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GENESIS OF THE GRAIN MARKET IN UKRAINE

Abstract. The article is devoted to the study of historical aspects of the formation of the gr ain market in Ukraine and the world. It is noted that the grain market is a strategic branch of the national economy, and grain products form the basis of the country's food security. The development of grain farming is extremely important for Ukraine, not only because it ensures the quality of food products, but also because Ukraine ranks among the top ten world wheat producers. This allowed Ukraine to increase the volume of grain exports in recent years. The generalization of scientific research and legal journalism recently illustrates the rapid increase in attention to the problems of the grain market: cultivation, storage, export.

The grain industry of Ukraine is a promising segment of the development of the agricultural market, which has potential on both domestic and global markets. Recognized as strategic, the industry ensures food security, the well-being of the population and the country's competitiveness. In the conditions of increased globalization, it is the products of the grain industry that are the priority direction of foreign trade, contributing to the growth of foreign exchange revenues in the country's budget and the development of rural areas.

It is justified that the grain industry can be considered as a market of pure competition, since the products of the industry are standardized, there is a large number of sellers and buyers; competition on the market is quite intense, as the supply exceeds the demand and sellers compete for the choice of the buyer of their products; the industry has favorable conditions for entering the foreign market, since in the coming years the demand for grain crops will only grow, and the only possibility to increase production volumes should be the transition of domestic product manufacturers to progressive, highly efficient production technologies.

The purpose of the article is to study the historical aspects of the formation of the grain market in Ukraine, to find favorable conditions for development and to identify risks.

The directions of the development of the grain market in Ukraine and the existing threats to the further development of competitiveness on the world market are outlined.

It is substantiated that Ukraine's achievement of leading positions on the world grain market will be facilitated by comprehensive and systematic work on increasing competitiveness and improving the quality of domestic grain, development and active implementation of the principles of grain logistics, activation of Ukraine in international organizations (FAO, International Grains Council, World Committee for Food Security), ensuring predictability and transparency of the grain market.

Keywords: agro-industrial complex, grain, export, grain market, public administration, agricultural products.

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ГЕНЕЗИС РИНКУ ЗЕРНА В УКРАЇНІ

Анотація. Стаття присвячена дослідженню історичних аспектів формування ринку зерна в Україні та світі. Зазначається, що ринок зерна є стратегічною галуззю народного господарства, а зернопродукти становлять основу продовольчої безпеки держави. Розвиток зернового господарства вкрай важливе для України, не лише тому, що цим забезпечується якість харчових продуктів, а і тому, що Україна займає місце у першій десятці світових виробників пшениці. Це дозволило Україні нарощувати обсяги експорту зерна за останні роки. Узагальнення наукових досліджень та правової публіцистики останнім часом ілюструє стрімке збільшення уваги до проблем зернового ринку: вирощування, зберігання, експорт.

Зернова галузь України є перспективним сегментом розвитку аграрного ринку, яка має потенціал як на вітчизняному, так і світовому ринках. Визнана як стратегічною, галузь забезпечує продовольчу безпеку, добробут населення

і конкурентоздатність країни. В умовах посилення глобалізації саме продукція зернової галузі є пріоритетним напрямком зовнішньої торгівлі, сприяючи зростанню валютних надходжень в бюджет країни та розвитку сільських територій.

Обґрунтовано, що зернову галузь можна розглядати як ринок чистої конкуренції, оскільки продукція галузі є стандартизована, у ній присутня велика кількість продавців та покупців; конкуренція на ринку є досить інтенсивною, оскільки пропозиція перевищує попит і продавці змагаються за вибір покупця їхньої продукції; галузь має сприятливі умови для виходу на зовнішній ринок, оскільки в найближчі роки попит на зернові культури тільки зростатиме, а єдиною можливістю нарощування обсягів виробництва має стати перехід вітчизняних товаровиробників до прогресивних високоефективних технологій виробництва

Метою статті є дослідження історичних аспектів формування ринку зерна в Україні, пошук сприятливих умов для розвитку та виявлення ризиків.

