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**ANALYSIS OF AGRICULTURAL SECTOR DEVELOPMENT
IN CENTRAL ASIA**

Abstract. Central Asia is one of the fastest growing regions of the world, with great potential for further development. All countries in the region are landlocked, some have valuable natural reserves of gas, oil and gold, and all countries have valuable human potential inherited from the Soviet era.

Central Asia is also an important agricultural region, where the population has been growing grain and cotton, fruits and vegetables, animal feed and other essential foodstuffs from century to century. Agricultural production and processing, as well as related services, are an important source of income in many countries of Central Asia (20–25% of GDP in Kyrgyzstan, Tajikistan, and Uzbekistan). About two thirds of the region's population live in rural areas. Meanwhile, various pests and diseases threaten agricultural productivity in the region, which causes significant harm to the economies of the countries.

Agriculture in Central Asia faces many challenges, including fragmented production, poor productivity, underdeveloped markets, weak institutional structures, and a lack of public resources to support agriculture.

In this situation, trade reforms, and corresponding changes in agricultural and trade policies, can play an important role in determining the direction of agricultural development.

Due to the intensive participation of Central Asian countries in international trade through membership in the WTO, the Shanghai Cooperation Organization or the Eurasian Economic Union, the issues of harmonizing domestic policies and programs with these processes are becoming more and more relevant.

States are faced with the task of ensuring that changes in trade policies are consistent with country development priorities. Thus, a clear understanding of trade rules and their implications for agriculture and food security is becoming a critical factor in strategic decision making.

Keywords: Central Asia, agroecconomics, development, efficiency, rural food, food security.

Introduction

Central Asia is rich in agricultural diversity. As for cultivation models and agricultural structures, there are differences between the republics of Central Asia. Since 1991, the variety of crops in the region has increased, but some countries have also retained their specialization.

Under Soviet rule, the countries of Central Asia specialized in specific cultures [1,2]. Cotton was grown in the region before the conquest of Russia, mainly by small farmers, but during Russian and towards the end of Soviet rule, cotton production increased significantly. As a result of intensification, Turkmenistan, Uzbekistan and Tajikistan became the main producers of cotton in the Soviet Union, but at the same time, these countries, such as Tajikistan, were also important producers of fruits and vegetables.

Today, cotton is still the main, so-called currency culture for the Turkmen, Uzbek and Tajik economies, and most often its production does not involve any additional processing and added value. Processing and further production take place elsewhere. Cotton made a significant contribution to the economies of Uzbekistan, Turkmenistan, and Tajikistan in the 1990s: in Uzbekistan, the cotton sector at that time occupied about 18 percent of the country's gross domestic product, in Turkmenistan - almost 25 percent, and almost 10 percent in Tajikistan. Today, this contribution has decreased: in Tajikistan and Uzbekistan, cotton currently accounts for about 5 percent of GDP, in Turkmenistan - about 2 percent.

Cotton is also grown in southern Kazakhstan [3] and some areas of Kyrgyzstan. However, there are important differences among the countries of Central Asia.

In Turkmenistan and Uzbekistan there is state, and in Tajikistan, private monopsony (buyer monopoly) in the cotton industry. In Kazakhstan and Kyrgyzstan, a more liberalized market and production environment. This feature of the cotton production complex is important for the purchase prices of cotton. Where ginner / ginner compete, producer prices tend to be higher than where there is only one customer.

Wheat is the main crop and product in Central Asia and the area allocated for wheat cultivation has been increasing since 1991, especially in Uzbekistan, Turkmenistan and Tajikistan. Under Soviet rule, large farms in these three countries concentrated mainly on cotton and wheat, between which, mainly, crop rotation was observed [4,5].

In modern Central Asia, wheat remains the main crop grown by commercial farmers (and sometimes rural households in private areas) throughout the region, often mainly to meet their needs. Kazakhstan is a leading grain producer in the region. The country was the breadbasket of the region under Soviet rule, and today only Kazakhstan is a self-sufficient country in the region in grain and exports wheat (grain) and flour to neighboring republics. Flour from Kazakhstan is also considered to be of higher quality than, for example, flour from local wheat in Tajikistan. Half of the demand for wheat in Tajikistan is satisfied by supplies from Kazakhstan.

Central Asia is also known for its rich variety of fruits and vegetables. Climate and soil allow you to grow different fruits and vegetables from spring to autumn. Under Soviet rule, horticultural production was most developed on collective farms. Over the past few years, product diversification, including commercial farming, has grown - for example, in Tajikistan. However, (ordinary) rural households still play an important role in urban fruit and vegetable markets.

