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Export potential of agricultural products: Financial aspects

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Received: 12.12.2024 Revised: 02.04.2025 Accepted: 30.04.2025 **Abstract**. This study analysed the financial mechanisms that stimulate the development of the export potential of agricultural products in order to strengthen Kazakhstan's position in global markets. It examined the role of the agricultural sector in the country's economic development and the factors influencing its competitiveness in international trade. To assess the sector's export potential, key financial instruments were evaluated, including government subsidy programmes, tax incentives, and export risk insurance mechanisms. The analysis highlighted the role of specialised financial institutions – such as Agrocredit Corporation and KazAgroFinance – which provide

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farmers with access to credit and leasing for production modernisation and export development. The influence of infrastructure, particularly transport and logistics corridors, on the cost and timeliness of agricultural deliveries was also considered. Technological advancement in the agro-industrial sector was identified as a critical factor in export growth. In addition, the importance of government policies aimed at improving macroeconomic stability, managing currency risks, and developing financial institutions is emphasised. The study presented data on the dynamics of Kazakhstan's agricultural exports, which grew from USD 2.1 billion in 2015 to USD 5.1 billion in 2024. Despite positive trends, challenges remain, including yield instability, limited processing capacity, and high transportation costs. Particular attention is given to exports to China, which rose from USD 351 million in 2019 to USD 954 million in 2023. The key findings underlined the necessity of expanding financial support tools, such as concessional loans, export risk insurance, and subsidies for transportation costs. Strategic investments in agricultural processing, new export corridors, and the digitalisation of certification procedures will further enhance Kazakhstan's competitiveness in global markets and support continued export growth in the agricultural sector

Keywords: international trade; food security; trade barriers; subsidies and grants; currency risks

INTRODUCTION

In the context of globalisation and the expansion of international trade, agricultural exports play a pivotal role in the development of national economies. For many countries with well-developed agricultural sectors, such exports serve as a vital source of foreign exchange earnings, contribute to economic diversification, and stimulate investment activity. However, the effectiveness of this process is largely contingent on financial factors, including access to credit resources, subsidy schemes, taxation policies, risk insurance, and international settlement mechanisms. The relevance of this study lies in the pressing need to enhance the competitiveness of domestic agricultural products in global markets. Contemporary challenges - such as price volatility in commodity markets, sanctions-related restrictions, shifts in global trade policies, and macroeconomic instability - necessitate the development of robust financial strategies to support the export potential of the agricultural sector. Furthermore, the integration of new technologies, the digitalisation of financial transactions, and the use of risk hedging instruments are increasingly essential for the successful performance of agricultural exporters.

Despite the sector's high export orientation, several issues hinder its sustainable development. Chief among these is insufficient financial support for producers, limited access to long-term and preferential credit, and barriers to securing export subsidies. In addition, exchange rate volatility and elevated logistics costs introduce further financial risks for exporters (Kryvovyazyuk et al., 2024). Customs barriers and the need to comply with international standards for product quality and safety also exert a considerable influence on the sector's performance. The export potential of agricultural products can be examined through the lens of key economic categories such as competitiveness, financial stability, and international trade relations. Within the framework of financial analysis of export activities, financing instruments play a crucial role. These include bank loans, leasing, factoring, government subsidies, and export risk insurance. Contemporary models of international trade highlight the significance of financial mechanisms in ensuring the sustainable growth of agricultural exports, as well as the necessity of active government involvement in creating a favourable environment for agribusiness development (Bekmuratov *et al.*, 2024).

Numerous studies focused on the financial dimensions of agricultural exports underscore the importance of various financial support tools in enhancing the competitiveness of domestic producers. For instance, E.J. Kane (2021) found that the availability of concessional lending and subsidies has a direct impact on the volume of agricultural exports, as it lowers production costs and promotes the modernisation of the agricultural sector. Similarly, A. Baubekova et al. (2020), in their analysis of government financing programmes in Kazakhstan, concluded that the presence of a well-developed financial support system for agricultural exports enables the country to achieve more stable growth in foreign trade performance. A. Ibyzhanova et al. (2024) examined the impact of currency fluctuations on the export revenues of agricultural enterprises and concluded that effective currency risk hedging strategies can mitigate the adverse effects of exchange rate instability. Their findings align with those of I.A. Raifu and A. Aminu (2020), who investigated the application of derivative financial instruments in agricultural exports and demonstrated that hedging through futures and options contributes to stabilising the incomes of export-oriented farms.

The issue of high logistics costs was explored by M. Rahman *et al.* (2022), who, through a comparative analysis of national logistics financing models, showed that optimising transport costs and investing in infrastructure significantly enhance export potential. J. Salimova-Tekay (2022) focused on export risk insurance and demonstrated that the availability of effective supply insurance mechanisms reduces the financial losses incurred by enterprises in force majeure situations. D.D.D. Fiankor *et al.* (2021) investigated the impact of international quality standards on the financial sustainability of agricultural exporters and found that the costs associated with product certification are offset by increased trust from foreign buyers. Concurrently, research by K.M. Mang'ana *et al.* (2023) revealed that targeted support for small and medium-sized agricultural enterprises by specialised financial institutions contributes to expanding their share in total agricultural exports.

In analysing government support measures, E. Ohrn (2023) concluded that tax incentives for agricultural exporters can serve as an effective instrument for stimulating foreign trade, though their efficacy depends significantly on the transparency of preference distribution mechanisms. A.W. Al-Khatib (2024) examined the impact of the digitalisation of financial transactions in export activities and demonstrated that the adoption of electronic payment systems and blockchain technologies can accelerate and secure settlements between exporters and importers. Collectively, these studies highlight the wide range of financial factors influencing the export potential of agricultural products. Nevertheless, despite the substantial body of research, several aspects of financial support for agricultural exports remain underexplored. In particular, the effectiveness of integrated financial strategies that combine government support, private investment, and international financial instruments requires further investigation. Moreover, the impact of digital technologies on access to credit for agricultural exporters remains insufficiently assessed, as do the mechanisms for insuring export risks in an increasingly unstable global market.

The aim of this study was to examine effective financial mechanisms that foster the sustainable development of the export potential of agricultural products, with due regard for current challenges and global market trends. The objectives of the research were: to analyse existing financial instruments for supporting the export of agricultural products and identify their advantages and limitations; to assess the impact of digitalisation on the accessibility and efficiency of financing agricultural exports; and to develop recommendations for improving public and private financial support mechanisms for agricultural exporters.

MATERIALS AND METHODS

The study employed a set of methods aimed at assessing the export potential of Kazakhstan's agricultural sector. The research involved an analysis of regulatory documents, strategic programmes, and government initiatives governing the development of the agro-industrial complex and its export capacity. Key factors influencing the competitiveness of agricultural products in the global market were examined, including financial mechanisms, infrastructure development, government support measures, and international trade relations. Statistical data were sourced from official institutions such as the Bureau of National Statistics (n.d.), the International Trade Centre (n.d.), and the Ministry of Agriculture of the Republic of Kazakhstan (n.d.). To evaluate export dynamics, data on the value and volume of agricultural exports during the period 2015-2024 were analysed. Statistical methods used included the calculation of growth rates, dynamic indices, and comparative analysis of key indicators across major product categories, including crop production, livestock, and processed agricultural goods.

