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Agriculture of Kazakhstan: State and Capacity in the International Market

The national agriculture of Kazakhstan is considered as a priority sector of the economy in the structure of the global market. The regularities of the directions of development of agriculture in the country associated with export are revealed. The following methods were used: analysis of statistical information, modeling of socio-economic processes, systemic and situational approaches associated with the adaptation of the industry to global phenomena and processes. A comparative analysis of agriculture in Kazakhstan as one of the priority sectors of the economy is given. The positive trends and results achieved in agriculture of the country, which brought the export of individual products, for example, grain, to leading positions, as well as the growth of agricultural land, increasing the yield of targeted use on the example of individual crops were evaluated. Agriculture is an exclusive sector of the economy, which was, is and will be the main type of human activity, regardless of the rapid development of urbanization, industries or innovative technologies. Therefore, the author considered the importance and role of agriculture in the development of the economy of Kazakhstan. And also, the article analyzes the development of the agro-industrial complex of the country. The development of agriculture in Kazakhstan is a priority in the strategy of economic development, which testifies to the strengthening of food security policy and the desire to occupy a prominent place in the international food market.

Key words: agricultural products, agriculture, export, industry, methods, agro-industrial complex, sector of the economy.

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Қазақстанның ауыл шаруашылығы: қазіргі жағдайы және халықаралық нарықтағы әлеуеті

Қазақстанның ұлттық ауыл шаруашылығы әлемдік нарық құрылымында экономиканың басым секторы болып саналады. Мақалада елдегі ауыл шаруашылығын дамыту бағыттарының заңдылықтары анықталды. Зерттеу барысында келесі әдістер пайдаланылды: статистикалық ақпаратты талдау, әлеуметтік-экономикалық процестерді модельдеу, саланы жаһандық құбылыстар мен процестерге бейімдеуге байланысты жүйелік және ситуациялық тәсілдер. Экономиканың басым секторларының бірі ретінде Қазақстандағы ауыл шаруашылығының салыстырмалы талдауы келтірілген. Елдің агроөнеркәсіптік кешенінде жеке өнімнің экспорты, мысалы, астықты жетекші орындарға экспорттау, сондай-ақ жеке ауыл шаруашылығы дақылдарының мысалында мақсатты пайдаланудың кірістілігін арттыру үшін ауыл шаруашылығына жарамды жерлердің өсуіне баға берілген. Ауыл шаруашылығы урбанизацияның, салалардың немесе инновациялық технологиялардың қарқынды дамуына қарамастан, адам қызметінің негізгі түрі болып табылатын және жалғасатын экономиканың айрықша секторы болып табылады. Сондықтан, автор Қазақстан экономикасын дамытуда ауыл шаруашылығының маңыздылығы мен рөлін қарастырды. Сонымен қатар, мақалада елдің агроөнеркәсіптік кешенінің дамуы талданды. Қазақстандағы ауыл шаруашылығын дамыту экономикалық даму стратегиясында басымдық болып табылады, бұл азық-түлік қауіпсіздігі саясатын нығайту және халықаралық азық-түлік нарығында көрнекті орынды иелену ниетін айғақтайды.

Түйін сөздер: ауыл шаруашылығы өнімдері, ауыл шаруашылығы, экспорт, өнеркәсіп, әдістер, агроөнеркәсіптік кешен, экономикалық сектор.

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Сельское хозяйство Казахстана: состояние и потенциал на международном рынке