For large farmers, the production and marketing of large volumes of perishable produce is often problematic. Infrastructure and markets are still not very suitable for large volumes of perishable goods, and farmers do not have the ability to store or quickly transport such products. You can understand that such products quickly deteriorate in high temperatures in the summer, without proper storage or quick sale. In this regard, one can understand why some farmers still prefer to grow cotton, even if purchase prices can be relatively low.

Methods

Methodological studies are general scientific methods of cognition - analysis and synthesis, analysis and synthesis, content - media analysis, sociography, a systematic and comparative historical method that allows you to determine the genesis, sequence and functioning of the stages of development of the agricultural sector in Central Asia.

Scientific research and experimental-methodical research in the field of agroecconomics in the countries of Central Asia.

Mainpart

The countries of Central Asia occupy a certain niche in the world market, and trade in this region is quite local. If we talk about the key grain - wheat, then all the countries considered in this material (Uzbekistan, Tajikistan, Turkmenistan, Kyrgyzstan) are dependent on external purchases of these products and specifically on the Kazakhstan market, which is the undisputed leader in the supply of wheat and wheat flour to the Central Asian market. At the same time, in the flour segment, diversification of foreign purchases by importers, as well as the development of own grain processing in the region under consideration, which includes two countries from the TOP-3 of the world's largest buyers of wheat flour, is currently of interest.

Uzbekistan. About 50% of the territory of Uzbekistan is allocated for pastures, while arable land makes up about 10% of the total area of the country [6].

The key agricultural crop in Uzbekistan is cotton, in terms of gross yield of which the country is in the top 10 world producers. The main grain crop grown in Uzbekistan is wheat; corn, barley and rice are also cultivated, but their volumes are insignificant.

The key grain crop produced in Uzbekistan is wheat. IGC analysts voiced the gross harvest of this culture in the country in 2019/20 MY at the level of 7 million tons compared to 6 million tons a year

earlier. The increase in wheat yield is due to an improvement in its yield, while the area under the grain remained at the level of the previous season.

Experts also predict wheat imports to Uzbekistan in 2019/20 MY at a high level - 2.9 million tons, which corresponds to last year's result. High external purchases of grain are due to the gradual increase in its consumption in Uzbekistan, which in 2019/20 MY can reach 9.4 million tons.

The gradual increase in wheat consumption is explained by the desire of the country's government to actively develop its own grain processing, while stimulating external purchases of raw materials. A year earlier, Uzbekistan abolished VAT on grain imports. As a result, there is a decrease in demand for imported flour from Uzbekistan, which is the third largest buyer of these products in the world. In 2019/20 MY, shipments of the processed product to Uzbekistan may amount to 0.9 million tons, which corresponds to the previous year and is inferior to the result of 2017/18 MY, when imports exceeded 1 million tons.

This situation is unfavorable for Kazakhstan, which is a key supplier of both wheat and flour to the market of Uzbekistan. Firstly, the development of the Uzbek flour-grinding industry leads to a decrease in imports of Kazakhstan flour.

According to APK-Inform, in 2018/19 MY less than 0.5 million tons of flour was delivered to Uzbekistan from Kazakhstan, while a year earlier this figure exceeded 0.7 million tons, and in the first 3 months of the current season, product imports decreased from 121,5 thousand tons a year earlier to 78.2 thousand tons. In turn, purchases of Kazakh wheat are growing and reached 2.2 million tons in 2018/19 MY, and in July-September 2019 exceeded 500 thousand tons against 374 thousand tons in the same period a year earlier.

Secondly, with the development of flour production, Uzbekistan began active deliveries to the Afghan market, which is the main direction of product shipments for Kazakhstan [7.8]. As a result, Kazakhstan's position is immediately weakening in two key markets for flour, and Uzbekistan is turning into a competitor. In addition, Kazakhstani milling mills express dissatisfaction with the fact that a large percentage of the flour exported by Uzbekistan is produced from Kazakh wheat.

It is possible that competition for the Afghanistan flour market will continue to increase, as this importer invests in the development of grain processing in Uzbekistan. Another important factor is the differentiation of transit and domestic tariffs in Uzbekistan. Transportation of flour across the country costs Kazakh flour mills more expensive than Uzbek, transporting the product to the border crossing «Galaba – Hairaton» at an internal tariff.

At present, the government of Uzbekistan is implementing a five-year plan to reduce sown area under cotton by 185 thousand hectares, which was launched in 2016/17 MY. Local authorities intend to reduce cultivated areas in those regions where oilseed productivity is below average, namely in areas with high soil salinity and mountainous parts of the country, and to reorient them to growing fruits and vegetables. According to the plan, by 2021, the area under cotton should be gradually reduced to 1 million hectares.

