



NEW BALANCE: TRENDS AND DYNAMICS OF THE DEVELOPMENT OF THE MEAT HUB IN THE CONTEXT OF THE PANDEMIC

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Annotation. *In the meat balance of Kazakhstan, the defining place belongs to beef, which cannot be replaced by other types of meat, since each of them has specific taste qualities, amino acid composition and nutritional value. However, a sharp decline in the production of beef products of cattle breeding during the years of market transformations led to a significant reduction in the consumption of beef and veal by the population against the background of a decrease in the supply of domestic meat and a significant increase in its import supplies in frozen form, mainly from far-abroad countries. As a result of increased competition between producers of certain types of meat, beef producers were not in the best economic position.*

The urgency of solving the problem of the development of the domestic meat market increases due to the loss of Kazakhstan's food security for this type of food.

The purpose of the study was to develop theoretical, methodological and methodological provisions of recommendations for the development of the market of meat products of cattle breeding in Kazakhstan.

The object of the study was agricultural producers and meat processing enterprises.

The scientific novelty is as follows: the theoretical foundations of the functioning of the market of meat and meat products as a complex and dynamically developing multifunctional production and economic system are revealed.

Key words: *meat industry of the agro-industrial complex, cattle, meat, meat products, sausage products, semi-finished products, canned food*

This study is funded by the Committee of Science of the Ministry of Education and Science of the Republic of Kazakhstan (Grant No. AP09261075 Formation of the model of the regional food hub as a horizontally integrated structure for ensuring food security (on the example of the meat cluster of Turkestan region) for 2021-2023.

Basic provisions. On the basis of the analysis and evaluation, the directions of improving the system in the context of modernization of the economy of Kazakhstan in the context of globalization are formulated; the analysis of the functioning of the market of meat products of cattle breeding, which is complicated due to a sharp reduction in state support for the industry, the discrepancy in prices for meat products of cattle breeding and the material elements of the costs of its production, the violation of economic relations between economic entities of the market, the fall in the effective demand of the population.

Introduction. The meat market, like any other market, is now undergoing changes, adapting to the new reality. Against the background of the pandemic, the world (and in particular the American) meat industry faced great difficulties: the closure of factories and production facilities due to the illness of employees, trade wars with China, and in addition, alternative meat production began to eat off a piece of profit from the general pie.



While the retail food market grew by 2.2% in 2019, the plant-based food segment increased by 11.4% (data from the Plant - based Food Association).

The largest concentration of transactions with «alternative» meat occurred in the United States, a country with a highly developed food and beverage sector. The European and Asian regions also have developed and fast-growing markets for lean meat [1].

At the moment, natural meat is the king of the category. It is estimated that on average, 30% of calories people get from meat products (chicken, beef, pork). According to CB Insights ' Industry Analyst Consensus, the global meat market could reach about \$2.7 T by 2040.

In the long run, there was a steady and steady increase in consumption, and by 2018, Americans consumed a near-record 220 pounds of red meat and poultry per capita, almost one and a half times the same figure in 1960 (167 pounds, USDA data).

Globally, the dominant livestock species are poultry, cattle (including beef and buffalo meat), pork, and to a lesser extent lamb and goat [2].

However, the balance of power has changed over the past 50 years. In 1961, poultry accounted for only 12 percent of global meat production; by 2013, it had roughly tripled to about 35 percent [3]. By comparison, the share of beef and buffalo meat in total meat production has almost halved and now stands at about 22 percent. The share of pork remained more constant at about 35-40 percent. Most of all, the production of beef decreased, and the consumption of poultry increased.

At the moment, there are several most likely scenarios for the development of the alternative meat market: this is the predominance of vegetable meat without animal proteins; meat grown in the laboratory; meat based on animal proteins (insects) and locally produced in small batches.

Materials and methods. The paper uses the methods of modeling and comparative analysis. To solve individual tasks, the methods of the «tree» of goals and expert assessments were used. The information and empirical base of the research is the normative legal acts of the regional and municipal levels; official data of the republican and regional authorities; methodological, scientific, educational and reference literature, materials of the Internet, as well as research conducted by the authors.