Окреслено напрямки розвитку ринку зерна в Україні та існуючи загрози для подальшого розвитку конкурентоспроможності на світовому ринку.

Обґрунтовано, що досягнення Україною лідируючих позицій на світовому зерновому ринку сприятиме комплексна та системна робота щодо підвищення конкурентоспроможності й поліпшення якості вітчизняного зерна, розвиток та активне впровадження принципів зернової логістики, активізація України в міжнародних організаціях (ФАО, Міжнародна зернова рада, Всесвітній комітет продовольчої безпеки), забезпечення прогнозованості та прозорості ринку зерна.

Ключові слова: агропромисловий комплекс, зерно, експорт, ринок зерна, публічне адміністрування, сільськогосподарська продукція.

Formulation of the problem. In the conditions of market relations and ensuring the sustainable development of grain farming for Ukraine, the development of grain farming is a strategically important direction of development. Grain is an important strategic quality food product for the population, it is considered the basis of ensuring food security. The development of grain farming is extremely important for Ukraine, not only because it ensures the quality of food products, but also because Ukraine ranks among the top ten world wheat producers. This allowed Ukraine to increase the volume of grain exports in recent years. The generalization of scientific research and legal journalism recently illustrates the rapid increase in attention to the problems of the grain market: cultivation, storage, export.

Grain and products made from it always have high liquidity, as they can be quickly sold on the world market and form the basis of the country's food security.

The natural and climatic conditions and fertile lands of Ukraine facilitate the cultivation of all grain crops and make it possible to obtain high-quality food grain in volumes sufficient to meet domestic needs and build export potential.

Analysis of recent research and publications. The history of the origin and development of the grain market in Ukraine, public administration in the field of agro-industrial complex were the subject of research by such scientists as I. Andrushchenko, A. Berlach, I. Bukhtiyarova, T. Kolomoets, V. Kolpakova, O. Kuzmenko, I. Pastukha, M. Plugatyria, O. Strelchenko, V. Stetsenko, V. Radisha, V. Pashko and others. Considering the fact that the grain market is a guarantee of food security, it is advisable to thoroughly investigate the conditions of development and the factors of threats to the grain market in Ukraine.

The purpose of the article is to study the historical aspects of the formation of the grain market in Ukraine, to find favorable conditions for development and to identify risks.

Presenting main material. The grain industry of Ukraine is a promising segment of the development of the agricultural market, which has potential on both domestic and global markets. Recognized as strategic, the industry ensures food security, the well-being of the population and the country's competitiveness. In the conditions of increased globalization, it is the products of the grain industry that are the priority direction of foreign trade, contributing to the growth of foreign exchange revenues in the country's budget and the development of rural areas.

In general, the grain market is a system of commodity-monetary relations that arise between its subjects in the process of production, storage, processing, transportation and sale of grain on the basis of free competition, optimal choice of directions for grain sale, cost-effective pricing, as well as state control over its quality and storage [1, p. 93]. Humanity began to cultivate grain crops since ancient times. And to this day, they deservedly occupy the leading positions in the ratings of food products in more than 50 countries of the world. Ukraine is also included in this list and is a powerful producer and exporter of grain crops. Grain is one of the main food crops in Ukraine. It is used to make a valuable food product - bread, which is highly valued all over the world for its consumer characteristics. That is why the importance of the grain market for our country is particularly important [2].

The historical development of agriculture and technology spans many millennia - from primitive stone tools to modern satellite farm management systems and gene manipulation. More than 8,000 years have passed since the first attempts to grow a primitive grain, which was then still a wild plant, to the first samples of soy whose genetic code was changed by man. On the path of this evolution, it is possible to single out certain dates when cardinal breaks took place.

The first was the so-called Neolithic revolution (11-6 thousand years BC). The first cereal used by humans was most likely spelled. This is a primitive variety of

wheat, the calorie content of which is 10% less than that of modern varieties, and there is almost no resistance to drought. In addition, spelled begins to fall off almost immediately if the grain ripens or the weather conditions change. And that's why it was quite difficult to take care of this plant. However, it was worth it. Some of the first archaeological finds of spelled took place in North Africa - at that time the Sahara desert was more like a grassy plain where cereals could grow [3; 5].