The study further assessed the role of financial instruments in stimulating agricultural exports. It examined mechanisms such as lending, subsidies, tax incentives, export risk insurance, and digital financial solutions currently applied in Kazakhstan to support exporters. Particular emphasis was placed on the activities and programmes of Agrarian Credit Corporation JSC (n.d.), KazAgroFinance JSC (n.d.), and the Export Credit Agency of Kazakhstan JSC (n.d.). To evaluate the effectiveness of financial mechanisms, the analysis incorporated data on the volume of loans issued, subsidies allocated, insurance pay-outs made, and the dynamics of export financing uptake. These indicators provided insight into how various financial tools contribute to enhancing the export performance of Kazakhstan's agricultural sector Additionally, the study examined the influence of infrastructure-related factors on the export potential of Kazakhstan's agricultural sector. The condition of logistics systems, transport corridors, warehouse capacities, and export terminals was assessed. Public and private investments in the modernisation of transport infrastructure were analysed, including initiatives implemented under the One Belt, One Road programme (World Bank, 2020). The logistics costs borne by Kazakhstan's agricultural exporters and their effect on the final cost of products were also considered.

One of the key components of the study was the analysis of Kazakhstan's international trade relations. Export flows and the country's main trading partners were examined, including China, Central Asian countries, the European Union, and the Middle East. Data on export structure, supply volumes, and changes in trade policy were utilised. Particular attention was given to the dynamics of exports to China, based on data from the International Trade Centre (n.d.). The study also explored digital tools and financial mechanisms that influence the development of the agricultural sector. The Agricultural Animal Identification System (AIIS) was analysed as a means of tracking livestock and monitoring product movement. Additionally, the Information System for the Traceability of Crop Production was studied for its role in controlling supply chains and ensuring compliance with international standards (Modern digital solutions..., 2025). The financial aspects of agricultural exports were further analysed using the example of the Baiterek Venture Fund (n.d.), which supports enterprises in the sector through credit and investment instruments. Based on these analyses, the study identified areas for improving the export strategy, financial mechanisms, and logistics infrastructure, all of which are critical to enhancing the efficiency and international competitiveness of Kazakhstan's agricultural products.

RESULTS

The export potential of the agricultural sector plays a vital role in the economic development of countries with well-established agricultural industries. It not only ensures the inflow of foreign currency revenues but also enhances the competitiveness of national products in global markets. In the context of globalisation, population growth, and increasing global demand for food, agricultural exports are becoming a key driver of sustainable economic growth. However, the development of this potential depends on numerous factors, including financial mechanisms, infrastructure, government support, and international trade relations. For many nations, the agricultural sector is of strategic importance, contributing significantly not only to food security but also to gross domestic product (GDP). Agricultural exports provide states with foreign exchange earnings, improve the trade balance, and stimulate the development of related industries such as transport, logistics, and raw material processing. Moreover, successful agricultural exports contribute to the technological advancement of the sector (Friedmann, 2021). Competing in global markets necessitates the modernisation of production, the adoption of advanced agricultural technologies, the enhancement of quality control systems, and the implementation of standards that comply with international requirements. These improvements, in turn, drive productivity and support the sustainable development of agriculture.

Despite the critical role of agricultural exports, their development is confronted by a number of challenges and factors affecting the competitiveness of products in international markets. Chief among these is access to financial resources. It is essential for agricultural enterprises to secure financing for production development, equipment modernisation, and the expansion of export operations. Countries with well-developed financial support systems for farmers tend to experience higher growth in export potential (Al-Ababneh et al., 2022). In Kazakhstan, for instance, government programmes such as loan subsidies and tax incentives for the agricultural sector support export expansion, although further improvements to these mechanisms remain necessary. Secondly, infrastructure exerts a significant influence on export potential. Access to modern logistics systems, efficient transport corridors, adequate warehouse facilities, and well-functioning export terminals all

determine the cost and speed of product delivery. Although Kazakhstan benefits from a unique geographical position between Europe and Asia, underdeveloped infrastructure and high transport costs continue to constrain the export potential of its agricultural sector.

Thirdly, international trade relations and national economic policy play a critical role. Trade barriers, tariff restrictions, sanctions, and product quality requirements can either facilitate or hinder export development. Kazakhstan is actively engaged in integration processes within the Eurasian Economic Union (EAEU) and is expanding cooperation with China, the Middle East, and the European Union, thereby opening new opportunities for market diversification (Manatovna et al., 2023). Another key factor is technological development and innovation in the agro-industrial complex. The adoption of precision farming techniques, advanced irrigation systems, genetic research, and biotechnology can significantly improve yields and product guality, thereby enhancing competitiveness in global markets (Goel et al., 2021). Environmental and climatic conditions also influence export potential. In Kazakhstan, agricultural output is highly dependent on weather variability, necessitating the adoption of adaptive technologies and risk management strategies. The implementation of agricultural risk insurance schemes and the development of irrigation infrastructure can greatly enhance production resilience and, in turn, boost export potential (Balogh & Jámbor, 2020).

The development of the export potential of the agricultural sector is unattainable without an effective system of financial support that enables enterprises to minimise risks, enhance productivity, and compete successfully in international markets. Financial instruments utilised in export activities include various lending mechanisms, government subsidies, tax incentives, risk insurance, and innovative digital solutions. When used competently, these instruments strengthen the resilience of the agricultural sector and encourage export expansion. One of the most critical tools for supporting agricultural exports is access to financial resources through lending and leasing. For enterprises targeting foreign markets, long-term loans with low interest rates are particularly important, as they enable investment in production modernisation, equipment procurement, and the development of logistics infrastructure (Ehlers et al., 2021). In Kazakhstan, this role is performed by specialised financial institutions such as the Agrarian Credit Corporation and KazAgroFinance, which offer affordable credit to farmers aiming to enhance their export capacity. Leasing programmes also play a significant role in supporting agricultural exports by allowing enterprises to upgrade their fleet of agricultural machinery without requiring substantial upfront investment. This is particularly beneficial for small and medium-sized farms, which often face difficulties in securing large-scale loans.