According to USDA, in 2019/20 MY, the area under oilseeds amounted to 1.05 million hectares, which is 50 thousand hectares lower than a season earlier. The gross harvest of crops is announced at 1.37 million tons against 1.28 million tons in 2018/19 MY, which is the first largest indicator among the countries of Central Asia. In addition, Uzbekistan ranked sixth in the ranking of world cotton producers this season, ahead of Turkey. Uzbekistan is also in 7th place in the ranking of the world's largest producers of cotton processing products. According to the USDA forecast, in 2019/20 MY the volume of cotton oil production will be 212 thousand tons, meal - 600 thousand tons.

Speaking about the cotton market in Uzbekistan, it is worth noting that the country's government is also implementing a plan to introduce fully integrated «cotton-textile clusters» for the production of oilseeds and textile products with the aim of vertically integrating the sector and attracting additional foreign investment in the textile industry [9]. It is expected that private clusters will modernize cotton production by introducing modern spot irrigation technologies, equipment for harvesting and cleaning it from seeds. In particular, in the coming years it is planned to introduce spot irrigation in the territory of 25 thousand ha.

As a result, modern irrigation technologies will help preserve water reserves and prevent soil salinization, automated harvesting equipment will reduce harvesting costs, and more thorough seed cleaning will help improve product quality [10, 11].

As a result, despite the reduction in areas under cotton, the government of Uzbekistan expects to keep its production volumes at the optimal level to cover the growing demand for oilseeds in the country.

According to official data, in 2018/19 MY, 15 clusters functioned in Uzbekistan with a total area under oilseeds of 164 thousand ha. In the future, it is planned to increase their number to 80 and concentrate all cotton production and processing in the hands of these clusters. It is expected that by 2020/21 MY all cotton produced will be processed domestically through the development of the textile industry, and cotton export is already declining at the moment.

Turkmenistan. Agriculture is one of the key sectors of the economy of Turkmenistan, but arable land makes up only 4% of the country's total territory. Due to difficult climatic conditions, almost all agricultural lands of the country are irrigated, while irrigation infrastructure and water consumption practices are not effective enough.

Almost all agricultural land in Turkmenistan is state owned and leased to farmers. In case of irrational use of land, the right to lease it is canceled. In addition, the state determines what crops need to be cultivated, and voices the norms for their production. Priority is given to wheat and cotton, which occupy about a third of all arable land. However, in recent years, diversification of agricultural production has been stimulated in accordance with the goal voiced by the government to achieve self-sufficiency in Turkmenistan with food. In general, all wheat and cotton are cultivated on state-owned land, while private farmers grow fruit and vegetables.

According to the USDA, the gross harvest of wheat in Turkmenistan this year amounted to 1.5 million tons, which is more than 2 times higher than the bad harvest season-2018/19, and also significantly higher than the average annual level. High grain production was facilitated by the expansion of areas under wheat and favorable weather conditions during ripening, which led to an improvement in its yield.

All wheat produced is consumed domestically. In particular, approximately 70% of the grain is processed into flour, 20% goes to seeds and 10% is used for fodder purposes. Domestic production of wheat flour in Tajikistan is relatively stable and amounts to about 550 thousand tons per year.

This volume is not enough to cover domestic demand for flour, as a result of which Tajikistan purchases both raw materials and processed products from foreign markets. External purchases of wheat and wheat flour in the current season are expected to be approximately at an average annual level of 100 thousand tons, which is significantly lower than the result of the previous MY, when, due to a decrease in domestic production, exports reached almost 0.5 million tons. The key supplier of products to Turkmenistan is Kazakhstan.

Turkmenistan is the second largest cotton producer in Central Asia after Uzbekistan. However, there is a tendency in the country to decrease oilseed productivity due to inefficient farming practices and an underdeveloped irrigation system.

According to USDA, in 2019/20 MY, the cotton crop in Turkmenistan is 391 thousand tons, which is higher than the lean season 2018/19 (356 thousand tons), but it is noticeably lower than the average annual level. At the same time, areas under crops in the country are stable, while oilseeds in the current season are about 25% lower than the annual average.

Cotton is Turkmenistan's key export-oriented crop. After cleaning and separating the seeds, the fiber is exported, and the seeds are processed for oil (about 85%) or stored as seed for the next season (about 15%). Almost 100% of the production of vegetable oils in Turkmenistan is cotton.

Tajikistan. Agricultural land makes up less than 30% of the total territory of Tajikistan, of which about 2/3 are pastures. In addition to the low share of arable land, a poorly developed irrigation system is also a problem, which is extremely important for cultivating crops in the Tajik climate.

