MODERNIZATION OF PRODUCTION IS AN EFFECTIVE MECHANISM FOR SOLVING PROBLEMS OF AGRO-INDUSTRIAL COMPLEX

Abstract. The goal is to address the issues of modernization and diversification in agricultural sector in order to increase the level of socio-economic development of the country. The article presents domestic and foreign experience of the States which implement these transformations in enterprises for the efficient use of production resources, reduction of labor costs, and increasing income. Objectives – to show that positive directions for expanding the scope of activities in production of products by increasing its range will optimize logistics costs, reduce dependence on supplies, which causes significant material and monetary costs, and gain independence from suppliers of necessary materials and raw materials. The results confirm that in agro-industrial complex, along with specialization, an objective necessity is diversified development, i.e. diversification and reconstruction. Agricultural enterprises in the North Kazakhstan region have experience related to this strategy. In the region, one can mention successful examples of organizing flour production on farms, which contributes to meeting the demand for flour-grinding products without intermediaries between producers and consumers, directly selling them to bakery enterprises, bakeries of the republic. The livestock complex of the NKR increases production of milk and its processing products - butter, sour cream, cottage cheese, cheese, kefir and yogurt. The

Agricultural policy: mechanism of implementation
Аннотация

Цель – решение вопросов модернизации и диверсификации в аграрной сфере в целях повышения уровня социально-экономического развития страны. Представлен отечественный и зарубежный опыт государств, осуществляющих эти преобразования в приятиях для эффективного использования производственных ресурсов, уменьшения затрат на рабочую силу, увеличения доходов. Задачи – показать, что позитивные направления расширения сферы деятельности в производстве продукции за счет увеличения ее ассортимента позволяют оптимизировать затраты на логистику, сократить зависимость от поставок, которая вызывает значительные материальные и денежные затраты, получить не ограниченность от поставщиков необходимых материалов и сырья. Результаты подтверждают, что в агропромышленном комплексе, наряду со специализацией, объективной необходимостью является многоотраслевое развитие, т.е. диверсификация и реконструкция. Сельскохозяйственные предприятия Северо-Казахстанской области имеют опыт этой стратегии. В регионе можно привести успешные примеры организации в хозяйствах производства муки, что способствует удовлетворению спроса на мукомольную продукцию без посредников между производителями и потребителями, напрямую реализуя предприятиям хлебопеченной промышленности, хлебозаводам Республики. Животноводческий комплекс СКО увеличивает производство молока и продуктов его переработки – масла, сметаны, творога, сыра, кефира и йогурта. Выводы отражают, что процессы модернизации и диверсификации в АПК должны осуществляться одновременно с углублением специализированной направленности производства, увеличением межобластного и производственного обмена, который является мощной основой развития национального рынка и многоу碌дой экономики.

Key words: agro-industrial complex, modernization, diversification, specialization, agricultural enterprises, flour-grinding products, production of milk and its processing products, demand, resources.

Туийінді сөздер: агроөнеркәсіптік кешен, жаңғыру, артаратандыру, мамандандыру, ауыл шаураушылығы қасіпорындары, ұн тарту, еңімдері, сут және оны қайта еңдеу еңімдерін еңдіру, сураныс, ресурстар.

Ключевые слова: агропромышленный комплекс, модернизация, диверсификация, специализация, сельскохозяйственные предприятия, мукомольная продукция, производство молока и продуктов его переработки, спрос, ресурсы.
Introduction. Diversification of production, as shows Kazakhstan and the experience of other countries, gives the opportunity to more complete exploitation of production resources, reducing the use of seasonal labor resources. Economic, environmental and social efficiency is seen in the fact that it allows to fill the market with goods, also creates a system of competition. It gives a chance to expand the volume of production, makes the receipt of financial resources more stable, increases profits and makes it stable.

The positive aspects of diversification, in difference from its form, allows: to organize production without a significant amount of waste; to optimize the costs of logistics; to reduce dependence on supplies, which cause high material and monetary costs; to obtain greater independence from suppliers of necessary materials and raw materials for production, which create risks in a free economy of sensitive material and monetary costs. For the agricultural sector this activity brings economic benefits, which provide the basis for a more stable condition and operation of production facilities.

Diversification in the agricultural sector is logically required by the special conditions of the technological process of the branch, the specificity of biology of agriculture and the dislocation of production of processing of raw materials. This is a process of placing in one organization several productions for production of various agricultural products, which purpose is efficiency and development of stability of its financial and social position [1]. In conditions of Kazakhstan economy diversification in agrarian sector is a destruction of monopoly in trade and sale, neutralization of negative specificity of agrarian production in ecological, economic and social spheres.