The methodological study is a general method of scientific knowledge-analysis and synthesis, Content-media analysis of sociography, a system-comparative method that allows us to determine the genesis, sequence and functioning of the stages of the development of a meat hub within the framework of the pandemic, the attractiveness and effectiveness of adapting foreign experience in the management of a meat hub in Kazakhstan.

Results and discussion. According to the Ministry of Agriculture of the Republic of Kazakhstan, the volume of gross agricultural output in 2020 increased by 5.6% and amounted to 6.3 trillion tenge.

Investments in fixed assets of agriculture increased by 15% and amounted to 573.2 billion tenge, in food production - by 13.5%, to 104 billion tenge. For all the main types of food, the security is 80% or more, and for some more than 100%.

For the development of animal husbandry, the collateral policy for lending to the purchase of livestock has been optimized [4]. The terms of consideration of applications for lending to farms and feedlots have been reduced [5].

Now it is possible to purchase cattle at a liquidity ratio of 1:1. At the same time, subsidies cover 15% of the pledge, and the remaining 85% is provided by the purchased livestock. The standards for conducting breeding and breeding work with breeding stock of sheep have been increased from 2500 to 4000 tenge, with commodity stock-from 1500 to 2500 tenge.



The standards for the purchase of domestic breeding stock (from 8 to 15 thousand tenge) and imported sheep stock (up to 150 thousand tenge per head), as well as a subsidy for milk production by 10 tenge, have also been increased.

To provide the population with food, a pilot project has been launched to develop a cooperative chain in the village «from the field to the counter» in Almaty, Zhambyl and Turkestan regions.

After poultry and pork, beef is the third most popular type of meat in the world. In the global volume of meat production of all types, the specific weight of cattle meat is about 21 %.

The number of cattle in the world is about one billion heads. More than 60 % of the livestock is accounted for by three countries - India, Brazil and China, Russia and Belarus-2.3 %.

In the world, the share of beef cattle accounts for 40 % of the livestock, respectively, 60 % is dairy cattle. Beef cattle production accounts for about 55 % of the world's beef production. In the United States, beef cattle account for 78% of the cattle population, in Canada-85 %, in Australia-92 %. The average slaughter weight of one head of cattle in the United States is 316 kg, in Canada-308 kg, the yield of meat per head of cattle is 115 and 117 kg, respectively. Meat cattle breeding is also developing intensively in European countries: in France, meat breeds account for 46 % of the total livestock, in Italy-24 %, in the UK-39 %, in Denmark-14 %. A number of countries have created their own breeding reproducers of beef cattle. The main counterparties in the beef market are the United States, Brazil, and China, which provide more than 40 % of global production. The share of the EAEU in world production is only 3.7 %. In the short term, China is projected to grow beef production by 1.4 %. On the one hand, stable domestic prices attract investors to the industry, on the other hand, low milk prices and reduced income in the dairy industry contribute to an increase in the slaughter of dairy herds.

In North America, production is expected to increase mainly due to the United States, where a record high of 12.1 million tons is forecast for 2020. In Australia and New Zealand, the increase in production is projected to be largely due to an increase in the slaughter weight of livestock [6]. In the EU, an increase in production is also expected, due to an increase in the slaughter of dairy cattle, which is taking place as part of the ongoing restructuring of the dairy industry. In Russia, due to the lack of profitability of the industry and as a result of the lack of investment, production is projected to decline by almost 2 % to 1.6 million tons. The highest consumption of beef per capita in Argentina – 55.5 kg, Brazil-39.3 kg and the United States-36.2 kg. There is also a high level of consumption in Australia, Bermuda, French Polynesia and Canada – 30-33 kg. The lowest beef consumption is in Liberia (0.8 kg), India (0.8 kg), the Democratic People's Republic of Korea (0.9 kg), the People's Republic of Bangladesh (1.3 kg), Ghana (1.1 kg), the Republic of Moldova (1.56 kg). In China, the world's largest producer, per capita consumption is only 5.3 kg. Over the period 2000-2013, consumption increased by only 1.3 kg.