The main agricultural production zones are concentrated in river valleys. The key grain grown in the country is wheat, while the production of barley, corn and other grains is insignificant. Among oilseeds, cotton, which is an export-oriented crop, predominates.

In recent years, the area under wheat in Tajikistan is relatively stable - about 0.3 million hectares, while crop yields fluctuate depending on weather conditions. This season, IGC analysts are voicing grain yields at 27.5 c / ha against a background of fairly favorable weather (the required amount of rainfall during the ripening period). As a result, the gross yield of wheat in 2019/20 MY amounted to 0.83 million tons, which exceeds the average annual figure for the last 5 years.

Wheat is the basis of cereal imports - it accounts for more than 90% of the total grain supplied to Tajikistan. At the same time, an increase in its domestic production in the 2019/20 season will help Tajikistan slightly reduce external grain purchases. Note that over the past 5 years, the country has gradually increased wheat imports, which, according to the results of 2018/19 MY, reached 1.2 million tons. In the current season, deliveries of products to Tajikistan are projected at 1.1 million tons, which generally corresponds to the average annual indicator.

The growing demand for wheat is explained by the development of its own grain processing in Tajikistan, as a result of which, over the past decade, there has been a gradual increase in the import of raw materials into the country, while foreign purchases of flour are rapidly declining. Currently, about 90% of Tajikistan's domestic needs for flour are met through domestic production.

It is worth noting that Kazakhstan is the main supplier of both wheat and flour to the Tajik market, for which changes in the structure of foreign purchases of products by the importer are unfavorable. Kazakhstan flour exporters are unhappy with the growing competition from Tajik flour produced from Kazakh wheat [12,13].

Tajikistan is the third largest producer of cotton among Central Asian countries. In recent years, the country has seen a gradual decrease in oilseed productivity, while the area under it is increasing. According to USDA, in 2019/20 MY, the cotton crop amounted to 170 thousand tons, which is slightly higher than last year's result.

Tajikistan is actively supplying cotton fiber to foreign markets - about 90% of production is exported. Oilseeds are processed domestically for oil, which is almost 100% of the total production of vegetable oils in Tajikistan.

Kyrgyzstan. Agriculture is one of the key segments of the country's economy, which accounts for about 20% of GDP. However, the development of this sector is extremely slow. Inappropriate use and inefficient practices have led to the depletion of agricultural land. In addition, the irrational use of water resources is a constant problem, which leads to low production volumes.

In the structure of agricultural land in Kyrgyzstan, about 45% are pastures, while arable land occupies less than 10% of the total territory of the country [14]. Among the existing economic entities operating in the field of agriculture, forestry and fishing, farms prevail (75% of the total).

USDA analysts voice the gross wheat harvest in the country in 2019/20 MY at the level of 590 thousand tons, which is 4% lower than the result a season earlier and 7% lower than the average annual level. The decline in crop production is due to a significant reduction in sown area under it, while the grain yield exceeded last year's figures.

In view of the decrease in domestic production, the growth of wheat and wheat flour imports into the country is forecasted in the current MY to 370 thousand tons, which is significantly higher than last year's and average annual rates. The increase in external purchases of wheat is also due to the desire of the Kyrgyz government to increase strategic stocks of these products in the country, which is key in the structure of food consumption of cereals (about 97% of the total). It should be noted that wheat and flour account for an average of 95% of the total volume of external purchases of grain products, and Kazakhstan is the main supplier of these goods.

At present, there are more than 50 flour mills in Kyrgyzstan. At the same time, only large and medium-sized grain processors are engaged in the gradual modernization and production of high-quality flour, while small enterprises do not have the technical capabilities to improve the quality of their products. In addition, depending on the market situation, medium and small enterprises periodically suspend their work.

Despite some progress, the agricultural sector of Kyrgyzstan remains underdeveloped [15]. The acute need for modernization, along with low economic development and poor government support, has led to stagnation in this segment. To improve the situation in agriculture, the country is resorting to the help of international organizations such as the FAO and USAID.

In particular, FAO assistance is aimed at developing the agricultural sector, including projects in the field of crop production, animal husbandry and fisheries, as well as support for the rational use of land and forest resources in the face of climate change.

Support from USAID includes two large-scale projects - Farmer-to-Farmer and Agro Horizon. The implementation of the first project took 5 years and ended in 2018. The target audience of this project was smallholder farms with a low level of income, for which trainings were held to increase crop yields and improve market stability and profitability. The second project has not yet been completed, and within its framework, the commercialization and industrialization of agriculture in Kyrgyzstan is carried out in order to increase its profitability.