Material and methods of research. Diversification of production, with all its socio-economic importance, the process is ambiguous. The main difficulty is to produce in relatively small volumes, on the basis of available production resources and at a competitive cost of production, and at high quality [2]. The process of diversification gets a special significance during the implementation of state programs, as it is desirable to develop the production of various types of products, not only agricultural production, for the continuous development of rural areas. Therefore, the development of multi-sectoral farming processes in rural areas should be coupled not only with the negative phenomena in the economy during crises, reduction of agrarian production, but also with the increase in socio-economic activity of the entire rural population, with the retention of young personnel in production [lk 2].

Agriculture is historically a multisectoral sector of the economy. Market relations develop an increase in the specialization of individual rural enterprises, regions, entire countries, but it does not limit, but expands the possibilities of diversification development. This is due to the natural conditions of farming, which is closely interconnected with the soil, differences in climate, biological and physiological factors. Even in a small individual enterprise the need to obtain a stable and higher profits, maximize profitability by increasing employment and intensification of the use of labor, direct access to markets for products without intermediaries and monopolists, requires a multi-branch organization of production.

Results and their discussion. Multi-branch economy can give conditions to improve the process of specialization due to auxiliary and additional branches.

The process of diversification allows [3]: to mobilize resources to overcome the crisis; to increase employment of the population, its income; has a positive impact on waste management; to use all opportunities of the enterprise for the development of production; allows to reduce the instability and riskiness of the operation of the enterprise; to saturate the market with goods and services; to overcome scarcity of the economy; to maintain competition; to overcome monopolism.

The need to meet the objective needs in the multisectoral organization of production are expressed at the regional level, the general social level [4]. They, in our opinion, are expressed in the formation of supply to meet individual demand, the permanent renewal of the range of goods and services, overcoming market imbalances, the development of supply and competition.

Additional reasons for the development of multisectoral production in the agroindustrial sphere are born because of the peculiarities of market relations and competition. Rural enterprises are under pressure from trade and marketing and processing companies. In this regard, adaptability to external conditions through the range of products produced is required. This allows to get to new consumer markets and other sources of cash inflows, and thus to obtain additional income.

The study of the specifics of agricultural diversification leads to the conclusion that they are divided into several directions. These directions should include:

- creation of additional branches in crop and livestock farming, the products of which are needed either for processing on the spot,
or for sale on profitable terms, including on the world market;

- organization of industries for the processing of agricultural products, such as the production of flour, cereals, butter, juices and juice-containing drinks, beer, canned food, sausages, cheese and other products from milk, and delicacies;
- creation of direct trade structures for the sale of products (fairs, kiosks, stores);
- organization of structures for rendering various services to the population, for a certain fee, such as plowing, sowing, harvesting, preparation of firewood, sale of cattle, breeding of fish for catching, etc.;
- organization of services to provide the population and other households with borrowed funds (money, commodity, production);
- construction of various social facilities to provide the population with recreation and health services, such as rest homes, sanatoriums, etc.;
- development of production on orders of hospitals, restaurants, the army, children’s institutions, as well as products of elite demand;
- creating environmentally friendly products for a wide range of consumers who care about their health.

Meanwhile, the processes of development of the multi-structure structure in the agricultural sector of the economy have their own specific difficulties. In agriculture, especially individual entrepreneurs, at this time a lot of small land and gross production, which do not have enough free profits for development, so they do not have the opportunity to obtain significant investments, and need significant credit.

Depending on the form, diversification makes it possible to organize production with little or no waste, reduce logistics costs and related losses, reduce dependence on supplies that cause high material and monetary costs, gain greater independence from suppliers of materials and raw materials necessary for production, which create risks in a free economy and sensitive material and monetary costs. For the agrarian sector this activity has economic and financial positive advantages, which implement conditions for the stable economic position of enterprises in the countryside, increases the degree of exploitation and return of capital from the production potential [5].

The process of diversification becomes especially important during the implementation of state programs, because it is desirable to develop the production of various types of products, not only agrarian production, for the continuous development of rural areas. Therefore, the development of multi-sectoral eco-
tual information about markets, in agrarian sector of North-Kazakhstan successfully adapted to market demands, provision with bread, meat procurement, vegetable oil production is developing. Agricultural enterprises buy equipment for flour production and baking bread, are engaged in organization of production and sale of products.

