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MAIN TRENDS IN THE SUPPLY OF VEGETABLE PRODUCTS TO THE REPUBLIC OF KAZAKHSTAN

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In the context of a constantly changing climate and economic realities, complex issues of food security are becoming increasingly relevant for the Republic of Kazakhstan.

One of the key components of nutrition is vegetable products, which play a vital role in providing the country's population with essential vitamins, minerals and fiber.

Kazakhstan, like many other countries, depends on vegetable imports to meet the needs of its population. However, today the market is experiencing significant changes in the supply structure [1, 2,3, 7].

In 2024, Kazakhstan imported food products worth $4 billion, which is 10% more than in the same period of 2023. As for vegetables, in 2024, Kazakhstan imported 478.7 thousand tons (5% less than in 2023). However, despite the decrease

in volumes, due to rising prices, the total value of imports increased by 16.2%, amounting to $175.7 million.

The growth of food imports has continued over the past 8 years. Since 2025, the volumes in dollar terms have increased by 2.3 times, while in physical terms the increase was only 7.7%, which indicates a significant increase in the cost of purchased food products [4, 5, 6].

The main suppliers of vegetables to Kazakhstan are Russia, Uzbekistan, China, and Tajikistan. In 2024, supplies of cucumbers from Russia increased by 36.4%, to 1.3 thousand tons, and cabbage by 21%, to 1.9 thousand tons. In 2024, Uzbekistan supplied 122.6 thousand tons of onions and garlic, but this is 15.2% less than in the previous year. At the same time, Uzbekistan significantly increased cabbage supplies - by 1.5 times, to 70.6 thousand tons.

In 2024, imports of onions and garlic from China increased by 45%, reaching 4.9 thousand tons. Cabbage supplies also increased - by 2.6 times, to 5.3 thousand tons, and cucumbers - by 2.7 times, to 4.2 thousand tons. Tomato supplies from China increased by 2.1 times.

Tajikistan is also a traditional supplier of onions and garlic. However, in 2024, supplies from this country decreased by 3.3 times, to 17.9 thousand tons.

At the same time, in 2024, there were noticeable changes in the vegetable market in Kazakhstan. On the one hand, the total volume of imports decreased, but their value increased. The structure of supplies changed. Russia remains a key supplier of food products, but China also increased its share of the vegetable market, while supplies from traditional supplier countries such as Uzbekistan and Tajikistan decreased for some items.

Changes occurred in the dynamics of individual types of vegetables. Onions and garlic. The total volume of imports decreased by 30.4%, to 146.6 thousand tons. The decrease occurred mainly due to a reduction in supplies from Uzbekistan and Tajikistan.

Cucumber imports decreased by 5.3% to 13.7 thousand tons. Supplies from Iran and Uzbekistan decreased, but increased from Russia, China and Afghanistan. Cabbage imports increased by 1.5 times to 80.4 thousand tons, the increase was due to increased supplies from Uzbekistan and China. Carrot, radish, beetroot and turnip imports increased by 27% to 61.5 thousand tons. Tomato imports increased by 9% to 60.8 thousand tons. Eggplant, spinach, pepper and asparagus imports increased by 11.7% to 57.6 thousand tons.

The vegetable market in Kazakhstan largely depends on the import of vegetables and fruits, and prices for these products are growing faster than in neighboring countries. In December 2024, fruits in Kazakhstan increased in price by 12.4% year-on-year. At the same time, in Uzbekistan, there was a decrease in fruit prices by 18.2%.

A similar trend is observed in the vegetable market. While in Kazakhstan vegetables became more expensive by 3.8% year-on-year, in Uzbekistan this figure was only 0.7%. The difference in price dynamics is significant for most vegetable

items, such as beets, onions, cucumbers and tomatoes. The exception is potatoes, which rose in price by about the same amount: by 37.7% in the cities of Kazakhstan and by 39.9% in Uzbekistan.