The main beef exporters, providing 47 % of the world's supply, are India, Australia, Brazil, and the United States. Belarus ranks 13th in the ranking of exporting countries (its share in global exports is 1.7 %). In 2019, 8.9 million tons of beef were exported to the world market, which exceeded the 2015 figure by 13 %. India and Brazil demonstrate high export growth rates- by 22 % and 14%, respectively. In the short term, global beef exports are expected to increase, mainly due to these countries. However, in each of these countries, the current situation and factors affecting the prospects for production and trade development are different. According to forecasts, India will retain its leading position in the world ranking of beef exporters in the near future.

The COVID-19 pandemic has dispelled illusions about the sustainability of modern international trade and economic ties. Even within the framework of the EAEU, the situation in this area is prone to change. Therefore, the issues of food security of the domestic market, where agricultural processing enterprises play an important role, are more relevant today than ever [7].



According to the Ministry of Agriculture, at present, out of 29 types of basic food products, the level of market security for 11 types of products is 80%, for 6 types (poultry meat, sausage products, cheeses, cottage cheese, apples, sugar and fish), it is necessary to increase production and saturate the market with these products.

The import of sausage products is about 33.3 thousand tons. At the same time, 85% of these products are imported from neighboring Russia. The domestic market is provided with domestic goods only by 62%. Moreover, their quality still leaves much to be desired, which is largely due to the lack and high cost of the main raw material – meat. Another reason is the significant non-production costs of enterprises, which they bear due to the current system of trade in the country [8].

According to the representatives of the Parliament of the Republic of Kazakhstan, although the Government is taking measures to use tools to control and prevent unjustified price increases, in fact, there are many systemic factors that do not allow to effectively control the cost and protect the consumer from the exorbitant appetites of merchants, intermediaries, the market mafia and foreign suppliers of products.

Agricultural products often become 2-3 times more expensive as they move from the field to the market. Retailers raise prices by another 50-60%. In addition, the subjects of retail trade networks extort retrobonuses of up to 30% of the cost of goods in the form of additional services (sorting, advertising, market access, and other conditions). And although, in theory, all these costs should not be transferred to the cost of goods, nevertheless, this has become a common practice in our country.

According to the Ministry of Agriculture, in January – July of this year, meat of all types was produced in the country by 4% more (590 thousand tons in slaughter weight) than in the same period last year. Production of sausages increased by 21.5% (from 27,358 to 33,234 tons), canned meat – by 4.3% (from 4,298 to 4,481 tons).

Meanwhile, the consumer market is sensitive to the state of affairs in the production and distribution of raw materials. And if the lion's share of the produced volume of meat goes to the export markets in its pure form, then, accordingly, prices on the domestic market are prone to endless growth.

In this regard, the above statistics clearly do not show the main thing – qualitative changes in the domestic market. The growth rate of gross meat production in the country does not yet indicate that a significant part of it goes to processing, ensuring an increase in the workload of enterprises and saturation of the consumer market with necessary products, which in general will contribute to the stabilization of prices for meat, semi-finished products, canned and sausage products.

In Kazakhstan, the main share of beef cattle is concentrated in peasant (farm) farms – 53.2% and households-29.1%. About 17.8% of the population is concentrated in agricultural enterprises, where breeding work is mainly carried out.

According to the director of «Kubley» LLP Talgat Berekeshev, the problem of our processing enterprises is underutilization of capacities.

The workload of meat processing plants is no more than 40-45%. The main reason is the current program of the Ministry of Agriculture for productive animal husbandry, under the terms of which subsidies are directed to fattening sites, and not to industrial processing of raw materials [9].

Farmers receive subsidies only if they hand over their raised cattle to a fattening site, and not to a meat processing plant. Livestock fattening companies benefit from exports. Therefore, subsidized livestock goes through resellers outside the country – to Uzbekistan, Russia, past the processing sector.



Last week, at a Government meeting, the head of the Ministry of Agriculture presented the draft «Comprehensive Plan for saturating the domestic market with domestic products for 2021-2023», which defines a specific pool of investment projects in each priority area, including the meat industry.

As part of measures to saturate the domestic market with high-quality sausage products, it is planned to finance meat processing enterprises for revolving purposes and encourage farmers to hand over livestock for slaughter.

Currently, 9 projects are being implemented for the construction of meat processing enterprises for 103 thousand tons, which will provide the domestic market with sausage products.