To further stimulate agricultural exports, the government employs a range of financial support mechanisms, including subsidies for production and transportation costs, as well as risk insurance (Erten & Leight, 2021). In Kazakhstan, programmes that reimburse a portion of transport costs help exporters reduce the final price of their products, thereby improving their competitiveness in foreign markets. Additionally, tax incentives for agricultural exporters serve as a strong motivator for expanding foreign trade activities. For instance, reducing the tax burden on export transactions or exempting agricultural exports from value-added tax (VAT) enables enterprises to retain more capital for reinvestment in production and operational development. Agricultural exports are subject to a wide range of financial risks, including exchange rate volatility, fluctuations in global commodity prices, demand instability, and political restrictions. In this context, export risk insurance plays a crucial role. In Kazakhstan, agricultural enterprises can utilise the services of insurance providers such as KazakhExport, which offer guarantees for export contracts and protect producers against financial losses. Hedging against price and currency risks is another effective mechanism for safeguarding export revenues. The use of futures contracts and options allows agricultural exporters to lock in favourable prices for their products, thereby mitigating the impact of abrupt market fluctuations (Oglend & Straume, 2020). However, this tool remains underdeveloped in Kazakhstan and requires further integration into the agricultural sector's financial practices.

Modern technologies have a profound influence on the financial infrastructure supporting exports. The adoption of digital platforms for processing export contracts, the implementation of blockchain technologies for international settlements, and the use of automated financial management systems can streamline trade operations and enhance transaction transparency (Edeh et al., 2020). Kazakhstan has already begun digitalising financial transactions through initiatives such as electronic agricultural receipts, which enable producers to secure financing against future harvests. The state plays a central role in creating the conditions necessary for the sustainable development of agricultural exports. Government intervention is essential not only to correct market imbalances but also to mitigate the financial risks faced by agricultural producers operating in foreign markets. The establishment of a favourable financial environment requires comprehensive measures encompassing export policy regulation, the development of financial institutions, infrastructure improvement, and the promotion of innovation within the agribusiness sector (Lin & Zhang, 2020).

One of the most important areas of state support for agricultural exports is the establishment of a predictable and sustainable macroeconomic policy. Fluctuations in exchange rates, inflation risks, and changes in tax legislation directly impact the financial stability of agricultural exporters. By regulating tax and customs policies, government agencies can create favourable conditions for agricultural enterprises, reducing administrative barriers and offering preferential tax regimes for export-oriented businesses. A key instrument of state policy is the control of inflation and currency risks, as rising domestic prices or sharp exchange rate fluctuations can render agricultural exports less profitable (Andrei *et al.*, 2020). In Kazakhstan, state financial institutions such as the National Bank and the Ministry of Finance are capable of taking measures to stabilise the national currency, thereby facilitating long-term export planning.

The state also plays an active role in the development of institutions that offer targeted financing for agricultural exports. In Kazakhstan, organisations such as KazAgroFinance, the Agrarian Credit Corporation, and the Export Credit Agency of Kazakhstan provide preferential loans, export risk insurance, and guarantees for international contracts. Additionally, public funds dedicated to export support are used to attract private investment into the agricultural sector and to subsidise interest rates on export-related loans. These mechanisms enable agricultural enterprises to expand their export geography, modernise production facilities, and minimise financial losses. The success of agricultural exports is also closely linked to the development of logistics and transport infrastructure (Chukurna et al., 2022). The state has a critical role in the modernisation of warehouse facilities, transport corridors, ports, and terminals that support the uninterrupted export of agricultural goods. In Kazakhstan, the government is actively investing in transport infrastructure under the One Belt, One Road initiative, which broadens the export potential of the agricultural sector. Programmes aimed at constructing logistics centres, such as dry ports and multimodal transport hubs, help to reduce transportation costs and increase the volume of exported goods.

Moreover, the digitalisation of financial processes, the automation of export contract management, and the development of electronic trading systems contribute to reducing the bureaucratic burden on agricultural exporters. Kazakhstan is implementing blockchain-based technologies in the agricultural export system to enhance the transparency of transactions between exporters and foreign buyers. State digitalisation programmes in the agricultural sector also facilitate access to financial resources, accelerate product certification procedures, and increase the efficiency of export operations. With its vast agricultural land and favourable climatic conditions for cultivating a variety of crops, Kazakhstan possesses significant potential in agricultural exports. Table 1 presents the volume of agricultural exports, illustrating the growth trajectory of the sector.

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	Table 1. Volume of agricultural exports of Kazakhstan for 2015-2024, million USD												
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024			
Plant growing	1,102.7	1,106.8	1,290.3	1,850.0	1,994.5	1,950.0	2,236.8	3,070.2	2,910.7	2,222.9			
Cattle breeding	39.9	39.0	52.4	108.1	180.2	81.8	154.0	176.0	175.4	226.5			
Processed agricultural products	945.1	978.2	1,087.2	1,133.5	1,115.0	1,348.7	1,428.4	2,346.3	2,311.5	2,655.0			
Total for agricultural products	2,087.7	2,123.9	2,429.8	3,091.6	3,289.6	3,380.6	3,819.2	5,592.6	5,397.6	5,104.4			

Source: created by the authors Bureau of National Statistics (n.d.)

The analysis of the Table 1 indicates a generally positive trajectory in Kazakhstan's agricultural exports, despite certain periods of decline. The most notable growth has occurred in the crop production category, where export volumes nearly tripled - from USD 1,102.7 million in 2015 to a peak of USD 3,070.2 million in 2022 – before declining in 2023-2024. The livestock sector also demonstrates export growth, though with more pronounced fluctuations, including a dip in 2020 and a subsequent recovery to USD 226.5 million in 2024. The most consistent growth has been observed in the export of processed agricultural products, which reached USD 2,655.0 million in 2024, reflecting increased global demand for value-added agricultural goods. Overall, the total volume of Kazakhstan's agricultural exports increased by more than 2.4 times over the review period, peaking at USD 5,592.6 million in 2022, followed by a modest decline in the subsequent years. This decrease may be attributed to shifting external market conditions, logistical challenges, or fluctuations in international demand.

Kazakhstan's agricultural exports are primarily composed of grain crops, oilseeds, flour products, meat, and dairy. Wheat and flour continue to account for the largest share of exports, reflecting Kazakhstan's longstanding strength in grain production. The primary importers of Kazakhstani wheat and flour include neighbouring Central Asian countries – Uzbekistan, Tajikistan, Kyrgyzstan, and Turkmenistan – as well as Afghanistan, Iran, and China. In addition to grains, the export of oilseeds such as rapeseed, sunflower, and flax is expanding, with Kazakhstani producers increasingly accessing new markets in Europe and Southeast Asia, where demand for high-quality vegetable oils and oilseeds is high. Meat exports, particularly of beef and lamb, are also on the rise. Kazakhstan is strengthening its position in markets such as China, Russia, and the Middle East, including Iran, Saudi Arabia, and the United Arab Emirates (Ministry of Agriculture..., n.d.). However, despite these positive developments, the export potential of the meat sector remains partially underutilised. This is largely due to challenges related to product

certification, veterinary and sanitary standards, and limited domestic processing capacity.