The opportunities for agrarian business remain even greater, just check the products for sale in retail outlets. They are of very high quality and are sold at high prices, disproving the arguments of some experts on economics, about the impossibility of small enterprises to produce goods to meet the demand of the population. Examples include such foods as smoked meat, lard, pork fat, home-made sausage, a wide range of milk products, sauerkraut and pickled cucumbers. The processes of development of the multisectoral agrarian complex, meanwhile, must go together with the deepening of specialization of productions, increase of interregional exchange and cooperation between entrepreneurs. The development of regional ties is a powerful factor of domestic market and production diversification. Social and economic decline, which is now observed in the country, is caused by the reduction of the scale of production and exchange, due to the insufficient level of specialization and diversification.

In our country, as well as in other countries with a developed market economy, it is observed that the prospects for increased specialization and growth of the scale of exchange between regions of agricultural production and food products objectively the way to improve the economic situation [1k. 7].

Both in Kazakhstan and in the United States and European countries one can see regions with sharply dedicated specialization in various products: vegetables, fruits, root crops, cereals, dairy, meat and other livestock products. This gives an effective use of economic and natural-climatic, differences in logistics, improving the quality of products, reducing costs, increasing consumption, leveling consumption by population groups and the period of the year. Kazakhstan’s economy makes little use of these factors, and there is a tendency for regions to lose their specialization. This problem is condemned by various problems, such as expensive logistics, criminal phenomena in trade, unreliable payment for products, insufficient connectivity in production and transport infrastructure.

Barter, lack of sales network in the form of regional and interregional markets, intermediaries-parasites in trade, little interest of regional authorities in the exchange are obstacles to the development of interregional exchange. But the tendency at the same time to deepening of specialization of regional economies does not cancel the processes of their diversification.

Farms and enterprises of North-Kazakhstan region have real opportunities to increase volumes of production in response to growth of demand from the population and enterprises of other oblasts for many types of products - seeds, flour, sugar, alcohol, groats, pasta, mixed fodder, meat processing products, bioethanol and rapeseed in the future. In this region the deepening of diversification of agro-industrial complex can be directed to meeting the demand for elite products - smoked meats, sausages, tenderloins, tongues, fresh meat, butter, specially smoked fat. Promising work on the collection and processing of blood, endocrine glands, which allows not only the use of by-products of basic production, but also to greatly increase income.

Especially it should be noted grain production of North-Kazakhstan region is not badly developed, it gives rather cheap and of high quality grain, such cultures as barley, millet, buckwheat, pea, rye, and of course wheat. The region is setting the basis for cluster development on the basis of the former plant "Biochem" for the production of bioethanol, revived in 2020. The technology of production of this product is based on modern methods of deep processing of grain with a minimum yield of waste production. In the intermedia restage it is production of gluten, carbon dioxide, fodder yeast [8].

Under new name LLP "BioOperations" plant produces starch, gluten for export, gluten. Opening of bioethanol production line is a stage of modernization, with total investments of 12 billion tenge, with planned production of 20 tons per year, with gradual expansion to 36 tons, thereby production will give the country 100% demand for this product. The bioethanol production line was launched at LLP «BioOperations», after a complete overhaul. This finished the last stage of installing the technological line for deep processing of wheat, the plant was supplied with modern equipment from France.

The annual processing capacity of LLP "BioOperations" will make up 300 thousand tons, the company operates with capacity of 360 thousand tons, modernization of another plant LLP "Bayrek" is going on, and the task in the medium term is to increase the share of wheat grain processing in the region to 90%.

North-Kazakhstan region has enough suitable natural conditions for development of vegetable growing and canning production
from them. Potato production is a leading branch of agricultural complex of the region, there are good soil and economic conditions for its cultivation.

At low costs there is an opportunity to get a high yield and excellent quality of this agricultural crop. Diversification in potato cultivation is seen in the development of seed production, modernization of cultivation, processing and storage technologies. Agro-industrial complex of the region has prospects of potato processing into popular consumer products - mashed potatoes and chips.

A good basis for a multi-structure of production is observed in the presence of good growing conditions and large capacities for sugar beet processing, which can be a powerful foundation for increasing the production of sugar, confectionery and other industries, which require raw materials from sugar beet.

Cattle breeding in the region is very well developed, which makes it possible to increase the production of milk as well as its products from it, such as butter, cheese, cottage cheese, sour cream, kefir, yogurt. A large company such as Maslodel is located here at the moment. Cattle breeding on milk production is characterized by high water consumption, high capacity of labor resources, capital intensity, that is why it should be increased in regions with favorable conditions and near centers with developed industry. In areas where conditions make its development difficult, production should be reduced. In areas with a lack of a sufficient number of workers, difficult logistics, small base for the provision of fodder, it is possible to develop cowless farms. In this case, the animals can be transferred to farms, individual farms, subject to reimbursement by the supply of natural products from cows, which is also possible for diversified production.