Рассматривается национальное сельское хозяйство Казахстана как приоритетная отрасль экономики в структуре глобального рынка. Выявлены закономерности направлений развития сельского хозяйства страны, связанного с экспортом. Используются следующие методы: анализ статистической информации, моделирование социально-экономических процессов, системный и ситуационные подходы, связанные с адаптацией отрасли к глобальным явлениям и процессам. Дан сравнительный анализ сельского хозяйства Казахстана как одной из приоритетных отраслей экономики. Оценены положительные тенденции и результаты, достигнутые в сельском хозяйстве страны, которые вывели экспорт отдельной продукции, например, зерновых, на лидирующие позиции, а также рост земель сельскохозяйственного назначения, повышения урожайности целевого использования на примере отдельных культур. Сельское хозяйство – это исключительная отрасль экономики, которая была, есть и будет главным видом деятельности человека, вне зависимости от стремительного развития урбанизации, отраслей промышленности или инновационных технологий. Поэтому, автор рассмотрел значимость и роль сельского хозяйства в развитии экономики Казахстана. А также, в статье проводится анализ развития агропромышленного комплекса страны. Развитие сельского хозяйства в Казахстане – это приоритет в стратегии экономического развития, что свидетельствует об укреплении политики продовольственной безопасности, и стремлении занять заметное место в международном рынке продовольствия.

Ключевые слова: продукция сельского хозяйства, сельское хозяйство, экспорт, отрасль, методы, агропромышленный комплекс, сектор экономики.

Introduction

Agriculture of Kazakhstan as an industry has a high potential. Our country has a large territory, which is potentially suitable for agricultural needs. The diverse climatic conditions in the regions of the country make it possible to grow almost all the cultures of the temperate thermal belt and develop animal husbandry.

In a message to the people of Kazakhstan on October 5, 2018, President N.A. Nazarbayev noted: “The main task is to increase labor productivity and export of processed agricultural products by 2022 year. We must use the best experience in managing the industry by introducing flexible, convenient standards and attracting “gray heads” – authoritative foreign experts in the field of agriculture»(Nazarbayev, 2018).

This sector is one of the key sectors of the country’s economy and not only the level of the country’s food security, but also the social stability of the state depends entirely on the degree of its development. This industry produces vital products for society, and a large economic potential is concentrated here.

The development of agriculture promotes the development of other industries that supply the means of production and consume agricultural products as raw materials, as well as provide transportation, trade and other services.

Materials and methods.

Analysis of statistical information is the basis of scientifically based conclusions about the state and prospects of development of the national agriculture of Kazakhstan, the position of the industry relative to global competitors. The system and substance-based approaches complement the analysis of the state of the industry and are associated with adaptation to global phenomena and processes that influence the supply and demand on the world market in different directions.

Results and discussions.

Despite the insignificant share in the country’s GDP, the agriculture of Kazakhstan remains the sphere of vital activity for the majority of the population. Today, 43% of the population lives in rural areas, and the standard of living not only of those who work here, but also of those who are to some extent related to this sphere depends on the degree of development of agricultural production. The well-being of the majority of people is closely related to the level of development of agricultural production.

Kazakhstan’s agriculture has enormous potential and growth reserves. However, over the past 5 years, the share of agriculture in Kazakhstan’s GDP remained between 4.2 and 4.8 (*Stat.kz: <http://stat.gov.kz>, 2018*). Despite this, agriculture is an important

sector of the economy of Kazakhstan. Agricultural land is 214.8 million ha., including arable land – 24.8 million ha., perennial plantings – 0.2 million ha., hayfields – 4.9 million ha., deposits – 5.0 million ha., pastures – 179.9 million ha (Mominbayev J. 2011: 163). And also, according to the FAO data for 2014, Kazakhstan ranks second in terms of arable land per person (1,45ha.) (FAO,2015).

In the north, climatic conditions are conducive to the cultivation of spring wheat, oats, barley and other grain crops, and also allow the development of vegetable growing, melon growing and the cultivation of a number of industrial crops – sunflower, flaxen, etc. In the south of the republic, in the foothill zone and in the river valleys, where there is a lot of heat, under artificial irrigation, high yields of cotton, sugar beet, yellow tobacco, rice give rise to orchards and vineyards. The natural conditions of Kazakhstan, their diversity cause significant potential opportunities for the development of animal husbandry. In the Republic, sheep, horse, camel and cattle breeding are traditionally practiced.

Desert and semi-desert areas in central and southeastern parts of Kazakhstan are widely used as seasonal pastures for livestock. In the eastern and southeastern republic. Agriculture has great potential and small reserves.

As the agrarian potential of Kazakhstan develops, much attention is paid to improving the quality of the technical equipment of the agro-industrial complex. Factors responsible for the demand for modern equipment and mechanization of agriculture are changes in production technology, progressive specialization and concentration of production in developing agriculture, and the quantitative and qualitative state of equipment for agricultural equipment.

Traditional for Kazakhstan is the livestock industry. For many centuries, domestic animals (horses, sheep, cows, camels) were the basis for the “family economy” for Kazakhs. State policy in the livestock industry, carried out in the Republic of Kazakhstan, ensures a steady growth in the number of livestock and poultry, increasing their productivity, increasing livestock production, and improving the herd reproduction.

Work is underway to further increase the production of competitive livestock products in order to ensure the country’s food security and export deliveries. The development of large-scale animal husbandry infrastructure is planned, including: the construction in the republic of special feedlots for cattle and sheep, a network of slaughter houses, modern meat processing complexes; development of

production and deep processing of wool and leather. These projects are supposed to be implemented in the framework of a public-private partnership with the participation of foreign investors. Another important direction in the development of the livestock industry is the expansion of the livestock breeding sector, based on increasing the proportion of breeding livestock, developing a specialized infrastructure, and modernizing livestock farms. It is projected to increase the number of breeding farms to 500 units. With the support of the holding “KazAgro”, financing and delivery of high-quality cattle are carried out. In general, it should be noted that the volume of investment in agriculture is increasing annually. In addition to budget allocations, the share of own funds of agricultural enterprises, borrowed funds and foreign investments is increasing. The state holding “KazAgro” takes an active part in these processes, attracting external and internal investment resources to the development of the agricultural potential of Kazakhstan, providing system state support for the development of a modern, competitive agricultural and industrial complex of Kazakhstan.

The volume of gross agricultural output in 2018 in the republic amounted to 4,410.1 billion tenge, which is 3.4% higher than the 2017 level.

The increase in production was due to an increase in crop production by 3.1%, the volume of slaughter of livestock and poultry in live weight by 4.3%, the yield of raw cow milk by 3.3%, and the increase in the number of eggs produced by 9.6% (Stat.kz: <http://stat.gov.kz>, 2019).

Permanent and systemic support of the industry from the state together with favorable weather and climatic conditions made it possible to obtain an unprecedented grain harvest in 2011 – 17 centners per hectare. This figure for 2017 is 13.4 centners per hectare. 27 million tons of grain in net weight was collected (Stat.kz: <https://moa.gov.kz/ru/documents/>,2019)

From these data it can be determined that the largest position in the export of agricultural products and food products is grain and its processed products. At the same time, Kazakhstan occupies a leading position in the world ranking of exporters in the sale of flour, exporting it annually to about 3 million tons (in grain equivalent). Grain export volumes annually make up on average more than 5 million tons per year.

In 2017, 8.8 million tons of grain were exported, including 5.7 million tons in pure form, 2.1 million tons of flour in grain equivalent (Stat.kz: <http://stat.gov.kz>, 2019). Kazakhstan grain is supplied to more than 70 countries of the world. The main

buyers of Kazakhstani flour are Uzbekistan among the CIS countries, Afghanistan – among other countries of the world. Grain terminals in the ports of Kazakhstan, Azerbaijan, Iran and Latvia have been built and are operational. The construction of a railway to Iran through Turkmenistan and in the direction of China has been completed. This makes it possible to increase the export of grain and flour in the direction of Turkmenistan, Iran, the countries of the Middle East, China and through its territory to the countries of South-East Asia.

In general, it is worth noting that the export of agricultural products in Kazakhstan passed its peak in 2012 (\$ 3.4 billion), associated with a very high yield in 2011, after which it progressively decreased to \$ 2.1 billion in 2016 (Bank of Kazakhstan, 2017). The share of exports of agricultural products in total exports of the country amounted to 6%. The main exports of agricultural products are cereals, the export of which brings more than \$ 1 billion a year on average over the past 10 years, and together with the export of flour, the share of these products exceeds 60% of total agricultural exports (Nurmaganbetov K.R. 2012: 75). At the same time, there is a gradual decrease in the export of grain, and since 2015 Kazakhstan has dropped out of the top ten world exporters of grain. Other export products are also declining, following the prices on the world market, where prices for plant products have declined, while prices for beef have not changed much, but have increased for poultry meat. The decline in exports was partially offset by a decline in imports, the maximum of which was in 2012 (\$ 5.5 billion). In 2017, imports fell to \$ 3 billion, resulting in a deficit in the agro-food trade fell to a minimum of the last six years at \$ 0.9 billion (Stat.kz: <http://stat.gov.kz>, 2019).

The increasing volumes of production of local agricultural products are not yet able to meet the needs of the local market by such parameters as: volumes, range, quality. There remains a high dependence on imports of processed products: cheeses, sausages, canned meat, butter, where imports cover about 40-50% of consumption. Products of processing of plant products are minimally dependent on cereals, but a significant dependence on oil is about 30%, canned fruits and vegetables more than 80%, almost complete dependence on sugar (FAO,2015).

In the livestock industry in the late 90s of the last century, it was possible to overcome the decline in production indicators, due to which the last 10 years this industry has been characterized by positive growth dynamics both in the number of farm animals and poultry and in production. Thus, during this

period, the average annual growth of livestock and poultry, as well as animal production was about 5% (Stat.kz: <http://stat.gov.kz>, 2019).

During the years of independence of the republic in the food industry there were significant structural changes that predetermined the further course and dynamics of its development.

Multimillion-dollar investments along with state support contributed to the development of an industry processing agricultural products, and today this industry is one of the main sectors of our state's economy, ensuring food security of the country.

Considering the importance of the agro-industrial complex in ensuring the food security of the country, in recent years the volumes and directions of state support have increased significantly.

Thus, the volume of state support for the agro-industrial sector has increased over the past decade by almost 20 times and in 2017 amounted to 359.4 billion tenge (Bank of Kazakhstan, 2017).

Despite the fact that the level of agricultural support in Kazakhstan annually exceeds 1% of GDP, the sector itself either stagnates or high rates are formed due to the influence of favorable climatic conditions. At the same time, as mentioned above, the share of agriculture in the economy is below the 5% level, thus raising the question of the proportionality of such support.

At the end of 2016, the concept of a new state program of support for the agro-industrial complex for 2017-2021, which has been in operation since 2017, was formulated. Given the tense state of public finances, expenses in the new program until 2020 decreased by 1.1 trillion tenge, to 1.7 trillion tenge (2.4 trillion tenge – the total amount of expenses for 2017-2021), compared to the previous program – “Agribusiness 2020”, which in 2017-2020 gg. planned to allocate 2.8 trillion tenge (Nurmaganbetov K.R. 2012: 75)

With the exclusion of expenditures on water management, in the new program 72% of all expenditures fall on subsidies, against 56% in the previous program. Thus, the state remains committed to forms of direct agricultural support. The effectiveness of state support is questionable. If before the crisis of 2008–2009, agriculture grew by an average of 5% per year, then since 2009 it has grown by 4% on average per year with a comparable level of support. In the new program for the development of the agro-industrial complex, an attempt is made to link the allocation of subsidies to the final result.

But at the same time, we cannot refute the fact that the implementation of state support for the agricultural sector over the years of independence has

created the necessary conditions for the development of effective competitive agro-industrial production, import substitution, expanding export opportunities and raising the standard of living and welfare of the rural population.

The state supports activities aimed at increasing the genetic potential of plants and animals. In particular, up to 40% is subsidized by the cost of elite seeds purchased by rural producers, seedlings, pedigree young stock, and the seed of sires.

Crop production costs are subsidized in agriculture. In addition, higher standards of subsidies have been established for producers who use moisture and resource-saving technologies, which allows creating conditions for attracting innovative technologies to production. In particular, in grain production, those who apply modern moisture-resource-saving technologies receive subsidies at higher standards.

In the livestock industry, the cost of feed used for the production of beef, pork, poultry, milk and fine wool is partially subsidized. In addition, here all state support measures are linked to a large-scale breeding plan, i.e. only those who are engaged in artificial insemination and selection on the recommendations of scientific organizations are subsidized.

Labor resources have an important role in the development of a particular economic sector. According to statistics, at present, of the 8.5 million people employed in the economy, about 1.4 million, or 16%, are employed in agriculture. It is worth noting that the number of people employed in agriculture is rapidly decreasing, in six years since 2010, their number has decreased by more than 900 thousand, where 80% of the reduction was due to self-employed, whose number has now dropped below 1 million. The number of people employed in farms and farms in the same period fell by 35% and at the end of 2016 was a little more than 110 thousand people, which is associated with the consolidation of these farms (Ministry of Agriculture of the Republic of Kazakhstan: <https://moa.gov.kz/ru/documents>, 2019)

Low wages, lack of social guarantees (the self-employed do not make pension contributions) are the main cause of the outflow of workers from agriculture. Part of the self-employed flowed into the services sector, construction, a certain part in the formal sector.

The level of wages in agriculture continues to be one of the lowest in the economy. In 2016, wages in agriculture corresponded to 56% of wages in the economy, which indicates a slight improvement in the indicator since 2013, whereas previously it was at

50% of the average wages in the economy. This can be associated with quite good indicators of industry growth in recent years, while the economy as a whole has experienced difficulties due to falling oil prices. However, it should be noted that the share of self-employed in agriculture reaches almost 70%, a reliable estimate of the level of wages in the industry is difficult. This is influenced by shadow operations, barter, unaccounted sales of products, seasonality of work in agriculture, etc.

Investments in agriculture, as well as agricultural production itself, is characterized by high volatility. In crop production, investment growth reached 54% in 2016, in livestock production – 44%. However, in 2015, growth in crop production was less than 1%, while in animal husbandry, a decrease of 24% was observed. In previous years, similar dynamics was observed, when a good growth in one period alternates with a recession in another period. Since 2006, there is a noticeable link between growth / decline in investment and growth / decline in yields in the previous year; this relationship was not confirmed only once – in 2011, when after a weak harvest in 2010, there was a high increase in investment (State program of development of the agro-industrial complex. 20017). It seems that more uniform and targeted investments in scientifically based methods and technologies would enable to achieve stable and growing crops in crop production, since the bulk of investments is concentrated in crop production, which in 2016 accounted for more than 80% of all investments. Thus, the process of reproduction in agriculture would become sustainable and progressive. Insufficient and improper investment leads to the depreciation of fixed assets. And in turn, the depreciation of fixed assets in agriculture is at the level of 40% and tends to increase – 36% in 2010, 32% in 2000 (Stat.kz: <http://economy.gov.kz>., 2018).

Foreign investment in agriculture is virtually absent. If foreign investment forms almost a third of all investment in the economy as a whole, in the agrarian sector they rarely exceed 1%. The main obstacles include low competitiveness, poor investment climate, the lack of a market for agricultural land and a short rental period for foreign investors, which makes it impossible to assess potential investments (Kleschevsky Y.N. 2014:165).

As is known, the source of food in the modern world is almost entirely agriculture and food industry. And agriculture is a fairly specific sector of the economy, which is highly dependent on natural and climatic conditions and is very resource intensive, which leaves an imprint on its development (Per P. 2009:6) Among the complex problems of

development of the agrarian sector in the aspect of interest to us, we note that each country, due to the specifics of agriculture, can produce only a specific set of food products, and the production of others is either impossible or very expensive. Therefore, for a full and balanced diet, it is necessary to develop the international food market (Stat.kz: <http://economy.gov.kz>, 2018).

According to the studied data, we can be sure that agriculture in Kazakhstan (the agro-industrial complex) is one of the priority sectors in the strategy of the country's economic development. It is also known that in the process of transition to a market economy, the country's agriculture faced great difficulties. In turn, it is worth noting that Kazakhstan has all kinds of resources for the proper development of agriculture in the country.

In order to successfully complete agrarian reforms, we need to closely monitor the state of global food security and agricultural development trends in the leading agrarian countries of the world, which are about the same and manifest in structural changes, institutional changes, technological

innovations and economic patterns that will allow us in the foreseeable future firmly ensure the country's food security and gain a foothold in the international food markets (Elmesov, 2015).

Conclusion

In conclusion, it should be summarized that agriculture is an exclusive sector of the economy, which was, is and will be the main type of human activity, regardless of the rapid development of urbanization, industries or innovative technologies. In general, there is an objective likelihood that the agricultural sector in Kazakhstan will become a precursor of the country's economic growth, however, there are a number of pressing problems that contradict the dynamic shift in agricultural development. All these issues are facing the country's leadership, and many of them are already being resolved, but their implementation has a specific protracted nature due to the imperfection of the legal mechanisms, as well as the psychological unpreparedness of the people themselves.

References

- Agriculture of Kazakhstan. Subsidiary of the People's Bank of Kazakhstan. 2017
- AIC of Kazakhstan – Ministry of Agriculture of the Republic of Kazakhstan [Electronic resource]. URL: <https://moa.gov.kz/ru/documents/1>
- Elmesov R.E., Ondash A.O. (2015) Vvedenie v ekonomicheskuyu globalistiku: prodovolstvennyye problemy [Introduction to Economic Global Studies: Food Problem] Al-Farabi Kazakh National University Bulletin of KazNU Series of international relations and international law. Vol 1, pp. 199-206
- FAO. Kazakhstan and FAO: Partnering to achieve sustainable livelihoods and food security. Rome, Italy: FAO, 2015. 2 p.
- Grain exports – Ministry of Agriculture of the Republic of Kazakhstan [Electronic resource]. URL: <https://moa.gov.kz/ru/documents/117>.
- Kleschevsky Y.N., Kazantseva E.G. (2014) Ocenka urovnya prodovolstvennoj bezopasnosti strany [Assessment of the level of food security of the country] Al-Paris, no 3, pp. 163-169.
- Message of the President of the Republic of Kazakhstan – Leader of the Nation Nursultan Nazarbayev to the People of Kazakhstan “Strategy” Kazakhstan-2050 “: a new political course of the established state
- Ministry of National Economy of the Republic of Kazakhstan. Committee on Statistics. Official statistical information [Electronic resource]. URL: <http://stat.gov.kz/faces>
- Ministry of National Economy of the Republic of Kazakhstan Statistics Committee. Statistics of agriculture, forestry, hunting and fisheries [Electronic resource]. URL: <http://stat.gov.kz/faces>
- Ministry of Agriculture of the Republic of Kazakhstan. State program of development of the agro-industrial complex of the Republic of Kazakhstan for 2017-2021.
- Ministry of National Economy of the Republic of Kazakhstan. Committee on Statistics. Official statistical information. Labor [Electronic resource]. URL: <http://stat.gov.kz/faces>
- Ministry of National Economy of the Republic of Kazakhstan. Committee on Statistics. Official statistical information. Investment [Electronic resource]. URL: <http://stat.gov.kz>
- Mominbayev J., Serikov D. (2011) Problemy klasterizatsii i povysheniya konkurentosposobnosti produkcii pishhevoj promyshlennosti Kazakhstana [Problems of clustering and improving the competitiveness of food products of Kazakhstan] Al-Paris, no 1, pp. 162-164.
- Nurmaganbetov K.R (2012) Osnovnye priority razvitiya agropromyshlennogo kompleksa Respubliki Kazaxstan [Main priorities of development of the agro-industrial complex of the Republic of Kazakhstan] Science Bulletin of S. Seifullin Kazakh Agrotechnical University, no 2, pp. 73-75.
- Per Pinstrup-Andersen. 2009 Food security: definition and measurement Food Security, vol. 1, pp. 5-7