Trends in the development of agricultural exports in Kazakhstan reveal a positive trajectory, characterised by product diversification, the expansion of export destinations, the adoption of digital technologies, and active government support. Nonetheless, despite these advancements, the sector continues to face a number of challenges that require comprehensive and coordinated solutions. A key trend is the diversification of export products. While Kazakhstan has traditionally maintained a strong position in grain and flour exports, recent years have witnessed a growing focus on higher value-added products. The country is actively developing exports of processed agricultural goods such as vegetable oils, dairy products, meat, and honey. One particularly promising area is the export of organic products, for which demand is increasing in international markets. The growth of this segment not only enhances the competitiveness of Kazakhstan's exports but also reduces reliance on volatile global commodity prices.

Kazakhstan has also significantly broadened the geographic scope of its agricultural exports, moving beyond traditional markets such as Central Asia, Russia, and Afghanistan. Particular emphasis is now placed on strengthening trade relations with China, the Gulf countries, the European Union, and Southeast Asia. China has emerged as a key strategic partner for Kazakhstan's agricultural sector. In 2023, agricultural exports to China reached USD 1 billion - almost double the value recorded in the same period of the previous year. Currently, 1,718 Kazakhstani enterprises export to China, including 1,629 engaged in crop production and 86 in livestock farming. The principal exported goods include grain crops, meat products, and oilseeds. To further increase export volumes, Kazakhstan plans to align its agricultural products with Chinese standards and regulatory requirements, thereby responding to the growing demand for high-quality agricultural goods (EastFruit, 2024). Table 2 presents the volume of agricultural exports to China, illustrating the country's growing role as a strategic export destination for Kazakhstan.

Table 2. Volume of exports of main agricultural product	ts from Kazak	nstan to Chi	na in 2019-2	2023, thousa	nd USD
	2019	2020	2021	2022	2023
Livestock	44	0	0	0	43
Meat and edible meat by-products	13,581	3,910	977	28	0
Fish and crustaceans, molluscs, aquatic invertebrates	4,085	502	115	475	2,910
Dairy products; bird eggs; natural honey; food products of animal origin	94	4,726	2,215	2,259	2,337
Other products of animal origin	3,307	942	2,037	2,476	4,521
Vegetables and edible roots and tubers	10	16	0	27	6
Cocoa and cocoa products	846	1,571	1,700	5,562	10,63
Tobacco and manufactured tobacco substitutes	4,377	11,915	14,237	5,987	13,97
Grains	98,210	95,558	42,736	7,1218	335,20
Oil seeds and fruits; various grains, seeds, and fruits; industrial or medicinal	95,583	130,923	76,893	214,130	283,03
Fats and oils of animal, vegetable, or microbial origin, and their cleavage products; finished edible fats	99,684	92,765	40,374	165,700	172,28
Residues and waste from the food industry; prepared animal feed	30,905	45,436	12,793	73,614	128,89
Total	350,726	388,264	194,077	541,476	953,84

Table 2. Volume of exports of main agricultural products from Kazakhstan to China in 2019-2023, thousand USD

Source: created by the authors International Trade Centre (n.d.)

The growth in exports of grain – from USD 98.2 million in 2019 to USD 335.2 million in 2023 - and oilseeds - from USD 95.6 million to USD 283 million - is particularly noteworthy, reflecting China's strong demand for these product categories. In contrast, exports of meat and edible meat by-products have declined to nearly zero, which may be attributed to sanitary restrictions or shifts in market demand. At the same time, exports of processed products, such as cocoa derivatives and residues from the food industry, have increased significantly, reinforcing the trend towards diversification in Kazakhstan's agricultural export structure. Overall, the data reflect positive dynamics and signal considerable potential for further growth in Kazakhstan's agricultural exports to China, particularly in segments such as vegetable oils, grains, and value-added processed products. Modern agriculture in Kazakhstan is increasingly integrating digital technologies to enhance the efficiency and transparency of export operations. The Ministry of Agriculture has introduced the Unified State Information System of Subsidies (GISS), which encompasses all areas of subsidies within the agro-industrial complex. This system ensures transparency in the subsidy allocation process, reduces corruption risks, and allows farmers to track the status of their applications in real time. Since its launch in 2023, GISS has processed over 240,000 applications, with more than 177,500 approved (Modern digital solutions..., 2025).

In the livestock sector, an automated Integrated Livestock System (ILS) has been implemented to enable accurate livestock accounting, monitor animal health, and control product movement. This contributes to enhanced biosecurity and improved product quality – critical factors for accessing international markets. Additionally, mobile applications such as VETMOBILE for veterinary professionals and TORTTULIK for livestock owners have been developed to facilitate the registration, monitoring, and management of livestock farms. To ensure full traceability of agricultural products from farm to consumer, the Ministry of Agriculture has initiated the development of the Plant Production Traceability Information System (PPIS). This system aims to monitor the entire production and distribution cycle of plant-based agricultural products, ensure compliance with international standards, and foster greater trust from foreign trade partners (Modern digital solutions..., 2025). State support remains a key factor in the development of agricultural exports. As a member of the Eurasian Economic Union (EAEU), Kazakhstan benefits from simplified trade procedures and reduced tariffs on exports to other member states. In addition, the government is actively engaged in negotiations to establish new trade corridors and free trade agreements, thereby improving conditions for agricultural exports. One of the government's priority areas is the enhancement of financial support mechanisms for exporters, including subsidies, export risk insurance, and the provision of preferential loans.

Despite these positive developments, Kazakhstan's agricultural exports continue to face several challenges. A high dependence on natural conditions contributes to unstable crop yields, which in turn affects export volumes. Furthermore, the issue of underdeveloped processing capacity remains unresolved: the lack of modern production facilities limits the ability to increase exports of higher value-added products. Logistics and infrastructure constraints also pose ongoing barriers, particularly in transporting goods to distant foreign markets. Another critical factor is the need to meet international standards of product quality and safety, which requires sustained investment in the modernisation of production processes and certification systems. Addressing these challenges calls for a comprehensive approach, including strengthened financial support, the introduction of modern risk management tools, and expanded access to international capital markets.

The financial stability of Kazakhstan's agricultural exporters is a cornerstone of the sector's successful development. It influences not only the global competitiveness of domestic agricultural products but also contributes to broader economic growth. In the context of global instability, exchange rate fluctuations, trade barriers, and high transport costs, exporters must employ a diverse range of financial instruments and strategies to minimise risks and enhance profitability. This requires improvements to preferential lending systems, the development of export risk insurance mechanisms, diversification of export products, better logistics infrastructure, reduced transport costs, and the continued digitalisation of export operations. State support programmes, such as financing through the Agrarian Credit Corporation and the Baiterek Venture Fund (n.d.), should be expanded. Increasing the availability of long-term loans - ranging from 7 to 10 years - with reduced interest rates would enable export-oriented enterprises to plan their activities more effectively. The introduction of a system of state guarantees and subsidies for export loans would reduce the lending risks faced by banks, thereby improving access to credit for farmers. It is also essential to enhance leasing mechanisms for the acquisition of modern agricultural machinery and equipment, supported by state-subsidised interest rates.

The establishment of a specialised fund to support agricultural exports - providing preferential loans for the modernisation of processing facilities and logistics infrastructure - would allow Kazakhstani agricultural exporters to access cheaper and longer-term financial resources. This is particularly important in light of growing competition in the global market. A dedicated agency for export risk insurance should be created to protect exporters from potential losses arising from the insolvency of foreign counterparties. The introduction of a state programme to subsidise insurance premiums for agricultural exporters would reduce the financial burden on companies and increase the accessibility of insurance services. Additionally, the development of mechanisms for hedging currency risks would help minimise losses resulting from sharp fluctuations in the tenge's exchange rate against major world currencies. The active development of insurance infrastructure would enable agricultural exporters to operate in foreign markets with reduced risks and greater confidence in the financial stability of their operations.

A key factor in ensuring financial stability is reducing dependency on a single product type or sales market. Kazakhstan's current export portfolio is largely composed of raw materials, such as grain and oilseeds, making it vulnerable to global price volatility. Product diversification and increased exports of processed goods would help mitigate these risks. Expanding domestic processing capacities - for products such as flour, vegetable oils, canned meat, powdered milk, and other high value-added goods - is essential. Promoting organic products in export markets also presents a promising opportunity, as there is rising demand in the European Union, China, and the Middle East for organic grain, honey, meat, and dairy products (Faichuk et al., 2022). Another important step in strengthening Kazakhstan's export position involves the development of finished food exports and the promotion of Kazakhstani brands in international markets. Participation in trade exhibitions and marketing programmes will be crucial to raising brand visibility and enhancing competitiveness abroad.

Kazakhstan's landlocked geography presents significant challenges for export logistics. In this context, the development of transport and logistics centres in key regions of the country is essential. Such infrastructure would reduce transportation time and lower logistics costs for exporters. In addition, subsidising railway tariffs for agricultural exporters - particularly for shipments to China, Europe, and the Gulf countries - would enhance cost-efficiency. The expansion of international transport corridors, including the One Belt - One Road initiative, will facilitate Kazakhstan's deeper integration into global supply chains. Optimising logistics will improve the competitiveness of Kazakhstani agricultural products by reducing delivery costs. The development of electronic platforms for product certification is equally important, as it will help minimise bureaucratic delays and accelerate market entry for exporters. The application of blockchain technologies for supply chain traceability will build trust among foreign buyers by ensuring product authenticity and compliance with international quality standards. Furthermore, the introduction of digital marketplaces for agricultural trade will enable exporters to access new partners directly, expanding market reach while lowering transaction costs. Digitalisation will streamline administrative procedures, reduce operational expenses, and improve oversight of logistics and financial transactions.

In summary, the financial sustainability of Kazakhstan's agricultural exporters depends on a complex set of factors, including access to financing, effective risk mitigation, product diversification, logistics development, and the digitalisation of operations. Comprehensive measures – such as affordable long-term lending, export risk insurance, support for value-added processing, reduced transportation costs, and the integration of digital technologies – are essential to strengthening the global competitiveness of Kazakhstani agricultural companies and ensuring the long-term, stable growth of agricultural exports.

DISCUSSION

The results of the study demonstrate that Kazakhstan's agricultural sector possesses substantial untapped export potential, although it faces a number of structural and operational limitations. Analysis of statistical data reveals that, in recent years, the volume of agricultural exports has shown steady growth; however, the export structure remains insufficiently diversified. The principal export commodities continue to be grain crops, sunflower oil, and meat products, while high value-added goods are represented in relatively small volumes. This highlights the urgent need to expand deep processing of agricultural raw materials, which would not only increase export revenues but also enhance the competitiveness of Kazakhstan's products in international markets. Climatic factors exert a significant influence on the stability of agricultural exports. Extreme temperature fluctuations, uneven precipitation distribution, and severe weather events introduce considerable uncertainty for producers, complicating the planning of export deliveries. W. Xie et al. (2020), in a study based on longterm meteorological and trade data, demonstrated that global warming is causing shifts in agricultural production zones, which will ultimately alter the structure of agricultural exports. While W. Xie et al. study focuses on long-term climate zone shifts and their implications for global trade, the present research centres on shortterm climate risks. Sudden weather anomalies, such as unexpected droughts or frosts, can sharply reduce crop yields and disrupt export schedules, thereby contributing to increased volatility in agricultural markets.

Infrastructure constraints also represent a major limiting factor in the development of Kazakhstan's export potential. Analysis of the country's transport and logistics systems indicates that high transportation costs, insufficient warehouse and export infrastructure, and dependency on transit routes through neighbouring countries pose serious challenges to exporters. Although several investment projects have been launched to modernise logistics – such as the development of international transport corridors and the establishment of logistics hubs - current data show that transport costs in Kazakhstan remain higher than those in competing export-oriented economies. This underscores the need for continued investment in infrastructure, the development of multimodal transport systems, and improvements in logistics efficiency. H.H. Park and S.J. Cho (2021) examined the influence of logistics-related factors on agricultural exports, focusing on transportation costs, infrastructure limitations, and disruptions in global supply chains. Their study concluded that inadequate transport networks, the absence of modern ports, and a lack of cold chain infrastructure are among the principal barriers to exporting perishable agricultural goods. The findings of the present study align with these conclusions, particularly with regard to the cost of logistics. However, unlike H.H. Park and SJ. Cho global analysis, this study identifies Kazakhstan-specific, seasonal challenges, such as peak logistical pressures during harvest seasons, limited storage capacity, and border delays linked to customs procedures.

Financial mechanisms to support exports also play a critical role in the development of the agricultural sector (Mamasydykov et al., 2019). The findings of this study indicate that existing programmes providing subsidies and loans to exporters have had a positive effect on industry growth; however, the scale of support remains insufficient. Kazakhstani farmers and processing enterprises continue to face limited access to affordable credit, which restricts their ability to expand production and enter foreign markets. A comparison with government support frameworks in other countries suggests that Kazakhstan must enhance its incentive structures for exporters by expanding preferential financing schemes and developing comprehensive export risk insurance mechanisms. R. Zhang et al. (2021) examined the influence of government subsidies and agricultural support programmes on export performance. His study considered a range of models, including production-based subsidies, compensation for transport costs, and the provision of export loans. Similarly, M. Springmann and F. Freund (2022) found that countries which actively subsidise their agricultural sectors tend to record higher export volumes than those with minimal government support. Programmes targeting smallscale farms were found to be especially important, as they enable these producers to compete with large agricultural holdings. The current study also confirms the importance of state support but highlights the issue of unequal resource distribution. Subsidy programmes in Kazakhstan are predominantly directed toward large agribusinesses, whereas small and medium-sized farms often struggle to access financial assistance. Addressing this imbalance is essential to achieving more inclusive and sustainable growth in agricultural exports.