Kazakhstan. The results are impressive: in 2019, products were exported at \$ 3.023 billion, which is 23% higher than the figures planned by the Ministry of Agriculture itself. In comparison with 2018, the volume of agricultural exports increased by 26%. At the same time, the share of processed products in the export structure amounted to 37% (\$ 1.125 billion).

The following regions made the largest contribution to the results of agricultural products export: Almaty's share in total exports amounted to 17.6%, agricultural products were exported at \$ 532 million, Kostanay region - 16.5%, \$ 499 million, Nur-Sultan - 14.5%, \$ 438 million, Turkestan region together with the city of Shymkent - 12.4%, \$ 373 million

According to the results of 2018, the largest increase in exports of agricultural products in monetary terms according to the results of 2018 was shown by East Kazakhstan Region - by \$ 110 million, Kostanay - by \$ 47 million, North Kazakhstan Region - by \$ 39 million and cities of republican significance Nur-Sultan - by \$ 199 million and Almaty - \$ 114 million. In general, export growth amounted to \$ 635 million.

The leaders in the export of processed agricultural products were four regions of the country - Kostanai, Almaty, Turkestan (plus the city of Shymkent) region and Almaty [16].

So far, the main export volume of Kazakhstani agricultural products is still accounted for by wheat (26.9%) and flour (14.7%). The Ministry of Agriculture has put together a top group of processed agricultural products, which accounts for 66% of processed exports: flour with a total share of 39.2% in the total export of processed products, vegetable oils - 9%, confectionery products - 9%, fish fillet - 4%, as well as baby food and dairy products - 2%. Also, a lot of cotton fiber is exported - 6% and processed feed (cake, bran, waste) - 4%.

One of the priority export directions for Kazakhstan is meat. And although plans to export 60 thousand tons of meat per year announced ten years ago have not yet been implemented, the Ministry of Agriculture does not lose optimism. The vice minister said that at the end of 2019, the gross production of beef amounted to 477 thousand tons. The volume of beef export amounted to 19.95 thousand tons based on the issued veterinary certificates (with 5.5 thousand tons in 2017). Gross production of mutton amounted to 150 thousand tons, export volume - 3.8 thousand tons (1.3 thousand tons in 2018).

Export of meat for domestic enterprises is very profitable. Due to beef export alone, producers received an average of 27 billion tenge (\$ 71 million, or 27% of all export revenue from livestock products - \$ 261 million).

The leaders in the export of beef are Turkestan region (5 thousand tons), Aktobe and Almaty regions (4 thousand tons each). The main exporters of beef are 20 Kazakhstan enterprises. Over the past year, they exported domestic meat to 11 countries. In 2019, the Ministry of Agriculture expects even greater indicators: 7.7 thousand tons have already been exported for three months of the year, and it is expected that the pace will increase.

In the context of priority markets, one of the main places is the market of the EAEU countries, to which Kazakhstan exports 1.2 million tons of agricultural products for a total of \$ 490 million. 919 million tons of products for \$ 258 million are sent to the Chinese market. The export to Iran is twice as high 1.8 million tons of agricultural products in the amount of \$ 329 million. At the same time, the volume of supplies to the Iranian market will expand in the near future.

Iran no longer has quotas for the import of grain and wheat, therefore, in accordance with the memorandum that we have concluded, there will be no volume restrictions. Everything will depend on the activity of our business. We plan to deliver a batch of 500 thousand tons (wheat) this year. Next year, reach the level of 1 million tons. In general, historically we supplied about 1.2 million tons of wheat. If we take barley, but it was not banned, it was supplied all these years, but if in 2017 we delivered only 880 thousand tons, then already last year we delivered 1.55 million tons.

The list of export interests for Kazakhstan also includes the markets of the Persian Gulf countries, and mainly the so-called golden six countries: the United Arab Emirates, Saudi Arabia, Bahrain, Oman, Qatar, Kuwait. In 2018, Kazakhstan exported 4.5 million tons of agricultural products to these markets.

In 2018, export volumes to Turkey amounted to 455 thousand tons of agricultural products in the amount of \$ 113 million. About 900 thousand tons of products worth \$ 303 million were exported to the EU countries. In its native region, Central Asia, the most active trade is with Uzbekistan, where export in 2018 amounted to 3.9 million tons for \$ 633 million.

Results and discussion

Agriculture in Central Asian countries faces many challenges, including fragmented production, low productivity, underdeveloped markets, weak institutional structures, and a lack of public resources to support agriculture. In this situation, trade reforms, and corresponding changes in agricultural and trade policies, can play an important role in determining the direction of agricultural development.

