

Agrarian-Industrial Complex of Kazakhstan in the Conditions of Integration Processes Development

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Abstract

The article presents results of theoretical and practical studies related to the development of agrarian-industrial complex of Kazakhstan. Special emphasis is put on the analysis of modern state of agrarian-industrial complex sectors in the conditions of international economy globalization. A conclusion is drawn that agrarian sector of Kazakhstan in its present state is not in full capacity to solve the tasks put on it on provision of food security, provision of raw materials for processing industry, conquering foreign markets etc. without state support. Agrarian-industrial complex problems are also exacerbated by the development of integration processes: accession to the Customs union and commitment to become a WTO member, expansion of imported products to Kazakhstani market, with which agrarian sector of the country cannot compete at the modern development level. Considering irreversible nature of integration it is necessary to adopt agrarian economy of the country to the requirements of new competitive environment. Based on factors study that influence the state of agrarian-industrial complex, peculiarities of agrarian-industrial complex sectors, namely agriculture, the article proposes main directions for agrarian-industrial complex modernization, management improvement, solving the issues of state regulation and support of the agrarian sector.

Key words: Agrarian sector, agrarian-industrial complex, subsistence support, food security, integration, competitiveness, Customs union.

Introduction

Agrarian-industrial complex, an integral part of which is agriculture, plays a special role in ensuring food security of the country. Meanwhile the state of food security in Kazakhstan is worrisome. The State has weak control over food market, the country cannot provide subsistence support anymore independently.

Globalization processes of the world economy facilitate the development of integration processes targeted on the development of entrepreneurship, expansion of the domestic products sales market etc. However, current participation of Kazakhstan in economic unions, namely Customs union, has not brought significant benefits. The share of import is growing and the products which can be produced in Kazakhstan are imported as well. This situation is rather dangerous for the country's economy and it increases its dependency on foreign market, increasing competition both in domestic and foreign market. One of the reasons for this situation is that the food production is falling behind internal needs, agrarian economy has low efficiency, and domestic products are not competitive etc. Решение Solution of the agrarian-industrial complex problems implies large-scale modernization, technical re-equipment of the enterprises, increasing state support to the level adopted by the agreements of the Customs union, improvement of management methods and their orientation to market laws.

Materials and methods. Methodological basis of the research were fundamental works in the sphere of economic theory, micro and macroeconomics. Methods of comparative and statistic analysis are used in the research.

Results. Agrarian-industrial complex takes a special place in the structure of national economy. Subsistence support of the population, provision of the raw materials to the processing industries, people's welfare, social-economic state of rural areas and other indicators depend on the level of its development.

Agrarian-industrial complex forms main conditions of labor force reproduction, goods and services are created in the sectors of agrarian-industrial complex that are targeted at consumption and revival of labor capacities of work force that were lost in the process of production. Such purpose of agrarian-industrial complex makes it part of reproduction process and defines the status of the sector as objectively necessary prerequisite of expanded reproduction. Development level of agrarian sector and food market has always been a defining factor of economic and social-political stability in the country; therefore dynamic development of this sector of the economy is one of the main priorities of perspective social and economic policy of the state.