In 2024, vegetables became the main accelerator of food inflation in Kazakhstan. Cooperation used in developed countries allows combining efforts to organize sorting, washing, packaging, cooling, temporary storage and transportation of finished vegetable products to the consumer. In recent years, three levels of cooperation in agricultural production have been observed in the world: growing products; their processing and preparation for sale; marketing. It is through agricultural cooperatives that control over the quality of vegetable products is carried out. Cooperatives unite in unions, controlling all wholesale trade and connecting science with production.

The President of Kazakhstan Kassym-Jomart Tokayev noted that all reforms, all measures for economic development are aimed at improving the standard and quality of life of citizens.

In 2024, the National Infrastructure Plan until 2029 was adopted, which provides for the implementation of over 200 projects with a total investment volume of over 40 trillion tenge.

The Law of the Republic of Kazakhstan "On the Production and Circulation of Organic Products" dated 10.06.2024 regulates the rational use of natural resources and their conservation, in addition, this law addresses issues of healthy nutrition and the development of the organic products market.

It is known that in the Order of the Ministry of Agriculture of the Republic of Kazakhstan "On approval of the Rules for subsidizing the increase in yield and quality of plant products" (with amendments from 2024), subsidies for partial reimbursement of costs of production of priority vegetable crops in closed ground are calculated from the areas confirmed by the agricultural producer or cooperative subject to subsidies.

In the forecast for the socio-economic development of the Republic of Kazakhstan for 2025–2029, growth was expected in all basic sectors of the economy: in industry – 4.7%, including in manufacturing – 7.0%, in mining – 2.8%, and the average annual growth in the volume of gross agricultural output was expected to reach 5.3%.

It is important to pay special attention everywhere to the current issues of management and marketing development in the production of vegetable products at modern enterprises. It is known that vegetable management is an important process of organizing, planning and controlling the cultivation, storage, transportation and sale of vegetable products. Vegetable marketing is the process of promoting and selling vegetable products, including strategies for attracting customers, increasing sales and creating brand awareness.

High-quality, eco-friendly packaging attracts attention; marketing slogans: “100% organic”, “No GMO”, “Farm products”; creation of a unique brand – memorable name, logo.

Digitalization of vegetables through social networks Instagram, TikTok, Facebook – beautiful photos of vegetables, recipes, stories of farmers; marketplaces and websites – sales through Ozon, Wildberries, Avito or your own online store; online advertising – targeted advertising, SEO promotion.

However, despite the enormous potential of agriculture, Kazakhstan faces a number of problems that could hinder the stable supply of vegetables to the population in the coming years.

Problems of vegetable supply in Kazakhstan:

1. Low level of self-sufficiency (despite its rich agricultural resources, Kazakhstan is significantly dependent on vegetable imports. Thus, according to the Ministry of Agriculture of the Republic of Kazakhstan, in recent years the share of imported vegetables in the total consumption volume has reached 30-40%. The problem with vegetable imports is especially acute in winter, when domestic production cannot meet demand).

2. Seasonality of production (most vegetables in Kazakhstan are produced in the summer and autumn seasons, which limits their availability in the off-season. For several months a year, the population is forced to rely on imports, which, on the one hand, increases the prices of vegetables, and on the other hand, reduces their availability for different segments of the population).

3. Problems with quality and storage (Insufficient storage infrastructure, therefore the inability to effectively store and process vegetables in the conditions of a lack of modern storage facilities and storage technologies, and also causes certain problems with ensuring food security. This leads to significant losses at all stages, from harvesting to the arrival of products on the market).

4. Impact of climate change (Climate changes such as droughts, late frosts, sudden temperature changes, and water shortages have a negative impact on the stability of vegetable production. This creates additional risks for food security and increases dependence on external supplies).

Scientifically based vegetable consumption standards. According to the recommendations of the World Health Organization, to maintain a normal level of health, an adult should consume at least 400 grams of vegetables and fruits per day.

For Kazakhstan, taking into account the peculiarities of the national cuisine, vegetable consumption should be at least 150 kg per person per year, which in total gives about 2.2 million tons of vegetables per year for a country with a population of 20 million people.

It is important to note that meeting these needs is impossible without the efficient organization of agricultural production that meets the demand for food.

Economic component. Vegetable production is not only an important element of food security, but also a key economic sector that provides jobs and income for a large number of farmers.

Personnel shortage in agriculture – outflow of labor from villages to cities, lack of qualified specialists.

However, there are currently several economic problems that limit Kazakhstan's potential for vegetable production:

1. Low level of mechanization of production (Much agriculture in Kazakhstan still works with outdated technologies, which reduces production efficiency and increases costs. Problems with logistics and sales – high transportation costs, lack of sales markets. Mechanization of planting, watering and harvesting processes could significantly increase yields and reduce production costs).

2. Lack of investment in storage and processing infrastructure (Kazakhstan lacks modern storage and processing facilities for vegetables. Fluctuations in vegetable prices – seasonal price hikes, dependence on imports. The development of such facilities would reduce losses and ensure the processing of products, which would make them available all year round).

3. Subsidies and government support (To increase the volume of vegetable production, subsidies are needed for farmers, including support for the purchase of modern equipment, improving soil quality and using modern agricultural technologies. Shortage of seed material and technology - limited access to high-quality seeds and advanced agricultural technologies. In addition, it is important to financially stimulate the growth of the processing industry, which can also reduce dependence on imports and increase the added value of products).

Solutions to problems.

1. Development of new technologies and innovations (Therefore, in order to increase the sustainability of agriculture, it is necessary to introduce innovative technologies into agricultural production, such as the development of irrigation and water conservation systems - the introduction of drip and point irrigation, modernization of the irrigation system. In particular, technologies related to vertical farming, as well as automated systems for managing agricultural processes, can significantly increase the yield of vegetable crops, especially in the context of climate change).

2. Increasing processing and storage volumes (Development of processing capacities and creation of modern storage facilities for vegetables will help solve the main problem of seasonality and increase the availability of vegetables to the population in the off-season. Creation of modern vegetable storage facilities – state subsidies and private investments in the construction of storage facilities. For example, creation of factories for the production of frozen vegetables and canned goods will ensure food security of the country, and also reduce dependence on external supplies).

3. Development of farms (It is necessary to strengthen support for farms, especially in regions with high agricultural potential. State support for farmers and subsidies for agribusiness - preferential loans, tax breaks for producers. Modernization of logistics and infrastructure - creation of wholesale markets, improvement of the transport network. Development of farmers' cooperation - unification of small farms in order to reduce production costs. Development of state programs aimed at providing subsidies and long-term loans for the purchase of

modern equipment, machinery and for improving infrastructure elements will help increase the efficiency of agricultural production).

4. Implementation of sustainable agricultural technologies (It is important to focus on sustainable agriculture, which will not only increase crop yields, but also maintain environmental sustainability. Development of domestic seed production - support for breeding centers, attraction of foreign technologies. Reduction of dependence on imports - development of greenhouse farms, expansion of vegetable production in closed ground. This is the inclusion of organic farming in agricultural practices, the use of renewable energy sources, as well as water resource management using modern technologies).

In the future, the Republic of Kazakhstan will be able to achieve food security in the vegetable growing sector with a comprehensive approach to solving existing problems.

At the same time, providing the population of Kazakhstan with vegetable products requires a comprehensive approach and coordination of efforts, both from the state and from the private sector.

The development of agriculture, the creation of efficient systems for storing and processing products, the introduction of innovative technologies and support for farmers - all these measures will help reduce dependence on imports and ensure the availability of high-quality, fresh vegetable products for citizens.

In the long term, such steps will contribute to strengthening the country's food security and stable economic development of rural areas.

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