Due to the intensive participation of Central Asian countries in international trade through membership in the WTO, the Shanghai Cooperation Organization or the Eurasian Economic Union, the issues of harmonizing domestic policies and programs with these processes are becoming more and more relevant [17]. States are faced with the task of ensuring that changes in trade policies are consistent with country development priorities. Thus, a clear understanding of trade rules and their implications for agriculture and food security is becoming a critical factor in strategic decision making.

Kazakhstan is the main exporter of the region. The country exports significant volumes of grain and flour to other republics of the Central Asian region, including exporting smaller volumes of dairy products. Wheat and grain products, including flour and bread, make up more than 60 percent of Kazakhstan's agricultural exports. As noted earlier, in particular, Tajikistan relies on grain imports from Kazakhstan: about 50% of the country's demand is met through imports from Kazakhstan. Moreover, in Tajikistan, domestic wheat (and flour) is of lower quality, and people prefer to consume Kazakh flour. Some rural households mix it with their home-made wheat.

In three countries specializing in cotton production, cotton is an important export product shipped to the EU and China. However, it is difficult to track the export route from the field to the plant, down to the sales floor.

The importance of cotton is clearly visible in Tajikistan, where cotton (including residues such as cottonseed oil and cake) accounts for more than 60 percent of the country's agricultural exports (according to FAO data for 2016). In Turkmenistan, cotton is even more important as an export agricultural commodity (cotton, including oil and oilcake, accounts for more than 80 percent of the country's agricultural export value). There is a wider range of agricultural exports in Uzbekistan, and cotton is somewhat less important than in Tajikistan and Turkmenistan.

China is becoming a more important player in Central Asia. Some export of agricultural products is carried out to China (where cotton occupies the main place).

According to analysts, there is potential for deliveries to the Chinese market, especially fruits and vegetables. At present, mainly cotton is exported to China and the trade balance is negative: more goods are imported from China than are exported to China from the Central Asian republics. It is noteworthy that Tajikistan, Kyrgyzstan and Uzbekistan are competing with China for the export of fruits and vegetables to Kazakhstan, i.e. for deliveries to the Kazakhstan market.

Trade with the EU includes cotton exports, as well as grain and oilseeds from Kazakhstan. At the same time, the Central Asian republics import food products from Europe. These imports primarily relate to processed products. This is a clear sign of improving living standards in Central Asia.

Obviously, there is a trend of «supermarketization» in which the market is increasingly giving way to supermarkets. This development primarily occurs in urban areas. In rural areas, smaller markets are still the most important exchange of agricultural products.

As for food imports, I have already mentioned that these products occupy a large place in the import of Central Asian countries.

Among the import costs, the largest place is occupied by a small assortment of products, including: tea; sugar; (chicken meat; vegetable oil; dairy products such as butter and pasteurized milk; and coffee and

cocoa (chocolate). Some of these foods come from different countries, while others, for example, are imported from Kazakhstan (In some cases, Kazakhstan re-exports food to other countries in Central Asia).

Not only Tajikistan depends on wheat imports from Kazakhstan, but also Uzbekistan, Kyrgyzstan and Turkmenistan import significant volumes of wheat and flour from Kazakhstan.

Tajikistan is still the most dependent on imports, but also imports a significant amount of rice and potatoes (important major crops).

Kazakhstan imports a wide variety of fruits and vegetables from neighboring Central Asian countries and China. CARs are interdependent when it comes to agricultural exports from the Central Asian region; goods from a country such as Tajikistan must cross Uzbekistan or Kyrgyzstan before they reach the Russian border.

The creation of the Eurasian Economic Union had implications for trade in Central Asia. The EAEU has facilitated trade between member states, but it is difficult for me to assess the impact of the EAEU in the region, since there is a lot of informal trade in agricultural goods that takes place in the border regions.

This informal trade is important for rural livelihoods and is not taken into account at the country / macro level. However, barriers to free trade between the Central African Republic and between Central Asia and neighboring countries remain.

Trade is hindered, for example, by poorly developed corridors, customs administration and phytosanitary standards, such as the EU.

Another problem is that many (small farmers) in Central Asia choose their own seeds. As a result, the crop is very heterogeneous, which can complicate the export of large volumes. Customers in Europe or Russia may require sorting products that require a different production system.

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ОРТАЛЫҚ АЗИЯ ЕЛДЕРІНДЕГІ АГРАРЛЫҚ СЕКТОРДЫҢ ДАМУЫН ТАЛДАУ

Аннотация. Орталық Азия – әлемнің қарқынды дамып келе жатқан аймақтарының бірі, сондай-ақ әрі қарай даму үшін үлкен әлеуеті бар. Аймақтың барлық елдері теңізге шығуға мүмкіндігі жоқ, кейбіреулері газ, мұнай мен алтынның құнды табиғи қорларына ие, ал барлық елдерде кеңес дәуірінен қалған құнды адами әлеует бар.