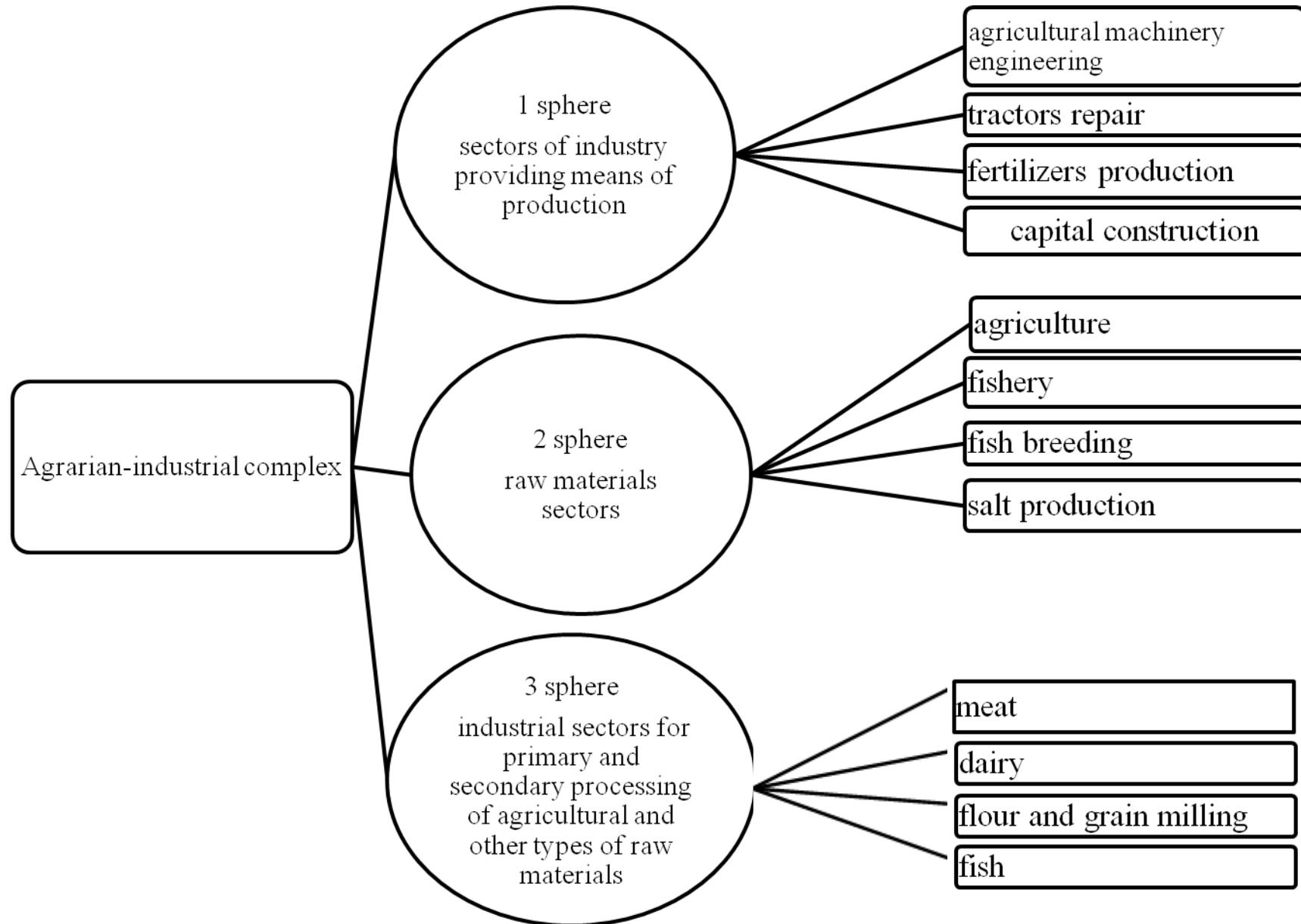
Traditionally agrarian-industrial complex of Kazakhstan has had agricultural specialization. In the Soviet period the republic was oriented towards production of grain crops and cattle breeding in the general division of labor, the products were then provided for other regions of the country. The country had 1/8 share in production of hard grain crops. Difference in natural and climatic conditions in the territory of Kazakhstan created prerequisites for production of big variety of food items of state and regional significance [1]. In the 80s of the 20th century agrarian-industrial complex was considered a multisectoral complex, which is represented by the aggregate of economic sectors, including production, storage, transport, processing and marketing of agricultural products, as well as food industry and other sectors of agrarian-industrial complex providing modern machines, equipment, information and other resources for it.