The civilizations of Egypt, Mesopotamia and China began to cultivate irrigated agriculture at about the same time (3 thousand years BC). At first, they relied only on the seasonal flooding of large rivers - the Nile, the Euphrates and the Yellow River, and then they learned to divert water that constantly irrigated certain areas.

The ancient Egyptians sowed and grew wheat, barley, spelt, beans, peas, lentils, flax, sesame. Stings were made with a wooden sickle with a flint or bronze insert, threshed with the help of bulls or cows on round rammed platforms. Grain was stored in sheaves covered with mud or in granary pits with large clay vessels placed there [3].

The largest rooms in the oldest Sumerian settlements known to science were storehouses in which public grain stocks were stored. Bread was sacred. Rituals were performed on the eve of sowing and after harvest, and holidays were held in honor of the fertility goddess Inanna. Therefore, storerooms became the first sanctuaries, a prototype of temples. The leading activity of the population of ancient China was agriculture. Millet, barley, and wheat were grown here, and later rice became the main crop imported from the south. The construction of public granaries for grain stocks in case of calamities and famine was widely carried out.

The next stage of agrarian evolution was the use of tripilla, when at the end of the Roman Empire, a more progressive system of crop rotation was introduced in the economy, which gave the land the opportunity to rest more.

As a result of the excavations of settlements of the Trypil culture, belonging to the third millennium BC. e., and got its name from the excavations in the area of the village of Trypillya, near Kyiv, which yielded evidence of grain storage in primitive communal society. At that time, grain was stored in pits, smeared inside with clay, or in large vessels - snags, which were placed in residential premises by 10-15 pieces.

In the middle of the first millennium BC. e. on the territory of Ukraine lived numerous tribes of Scythian ploughmen who were engaged in agriculture. They traded bread through the Black Sea Greek colonies - Olbia, Chersonesus, Panticapae. Storehouses for grain and other supplies were discovered during the excavations of Ancient Chersonesus (near Sevastopol) [3; 5].

A large amount of material has been collected about the storage of grain reserves in our Slavic ancestors, who until the VII century. went through a long way

of cultural development and lived a settled life. Their main occupation was agriculture. They cultivated rye, barley, millet, peas and beans.

Each settlement had separate buildings for storing food supplies. In special warehouses and in living quarters, grain was stored in large wooden barrels or in cylindrical pits with a raised top, dug in the mainland clay. The walls of such pits were usually burnt to a red color.

According to historical data, during the primitive communal system, grain stocks were stored in specially dug pits or vessels buried in the ground. In the slave society, grain was stored in vessels that were placed in living quarters or special storages built of clay, stone or wood.

Under the feudal system, peasants built special granaries for grain storage. They began to use millstones to grind it. On the territory of churches and monasteries, grain was stored in sub-churches. The first attempts to make large stocks of grain in Ukraine date back to the end of the 15th century, when there was a need to harvest it for the army. During this period, grain yards and bread shops began to be established in large cities. The grain in the granaries was renewed every year by at least a third, and not freshly harvested, but after long-term storage. The organization of storage of grain stocks improved significantly at the beginning of the 18th century. The Central State Administration - Provision Order was created to provide the army with food.

Active development of agronomic science began. In 1765, the Free Economic Society was founded. Its members proposed the project of the first elevator, gave recommendations on the location of storage facilities for grain, its long-term storage without the access of moist air, and the use for this of pits tightly covered with a thick layer of quicklime. Already in the 18th century. the principle of blowing grain masses with air using bellows was known. Methods of storing grain and flour for storage and quality control methods were developed. Norms of natural losses during grain storage were established. The recommendations were based on the results of research that was intensively conducted at the end of the 18th and the beginning of the 19th centuries [3; 4].