Орталық Азия, сонымен қатар маңызды ауылшаруашылық аймақ болып саналады, онда халқы ғасырдан ғасырға астық пен мақта, жеміс-жидектер мен көкөністер, мал азығы және басқа да қажетті азық-түлік өнімдерін өсірді. Ауылшаруашылық өнімдерін өндіру және өңдеу, сондай-ақ байланысты қызметтер Орталық Азияның көптеген елдерінде маңызды табыс көзі болып саналады (Қырғызстан, Тәжікстан және Өзбекстандағы ЖІӨ-нің 20-25 %-ы). Облыс халқының үштен екісі ауылда тұрады. Сондай-ақ әртүрлі зиянкестер мен аурулар аймақтағы ауылшаруашылық өнімділігіне қауіп төндіреді, бұл елдердің экономикаларына айтарлықтай зиян келтіреді.

Орта Азиядағы ауылшаруашылығы көптеген қиындықтарға тап болады, оның ішінде бөлшектенген өндіріс, өнімділіктің төмендігі, нарықтардың дамымауы, әлсіз институционалдық құрылымдар және ауыл шаруашылығын қолдауға арналған мемлекеттік ресурстардың жетіспеуі бар.

Бұл жағдайда, сауда реформалары мен ауылшаруашылық және сауда саясатындағы тиісті өзгерістер ауыл шаруашылығының даму бағытын анықтауда маңызды рөл атқара алады.

Дүниежүзілік сауда ұйымына, Шанхай ынтымақтастық ұйымына немесе Еуразиялық экономикалық одаққа мүше болу арқылы Орталық Азия елдерінің халықаралық саудаға белсенді қатысуына байланысты, ішкі саясат пен бағдарламаларды осы процестермен үйлестіру мәселелері барған сайын өзекті бола түсуде.

Мемлекеттердің алдында сауда саясатындағы өзгерістердің елдің даму басымдықтарына сәйкес келуін қамтамасыз ету міндеті тұр. Осылайша, сауда ережелерін және олардың ауылшаруашылығы мен азық-түлік қауіпсіздігіне тигізетін әсерін нақты түсіну стратегиялық шешімдер қабылдауда шешуші факторға айналып келеді.

Түйін сөздер: Орталық Азия, агроэкономика, даму, тиімділік, ауылдағы азық-түлік, азық-түлік қауіпсіздігі.

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АНАЛИЗ РАЗВИТИЯ АГРАРНОГО СЕКТОРА В СТРАНАХ ЦЕНТРАЛЬНОЙ АЗИИ

Аннотация. Центральная Азия представляет собой один из быстрорастущих регионов мира, обладающая большим потенциалом для дальнейшего развития. Все страны региона не имеют выхода к морю, некоторые обладают ценными природными запасами газа, нефти и золота, и все страны – ценным человеческим потенциалом, полученным в наследство от советской эпохи.

Центральная Азия также является важным сельскохозяйственным регионом, где население из века в век занималось выращиванием зерна и хлопка, овощей и фруктов, кормов для сельскохозяйственных животных и другого важнейшего продовольствия. Производство и переработка сельскохозяйственной продукции, а также сопутствующие услуги являются важным источником доходов во многих странах Центральной Азии (20-25% ВВП в Кыргызстане, Таджикистане и Узбекистане). Около двух третей населения региона проживают в сельских районах. Между тем, продуктивности сельского хозяйства региона угрожают различные вредители и заболевания, что наносит существенный вред экономикам стран.

Сельское хозяйство в странах Центральной Азии сталкивается с многочисленными вызовами, включая фрагментированное производство, низкую производительность, недостаточно развитые рынки, слабые институциональные структуры, а также недостаток государственных ресурсов для поддержки сельского хозяйства.

В данной ситуации торговые реформы и соответствующие изменения в аграрной и торговой политике могут сыграть важную роль в определении направления развития сельского хозяйства.

Ввиду интенсивного участия стран Центральной Азии в международной торговле посредством членства в ВТО, Шанхайской организации сотрудничества или Евразийского экономического союза, вопросы согласования внутренней политики и программ с данными процессами становятся более и более актуальными.

Перед государствами встает задача проследить, чтобы изменения в торговой политике соответствовали приоритетам развития стран. Таким образом, четкое понимание торговых правил и их последствий для сельского хозяйства и продовольственной безопасности становится критическим фактором в принятии стратегических решений.