Three groups of sectors were identified in the agrarian-industrial complex. The first group included such industrial sectors as tractor and agricultural machinery engineering, tractor and agricultural machinery repair, mineral fertilizers production and chemical protection means for crops, microbiological and combined feed industry, as well as capital construction; the second group included raw materials sectors: agriculture, fishery and fish breeding in inland water reservoirs and ocean fishery, salt production; the third group included sectors of industry for primary and secondary processing of agricultural and other types of raw materials (sectors of meat, dairy, flour and grain milling and fish industry etc.). Main structural elements of agrarian-industrial complex are shown in the picture 1. Provided structure of agrarian-industrial complex can be considered classical. The core of agrarian-industrial complex is no doubt agriculture, that is why in development of the agrarian-industrial complex and economy in general strategic development plans main emphasis should be put on the development and enhancement of competitiveness of agriculture as a basis for efficient economy creation. Industrial and construction sectors, which ensure supply of production means, are connected to agriculture. Agriculture plays integral role in solution of the food security issues. In the developing economic systems the issues of food security are related to limitations of available food items, which often is transformed into such problems as poverty, malnutrition, starvation. Modern situation in the world is characterized by presence of a huge number of people suffering from hunger in the third world countries on one side and excess production of food items in the developed countries, the population of which is no more than 20% of the world population. Developing countries are not able to provide own food supplies to the population according to the physiological consumption norms, they have to import it in exchange to strategic material resources, precious metals and significant political concessions.

It is not accidental that food security is an integral part of national security of a country, because no state can reach national and economic security without satisfying the needs of the population in high quality food in the first place. President of Kazakhstan N.A. Nazarbayev has identified the problem of

ensuring food security of the country as one of the main issues of the modern development stage: «food security of the country should be ensured. In order to do that it is necessary to increase investments attraction in agriculture and food industry. Special attention should be paid to incentivizing production of the most important food items, in which the needs of the country are not satisfied» [2].

Modern state of food market in Kazakhstan is characterized by the threshold level of food dependency on the foreign market. For majority of food items in the consumer basket import comprises 40 to 60%. Only for such items as bread and bakery products Kazakhstan is providing for itself and neighboring countries [3]. Meanwhile many imported goods such as meat canned goods, pasta, butter, yoghurts, sausages, sweets, oil etc. can be produced in Kazakhstan in sufficient amount.



Picture 1 Structural elements of the agrarian-industrial complex of Kazakhstan

In 2011 gross production in agriculture was worth 2286042 million Tenge and grew compared to 2004 by 3,2 times. Gross production of horticulture in the same period grew 3,4 times, cattle breeding production - 3,1 times. The share of horticulture production in 2004 was - 56 , in 2011 – 58,5%[4]. These generally positive indicators, did not lead to creation of agrarian sector that can compete equally with the partners in the Customs union. Indicators of the cattle breeding sector which is a priority for Kazakhstan decreased slightly, therefore they did not have a big influence on the food security state. (Table 1)

Table 1. – Gross production of agriculture of Kazakhstan, million Tenge

Indicators	2004	2005	2006	2007	2008	2009	2010	2011
Total	698832,9	763843,4	853312,9	1121773,	1384188,4	1640188	1442630	2286042
Horticulture	391249,1	400217,9	432491,6	630795,7	761117,2	936849,6	662652,6	1337194
Cattle breeding	30583,8	363625,5	420821,3	490977,9	623071,2	703338,3	774105,8	942384
<i>note- compiled based on the data of the Statistics agency of the Republic of Kazakhstan 2012</i>								

At the same time there was a decrease in the share of agriculture in GDP of the country from 7,1% in 2004 to 5% in 2011. It is necessary to note that in 1990 it was 34%. Potential of agriculture is used inefficiently. The condition of lands and quality of products is worsened. There is an increase in the amount of useless lands and those that were taken out of agricultural flow. Desertification is happening in 66 % of the territory and arable lands have lost up to 1/3 of earth humus [5]. The share of land taken by grain crops stays high, production of forage crops is behind the needs of cattle breeding sector. Quality indicators of the sector stay on a low level.

Main part of agricultural producers in Kazakhstan comprises of small and medium size farms. Analysis shows that private subsidiary farming (PSF) is the predominant form in Kazakhstan’s agriculture, their share in gross agricultural production has been present for a long period of time. Such structure of agricultural production does not provide conditions for competitiveness and labor productivity enhancement in the sector. Comparison of yield in Kazakhstan with similar indicators in the G8 and Customs union countries shows significant gap. So, the yield of grain in France was – 69,9, USA– 58,4 centners per hectare, in Kazakhstan 10,1 centners per hectare, in Belarus – 35,2, Russia – 23,8 centners per hectare. The given data shows urgent need to use modernized technologies of land and water management, use of cultures that are resistant to severely continental climate, diseases, draught and pests. Labor productivity of agricultural workers is low. It is only 18% of agricultural workers’ labor productivity in developed countries. If we compare it to the USA the labor productivity level in Kazakhstan is only 1% of the US level, at the same time the number of employees in Kazakhstan in 2011 - 26,5 – is the highest among the sectors of national economy. [4].

Besides the sectors mentioned it is necessary to develop the sphere of agricultural products processing and sales of products for efficient functioning of the agrarian-industrial complex. It plays a significant role in ensuring food security of the country, because the agrarian-industrial complex should be considered as a system. In other case it will be impossible to ensure efficient development of agricultural complex in general.

In the years of economic reforms the state of processing sectors worsened significantly. If the share of food industry in the industrial production sector in 1991 was 22,3 %, in 2011 it is only 5,2% (Table 2)

Table 2 – Dynamics of structural changes in the food industry of Kazakhstan for the period of 1991-2011

	years					
	1991	1995	2000	2005	2010	2011
Share of sector's products in total volume of industrial production, %	22,3	13,0	12,1	7,9	5,7	5,2
Share of employees of the sector in the total number of employees in industrial production, %	9,5	12,0	10,3	10,8	10	10
<i>note- compiled based on the data of the Statistics agency of the Republic of Kazakhstan 2012</i>						

Such state leads to domination of import in domestic market. So the volumes of import of meat, tea, sugar, alcohol are growing. Commodity structure of Kazakhstan's export can hardly be called optimal. The biggest volume of export is still taken by two main groups of commodities: mineral products and metals. Meanwhile, according to the official data Kazakhstan satisfies its domestic needs in agricultural products with plenty to spare. In order to do the analysis of food provision to population the data are used that were developed by the Kazakhstan nutrition academy of the Ministry of education and science of the Republic of Kazakhstan that are called national (minimal) food items consumption norms by an average citizen of Kazakhstan.

Table 3 shows data on consumption of the main food items in Kazakhstan for a range of years. As it can be seen from the table, minimal consumption level for a range of products is ensured in the country. But this consumption level is significantly different from medical norms. For an analyzed period of time consumption of the most important products neither reached medical norms nor the level of 1990. So, in 1990 an average citizen of Kazakhstan consumed the following: meat– 73 kilogram, eggs - 225 pcs, potatoes - 86, milk – 311, vegetables - 120 kilogram.

Table 3. – Average per capita consumption of the main food products in Kazakhstan in comparison to medical norms

Food items	Medical consumption norms (kg/year)	Years					
		2006	2007	2008	2009	2010	2011
Meat and meat products	82,3	37,1	40,8	40,8	51	53	66
eggs, pcs.	260	114,1	120,8	119,6	129	130	150
Fish and fish products	18	8,6	9,1	9,2	9,4	9,2	9,1
Sugar	24	16,6	17,4	16,6	17,1	16,2	16,5
Oil	10	10,4	10,4	10,5	12,2	11,9	11,5
vegetables, gourds	120	71,8	73,0	72,5	76	71	88
Potatoes	95	45,2	45,5	44,8	43	42	47
Milk	400	205,1	207,8	204	210	204	228
<i>note- compiled based on the data of the Statistics agency of the Republic of Kazakhstan 2012</i>							

In development of medical nutrition norms the recommendations were decreased almost two times, in particular meat consumption was identified at the level of 41 kilogram, eggs-103 pcs. etc.[6]. However according to the scientifically based food items consumption norms for proper functioning of the body a person has to consume 82 kilogram of meat, practically every citizen of our country consumes 66 kilogram. For comparison, in Belarus the consumption of meat is 60, in Russia– 56 kilogram, every US citizen consumes 115, and European citizen – 90 kilogram of meat. Kazakhstan citizens don't consume enough of all main types of food, except bread products. Furthermore, understated consumption norms do not incentivize expansion of low market capacity, improving provision of food to population by means of domestic production and increasing entrepreneurial activity in agrarian sector.

Discussion

The given data allow to argue about low efficiency of agrarian sector. The main reasons for such state are:

- weak development of infrastructure, providing storage, preparation and processing of agricultural products;
- imperfect taxation system, in particular, high taxation burden for processing enterprises;
- large number of intermediaries and middlemen, increasing the price level for final consumers;
- weak performance of wholesale trade that does not correspond to the market requirements;
- insufficient level of effective state support;
- low productivity of grain crops and cattle;
- insufficient level of technological and technical support of agriculture, which does not allow to create conditions for efficiency improvement in the sector;
- low competitiveness of agrarian products, its incompliance with the safety and quality standards of ISO and HACCP;
- imperfectness of the customs-tariff regulation system;
- high production risks, associated with the seasonal nature of production and dependence on natural and climatic factors;
- specificity of land and biological resources use in agrarian production, making the processes of production, processing and distribution more difficult;
- insufficient implementation of the scientific and technical progress advances, which leads to slower growth of productivity in agriculture than in other sectors of economy;
- high share of small property owners, who are unable to use new technologies and raise labor productivity.

Solution of the abovementioned problems of agrarian sector requires the need to develop a more efficient national agrarian policy able to create a competitive agrarian sector. This policy, from our point of view, should be reconciled with the countries-members of the Customs union.

In the conditions of world economy globalization an important factor of reviving the agrarian sector of Kazakhstan's economy is development of integration ties. Implementation of the integration idea is seen in the creation of Customs union of Kazakhstan, Russian and Belarus, development of a Common economic space (CES). Furthermore, Kazakhstan continues preparation to WTO accession. Integration processes create necessary condition to give domestic products necessary conditions to enter the foreign markets by means of removing the barriers, primarily to the Customs union countries. They create certain advantages for business, state and population, main of which are: expansion of the sales markets, domestic market saturation with available pricewise products, improvement of subsistence provision etc. However some of the results of Customs union functioning in our opinion are questionable. So, Kazakhstan receives the least benefits from its membership in the Customs union, its share in the export is rather small (about 10%) and has a decreasing trend (for the first six months of 2012– by 14%, 9 months 2012– by 9,8%). Since the moment of Customs union creation the share of

Kazakhstan did not grow significantly. According to the opinion of analyst G. Rakhmatulina [7], in the conditions when the country has all necessary conditions for expansion of mutual trade: favorable taxation, removal of administrative barriers for business – this is a very concerning trend that requires deep study. Below are the data on correspondence of export and import in Kazakhstan:

- volume of processed agricultural products import exceeds the volume of their export for a long period of time;

- analysis of import flows shows that the share of import in domestic consumption for some food products exceeded the maximal threshold and was: for sausages - 40,2%, canned meat and by-products - 36, fish prepared and canned – 76,7, pre-packed and ready vegetable products - 80,1, oil – 36,4, dairy products – 27,6, butter -20,7, cheese and cottage cheese – 41%. For a range of products: flour, margarine and other the situation is better -0,25 and 4,5% respectively [4].

Economic reforms in the country have led to creation of mixed agrarian economy, creation of principally new conditions for entrepreneurial activity; first of all increase of competition both in domestic and foreign food markets. Domestic business has not been ready to such changes.