The main tools for separating grain from chaff and earth remained a sieve, a shovel and a primitive fan-mill, although mechanical fans were already produced by the industry from the beginning. 1830s pp. The grain was winnowed by throwing it against the wind with a shovel or scoop. Cleaned grain was stored in storerooms, attics, in barrel-shaped vessels - thatched houses, and most often - in grain pits. Straw was stacked in skirds.

In the era of the USSR, large volumes of agricultural production were due to huge subsidies, not efficiency. Today, such an orientation on production volumes and self-sufficiency at any cost (partly this approach works) is inappropriate. If we

take into account that agricultural enterprises received large subsidies and that production was unacceptable as the ultimate goal of economic measures, then a certain decrease in the volume of agricultural production in Ukraine during the transition period was understandable and even desirable. The fact that after adapting to the new price conditions, the profitability of agricultural production remains critically low at best is cause for concern. Indeed, reforms in the agricultural sector should help Ukrainian agricultural producers to realize their enormous productive potential [6].

At the current stage, new requirements have appeared regarding the equipment used for post-harvest processing and, in particular, drying of grain and oil crops. The technology that was previously used in collective farms and state farms does not suit modern agricultural producers. That is why a problem has arisen that concerns the entire complex of grain production, in particular grain drying. After all, about 20-35% of all grain is dried in the country, and in some years even 50-70%. Grain drying is an urgent need, especially in the north and west of Ukraine.

Therefore, the introduction of new methods of drying grain and oil crops, the purchase of small grain dryers, and, in particular, fluidized bed dryers, vacuum dryers, new heat generators for dryers based on energy-saving technologies, different from the known high efficiency and speed, simplicity of the device and operation, quality of work and the flexibility of technological process management is a very relevant issue.

It is interesting that at the beginning of the 21st century, Ukraine exported only 4-5 million tons of grain per year. Today, Ukrainian grain is exported to more than 90 countries of the world, of which about 20 buy 1 million tons of grain or more. According to data from the US Department of Agriculture, in 2016-2017, in the ranking of the largest grain exporters, Ukraine took 3rd place in the volume of barley supplies, 4th in corn, and 6th in wheat. In recent years, Ukraine has confidently entered the top ten grain exporting countries in the world. A distinctive feature of the forecast for the development of the world agricultural market until 2024 is the presence of Ukraine in key positions in almost all segments of grain crops, along with already traditional players [6; 8].

It is appropriate to define the subjects of the grain market, which takes into account not only the state and farmers, but also other participants in the relationship. (Figure 1)