Ключевые слова: Центральная Азия, агроэкономика, развитие, эффективность, сельское продовольствие, продовольственная безопасность.

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REFERENCES

- [1] Сельское хозяйство в Казахстане: <https://www.kazportal.kz/selskoe-hozyaystvo-v-kazahstane/>
- [2] Kozubenko I.S. (2018) Analitika dannyh kak instrument gosudarstvennogo upravleniya APK [Elektronnyj resurs]. URL: https://www.sas.com/ru_ru/events/17/sfr-2017.html#materials/ (data obrashheniya: 16.08.2018)
- [3] Koptaeva G.P., Shinet G.G., Agabekova G.N. Agricultural economy: development of crop production and its competitiveness // *News of the national academy of sciences of the republic of Kazakhstan series of social and human sciences* ISSN 2224-5294. 170 Volume 5, Number 327 (2019), 91 – 102. <https://doi.org/10.32014/2019.2224-5294>.

- [4] Валовой внутренний продукт методом производства за январь-декабрь 2019 года – Комитет по статистике Министерства национальной экономики Республики Казахстан, Национальные счета - Интегрированные счета: <http://stat.gov.kz/getImg?id=ESTAT297361>
- [5] <https://kapital.kz/gosudarstvo/68144/ekonomicheskij-effekt-ot-cifrovizacii-apk-sostavit-40-mlrd-tenge.html>
- [6] Seitova V.N., Isahmetova A.N., Makhatova A.B., Giese R. The status and the ways of rational use of production capacity of agricultural processing enterprises in the turkestan region // *News of the national academy of sciences of the republic of Kazakhstan series of social and human sciences* ISSN 2224-5294, Volume 6, Number 328 (2019), 5–10. <https://doi.org/10.32014/2019.2224-5294.201>
- [7] <http://kazakh-zerno.kz/novosti/agramye-novosti-kazakhstana/243961-kazakhstan-tsifrovizatsiya-apk-prodolzhaetsya>
- [8] <https://strategy2050.kz/ru/news/51207/>
- [9] Rekomendatsii «O soglasovannykh deystviyakh gosudarstv-chlenov Evraziyskogo ekonomicheskogo soyuza v oblasti razvitiya eksportnogo potentsiala selskhozayastvennoy produktcii i prodovolstviya». Evraziyskaya ekonomicheskaya komissiya. M., 2016 g., 13 dekabrya, №30. 5 s.
- [10] Занятое население по основным видам экономической деятельности (квартальные данные) 2010-2018 гг. – Комитет по статистике Министерства национальной экономики Республики Казахстан, Труд: <http://stat.gov.kz/getImg?id=ESTAT104800>
- [11] Klimova N.V. (2013) Osobennosti regulirujushhego vozdejstviya gosudarstva na agrobiznes v zarubezhnykh stranah [Elektronnyj resurs] // *Politematicheskij setevoy jelektronnyj zhurnal Kubanskogo agrarnogo universiteta*. 2013. № 90. URL: <http://ej.kubagro.ru/2013/06/pdf/45.pdf> (data obrashhenija: 16.08.2018)
- [12] <http://www.sarap.kz/index.php/ru/pol-ob/pol-ec/265-prodovolstvennaya-bezopasnost-kak-neot-emlemaya-chast-natsionalnoj-bezopasnosti-kazakhstana.html>
- [14] A.T. Kokenova, A.B. Abylkasym, A.R. Shalbaeva, N.S. Abdurazakov, N.M. Bekmanova Innovation in agriculture: digitization as a factor of new opportunities // *News of the national academy of sciences of the republic of Kazakhstan series of social and human sciences* ISSN 2224-5294, Volume 6, Number 328 (2019), 226–236. <https://doi.org/10.32014/2019.2224-5294.236>
- [15] Nurmanbekova G., Duiskenova R. (2019). Realization of regional innovation policy // *Bulletin of national academy of sciences of the Republic of Kazakhstan. Series of agricultural sciences*. ISSN 1991-3494. 2019. Vol. 4, N 380. P. 201-209. <https://doi.org/10.32014/2019.2518-1467.12>
- [16] Ayazhanova M., Muldokanova Sh. (2019). Development management system in agriculture // *News of the National academy of sciences of the Republic of Kazakhstan. Series of agricultural sciences*. ISSN 2224-526X. 2019. Vol. 4, N 52. P. 24-30. <https://doi.org/10.32014/2019.2224-526X.1>
- [17] Portal Nacional'noj tehnologicheskoy iniciativy <http://nti.one/>. Stranica Rabochej grupy «TechNet» (Peredovye proizvodstvennye tehnologii) NTI. <http://fea.ru/compound/national-technology-initiative/>