Another key issue is the influence of international trade agreements on agricultural export performance. The data show that Kazakhstan is actively cultivating trade relations with China, Central Asian countries, and the European Union. However, the country's export policy still requires further adaptation to meet evolving international requirements. Major barriers include challenges with product certification, compliance with phytosanitary and veterinary standards, and restricted access to new markets. In this context, it is necessary to enhance state support in the areas of certification and quality control, including the establishment of laboratory centres and the simplification of procedures for entering foreign markets (Tyukhtenko et al., 2024). J.H. Grant et al. (2021) analysed the impact of trade barriers on agricultural exports, showing that even minor changes in customs tariffs and quotas can significantly affect export volumes. The findings of L. Zhai et al. (2022) similarly demonstrate that countries facing

trade restrictions experience an average 15-20% decline in agricultural exports due to reduced competitiveness. This study also explored the effects of trade barriers, though with a particular focus on sanitary and veterinary regulations rather than tariff-based measures. It is the difficulty in meeting international food safety standards that most significantly constrains the export potential of Kazakhstan's agricultural sector.

E.M. Meemken et al. (2021) investigated the impact of certification and compliance with international standards on agricultural exports. Their study demonstrated that certified products gain access to premium market segments, enabling exporters to achieve higher prices. They also observed that consumers in developed countries show a strong preference for products with verified quality and environmental safety assurances. The present study confirms the critical importance of certification but also highlights additional challenges, particularly the high cost of obtaining international certification. This factor presents a dual effect: while certification enhances competitiveness, it simultaneously limits opportunities for small-scale producers lacking the financial capacity to undertake complex certification procedures.

In addition, the study revealed that modern agricultural technologies can significantly increase Kazakhstan's export potential. The adoption of precision farming, digital trading platforms, and blockchain technologies for product traceability can enhance the competitiveness of Kazakhstani agricultural goods. However, the current level of technological implementation remains insufficient, indicating the need for stronger state support. This should include measures aimed at digitalising the agricultural sector, fostering agricultural start-ups, and facilitating the adoption of advanced production techniques. J. Liu and J. Xie (2020) explored the role of technological innovation in strengthening the competitiveness of agricultural exports. Their research examined the implementation of automated production management systems, digital trading platforms, and traceability technologies. Similarly, M. Matthess and S. Kunkel (2020) found that countries investing heavily in the digitalisation of the agro-industrial sector tend to outperform those that rely on traditional production methods. The findings of the present study confirm the importance of technological progress, while also pointing to disparities in its adoption. Large-scale producers derive tangible benefits from digitalisation, but for small and medium-sized farms, the high cost of advanced technologies remains a major barrier to entry.

Overall, the analysis revealed that logistics, digitalisation, and compliance with environmental and quality standards are among the key determinants of agricultural export performance. While the study aligns with broader international trends, it also identifies specific barriers, including logistical bottlenecks, financial constraints, and the challenges producers face in adapting to evolving trade conditions. These findings underline the necessity of a comprehensive strategy for enhancing Kazakhstan's export potential – one that considers both macroeconomic factors and the real-world challenges encountered by producers at the micro level.

CONCLUSIONS

Developing the export potential of the agricultural sector plays a vital role in Kazakhstan's economic growth by generating foreign exchange earnings, improving the trade balance, and stimulating the development of related industries. In recent years, Kazakhstan has demonstrated positive trends in agricultural exports, particularly in the segments of grains, oilseeds, and processed goods. Access to financial resources remains a key success factor for agricultural enterprises. State support programmes – such as loan subsidies, tax incentives, and export risk insurance - contribute to export growth, but require further refinement. Long-term loans with low interest rates, offered by specialised financial institutions such as the Agrarian Credit Corporation and KazAgroFinance, are particularly important for enabling export-oriented investment. Nevertheless, infrastructure development continues to pose a significant challenge. Despite Kazakhstan's strategic geographical location between Europe and Asia, high transportation costs and underdeveloped logistics infrastructure hinder the full realisation of export potential. International trade relations also have a major influence on export performance. Kazakhstan actively participates in regional integration through the Eurasian Economic Union (EAEU) and is strengthening trade ties with China, the Middle East, and Europe. However, successful expansion into these markets requires product adaptation to international quality standards, necessitating greater investment in certification, guality assurance, and biosafety systems.

Technological development, including the introduction of digital platforms and innovative solutions, enhances the competitiveness of Kazakhstan's agricultural exports. The implementation of automated accounting systems – such as IFA for livestock and GISS for subsidies - has improved transparency and administrative efficiency in the sector. In 2023 alone, 240,000 applications for subsidies were submitted via the GISS platform, with over 177,500 approved, demonstrating strong farmer engagement with state support mechanisms. An analysis of Kazakhstan's agricultural export potential confirms its strategic importance to the national economy. Between 2019 and 2024, agricultural export volumes exhibited a generally positive trajectory, despite isolated periods of decline. Notably, crop exports nearly tripled, rising from USD 1,102.7 million in 2015 to a peak of USD 3,070.2 million in 2022, followed by a modest decrease in 2023-2024. Livestock exports also expanded, reaching USD 226.5 million in 2024. Processed agricultural products showed the most stable growth, increasing to USD 2,655.0 million in 2024. Overall, the total volume of agricultural exports more than doubled – growing by over 2.4 times during the review period – indicating strong and growing international demand for Kazakhstani agricultural products. Kazakhstan's main agricultural export items include grain crops, flour and cereal products, oilseeds, meat, and dairy products. Wheat and flour constitute the largest share of these exports, with the primary importers being countries in Central Asia – Uzbekistan, Tajikistan, Kyrgyzstan, and Turkmenistan – as well as Afghanistan, Iran, and China. Exports to China have shown particularly strong growth, rising from USD 351 million in 2019 to USD 954 million in 2023.

Thus, the export potential of Kazakhstan's agricultural sector plays a vital role in the country's economic development by enhancing the global competitiveness of its products and supporting sustainable growth. The development of agricultural exports is influenced by a wide range of factors, including financial mechanisms, state support, infrastructure quality, and international trade relations. A limitation of this study lies in the limited availability of comprehensive statistical data, which may not fully capture the current situation due to the volatility of external markets and the influence of broader macroeconomic conditions. Promising directions for future research include the development of strategies to diversify agricultural exports, analysis of the effects of climate change on agricultural productivity, evaluation of government support mechanisms, and the implementation of digital technologies to optimise export processes.

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REFERENCES

- [1] "Agrarian Credit Corporation" JSC. (n.d.). Retrieved from <u>https://agrocredit.kz/en/</u>.
- [2] "Export Credit Agency of Kazakhstan" JSC. (n.d.). Retrieved from https://kazakhexport.kz/en/.
- [3] "KazAgroFinance" JSC. (n.d.). Retrieved from https://www.kaf.kz/en/.
- [4] Al-Ababneh, H.A., Osmonova, A., Dumanska, I., Matkovskyi, P., & Kalynovskyy, A. (2022). Fulfilling the export potential of agricultural production in the context of aggravating global food crisis. *Financial & Credit Activity: Problems of Theory & Practice*, 6(41), 469-485. doi: 10.18371/fcaptp.v6i41.251504.
- [5] AL-Khatib, A.W. (2024). The determinants of export performance in the digital transformation era: Empirical evidence from manufacturing firms. *International Journal of Emerging Markets*, 19(10), 2597-2622. <u>doi: 10.1108/ IJOEM-08-2022-1223</u>.
- [6] Andrei, J.V., Popescu, G.H., Nica, E., & Chivu, L. (2020). The impact of agricultural performance on foreign trade concentration and competitiveness: Empirical evidence from Romanian agriculture. *Journal of Business Economics and Management*, 21(2), 317-343. doi: 10.3846/jbem.2020.11988.
- [7] Baiterek Venture Fund. (n.d.). Retrieved from https://bvfund.kz/en.
- [8] Balogh, J.M., & Jámbor, A. (2020). The environmental impacts of agricultural trade: A systematic literature review. *Sustainability*, 12(3), article number 1152. <u>doi: 10.3390/su12031152</u>.
- [9] Baubekova, A., Tikhonova, A., & Kvasha, A. (2020). Evolution of agricultural policy in Kazakhstan. In A. Loulouri & N. Mouraviev (Eds.), *Kazakhstan's developmental journey: Entrenched paradigms, achievements, and the challenge of global competitiveness* (pp. 51-90). Singapore: Palgrave Macmillan. <u>doi: 10.1007/978-981-15-6899-2_3</u>.
- [10] Bekmuratov, A., Myrzaibraimova, I., Mamashov, K., Raimberdiev, B., & Tookeeva, D. (2024). Impact of leasing transactions on business development in Kyrgyzstan. *Scientific Bulletin of Mukachevo State University. Series Economics*, 11(3), 21-33. doi: 10.52566/msu-econ3.2024.21.
- [11] Bureau of National Statistics. (n.d.). *Statistics of foreign, mutual trade and commodity markets. Dynamic tables.* Retrieved from <u>https://stat.gov.kz/en/industries/economy/foreign-market/dynamic-tables/</u>.
- [12] Chukurna, O., Nitsenko, V., Tyukhtenko, N., Lomonosova O., Zhartay, Z., & Dobrovolskyi, V. (2022). Substantiation of the green approach in the formation of a sustainable system of ecological logistics. *Naukovyi Visnyk Natsionalnoho Hirnychoho Universytetu*, 1, 76-82. doi: 10.33271/nvngu/2022-1/076.
- [13] EastFruit. (2024). Kazakhstan prepares to export potatoes to China. Retrieved from https://surl.lu/yzedxj.
- [14] Edeh, J.N., Obodoechi, D.N., & Ramos-Hidalgo, E. (2020). Effects of innovation strategies on export performance: New empirical evidence from developing market firms. *Technological Forecasting and Social Change*, 158, article number 120167. doi: 10.1016/j.techfore.2020.120167.
- [15] Ehlers, M.H., Huber, R., & Finger, R. (2021). Agricultural policy in the era of digitalisation. *Food Policy*, 100, article number 102019. doi: 10.1016/j.foodpol.2020.102019.
- [16] Erten, B., & Leight, J. (2021). Exporting out of agriculture: The impact of WTO accession on structural transformation in China. *Review of Economics and Statistics*, 103(2), 364-380. <u>doi: 10.1162/rest_a_00852</u>.

- [17] Faichuk, O., Voliak, L., Hutsol, T., Glowacki, S., Pantsyr, Y., Slobodian, S., Szeląg-Sikora, A., & Gródek-Szostak, Z. (2022). European green deal: Threats assessment for agri-food exporting countries to the EU. *Sustainability (Switzerland)*, 14(7), article number 3712. doi: 10.3390/su14073712.
- [18] Fiankor, D.D.D., Curzi, D., & Olper, A. (2021). Trade, price and quality upgrading effects of agri-food standards. *European Review of Agricultural Economics*, 48(4), 835-877. <u>doi: 10.1093/erae/jbaa026</u>.
- [19] Friedmann, W.H. (2021). Changes in the international division of labor: Agri-food complexes and export agriculture. In *Towards a new political economy of agriculture* (pp. 65-93). New York: Routledge. doi: 10.4324/9780429269493.
- [20] Goel, R.K., Yadav, C.S., Vishnoi, S., & Rastogi, R. (2021). Smart agriculture urgent need of the day in developing countries. *Sustainable Computing: Informatics and Systems*, 30, article number 100512. <u>doi: 10.1016/j. suscom.2021.100512</u>.
- [21] Grant, J.H., Arita, S., Emlinger, C., Johansson, R., & Xie, C. (2021). Agricultural exports and retaliatory trade actions: An empirical assessment of the 2018/2019 trade conflict. *Applied Economic Perspectives and Policy*, 43(2), 619-640. doi: 10.1002/aepp.13138.
- [22] Ibyzhanova, A., Rustenova, E., Akhmetzhanova, N., Talapbayeva, G., & Yerniyazova, Z. (2024). Opportunities for Kazakhstan's agricultural exports to the Chinese market. *Journal of Eastern European and Central Asian Research*, 11(5), 871-886. doi: 10.15549/jeecar.v11i5.1570.
- [23] International Trade Centre. (n.d.). *Bilateral trade between Kazakhstan and China product: Total all products*. Retrieved from <u>https://surl.li/cttolq</u>.
- [24] Kane, E.J. (2021). Political economy of subsidizing agricultural credit in developing countries. In D.W. Adams (Ed.), *Undermining rural development with cheap credit* (pp. 166-182). New York: Routledge. doi: 10.4324/9780429270178.
- [25] Kryvovyazyuk, I., Oksenyuk, K., Zavadska, O., Oleksandrenko, I., & Dmytruk, V. (2024). Overview of global challenges and survival strategies for export companies. *Economic Forum*, 14(3), 35-49. doi: 10.62763/ ef/3.2024.35.
- [26] Lin, B.X., & Zhang, Y.Y. (2020). Impact of the COVID-19 pandemic on agricultural exports. *Journal of Integrative Agriculture*, 19(12), 2937-2945. doi: 10.1016/S2095-3119(20)63430-X.
- [27] Liu, J., & Xie, J. (2020). Environmental regulation, technological innovation, and export competitiveness: An empirical study based on China's manufacturing industry. *International Journal of Environmental Research and Public Health*, 17(4), article number 1427. doi: 10.3390/ijerph17041427.
- [28] Mamasydykov, A.A., Abdiev, M.Z., Attokurova, G.M., & Abrakhmanov, O.E. (2019). Development of export potential of processing companies on the cluster basis with the help of quality management. *International Journal for Quality Research*, 13(4), 931-946. doi: 10.24874/JJQR13.04-13.
- [29] Manatovna, T.A., Dabyltayeva, N.E., Ruziyeva, E.A., Sakhanova, G., & Yelubayeva, Z.M. (2023). Unlocking intersectoral integration in Kazakhstan's agro-industrial complex: Technological innovations, knowledge transfer, and value chain governance as predictors. *Economies*, 11(8), article number 211. doi: 10.3390/ economies11080211.
- [30] Mang'ana, K.M., Ndyetabula, D.W., & Hokororo, S.J. (2023). Financial management practices and performance of agricultural small and medium enterprises in Tanzania. *Social Sciences & Humanities Open*, 7(1), article number 100494. doi: 10.1016/j.ssaho.2023.100494.
- [31] Matthess, M., & Kunkel, S. (2020). Structural change and digitalization in developing countries: Conceptually linking the two transformations. *Technology in Society*, 63, article number 101428. <u>doi: 10.1016/j.techsoc.2020.101428</u>.
- [32] Meemken, E.M., Barrett, C.B., Michelson, H.C., Qaim, M., Reardon, T., & Sellare, J. (2021). Sustainability standards in global agrifood supply chains. *Nature Food*, 2, 758-765. doi: 10.1038/s43016-021-00360-3.
- [33] Ministry of Agriculture of the Republic of Kazakhstan. (n.d.). Retrieved from https://surl.lu/gqbyao.
- [34] Modern digital solutions are being actively implemented in the agricultural sector in Kazakhstan. (2025). Retrieved from https://surl.li/irdztx.
- [35] Oglend, A., & Straume, H.M. (2020). Futures market hedging efficiency in a new futures exchange: Effects of trade partner diversification. *Journal of Futures Markets*, 40(4), 617-631. <u>doi: 10.1002/fut.22088</u>.
- [36] Ohrn, E. (2023). Corporate tax breaks and executive compensation. *American Economic Journal: Economic Policy*, 15(3), 215-255. doi: 10.1257/pol.20210155.
- [37] Park, H.H., & Cho, S.J. (2021). An analysis of the effect of logistics efficiency on the export of Korean agricultural products to new southern countries. *Journal of Korea Trade*, 25(1), 169-183. <u>doi: 10.35611/jkt.2021.25.1.169</u>.
- [38] Rahman, M., Kamal, M.M., Aydin, E., & Haque, A.U. (2022). Impact of Industry 4.0 drivers on the performance of the service sector: Comparative study of cargo logistic firms in developed and developing regions. *Production Planning & Control*, 33(2-3), 228-243. doi: 10.1080/09537287.2020.1810758.