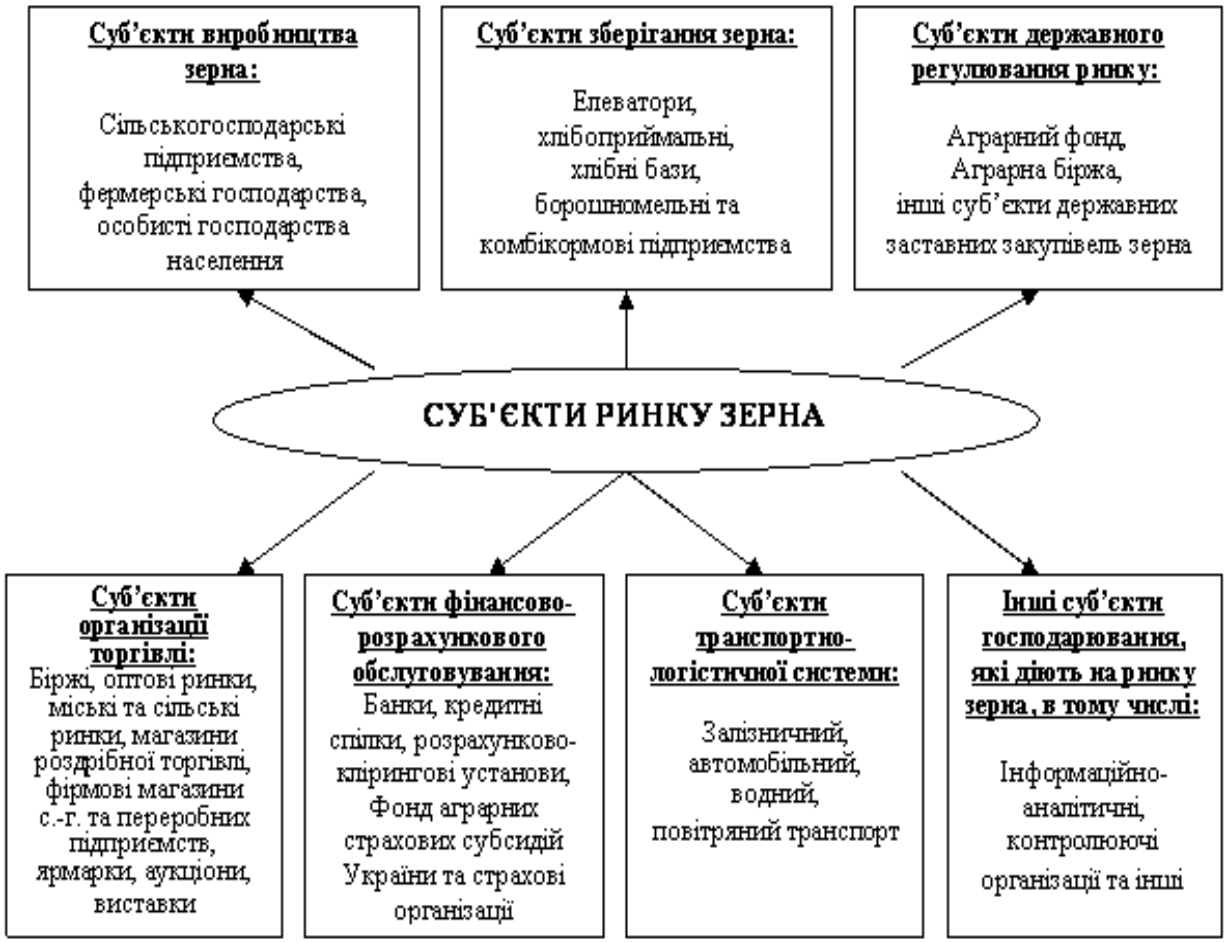


Fig. 1

In the future, the total area of agricultural land is expected to increase, especially in countries with a significant amount of land, including our country. Thus, the grain industry of Ukraine, despite the existing prospects for the development of this market, currently has certain obstacles and challenges for the further growth of grain production and their export, among which the following can be distinguished:

1. Logistics infrastructure: insufficient capacity for grain storage (elevators, warehouses); impossibility to control the quality of grain in the storage process due to the weak supply of elevators with quality laboratories; detention of goods due to shortage and poor technical condition of railway wagons; high cost of transport services; low potential of port capacities.

2. Risks of a shortage of transport capacities for all types of transport, taking into account the possibilities of growth in the volume of production and export of grain. If the volume of grain exports increases, the throughput capacity of the grain logistics system of Ukraine must ensure the processing of the indicated volume of cargo.

3. Constant increase in the volume of grain production with a simultaneous low share of high-quality food grain, which exporters can offer to partner countries [6; 7].

Conclusions. Ensuring the realization of state interests on the grain market, the state must: support agricultural production and increase the competitiveness of grain market entities; to support small entities of the grain market and entities that are just starting their entrepreneurial activities; to develop the market infrastructure related to the grain market; rational use of agricultural land and protection of arable land; support local initiatives for the development of rural areas and the quality of life in the countryside; provide preferential lending for the purchase of the latest agricultural machinery; to develop agricultural engineering; introduce the latest technologies into production in order to intensify the development of the grain market, etc. [8, p. 69]. State regulation of the grain market should include not only state management and its state financing, but also such levers of influence as: administration of taxes and fees; implementation of credit and depreciation policy; provision of financial assistance; determination of conditions for the use of land, water and other natural resources; pricing policy, etc.

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