In livestock breeding in North-Kazakhstan region there is a positive growth trend in production volumes. Farms of the region have great opportunities in terms of increasing the production of such products as sausages, smoked meats, canned meat, rolls, slices, as well as in terms of utilization of waste from slaughtering animals in cattle and pig breeding. The experience that is now available, gives great hope for development.

In general the situation in the agricultural sector of the region on most farms in the interests of industry development needs to actively diversify through the construction of processing industries. But for further development a significant activity is required to find new consumers for the products both within the region and beyond its borders. Akmola oblast and Nur-Sultan city can become such markets in perspective. Quite a large number of potential consumers live there, they have stable and rather high incomes, and, consequently, solvent demand. It is important to produce such plant and animal products, which have high demand among well-to-do groups of consumers, such as: whole milk, fresh meat, cream, sour cream, yogurt, deep processing products. These products can be produced through the introduction of multi-structure nature of production.

It is possible to save sheep farms in the region by concentrating them in the best areas for their breeding, and by developing the processing of their products. Preservation of sheep breeding in the region can be achieved by concentrating it in the most favorable natural-economic conditions, as well as by processing its products in sheep farms.

Summing up, it is possible to conclude that development of multibranch production does not deny other actions on organization of production, for example, increase of concentration, integration, cooperation and specialization in AIC of North-Kazakhstan region and all Kazakhstan. In Kostanay region the sphere of agriculture is the second basic direction of regional economy, the share in gross regional product makes 11.2%, over 120 thousand people are occupied in this branch.

The region is characterized by diversification of areas and increase of the share of oil-bearing crops. In 2020, the total sown area was 5.3 million hectares, including 4.1 million hectares under grain and leguminous crops. As part of the continued diversification of the cropping pattern, oilseed crops were increa-sed to 640.0 hectares, 132.0 hectares more than in 2019. The gross harvest of grain was 4 million tons at an average yield of 10.2 cwt/ha.

It should be noted that for the production of major crops and livestock were provided with state support measures. Financing of agro-industrial complex was increased for more than 15% and amounted to 38.4 billion tenge in 2020. Processing enterprises of the region due to own manufacture provide need of the population for foodstuff, they made commodity output to 202 billion tenge with 24% growth.

Thus production of butter has increased by 19%, cheese and cottage cheese by 44%, milk and cream by 49%, sausage products by 10%, canned food by 84%, flour by 18%, groats by 27%. A feeding ground for 5 thousand cattle and breeder farm for 2.5 thousand cattle is being built in Arkalyk, a project to set up a broiler poultry farm with annual capacity of 12.5 thousand tons of poultry is being implemented in Karabalyk district of the region,
which will significantly reduce imports of these products into the region. An important project of the branch is a project in the sphere of renewable energy sources - construction of wind power plant with capacity of 50 megawatts in Kostanay region by LLP "Zhelektrik" (Kostanay region). As a result it is planned to build 16 wind generators, for which more than 18 billion tenge are allocated. There was an increase in meat production by 6.3%, milk by 1.7%, since the beginning of 2021 the export of vegetable oil increased fourfold, and by 20% - flour. Exported 800 thousand tons of grain crops, 572 thousand tons of flour.

In Turkestan region in 2020 about 220 thousand tons of products of the first, second and third crops were produced in 128 rural districts in the area of 5.2 thousand hectares of 1 999 peasant farms. On average from one hectare received a profit of 5 million tenge. If 214 thousand peasant farms are registered in the Republic, then in Turkestan region about 71 thousand agricultural formations, which is 33% of their total number, of which 65% are small peasant farms. The peasant farm "Nurjan" (rural district of LLP «Birtilek»), using advanced technologies, provides the population with vegetables and seedlings. Tomatoes, cucumbers and other crops are grown in a greenhouse on 11 hectares by drip irrigation; the grown products are supplied to Nur-Sultan, Almaty and northern regions. The development of agriculture in the regions is one of the important state priorities, and diversification is the main condition for competition.

**Conclusions.**

Diversification of production enables more rational use of production resources, stable flow of cash flow, reduced dependence on labor resources. Gives the opportunity to fill the market of agricultural raw materials, products and food, to form a better competition.

The need for the development of multi-sectoral production is composed at the regional level, in the need: the permanent updating of the goods and services, the development of supply, overcoming competition and large-scale disproportions in the economy.

The process of agroindustrial complex diversification should act together with the deepening of production specialization, increasing interregional and production exchange, which is a powerful basis for the development of the national market and multi-form economy.

Diversification of production is the most important movement in the organization of production creation, promotes deepening of specialization, development of cooperation, integration and increase of production con-centration in agroindustrial complex of regions of the country.

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Аграрлық саясат: іс жүзіне асыру механизмі