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S.T. Abildaev, A.N. Narenova, G.K. Iskakova, 2024.
Taraz University named after M.Kh. Dulaty, Taraz, Kazakhstan.
E-mail: an.narenova@dulaty.kz

IMPLEMENTATION OF EXPORT STRATEGIES OF AGRICULTURAL BORDER REGIONS OF KAZAKHSTAN

Abildaev Sultan Talasbaevich – PhD, associate professor of the Department of Economics and Management, Taraz University named after M.Kh. Dulaty, Taraz, Kazakhstan, E-mail: sultan_feb@mail.ru; https://orcid.org/0000-0002-7525-5097;
Narenova Aiman Nurmagambetovna – candidate of economic sciences, associate professor of the Department of Economics and Management, Taraz University named after M.Kh. Dulaty, Taraz, Kazakhstan, E-mail: an.narenova@dulaty.kz; https://orcid.org/0000-0002-0550-5986;
Iskakova Gulzat Kuanyshbaevna – PhD, senior lecturer of the Department of Economics and Management, Taraz University named after M.Kh. Dulaty, Taraz, Kazakhstan; e-mail: gl_iskakova@mail.ru; https://orcid.org/0009-0001-9702-218X.

Abstract. The purpose of the study is to study the export strategy of Kazakhstan in the development of cross-border trade. 14 regions of Kazakhstan border the territories of Russia, China, Uzbekistan, Kyrgyzstan and Turkmenistan. The economy of all border areas of the country is characterized by insufficient use of natural resource and tourism potential, single-profile structure, weak activity of small and medium-sized businesses in the use of cross-border factors, generally weak integration with the international economic system. One of the main sectors of the economy of border areas is agriculture, the share of which in the structure of the economy is 31.6%.

The paper looks at factors affecting a country's place in the global food market. The research methodology is based on generalization, analysis and synthesis, statistical methods, SWOT analysis characterizing the current economic situation, the geopolitical position of Kazakhstan as a border country and the problems of developing the export strategy of the agro-industrial complex.

The practical significance of the research results is determined by the possibilities of using the results obtained to develop important decisions aimed at forming an agricultural export strategy for the development of border regions

Keywords: export strategy, border regions, agricultural products, sustainable development, state support.

С.Т. Абилдаев, А.Н. Наренова, Г.К. Искакова, 2024.
М.Х. Дулати атындағы Тараз университеті, Тараз, Қазақстан.
E-mail: an.narenova@dulaty.kz

ҚАЗАҚСТАННЫҢ ШЕКАРА МАҢЫНДАҒЫ АУЫЛ ШАРУАШЫЛЫҒЫ ӨҢІРЛЕРІНІҢ ЭКСПОРТТЫҚ СТРАТЕГИЯЛАРЫН ІСКЕ АСЫРУ

Абилдаев Султан Таласбаевич – PhD, М.Х. Дулати атындағы Тараз университетінің «Экономика және менеджмент» кафедрасының қауымдастырылған профессоры (доценті), Тараз, Қазақстан, E-mail: sultan_feb@mail.ru; https://orcid.org/0000-0002-7525-5097;
Наренова Айман Нурмагамбетовна – экономика ғылымдарының кандидаты, М.Х. Дулати атындағы Тараз университетінің «Экономика және менеджмент» кафедрасының қауымдастырылған профессоры (доценті), Тараз, Қазақстан, E-mail: an.narenova@dulaty.kz; https://orcid.org/0000-0002-0550-5986;
Искакова Гулзат Куанышбаевна – PhD, М.Х. Дулати атындағы Тараз университетінің «Экономика және менеджмент» кафедрасының аға оқытушысы, Тараз, Қазақстан; E-mail: gl_iskakova@mail.ru; https://orcid.org/0009-0001-9702-218X.

Аннотация. Зерттеудің мақсаты – шекара маңындағы сауданы дамытудағы Қазақстанның экспорттық стратегиясын зерделеу. Қазақстанның 14 облысы Ресей, Қытай, Өзбекстан, Қырғызстан және Түрікменстан аумақтарымен шекаралас. Елдің барлық шекара маңындағы аумақтарының экономикасы табиғи-ресурстық және туристік әлеуеттің жеткіліксіз пайдаланылуымен, құрылымның монопрофильділігімен, трансшекаралық факторларды пайдаланудағы шағын және орта кәсіпкерлік субъектілерінің әлсіз белсенділігімен, тұтастай алғанда халықаралық экономикалық жүйемен әлсіз ықпалдасуымен сипатталады. Шекара маңындағы аумақтар экономикасының негізгі салаларының бірі ауылшаруашылығы болса, оның экономика құрылымындағы үлесі 31,6%-ды құрайды.

Мақалада елдің әлемдік азық-түлік нарығындағы орнына әсер ететін факторлар қарастырылады. Зерттеу әдіснамасы ағымдағы экономикалық жағдайды, Қазақстанның шекаралас ел ретіндегі геосаяси жағдайын және агроөнеркәсіптік кешеннің экспорттық стратегиясын дамыту проблемаларын сипаттайтын қорытындылауға, талдауға және синтездеуге, статистикалық әдістерге, SWOT-талдауға негізделген. Зерттеу нәтижелерінің практикалық маңыздылығы шекаралық өңірлерді дамытудың ауыл шаруашылығы экспорттық стратегиясын қалыптастыруға бағытталған маңызды шешімдерді әзірлеу үшін алынған нәтижелерді қолдану мүмкіндіктерімен айқындалады.

Түйін сөздер: экспорттық стратегия, шекара маңындағы өңірлер, ауыл шаруашылығы өнімдері, тұрақты даму, мемлекеттік қолдау.

