding the scope and opportunities of information logistics, use of e-commerce.

In combination of actions, when the logistic approach is implemented, this will reduce the level of information, production, business risks, as well as increase the export opportunities of producers of agrarian products significantly, especially in the context of the urgency of the issue of guaranteeing the food security of the world, its individual regions and countries. Exports of agricultural producers are based on a combination of factors, including globalization. That is why the development of logistics centers, the strengthening of the role of logistics in the development of agrarian business will allow for wider opportunities in the selling of agrarian products and invest money in improving the infrastructure provision of the market in order to improve the management of financial and information flows. The use of e-commerce, which significantly expands the market opportunities of all participants in the process of selling agrarian products in the domestic and foreign markets, is evident at the time, which confirms the experience of most countries of the world that form the basis of food security such as: the USA, Canada, Australia, Brazil, China, India. The main emphasis in the development of agrarian business in the last 10-20 years was made on the use of innovative technologies and the use of a wide range of logistical capabilities, which, together with the provision of infrastructure support for the market of agrarian products, allowed the exporting states to take the highest competitive position in the global market. But this approach allows to get the relevant benefits only locally, not globally.

That is why the authors stipulate that the regulation of the infrastructure provision of the agrarian market at the local level through the introduction of a logistic approach provides an opportunity to obtain economic interests of the exporting states. In the global market the solution of a problem must have a wide range of actions and it is aimed at streamlining the economic, socio-ecological interests of the world society, which will eliminate food risks and
Table 1
The essence and features of the interaction of participants of the market of agrarian products with the use of e-commerce opportunities

<table>
<thead>
<tr>
<th>Process participants</th>
<th>Informational support of activity of all market participants</th>
<th>Services in the field of foreign economic activity</th>
<th>Results of participants' interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agrarian enterprises of various forms of ownership, sizes of production. Processing, storage enterprises.</td>
<td>Electronic exchange of information, electronic money flow, e-commerce, electronic money, e-marketing, e-banking, electronic insurance services</td>
<td>Development of partnership relations between all participants in the process Coordination of actions, cooperation with state authorities Participation in the development of regional, state development programs, development strategies Implementation of measures aimed at increasing the competitive position of producers, improving image positions Registration of customs documents Issuance of certificates of origin of products, goods and services (in international form) Issuance of expert opinions Practical help in conducting trading operations Provision of reference and information services Organization of professional training, internships</td>
<td>Improvement of the infrastructure provision of the agrarian market, its separate segments on the domestic and foreign markets. Increasing the level of awareness of all participants of the process, increasing the level of access to information, the speed of its updating, technical support. Improving the efficiency of the producers of agricultural products, processing enterprises. Increasing the share of exports in total sales of agricultural products. Coherence of interests of all participants of the process, increasing the level of business activity. Reducing the level of information, production, entrepreneurial risk.</td>
</tr>
<tr>
<td>Internet Service Providers.</td>
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<tr>
<td>Chambers of Commerce and Industry (regional level).</td>
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<td>Banking institutions, insurance companies.</td>
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<tr>
<td>Environmental organizations.</td>
<td>Information provision of the process of mutual harmonization of environmental standards and norms at the international level, taking into account existing programs for the preservation of the natural environment.</td>
<td>Extension of the information circle of issues and implementation of measures for the preservation of the natural environment, reducing the level of resource intensity in the production of agricultural products. Financing activities through environmental funds (grant projects).</td>
<td>Increasing the level of environmental friendliness (safety) of agrarian products.</td>
</tr>
<tr>
<td>Community organizations.</td>
<td>Availability and completeness of information on the compliance of agrarian products with international standards, safety and environmental friendliness of agrarian products by species. Information provision of the process of ensuring food security for vulnerable groups of the population, implementation of international programs to combat and prevent obvious and hidden hunger.</td>
<td>Formation of an informational environment, which will allow the public to have free access to the results of compliance with producers of agricultural products technological norms, market access to safe products, and its export.</td>
<td>Increasing the level of environmental consciousness of producers, their social responsibility. Prevention of obvious and hidden hunger. Protection of vulnerable groups of the population. Protecting the interests of import-dependent states of the world, leveling food risks.</td>
</tr>
</tbody>
</table>

Source: formed by authors
4. Conclusions

Providing opportunities in the development of the agrarian sector is closely linked to the operation of market mechanisms. In terms of the strengthening of globalization trends and the transnationalization of business, including agrarian, it is necessary to address the issues of improving the market infrastructure of agrarian products in order to increase the competitive position of commodity producers, adapt to the conditions of the global market, address the issue of food security of the world and its individual regions. One of the directions of improving the infrastructure of the market of agrarian products is the development of logistics activities and the expansion of information capabilities of all market participants, the introduction of the process of electronic commerce.

It is revealed that expanding the scope of e-commerce in the agrarian sector allows obtaining the benefits of purchasing the necessary material resources, updating technologies and equipment, presenting products in constant global access for all potential partners, providing information on quality, safety, conditions of its sale, transportation etc. This approach allows not only to optimize costs, but also to expand the range of partners, enhance competitive positions and investment opportunities.

It is stipulated that the information component of the infrastructure of the market of agrarian products allows to expand the export opportunities of commodity producers, which is confirmed by the experience of the majority of exporting countries. The use of e-commerce opportunities for the sale of agrarian products can increase the productivity of producers, processors, increase the awareness of all process participants, level of access to information, its updating, reduce the level of information, production and business risks, increase the level of information provision of activities of all market participants, including during export. This is due to the economic interests of agricultural market participants.

This approach is local in terms of the growing influence of the global market requirements, and the high level of dependence of the process of formation of export-import capabilities of the world countries prompts the settlement of infrastructure links. Priority directions for further development of the agrarian sector should be to ensure not only economic interests, but also social and environmental, which is a time requirement due to the compliance with food quality standards, their availability for a long term, especially in the regions and individual states that have been dependent on the import of agrarian products.

The authors stipulate that in the global market the solution of a question should have a wide range of actions that should be directed at the ordering of economic, social and environmental interests of the world society. Improvement of the infrastructure provision of the agrarian market should be a matter of food safety and availability, given the need to level out obvious and hidden hunger, and not only the spread of innovative technology of production and receiving extra profits. The regulation of the infrastructure provision of the agrarian market should be guaranteed by the state position in the formation of food security on the basis of its own production or import of quality and safe agricultural products.

The issue under study is complex and multi-faceted, but the orientation of agricultural production only to the economic interests of exporting countries can be used to increase the tension in society, including ignoring environmental problems and the social security of the world community.

References:


