

the elevator, milling-cereal and feed industries, each of which is of great importance in providing the country's population with high-quality food products and their activities are ultimately aimed at implementation of the State Program on Development of Agro-Industrial Complex of the Republic of Kazakhstan for 2017-2021.

Studies of sectoral production, analysis of the structures of inter-sectoral interaction revealed a number of problems that hinder the sustainable development of domestic grain-product subcomplex of the AIC, including milling-cereal enterprises [2]. It follows from the study that raw material potential of the national milling-cereal industry is sufficient for the balanced production of various flour types and varieties, and full satisfaction of the needs of bakery, confectionery and pasta industries.

The potential of flour production is 7 million tons at full capacity, which makes it possible to expand export markets. The distribution of production forces of the flour-milling industry is not evenly distributed. So, five oblasts account for more than 70% of the total production: - Akmola oblast - 10,4%, Karaganda oblast - 9,7%, Kostanay oblast - 28,8%, North-Kazakhstan oblast - 9,0% and Shymkent city - 12,1%, however in these grain-producing regions recession of production is observed.

Results and their discussion. Analysis of the effectiveness of the processes taking place in the agriculture of the Republic of Kazakhstan has confirmed the preservation of the traditional interest of investors in this industry. For example, only in Kostanay region 22 major projects are implemented for an amount exceeding 22 billion tenge, which include programs for the organization of support for rural producers, the production of innovative types of equipment for agricultural work and deep processing of crops in the release of products [3].

The implementation of projects is aimed at sustainable socio-economic development of the region, as they create additional jobs, form a modern infrastructure of rural settlements, improve the quality of life of the population. As an example of a successful site chosen in the implementation of many investment projects, the Industrial Zone of Kostanay should be mentioned. On its territory, including the introduction of a project solution worth about 250 million dollars of deep processing of agricultural raw materials, which was initiated by LLP "BioGrain" together with a Chinese partner [4].

In Kazakhstan a roadmap for the development of grain processing will be developed. Kostanay region takes a leading place on processing of grain and grain products, production

capacities - 2 345,4 thousand tons: among them, fine-grinding flour from wheat and meslin (mixture of wheat and rye) - 96%, groats, flour of a rough grind - 0,45%, fresh bread - 1,6%, macaroni - 1,1%, forages ready for animals - 0,7%. The activity of its subsidiary BioOperations LLP (Tayinsha, North Kazakhstan region) is aimed at production of bioethanol, wheat gluten, starch, flour and animal feed.

Kazakhstan's production in January-July 2020 was 1.89 million tons of flour, 6.4% (2.019 mln tons) lower than in the same period of 2019.

Distribution of production forces of the pasta industry is located in five regions, which account for about 79% of all manufactured products - the cities of Nur-Sultan and Shymkent (18%), Kostanay and North Kazakhstan regions (15%) and West Kazakhstan region (13%). The main production capacities are concentrated mainly in the north of the country. In Kyzylorda and Turkestan regions for the period January-July 2019 - 2020 no production of pasta was recorded. The coefficient of balance of foreign trade turnover for "flour" products is 0.98 or closer to 1, which means prevalence of export over import, or import volumes are insignificant compared to export.

This coefficient means a huge potential for integration and increase in exports of these products and high quality of products. For the product "pasta" competitiveness index is equal to 0.09, which means complete balance of foreign trade turnover (the coefficient is closer to zero), takes place when export is equal to import, this means that foreign trade exchange for this product occurs with equality of trade conditions and opportunities. The export of pasta requires an increase in investment and renovation of production capacity to improve the quality of products and increase exports [5].

On this basis, this indicator reflects the increase in exports per unit increase in investment and is a criterion of elasticity of flour exports and shows the dependence on the economic growth of flour production and on investment. Export of pasta is a less investment-attractive sector and needs long-term measures of financial support.

Given this indicator, flour production remains more attractive for both producers and investors compared to pasta production, but with increased support measures and investment attraction, pasta production has a high value-added chain [6].

Flour production: potential to increase exports From March 22 to June 1 of this year, the Republic of Kazakhstan had bans and restrictions (quotas) on the export of flour, intro-

duced due to the need to ensure food security of the population and the increased demand in the countries - importers of Kazakh products.

Combination of grain and flour markets in Central Asia led to a sharp growth of the flour industry in the countries - importers of domestic flour. Exports of flour from Kazakhstan in January-June 2020 increased by 23.75% and amounted to \$ 198 million. It should be noted that export revenues for flour increased at the background of declining physical volumes, indicating a jump in prices for these products. The leaders in wheat flour exports are Kostanay region (37.4%) and Shymkent city (18%) [7]. In 2019, a total of \$201.1 million worth of products were exported from these two regions. Also major suppliers of wheat flour are North Kazakhstan, Akmola, Turkestan, Karaganda regions and Nur-Sultan city. They account for 35% of the total exports or \$127.4 mln, wheat flour imports showed significant growth (276.8%) compared to the same period of last year and amounted to \$1.6 mln.

It should be noted that the provision of the domestic market with flour is at a high level among other commodity groups. Over the past year, import of flour made not more than 0.12% of production in the country. Main consumers of Kazakhstani flour are Afghanistan - 61% (\$221.4 mln) and Uzbekistan - 21.2% (\$76.9 mln). Major consumers include such countries as Tajikistan - 5.3% (\$19.3 mln), Russia - 4.5% (\$16.4 mln), Turkmenistan - 2.9% (\$10.4 mln) and Kyrgyzstan - 2.6% (\$9.6 million).

Supplies of Kazakh flour to the main importing countries on average make up 90% of total imports of these countries. Pasta market has a large scale in the world, the total export of pasta products is about \$8.7 billion. The share of Kazakh products in the market is less than 0.2% [8]. LLP "Aruana-2010" - as an important link in the grain product cluster within the framework of the state program "Roadmap-2020" the project on construction of elevator-milling complex with a processing capacity of 300 tons of grain per day is implemented.

Aruana-2010" LLP is a modern, dynamically developing enterprise, which is one of the largest flour producers in Kazakhstan, striving to become a recognized leader among producers in the market of CIS countries and Central Asian region. The elevator and mill complex "Aruana-2010" is an enterprise with a developed infrastructure: The complex has an elevator with capacity of 32000 tons of grain, truck weighing room with electronic scales with carrying capacity up to 100 tons, railway weighing room-120 tons, grain dryer, mill with processing capacity of 300 tons of

grain, finished product warehouse with capacity of 6000 tons of flour, access roads, production and technological laboratory of grain quality, mill laboratory of flour quality, administrative and household buildings, repair shops and car park.

The company "Aruana-2010" LLP is one of the leading manufacturers of flour in the market of Kazakhstan. Having high production and personnel potential, the company has set the main task to produce competitive products. The policy of "Aruana-2010" LLP in the food safety area is a part of the general strategy of the enterprise development: producing high quality and safe products based on the consumers' requirements and expectations; expansion of domestic sales markets, and increase in the volumes of deliveries to the foreign markets; development of kinds of products demanded by the consumers.

The mill complex is equipped with the newest equipment of "Gencdegirmen" (Turkey). Company "Gencdegirmen" (Turkey) offers modern complex technological solutions for milling enterprises: systems of cleaning and grinding of grain crops, automation systems, automatic selection, aerosol-transport of finished products, as well as systems of waste processing.

One of the main activities of Aruana-2010 LLP is flour production. Currently, the company produces wheat baking flour and steadily provides flour to trade and bakery enterprises. PATSHA" trademark flour is produced from high-quality grain of high protein content grown in ecologically clean fields of Kazakhstan. Our own elevator allows us to form an optimally balanced stock of grain. Due to this due to the formation of milling batches it is possible to achieve high quality of the final product. Flour obtained from such grains has high gluten content, significantly exceeding the norms of GOST. High product quality is determined by hydrothermal preparation of grain for milling. The hydrothermal treatment of the grain is carried out in three stages, which makes it possible to loosen the endosperm effectively and to achieve the necessary technological humidity. Flexible technology provides the output of products of adjustable grade and purpose, depending on the needs of customers [9].

The mill complex is fully automated, all production processes are under the control of electronic control system. It is possible to provide effective work of the enterprise only by rational use of raw materials and cost reduction by improving the technology of preparation and grinding of grain, installation of modern equip-

ment at all stages of the technological process, organization of its highly efficient operation, rational use of labor and energy resources.

Kazakhstan produces a relatively large volume of pasta products. Export of the commodity item is 20% of production, which indicates a large potential for production and increase in exports of pasta products. The volume of pasta exports has almost doubled in the last two years. The main components of pasta production are widely available in the domestic market (flour, water, other additives). Export shipments of pasta products for January-June 2020 totaled \$21.2 million, an increase of 58.2% over the same period in 2019. At the same time, there has been a positive trend in pasta exports over the past five years from \$10.6 million to \$29.1 million (174.5% growth), indicating an increase in the competitiveness of domestic products in foreign markets. From 2015 to 2019, pasta imports showed a slight decrease of 6.3%, from \$41.5 million to \$28.9 million. However, despite restrictive measures caused by quarantine measures, pasta imports for the first half of 2020 were \$17.9 million, an increase of 15.5% over the same period in 2019 (\$15.5 million).

China's pasta consumption has shown an average growth rate of 6% over the past three years, with imports growing at a rate of 9% from 2017 to 2019. However, there is a need to increase production for exports to China, given that the share of exports to China of total RoK exports is no more than 1%. Thus, 370 tons of products were exported in 2019 [10]. Given the capacity of the Chinese market and the production capabilities of RK, it is necessary to consider this market for domestic companies. With effective investment in the pasta industry there is the potential for additional capacity, while taking into account domestic consumption (domestic sales in 2019 of 153 thousand tons). Given the estimated growth of the expert community, the average growth of pasta consumption in Kazakhstan in recent years was 13%. Considering these factors, the potential of pasta production at 47% utilization, or 166 thousand tons of production, has three options for capacity reloading.

In order to enter Chinese markets, it is necessary to upgrade production capacity, expand the range of pasta products, adjust the technological process to the needs of China and strengthen support measures.

With additional capacity by 10 percent the increase in exports will be 16.5 million dollars, or an increase in exports by 56 percent, 20% capacity increase in exports will be 39.7 million dollars, or export growth of 1.37 times;

30% capacity increase in exports will be 62.8 million dollars, or export growth of 2.1 times.

In Kazakhstan, the main regions for pasta exports are Almaty (33.7%), Kostanay (13.4%) and Pavlodar (12.2%) regions. In 2019, a total of \$17.2 million was exported from these three regions. Major suppliers of pasta products are Almaty and Shymkent cities, West Kazakhstan, North Kazakhstan and Karaganda regions. Their share accounts for 36.8% of all exports, or \$10.7 million.

Analysis of the import of instant noodles for the first half of 2020 amounted to 4592 thous. USD, which is 18% higher than in the same period of 2019. According to the World Instant Noodle Association (WINA), consumption in Kazakhstan in 2019 was 250 million servings.

The main consumers of noodles are China, Indonesia, India, Japan and Vietnam, accounting for 67% of global consumption. Kazakhstan ranks 28th with a share of 0.2% of total consumption in the world. An important competitive advantage of the domestic product is that the cost of fast noodles in Kazakhstan is 60% lower than in China. At the same time, it is believed that production of fast noodles is more complicated and expensive than pasta production due to the need for large investments in production line, equipment and recruitment of highly qualified personnel.

Conclusions.

1. The flour-and-cereal industry of Kazakhstan has a high potential for development, but is currently characterized by an insufficient level of competitiveness.

2. The achievement of a high level of competitiveness is possible in the conditions of solving the problems of increasing the efficiency of agricultural structures.

3. Full recognition of domestic products in foreign markets can happen in conditions of increased participation of the state in the management of the grain product complex.

4. Programs of state regulation aimed at improving relations with partner countries will allow to expand export directions of sales and ensure the stability and security of the national economy.

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Information about author:

Yesakhmetova Lyailya Muratbekovna; PhD student; Almaty Technological University; Almaty, 050012 Tole bi str. 100, Kazakhstan; Elm.78@mail.ru; <https://orcid.org/0000-0003-3364-3021>

Автор туралы ақпарат:

Есахметова Ляйля Муратбековна; PhD докторанты; Алматы Технологиялық Университет; Алматы қ., 050012 Толе кошесі 100, Қазақстан; Elm.78@mail.ru; <https://orcid.org/0000-0003-3364-3021>

Информация об авторе:

Есахметова Ляйля Муратбековна; докторант PhD; Алматинский Технологический Университет; г.Алматы, 050012 ул.Толе би 100, Казахстан; Elm.78@mail.ru; <https://orcid.org/0000-0003-3364-3021>