С.Т. Абилдаев, А.Н. Наренова, Г.К. Искакова, 2024.
Таразский университет имени М.Х. Дулати, Тараз, Казахстан.
E-mail: an.narenova@dulaty.kz

РЕАЛИЗАЦИЯ ЭКСПОРТНЫХ СТРАТЕГИЙ СЕЛЬСКОХОЗЯЙСТВЕННЫХ ПРИГРАНИЧНЫХ РЕГИОНОВ КАЗАХСТАНА

Абилдаев Султан Таласбаевич – PhD, ассоц. профессор кафедры «Экономика и менеджмент» Таразского университета имени М. Х. Дулати, Тараз, Казахстан, E-mail: sultan_feb@mail.ru; https://orcid.org/0000-0002-7525-5097;
Наренова Айман Нурмагамбетовна – кандидат экономических наук, ассоц. профессор кафедры «Экономика и менеджмент» Таразского университета имени М. Х. Дулати, Тараз, Казахстан; E-mail: an.narenova@dulaty.kz, https://orcid.org/0000-0002-0550-5986;
Искакова Гулзат Куанышбаевна – PhD, старший преподаватель кафедры «Экономика и менеджмент» Таразского университета имени М. Х. Дулати, Тараз, Казахстан; E-mail: gl_iskakova@mail.ru, https://orcid.org/0009-0001-9702-218X.

Аннотация. Целью исследования является изучение экспортной стратегии Казахстана в развитии приграничной торговли. 14 областей Казахстана граничат с территориями России, Китая, Узбекистана, Кыргызстана и Туркменистана. Экономика всех приграничных территорий страны характеризуется недостаточным использованием природно-ресурсного и туристического потенциала, монопрофильностью структуры, слабой активностью субъектов малого и среднего предпринимательства в использовании трансграничных факторов, в целом слабой интеграцией с международной экономической системой. Одной из основных отраслей экономики приграничных территорий является сельское хозяйство, доля которого в структуре экономики составляет 31,6%.

В статье рассматриваются факторы, влияющие на место страны на мировом продовольственном рынке. Методология исследования основана на обобщении, анализе и синтезе, статистических методах, SWOT-анализе, характеризующих текущую экономическую ситуацию, геополитическое положение Казахстана как приграничной страны и проблемы развития экспортной стратегии агропромышленного комплекса. Практическая значимость результатов исследования определяется возможностями применения полученных результатов для выработки важных решений, направленных на формирование сельскохозяйственной экспортной стратегии развития приграничных регионов.

Ключевые слова: экспортная стратегия, приграничные регионы, сельскохозяйственная продукция, устойчивое развитие, государственная поддержка.

Introduction

The current tense relations between the United States, the European Union (EU), and the Russian Federation, associated with the military crisis in Ukraine, are increasingly impacting food security and international trade in agricultural

products. Ukraine and Russia are among the world's leading suppliers of grain and sugar. Under such conditions, international trade relations with border countries have started to develop actively, forming mutually beneficial partnerships. In this context, Kazakhstan possesses a significant yet underutilized agricultural potential, which could contribute to comprehensive and inclusive economic growth. The opportunities for agricultural development in Kazakhstan go far beyond its available land resources. The country has a recognized comparative advantage in agricultural production due to several factors (Petrik, et al., 2016).

China has long been one of Kazakhstan's largest trade partners. For China, in turn, Kazakhstan is one of the major partners among the border regions of Central Asia in terms of trade. Therefore, the goal of this study is to examine Kazakhstan's export potential in border agricultural trade with China, summarize the problems, and develop recommendations for forming an organizational-economic system for agricultural exports by domestic agribusiness entities.

In line with the stated goal, the research objectives include: studying the theoretical aspects of international trade, analyzing and assessing the export potential of the country's agriculture, and developing recommendations for inter-country economic cooperation between the border regions.

The need for studying the dynamically developing domestic agro-export industry as a research object, in its interaction with the external environment, is also emphasized.

The scientific novelty of the research lies in the authors' conclusion, which presents an assessment of the country's food security, based on data from the Bureau of National Statistics of the Republic of Kazakhstan, supplemented with data from the Global Food Security Index report. The authors also recommend several directions to increase the export of agricultural products to neighboring countries.

Literature review

The evolution of economic theories on trade between countries has developed over several centuries. The methodology of its theoretical tools includes almost all schools of economic thought. In research by economists, similar interpretations of the term «export» are given. For example, in the «Soviet Encyclopedic Dictionary», the term «export» (from the Latin word *exporto*, meaning «to carry out») is defined as the export of capital and/or goods to another country (Prokhorov, 1982). According to the World Bank's definition, export is the value of goods and services provided to other countries. The «Oxford English Dictionary» defines «export" in almost the same way (Simpson & Weiner, 1989). The modern dictionary of foreign words explains «export» as the «export of goods from the country for sale or practical use abroad» (Bulyko, 2005). One of the first theories in this field was the theory of absolute advantage (Tekeeva, et al., 2021). The essence of this theory is that it is beneficial for a country to export goods where its production costs are lower than in other countries (i.e., the exporting country has an absolute advantage) and to import goods where its production costs are relatively higher (i.e., the importing country has

an absolute advantage). Such trade becomes mutually beneficial for both countries, and the importance of exports grows with each passing day, becoming a key aspect of state policy and economic security.

This issue is more specifically addressed in the Spatial Theory of Trade by Esteban Rossi-Hansberg (Rossi-Hansberg, 2005). The main idea of the spatial trade theory is as follows: trade between countries the finished product is located in different countries. A key factor in such trade is geographical distance and a range of other barriers. For example, if the country producing the finished goods imposes import tariffs on intermediate goods from producer countries, this could lead to a situation where some companies in the finished goods country switch to producing intermediate goods, thereby reducing their production of finished products.

The following conclusions can be drawn:

-When the distances between countries are small, the volume of trade between them increases;

-Reducing transportation costs promotes specialization in the goods for which each trading partner has a comparative advantage;

-The structure and volume of trade relations between countries are shaped by the initial structure of production as well as the historical relationships between neighboring countries and their national trade policies (Kireev, 2011). Inter-industry trade often occurs between countries with different levels of technological development and is typically formed in extractive industries (exporting resources from developing economies and importing already manufactured goods). Intra-industry trade generates income for the owners of production factors through production scaling.

Materials and methods

The foundation of the research methodology consists of scientific works by prominent scholars in the field of international trade, as well as recommendations from applied research related to the current state of inter-country trade and the challenges of its development.

The research methodology is based on classical general scientific methods of analysis: generalization, analysis, synthesis, statistical methods, methods of graphical visualization of results, SWOT analysis, etc.

The analysis of dynamic indicators is based on relative dynamic values (RDV). These indicators characterize the essence of the changes occurring in the level of internal development of the phenomenon under study over time. The indicator's value is determined by dividing the level of the selected research feature over a time period or at a specific moment by the value of the same indicator in the previous period or in the baseline comparison period. This value is considered the growth coefficient (GrC) (Shorokhova, et al., 2015):

$$\text{RDV} = \text{GrC} = \frac{\text{Current indicator level}}{\text{Baseline indicator level}} \quad (1)$$

The indicators characterizing dynamics can be divided into base and chain values, depending on the chosen comparison base. In the first case, the comparison is made using one of the indicator levels taken as the baseline. In the second case, the comparison is made with the previous indicator value. These indicators are defined as follows:

Base growth rate:

$$\text{RDVb} = GR \quad = \frac{Y_i}{Y_o} \tag{2}$$

Chain growth rate:

$$\text{RDVchain} = \text{GR}' = \frac{Y_i}{Y_i - 1} \tag{3}$$

where Y_i – is the current value of indicator;

Y_i - 1 – is the previous value;

Y_0 – is the baseline value for comparison .

Relative Structural Values (RSV) reflect the share of constituent elements within the total set. The RSV is calculated as follows:

$$RSV = \frac{i - th\ part\ of\ the\ total}{whole\ total} * 100\% \tag{4}$$

Another research method applied in this study is multidimensional comparative analysis for a comprehensive assessment of agricultural product export infrastructure and its economic security. Multidimensional comparative analysis is used to compare several sets of data based on a system of indicators suitable for conducting evaluations (Reshetnyak, et al., 2016). The condition for using the comparative complex assessment method is the comparability of different indicators by their nature. The parameters are compared not by absolute results but by relative variations.

The main tool for managing entities is the «qualitative» matrix of strategic SWOT-analysis analysis. This method is used to assess factors in the competitive environment. In modern strategic planning, SWOT analysis is seen as one of the stages of evaluation, summarizing information, analyzing competitive opportunities, and developing directions for further growth.

Data on organizations and corresponding factors (Leblebici, 2014), along with real data (Vaara, et al., 2016), were used to apply compilation methods, critical analysis, and provide a conceptual explanation of the phenomenon under study (Argyres et al., 2020).

Results and discussion

In December 2021, the Government of the Republic of Kazakhstan approved the Concept for the Development of the Agro-Industrial Complex of the Republic of Kazakhstan for 2021-2030, which outlines significant opportunities for the country

to become one of the leading players in the region characterized by growing demand for agricultural products. According to the Concept, by 2030, it is expected that exports of agricultural products will increase threefold compared to 2020 levels (The concept of development of the agro-industrial complex of the Republic of Kazakhstan for 2021-2030). Kazakhstan ranks 9-th in the world and 2nd among CIS countries in terms of land area. Over 80% of its total land is designated for agricultural use, of which 80% are pasturelands. The vast areas of pastureland allow the country to support nearly 30 million head of livestock (cattle and poultry).

In terms of territorial distribution, 42% of Kazakhstan's population (about 75 million people) live in rural areas, with 32 million people employed in agriculture. Additionally, 16 million people work on their private farms. The availability of such labor resources in rural areas indicates that the agricultural sector is well-equipped with the necessary human resources for its development (Espolov, 2020). With a stable and steady growth in Kazakhstan's export volumes, it is possible that the country could meet its agreement with China ahead of schedule to increase trade turnover to $35 billion by 2030 (Kazakhstan increased the supply of agricultural products to China by 133.7%). Kazakhstan exports 30% of its domestically produced flour and 15% of its vegetable oil to foreign markets. The volume of exports of oilseeds and fruits, other seeds and fruits, and medicinal plants amounted to $382,778 thousand. The production volume increased by 6.8% in 2021. Grains were exported for a total of $1,659,902 thousand, which is 21.8% higher than the previous period. In smaller volumes, the country also exports dairy products, chocolate, confectionery, poultry meat, and pasta (Kaliev, 2019). Grains make up the largest share of the country's agricultural exports, accounting for 18.3% of the total volume (Figure 1).

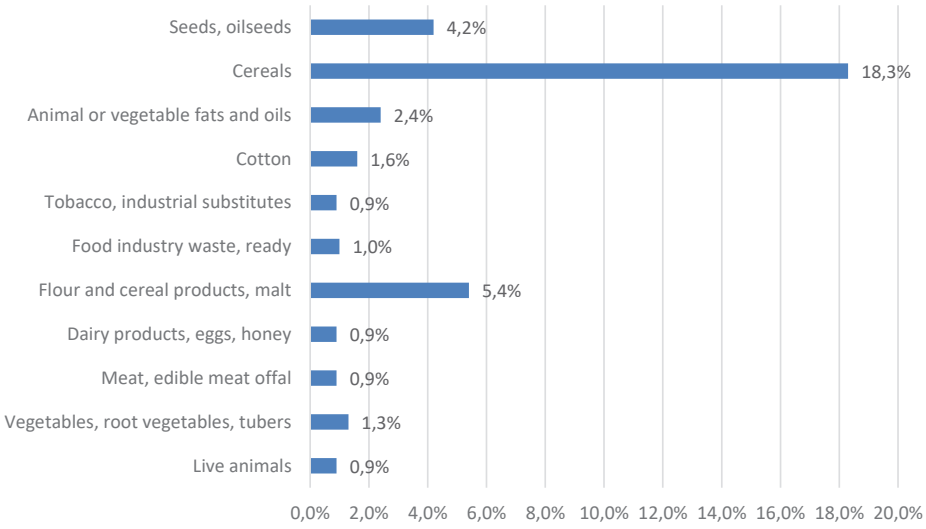

Figure 1 - Structure of Kazakhstan's Exports of Agricultural, Forestry, and Fisheries Products in 2021, %

The second largest export product is oilseeds and fruits (4.2%). Each year, the demand for animal/vegetable fats and oils, as well as processed food products, is growing. These account for 2.4% of agricultural exports. Currently, the activation of the fat-and-oil production sector is one of the important directions for the development of Kazakhstan's agro-industrial complex. In recent years, enterprises in the agro-industrial complex have been purposefully increasing the area under oilseed crops. The main factor positively influencing the expansion of production has been the profitability of growing these crops compared to other agricultural crops. In our country, among oilseed crops, sunflower has traditionally been given primary preference. In addition to sunflowers, the group of oilseed crops includes rapeseed, linseed, soybeans, and mustard. (Kazhieva, et al., 2020).

The significance of these crops is absolute: the production of sunflower oil, which is consumed daily by the population of the country, serves as raw material for the production of fat-and-oil products, various types of canned goods, as well as in the pharmaceutical and chemical industries (Dolgolyuk, et al., 2014). The waste generated during the processing of oilseeds is a necessary component in the structure of animal feed. The fat-and-oil production sector is an important component not only of the agro-industrial complex but also of several other sectors in the processing industry.

Mutual supplies of agricultural products between Kazakhstan and China are characterized by stable growth. In 2023, the trade turnover of agro-industrial products between the two countries reached $1.3 billion, which is 67% more compared to 2022, when this figure was $781 million. The volume of agricultural exports to China doubled to $1 billion, while in 2022 it was $550 million. Imports from China remained at $290 million, the same level as in 2022. In the first five months of 2024, the trade turnover increased by 14% and amounted to approximately $540 million. Exports reached $380 million, showing a growth of 3.2%. Regarding the dynamics of exports of grains and oilseeds, in 2022, Kazakhstan exported about 259 thousand tons of grain to China, including 36 thousand tons of wheat and 223 thousand tons of barley. Oilseeds totaled 404 thousand tons, of which 168 thousand tons were flax, 189 thousand tons were sunflower, and 47 thousand tons were other oilseeds.

In 2023, the volume of grain exports increased to 1.4 million tons, of which 538 thousand tons were wheat and 880 thousand tons were barley. Exports of oilseeds rose to 631 thousand tons, including 305 thousand tons of flax, 204 thousand tons of sunflower, and 123 thousand tons of other oilseeds.

Kazakhstan has signed protocols with China for the export of 27 types of products, of which 18 pertain to plant products and 9 to animal products. Currently, 9 companies exporting livestock products and 728 companies exporting crop products are awaiting inclusion in the registry of importers in China. A total of 1,948 enterprises in plant production and 40 enterprises in animal production have been included in this registry. The trade turnover between the countries has tripled in monetary terms during the observed period: from $8 billion to $24 billion.

Given favorable conditions, there is a potential trend for further increases in trade turnover between Kazakhstan and China. Regarding the share of trade with China in Kazakhstan's overall trade turnover, it should be noted that Chinese producers operate quite aggressively. In terms of the structure of Kazakhstan's trade with China (both exports and imports), it is worth noting that exports of Kazakh goods to China increased from $4.23 billion to $13.06 billion, while imports of Chinese goods rose from $3.67 billion to $11.14 billion. The changes in the structure of trade turnover between the countries are presented in Figure 2.

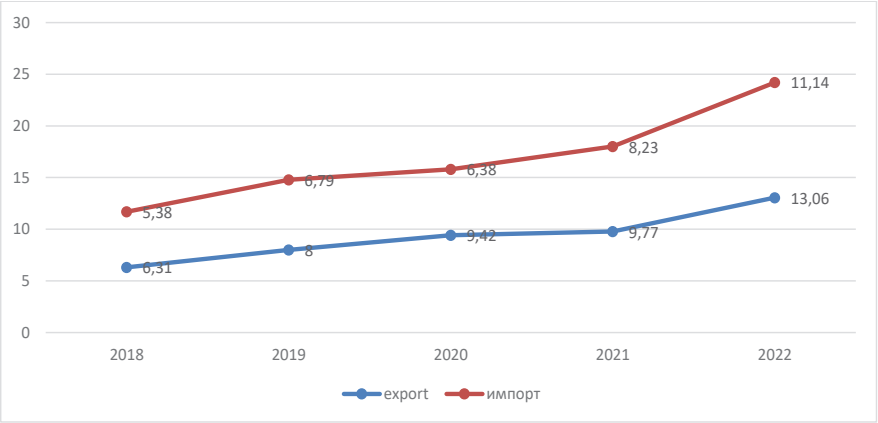

Figure 2 - Changes in the structure of Kazakhstan's trade turnover with China

There is no balance between exports and imports, meaning that the Kazakh side exports more goods in monetary terms than it imports. When discussing changes in the share of China in the structure of Kazakhstan's exports and imports, a very interesting picture emerges. The changes in the share of China in the structure of Kazakhstan's exports and imports are presented in Figure 3.

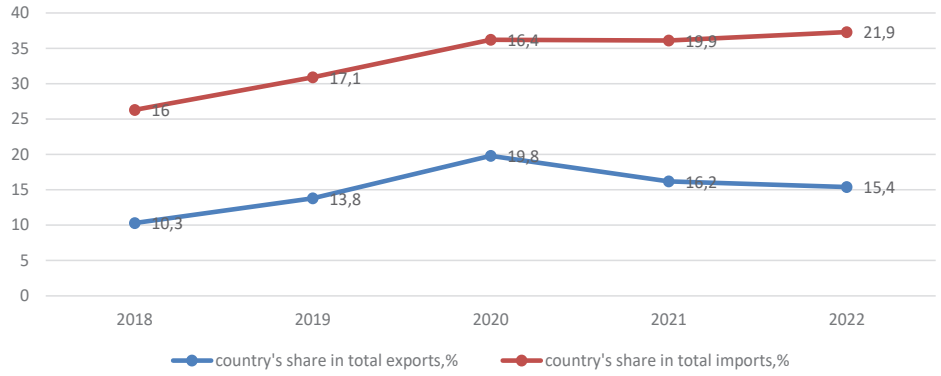

Figure 3 - Changes in the hare of China in the structure of Kazakhstan's exports and imports

Based on the presented graph, it should be noted that during the observed period, the share of China in the overall volume of Kazakhstan's imports increased by 6% (from 14% to 21.9%), meaning that in 2022, Kazakhstan purchased every fifth product from Chinese producers. In terms of exports, it should be noted that the increase was 4% (from 11.5% to 15.4%), indicating that the volumes of trade with China are growing within the overall structure of Kazakhstan's exports, as the Chinese economy increasingly consumes Kazakh goods. The trade turnover indicators between the countries demonstrate the strengthening of trade ties and the mutual penetration of economies. The Chinese side expresses interest in importing agricultural products from Kazakhstan, increasing the volume of rail transportation, and strengthening interregional cooperation and partnerships in the IT sector. Currently, Kazakh companies are receiving active support in accessing major Chinese trading platforms and the Chinese market as a whole. The main indicators of foreign trade between the Republic of Kazakhstan and China are presented in Table 1.

Table 1 - Main indicators of foreign trade between the Republic of Kazakhstan and China, thousands of dollars

	Trade turnover		Exports		imports	
	Total	share of the country in overall trade turnover, %	Total	share of the country in overall trade turnover, %	Total	share of the country in overall trade turnover, %
2021 year						
Total	101 736 459,9	100	60 321 024,4	100	41 415 435,5	100
China	18 000 962,5	17,7	9 772 505,6	16,2	8 228 456,9	19,9
2020 year						
Total	86 469 848,8	100,0	47 540 772,7	100,0	38 929 076,1	100,0
China	15 798 567,6	18,3	9 420 579,1	19,8	6 377 988,6	16,4

One of the main crops supplied by Kazakhstan to China is wheat. In 2023, wheat exports to China amounted to 592 thousand tons, and in the first quarter of 2024, this figure reached 220 thousand tons. Additionally, over the past five years, exports of crop products from Kazakhstan to China have increased by 4.6 times, from 750 thousand tons in 2019 to 3.5 million tons in 2023. In 2023, Kazakhstan significantly increased the volume of wheat supplies to China compared to the previous season, both in physical and monetary terms. From September to December 2023, 154 thousand tons of Kazakh wheat were shipped to China, which is nearly seven times higher than the figure for the same period in 2022 (22.6 thousand tons). In monetary terms, wheat exports from Kazakhstan to China for the first four months of 2023 amounted to $36.9 million (compared to $8.6 million for the same period in 2022). The agricultural product exports from Kazakhstan to China are presented in Table 2. A total of 1,718 domestic enterprises export products from Kazakhstan to China: 1,629 enterprises in crop production and 86 enterprises in livestock production. The trade turnover between the two countries from January to August 2023 amounted

to $798.9 million, which is 72.7% higher than the same period last year ($462.6 million). In the future, Kazakhstan and China intend to increase the volumes of trade turnover.

Table 2 - Exports of Agricultural Products from Kazakhstan to China
(in thousands of dollars)

Product code	Product name	Export: Kazakhstan to China (in thousands of US dollars)			Change dynamics, %	
		2019 y.	2020 y.	2021 y.	2020/ 2019	2021/2020
'12	Oilseeds and fruits, other seeds, fruits, and grains, medicinal plants	95583	130923	76893	137,0%	58,7%
'10	Grains	98210	95558	42736	97,3%	44,7%
'15	Animal and vegetable fats and oils and their breakdown products, prepared food	99684	92765	40374	93,1%	43,5%
'52	Cotton	31136	19908	17865	63,9%	89,7%
'24	Tobacco and industrial substitutes	4377	11915	14237	272,2%	119,5%
'23	Food industry waste and prepared animal food	30905	45436	12793	147,0%	28,2%
'41	Raw hides (except for natural fur), tanned leather	3738	1104	3916	29,5%	354,7%
'51	Wool, fine/coarse animal hair, yarn, fabric made from horsehair	577	543	2745	94,1%	505,5%
'11	Products of the milling and cereal industry, malt, inulin, starches, wheat gluten	6577	6193	2622	94,2%	42,3%
'04	Dairy products, natural honey, animal-origin food products	94	4726	2215	5027,7%	46,9%
'05	Animal products not elsewhere classified	3307	942	2037	28,5%	216,2%
'02	Meat, edible foal	13581	3910	977	28,8%	25,0%
'08	Edible fruits, nuts, citrus peels/melon rinds	186	515	460	276,9%	89,3%
'17	Sugar and sugar confectionery	1542	1410	371	91,4%	26,3%
'03	Fish, crustaceans, mollusks, other aquatic invertebrates	4085	502	115	12,3%	22,9%
'07	Vegetables, some edible root crops, tubers	10	16	0	160,0%	0,0%
'01	Animals	44	0	0	0,0%	0,0;
Total agricultural products		393636	416366	220356	105,8%	52,9%

According to the data in the table, an analysis was conducted on the impact of the pandemic on changes in the structure of agricultural product exports and the influencing factors. The demand from China for exports of the following products fell by half: oilseeds, their seeds, and other fruits; medicinal plants (-41.3%); grains

(-55.3%); animal and vegetable fats and oils; prepared food products (-53.5%); products from the milling and cereal industry, malt, inulin, and starch, as well as wheat gluten (-57.7%); eggs, dairy products, natural honey, and animal-origin food products (-53.3%); meat and edible offal (-75%); sugar confectionery and sugar (-73.7%); fish, crustaceans, mollusks, and other aquatic invertebrates (-77.1%).

Some products saw their export growth increase several times, including: raw hides, untreated (except for natural fur), tanned leather: 3.5 times; fine/coarse animal hair; wool; horsehair yarn and fabric: 5 times; animal-origin products: 2.2 times.

When analyzing the structure of changes in agricultural product exports, it can be noted that the demand has increased for raw materials. At the same time, the demand for finished products has decreased. In the structure of agricultural product exports (Figure 2), the largest share is held by seeds and fruits of oilseeds; seeds and fruits, grains of other plant cultures; and plants used for medicinal purposes (34.9%). Kazakhstan has significant potential in this area.

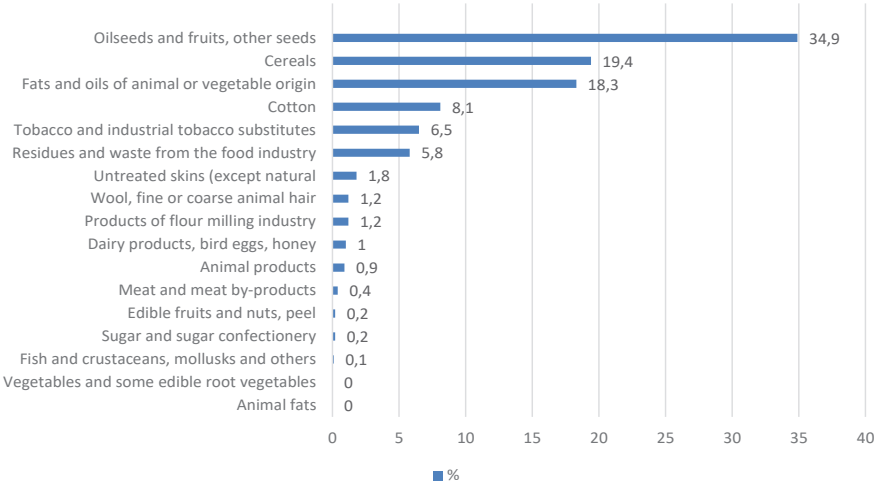

Figure 2 - Share of Kazakhstan's Agricultural Product Exports to China, %

Grains are the second largest export item, accounting for 19.4% of total agricultural exports to China. By the end of 2021, it was planned to include 11 agricultural crops in the China's General Administration of Customs (GAC) registry. Among them are soybeans, wheat bran, rapeseed meal, barley, alfalfa, corn, flax, wheat flour, and feed flour from wheat and barley. The Ministry of Agriculture of Kazakhstan is working on concluding contracts for 9 items of agro-industrial complex products intended for export to China: safflower, potatoes, peas, beet pulp, meal, oat flakes, cereals, lentils, rapeseed, and pomace. The country has over 25 million hectares of arable land, which allows for the cultivation of various types of agricultural crops. Kazakhstan is the largest grain producer in the world. Over the past 10 years, the average export volume of grain has ranged from nearly 3 million to 10 million tons.

Kazakhstan exports 30% of its domestically produced flour and 15% of its vegetable oil to foreign markets. In smaller volumes, the country also exports dairy products, chocolate, confectionery, poultry, and pasta. China is among the top five countries exporting cotton from Kazakhstan. This product accounts for 8.1% of all agricultural exports. Expanding export potential in this direction will ensure active development of agriculture in the southern regions of the country. From January to February 2021, the main buyers of domestic cotton fiber were Turkey (18.8 thousand tons), followed by Latvia (12.8 thousand tons) and Moldova (12.2 thousand tons). Rounding out the top five buyers are Russia (over 9.7 thousand tons) and China (8.1 thousand tons). In addition, 4.8 thousand tons of cotton yarn were exported to countries such as Russia, China, and Turkey. At the same time, Kazakhstan imported 9.3 thousand tons of cotton fabric: 4 thousand tons from China, over 3.3 thousand tons from Uzbekistan, and nearly 1.2 thousand tons from Russia (Kaliev, 2019).

The vast majority of cotton fiber produced in Kazakhstan is intended for export (over 90%). Among the main enterprises engaged in the processing of raw cotton are: LLP «KhansuarInvestCompany», LLP «Myrzakent Cotton Processing Plant», LLP «Bagara-Makta», JSC «Makta Corporation» and LLP «Ak-Altyn Corporation». Raw cotton is exported at low prices, while finished products are imported into Kazakhstan at high prices with significant added value (Alibi S., 2022). Since cotton is sold only in its raw form, its price depends on the offers from foreign trading companies. To eliminate intermediaries and operate independently of foreign companies, it is necessary to develop and support a cotton cluster in the region. JSC NC «Kazakhstan Temir Zholy» must provide wagons based on the government's recommendation, which will operate between the following stations: from «Maktaaral» to the «Dostyk» station (Alashankou), intended for entrepreneurs exporting cotton fiber abroad. The transportation costs for cotton fiber will be less than 50% of the price. To increase the volume of cotton sales to other countries and support investors, the Ministry of Trade and Integration has been tasked with finding opportunities to reduce railway freight tariffs by 50%.

The Committee for Investments of the Ministry of Foreign Affairs should consider the issue of attracting foreign and domestic investors for the development of the cotton cluster. This issue should be discussed in collaboration with the embassies of countries purchasing cotton fiber: China, Turkey, Belarus, the Czech Republic, Germany, Russia, Uzbekistan, Latvia, Moldova, and Belgium.

The Turkestan region is the only region in the country engaged in the cultivation of raw cotton in Kazakhstan. Almost 25,000 agricultural producers work here. It was planned to allocate 126.3 thousand hectares for cotton planting in 2022, which would allow for a harvest of 330.3 thousand tons. Due to geographic and political events occurring in the world, existing transportation routes have become complicated, and transportation costs have increased nearly several times. This has affected the demand from foreign trading companies that purchase cotton on the Kazakh market. Such a situation has led to instability in the price of raw cotton. The selling price of raw cotton primarily depends on the established prices of cotton

fiber in the global trade market and is formed on the Liverpool cotton exchange, taking into account the index on the date of price determination (Iskakova et al., 2020). Almost 20% of agricultural product exports consist of animal/vegetable fats and oils and their breakdown products; prepared food products. Currently, the development of the fat-and-oil industry is one of the relevant directions in shaping Kazakhstan's agro-industrial complex. In recent years, agricultural enterprises have been purposefully expanding the sown areas of oilseeds, driven by their significant profitability compared to other agricultural crops. In our country, the list of oilseed crops traditionally includes sunflowers, which receive primary preference, as well as rapeseed, flaxseed, soybeans, and mustard. The importance of these crops is significant: the production of sunflower oil, which is used daily in human nutrition, as well as as raw material for the production of fat-and-oil products, various canned goods, and in the pharmaceutical and chemical industries. The waste generated from processing oilseeds is actively used in animal feed. In this regard, the fat-and-oil industry is one of the priority components not only of the agro-industrial complex but also of several other industries.

Tobacco and industrial substitutes (6.5%) and food industry waste; prepared animal feed (5.8%) accounted for just over 5% of the total. The remaining agricultural products account for less than 1% of exports. In 2020, supplies of other dairy products began; however, in 2021, they were suspended. Kazakhstan has significant potential for milk and dairy production. Each year, production capacities are increasing, as active government support directed towards animal husbandry has provided dairy processing enterprises with the necessary raw material base. In the agricultural sector, the Xi'an Oil and Grain Industrial Group «Aydzhu» has been implementing an innovative model based on contracts for growing crops in Kazakhstan since 2016. For this purpose, it has organized logistics, production, and processing of agricultural products in the North Kazakhstan region. The company places orders with Kazakh farmers to grow agricultural products at guaranteed purchase prices. The volume of purchases is determined based on the forecasted demand in the Chinese consumer market. This has stimulated farmers to utilize uncultivated agricultural land for growing export-oriented crops and has also increased their incomes.

The Main Customs Administration of China has included about 900 companies from Kazakhstan in its registry. The inclusion of enterprises in the customs registry is an ongoing process as Kazakh companies submit applications. Additional work is underway to include another 859 Kazakh enterprises engaged in the production and processing of plant products in the registry of the General Administration of Customs of China (GACC) (data from the Committee of State Inspection in the Agro-Industrial Complex).

The Ministry of Agriculture of the Republic of Kazakhstan believes that one of the main problems for exporting Kazakh plant products to China is the preliminary inspection conducted by representatives of certification authorities who travel to Kazakh enterprises for verification. One issue is as follows: if the imported food products to China have a signed Protocol on phytosanitary requirements, the Kazakh

producer and exporter must undergo registration with the GACC. The Ministry of Agriculture of the Republic of Kazakhstan is systematically working on coordinating and addressing phytosanitary regulatory requirements. This will create conditions for domestic products to access the Chinese market.

To assess the export potential of Kazakhstan in trade with China for agricultural products, a SWOT- analysis has been conducted (Table 3).

Table 3 - SWOT analysis

Strengths - S	Weaknesses - W
-Vast territories and areas of irrigated land; -Kazakhstan ranks second in the world for arable land per capita; -Largest exporter of grain and flour; -Active subsidization of breeding livestock; -Kazakhstan has received a status of a country free from foot-and-mouth disease (FMD) in five regions from the World Organization for Animal Health (OIE), which permits the export of beef; -Subsidization of crop production for specific types of products and costs; -Presence of cross-border territories with China; -Availability of an international highway connecting Kazakhstan and China; -Active development of railway communication for cargo and passenger transportation.	-A small share of agricultural products in the country's GDP; -Low labor productivity in agricultural production, which affects competitiveness indicators; -Need to improve trade and logistics infrastructure and increase cargo flow speed; -Lack of access for domestic exporters to China's electronic trading platforms; -Systematic work in the veterinary sector is needed to prevent and avoid outbreaks of diseases; -Dependence of agriculture on worsening natural and climatic conditions.
Opportunities - O	Threats - T
-Increase in the volumes of agricultural product exports; -Expansion of exports by types of agricultural goods; -Improvement of production technologies for agricultural products and reduction of costs; -Enhancement of investment methods in the agro-industrial complex, attracting foreign capital; -Increase in the productivity of irrigated lands through modernization; -Growth of competitive advantage indicators for each type of domestic agricultural product.	-Unfavorable changes in natural and climatic conditions; -Reduction of water resources in rivers; -Spread of various diseases among animals and plants, which could result in the country losing its export permit status; -Pollution of the natural environment, which may affect the ecological safety of agricultural products; -Risk of decreased effectiveness of state regulation in the agro-industrial complex; -Emergence of competitors in the logistics sector.

The main conditions for exporting agricultural products include compliance with the established veterinary requirements of the importer; the company exporting the products must be under the supervision of the state veterinary service; a system for monitoring critical control points in the production process must be organized at the enterprise, as well as a system for monitoring the products.

Conclusion

Based on the analysis of the existing mechanisms capable of ensuring access for

domestic agricultural products to the Chinese market, several conclusions can be drawn:

1. The Chinese market is one of the most difficult consumer markets for many domestic goods due to the wide range of tools implemented within its territory to protect local food producers and agricultural products. These include not only tariff protection measures but also non-tariff instruments.

2. Currently, China holds a leading position in the production and export of agricultural products in the global market. However, the majority of the products produced in the country are consumed domestically, as there is high demand for these goods on the internal market, and the population's needs for food products are increasing daily.

3. To effectively and modernly address emerging issues regarding mutual trade, it is necessary to establish a Subcommittee on Agriculture between Kazakhstan and China.

4. Expanding the capabilities of customs checkpoints will help activate cross-border cooperation and improve the efficiency of border crossing points, logistics centers, and transport infrastructure along the border.

5. China is one of the leading exporters of food products to neighboring countries, with a significant share being vegetables, fruits, and processed agricultural products. A special place in exports is given to fish and fish products. In this regard, Kazakhstan's task is to increase its export potential in agricultural products where it has a comparative advantage.

6. From the perspective of feasibility, it is necessary to increase export capacities within the framework of already supplied products (oilseed crops, products of deep processing, meat and meat products, grains, and feed). Subsequently, it is essential to plan the expansion of the assortment of these product groups, as the neighboring country has significant demand for imported supplies of a wide range of agricultural products.

7. Chinese imports of agricultural products are influenced by the state trading system. Its primary task is to ensure supply at stable prices for food products. A significant share of agricultural products imported under quota is subject to government control by trading enterprises, which hold substantial portions of the total quota volume.

8. Improving logistics and increasing their throughput capacity will boost cargo flow and serve as a foundation for enhancing Kazakhstan's export potential in the Chinese market. The effective use of geographical factors, natural and climatic conditions, labor resources, and new technologies in agriculture will underpin the growth of domestic producers' trade in the Chinese consumer market. Implementing export strategies in the border regions of agriculture will expand Kazakhstan's export potential in this sector of the economy.

References

Petrik M.& PomfretR. (2016). Agricultural policies in Kazakhstan, Discussion Paper, No. 155, *Leibniz Institute of Agricultural Development in Transition Economies* (IAMO), Halle (Saale), 1-29, https://nbn-resolving.de/urn:nbn:de:gbv:3(2), p. 54045

Prokhorov A.M. (1982). Soviet Encyclopedic Dictionary. 2nd ed. M.: Soviet Encyclopedia. 1533

Simpson J., Weiner Ed. (1989). Oxford English Dictionary. Second edition ed. by.ClarendonPress, 300

Bulyko A.N. (2005). Modern dictionary of foreign words. More than 25 thousand words and phrases, 705

Tekeeva X.E. & Uzdenova M. H. (2021). Development of international trade. *Moscow Economic Journal*, 11, 657-662.https://doi: 10.24412/2413-046X-2021-10693

Rossi-Hansberg E. A. (2005). Spatial Theory of Trade. American Economic Review, Vol. 95 (5).

Kireev A.P. (2011). Theories of international trade of the XXI century. Economic School. Almanac. Volume 7.

Shorokhova I. S., Kislyak N. V., Mariev O. S. (2015). Statistical methods of analysis: [studies. manual]. Ministry of Education and Science of the Russian Federation, 53-56.

Reshetnyak E. I. & Lobodin R. O. (2016). Methods of multidimensional comparative analysis in assessing the competitiveness of an enterprise.BIZNESINFORM, 9, 100-105.

Leblebici H. (2014). Organizational research in history and organization theory in the first decade of the 21st century: potential for a transdisciplinary convergence Organizations in Time: History, Theory, Methods, Oxford University Press, Oxford, pp. 56-99

E. Vaara, J., A. Lamberg (2016). Taking historical embeddedness seriously: three historical approaches to advance strategy process and practice research Acad. Manag. Rev., 41 (2016), pp. 633-657. https://doi.org/10.5465/amr.2014.0172

N.S. Argyres, A. De Massis, N.J. Foss, F. Frattini, G. Jones, B.S. Silverman. (2020). History-informed strategy research: the promise of history and historical research methods in advancing strategy scholarship. Strat. Manag. J.,40, pp. 343-368 https://doi.org/10.1002/smj.3118

The concept of development of the agro–industrial complex of the Republic of Kazakhstan for 2021 - 2030. Resolution of the Government of the Republic of Kazakhstan dated December 30, 2021 No. 960. [Electronic resource]. URL: https://adilet.zan.kz/rus/docs/P2100000960#z656/ (cited June 09, 2023).

Espolov T.I. (2022). The national project will accelerate the solution of the agro-industrial complex. The newspaper «Kazakhstanskaya Pravda». 04.09. 2020.

Kazakhstan increased the supply of agricultural products to China by 133.7%. [Electronic resource]. URL: https://eldala.kz/novosti/kazahstan/13171-kazahstan-na-133-7-uvelichil-postavki-selhozprodukcii-v-kitay/ (cited June 10, 2023).

Kaliev G.A. (2019). Strategic priorities for the development of the agro-industrial complex of Kazakhstan. Nikon readings. [Electronic resource]. 24, p. 421-425. URL: https://elibrary.ru /item.asp?id 41471288/ (cited June 09, 2023).

KazhievaZh.Kh., Zhailaubaeva Sh. D. (2020). Analysis of the state and development of the vegetable oils market of the East Kazakhstan region // Scientific journal «Bulletin of the University «Turan». 3(87), p. 103-107.

Dolgolyuk I.V., Tereshchuk L.V., Trubnikova M.A., Starovoitova K.V. (2014). Vegetable oils – functional food products. Machinery and technology of food production. 2, p. 35-37.

What agricultural products Kazakhstan plans to supply to China. [Electronic resource]. URL: https://kapital.kz/economic/98207/kakuyu-produktsiyu-apk-kazakhstan-planiruyet-postavlyat-v-kitay.html/ (cited June 08, 2023).

Alibi S. (2022). Kazakhstan sells cotton to Uzbekistan and China, and buys fabrics from them. Infographics. [Electronic resource]. URL: https://lsm.kz/hlopok-vneshnyaya-torgovlya-infografika/ (cited June 13, 2023).

Iskakova G.K., Smagulova K.R., Bayuzakova G. I. (2020). Productive employment in the textile industry of Kazakhstan Izvestiya Vysshikh Uchebnykh Zavedenii, Seriya Teknologiya Tekstil'noi Promyshlennostithis. 386(2), p. 27-31.

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