Let us list the problems that in our opinion hinder the development of agrarian economy:

-insufficient investments to food sector. According to the statistics the share of investments in food sector in 2001 was 4,0%, in 2011 -3,6%, i.e. in 10 years the share of investment not only did not grow, but it decreased;

- imperfect system of state regulation of the market for the products of agrarian-industrial complex. For Kazakhstan neighboring the largest world consumers and producers of food products regulation of domestic market has big significance for mitigating the threats of food security. The need for government intervention is also caused by seasonal fluctuations of agricultural products production volumes, and therefore unequal supply of food products to domestic market, which is the reason for sharp fluctuation of prices and inflation processes. If we analyze the subsidies in agriculture of Kazakhstan it is clear that they are on a low level. For comparison let us consider the volume of state subsidies for 1 hectare of arable land. According to the calculations of academician G. Kaliyev the amount of subsidies per 1 hectare in Kazakhstan is about 7 USD, in Russia– 60, in Belarus– 250, and in EU countries this indicator exceeds 350 USD per 1 hectare [44]. The ration of state subsidies in the structure of gross agricultural production in EU countries is 48%, in Japan – 71%, in USA – 28%, in Kazakhstan – 1,9%. Meanwhile, the Customs union countries have reached an agreement that the state support to agrarian sector can reach 10%. Low support level of agrarian-industrial complex of Kazakhstan is a serious detriment for increasing its efficiency and competitiveness, considering higher development level of this sphere in the Customs union countries.

- inefficient work of financial and information-marketing system. In the conditions of markets globalization the access of domestic agricultural producers for foreign market is impossible without interaction with information, consulting, marketing services of foreign countries. In this situation the role of marketing on macro level grows significantly. That is why JSC «KazAgroMarketing» has joined Agrimis system, where work more than 20 countries of the European union and became a full member of the Asian-Pacific Association of Food Marketing Agencies. The activities of the bodies, on which the funding and loans to agrarian-industrial sector depends, should be under special control. In order to increase access to loans it is necessary to expand the network of agricultural loan partnerships, increase amount of loans and types of financial services provided. An issue is raised about creation of a specialized agrarian bank.

-activities of the development institutes. With the beginning of 2000-s, when economic situation relatively stabilized, the country had opportunities for creation of the development institutes, support funds for the economy in general and some of its sectors specifically. National holdings were created with the goal of decreasing burden of the ministries and agencies and relieve them

of the uncharacteristic functions, concentrate state assets, create large integrated entities, able to compete in global markets and free the country from dependency on raw materials. Activity of the development institutes, KazAgro in particular, from our point of view, also requires improvement. The following can be noted:

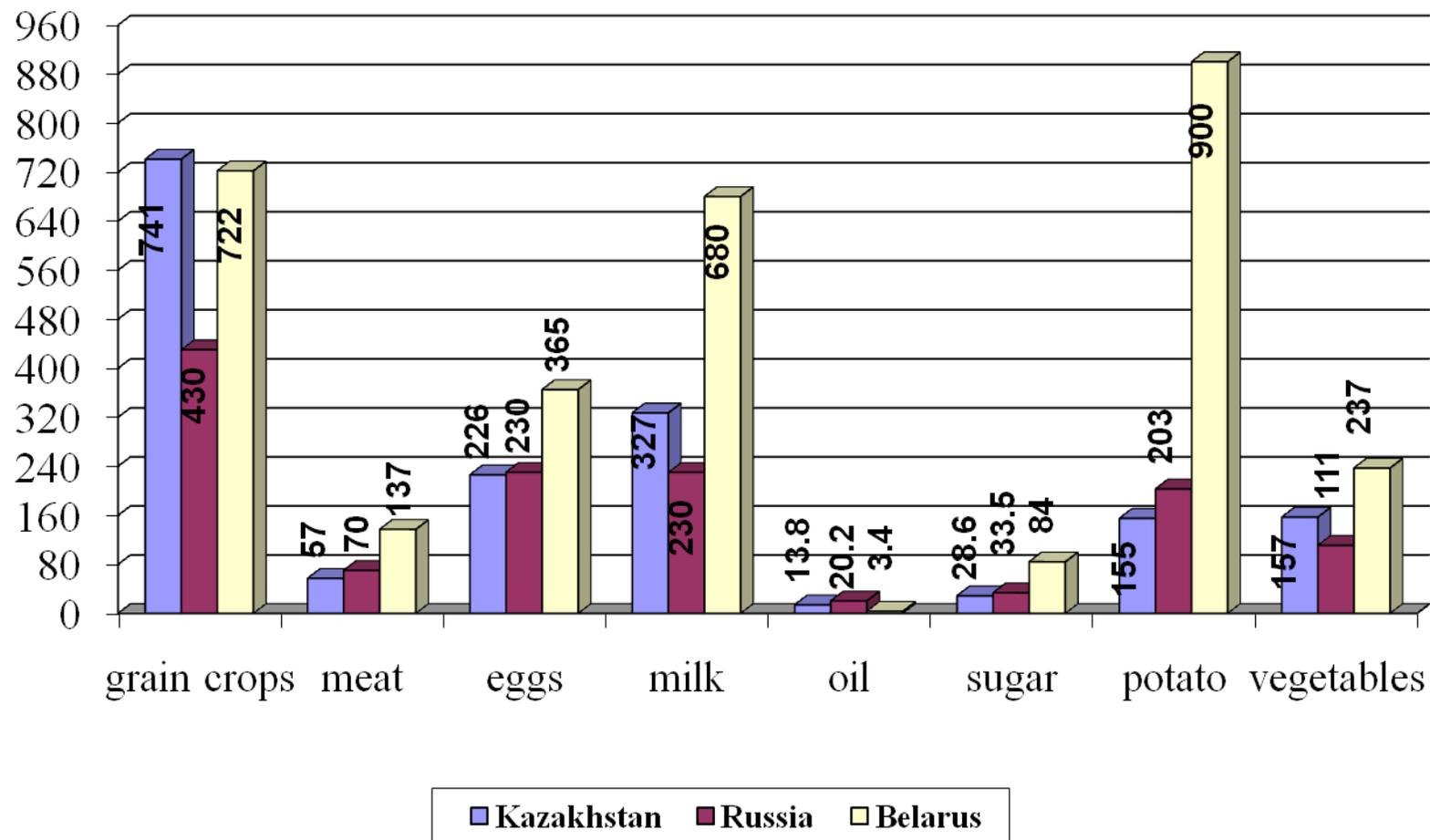
1. weak interaction of the institutes, activity of which is aimed at implementation of the same tasks (Government, Ministry of agriculture, KazAgro);
2. lack of good planning and weak use of the marketing instruments. For instance, this led to significant discrepancies between production of grain crops and capabilities of infrastructure for storage and transportation of the products.

In our opinion globalization is not accompanied by harmonization in the global community, it brings not only advantages, but adverse consequences as well. Due to different development level of various countries (like in the Customs union), it is causing problems and crises, especially in some economically weak developing countries, creating threats for domestic business. Kazakhstan's problem lies in the fact that there is not enough agricultural products produced in Kazakhstan, and due to high net cost, low quality and lack of good marketing instruments of market study it cannot compete, which leads to import expansion in domestic markets. The abovementioned is confirmed by the fact that Kazakhstan has negative balance with Customs union partners, i.e. it imports more from these countries than exports. Kazakhstan falls behind its Custom union partners in all food products production per capita except grain crops. Picture 2 shows per capita volumes of main food products production in the Customs union countries.

One of the topical issues in this situation is the issue of state regulation and support, assessment of the degree of acceptable state intervention in the activities of agrarian enterprises, directions, forms and necessary scale of state support of the agrarian sector enterprises. We think that the problem of insufficient state support of agrarian sector lies on the surface. For instance, state support in Belarus is 18%, in Russia – 8%, in Kazakhstan only 4% of the cost of agrarian products. Kazakhstan needs to increase the level of state support to 10%, the level, which was identified by the agreements of the Customs union member states. Indeed low level of agrarian-industrial complex support is a serious impediment to increase of its efficiency and competitiveness, considering higher development level of this sphere in other Customs union countries.

In our opinion in order to solve the problems of agrarian sector besides improvement of the state support system it is necessary to incentivize the processes of agricultural enterprises enlargement, implement market management methods, based on the principles of marketing and management.

Picture 1 Production of the main food items per capita in the Customs union countries in 2011(in kg) [2]



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