- [39] Raifu, I.A., & Aminu, A. (2020). Financial development and agricultural performance in Nigeria: What role do institutions play? *Agricultural Finance Review*, 80(2), 231-254. <u>doi: 10.1108/AFR-06-2018-0045</u>.
- [40] Salimova-Tekay, J. (2022). Infrastructure financing in Kazakhstan. MPFD Working Papers No. WP/22/02. Retrieved from <u>https://hdl.handle.net/20.500.12870/4340</u>.
- [41] Springmann, M., & Freund, F. (2022). Options for reforming agricultural subsidies from health, climate, and economic perspectives. *Nature Communications*, 13, article number 82. <u>doi: 10.1038/s41467-021-27645-2</u>.
- [42] Tyukhtenko, N., Churkina, I., Pavlovych, O., Mokhnenko, A., & Burak, V. (2024). Foreign market entry strategy as a key to the competitiveness of enterprises. *Ekonomika APK*, 31(5), 86-98. doi: 10.32317/ekon.apk/5.2024.86.
- [43] World Bank. (2020). South Caucasus and Central Asia: The belt and road initiative Kazakhstan country case study. Retrieved from <u>https://surl.lu/plyvil</u>.
- [44] Xie, W., Huang, J., Wang, J., Cui, Q., Robertson, R., & Chen, K. (2020). Climate change impacts on China's agriculture: The responses from market and trade. *China Economic Review*, 62, article number 101256. <u>doi: 10.1016/j.chieco.2018.11.007</u>.
- [45] Zhai, L., Yuan, S., & Feng, Y. (2022). The economic effects of export restrictions imposed by major grain producers. *Agricultural Economics*, 68(1), 11-19. doi: 10.17221/329/2021-AGRICECON.
- [46] Zhang, R., Ma, W., & Liu, J. (2021). Impact of government subsidy on agricultural production and pollution: A game-theoretic approach. *Journal of Cleaner Production*, 285, article number 124806. doi: 10.1016/j. jclepro.2020.124806.

Експортний потенціал аграрної продукції: Фінансові аспекти

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Анотація. Робота спрямована на аналіз фінансових механізмів, що стимулюють розвиток експортного потенціалу аграрної продукції, для зміцнення позицій країни на світових ринках. У роботі досліджувався експортний потенціал аграрного сектору Казахстану, його роль в економічному розвитку країни та фактори, що впливають на його конкурентоспроможність на міжнародних ринках. Для оцінки експортного потенціалу аграрного сектору розглянуто ключові фінансові механізми, включно з державними програмами субсидування, податковими пільгами та механізмами страхування експортних ризиків. Було виокремлено роль спеціалізованих фінансових організацій, таких як Агрокредитна корпорація та КазАгроФінанс, які забезпечують аграріїв доступом до кредитування та лізингу для модернізації виробництв і розвитку експортних можливостей. Розглядався вплив інфраструктури, включно з транспортними та логістичними коридорами, на вартість і терміни поставок сільськогосподарської продукції. Одним із важливих чинників, що визначають розвиток експорту, є технологічний прогрес в агропромисловому комплексі. Також підкреслюється значущість державних програм, спрямованих на поліпшення макроекономічної політики, стабілізацію валютних ризиків і розвиток фінансових інститутів. Розглядалися дані про динаміку обсягу сільськогосподарського експорту Казахстану. Обсяг експорту всієї продукції сільського господарства збільшився з 2,1 млрд доларів у 2015 році до 5,1 млрд доларів у 2024 році. Незважаючи на позитивні тенденції, відзначались проблеми, такі як нестабільність урожайності, дефіцит переробних потужностей і високі транспортні витрати. Особливу увагу приділено експорту сільськогосподарської продукції до Китаю, який збільшився з 351 млн доларів у 2019 році до 954 млн доларів у 2023 році. Основні висновки роботи включали необхідність розширення фінансових інструментів підтримки, таких як пільгове кредитування, страхування експортних ризиків та субсидування транспортних витрат. Інвестиції в переробку сільськогосподарської продукції, розвиток нових експортних маршрутів і цифровізація процедур сертифікації допоможуть зміцнити позиції Казахстану на міжнародних ринках і збільшити обсяги аграрного експорту

Ключові слова: міжнародна торгівля; продовольча безпека; торговельні бар'єри; субсидії та дотації; валютні ризики