In this regard, there is some uncertainty: whether the relevant direction should be for the Ministry of Industry and Infrastructure Development, or for the Ministry of Agriculture. After all, agricultural processing is nothing but an industry, the development of which the agricultural department, in fact, should not be engaged in. In the structure of the Ministry of Agriculture, there is no branch department responsible for the policy of the development of the processing industry, which puts processors in such conditions when they are left to themselves [10].

The NCE believes that for the normal development of the meat processing industry in the context of import substitution, it is necessary first of all to increase the raw material base by encouraging farmers and villagers to submit raw materials for processing.

Conclusion

In order to develop a high-quality agricultural processing industry, it is necessary to establish clear criteria for meat processors in terms of deep processing: for the production of meat and meat products with simultaneous processing of blood, offal, bones and other waste during slaughter. Due to the introduction of these criteria for the amount of subsidies at the standard of 200 tenge/kg for live or 400 tenge/kg for slaughter weight, about 8 billion tenge of subsidies will be required.

To encourage deep processing of meat, it is proposed to provide passports of investment subsidies for cost recovery (from 35% to 50%) as part of the modernization of meat processing enterprises, the main share of which falls on the purchase of the necessary technological equipment of enterprises. Many rational proposals from the business community are also available for the sale of products.

Within the framework of the formed policy of the agro-industrial complex, in order to conduct effective interaction between producers of raw materials, processing and marketing organizations, allowing to reduce consumer prices for food products of domestic production, it is proposed to develop a price mechanism. For each type of agricultural product that is subject to price regulation, it is proposed to set three different types of prices – target, threshold and intervention.

The main directions of the development of the meat industry should include: reducing production costs, increasing the specific weight of the final product, its assortment, and the level of standardization to increase the competitiveness of production. Will all this be reflected in the new state program of the agro-industrial complex? Most likely, it will. At the same time, many distortions of the meat industry are already being corrected. It is important that farmers and farmers will now have an interest in handing over livestock for processing.

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НОВЫЙ БАЛАНС: ТЕНДЕНЦИИ И ДИНАМИКА РАЗВИТИЯ МЯСНОГО ХАБА В РАМКАХ ПАНДЕМИИ

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Резюме. С учетом рассмотренных проблем актуальность вопросов, связанных с совершенствованием механизма устойчивости развития мясного хаба, значительно возросла, как возросла и потребность поиска нового методологического аппарата, направленного на адаптацию и изучение зарубежного опыта и практического внедрения его в отечественную мясную отрасль.

Ключевые слова: мясная отрасль АПК, скот, мясо, мясные продукты, колбасные изделия, полуфабрикаты, консервы.

Данное исследование финансируется Комитетом науки Министерства образования и науки Республики Казахстан (Грант № AP09261075 Формирование модели регионального продуктового хаба как горизонтально интегрированной структуры в целях обеспечения продовольственной безопасности (на примере мясного кластера Туркестанской области) на 2021-2023 гг.

ЖАҢА ТЕҢГЕРІМ: ПАНДЕМИЯ АЯСЫНДАҒЫ ЕТ ХАБЫНЫҢ ДАМУ ҮРДІСІ МЕН СЕРПІНІ

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Түйін. Қарастырылған проблемаларды ескере отырып, ет хабының тұрақты даму тетігін жетілдірумен байланысты мәселелердің өзектілігі едәуір артты, өйткені шетелдік тәжірибені бейімдеу мен зерттеуге және оны отандық ет саласына іс жүзінде енгізуге бағытталған жаңа әдістемелік аппаратты іздеу қажеттілігі артты.

Түйін сөздер: АӨК ет саласы, мал, ет, ет өнімдері, шұжық өнімдері, жартылай фабрикалар, консервілер.

Бұл зерттеуді Қазақстан Республикасы Білім және ғылым министрлігінің Ғылым комитеті қаржыландырады 2021-2023 жылдарға арналған грант №AP09261075 Азық-түлік қауіпсіздігін қамтамасыз ету мақсатында көлденең біріктірілген құрылым ретінде өңірлік азық-түлік хабының моделін қалыптастыру» (Түркістан облысының ет кластері мысалында)