Development of agro-industrial complex in Kazakhstan in the context of a common economic space

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Abstract. The author analyzes the results of integrative interaction on the development of agro-industrial complexes (AIC) in the framework of the Eurasian Economic Community customs union (CU) and the common economic space (or Common Free Market Zone, CFMZ) projects and considers the evolution dynamics of the agribusiness in the Republic of Kazakhstan, as one of the active participants of the CFMZ integration project. Studies revealed that, despite the positive results in agro-industrial business, reliance of the Republic of Kazakhstan on imports of certain types of agricultural products and food remains quite high and cannot guarantee the food security of the country. Instability of world prices on agricultural products, the excess of contract prices on import over export prices for some products, the variability of natural climatic conditions affecting agricultural production, and the reduction in global fertile land lead to stiffening the competition in the global agricultural market. Under these circumstances, implementation of coordinated agricultural policy by CFMZ member countries is of particular relevance. The author suggests a number of promising areas for regional cooperation among the CU and CFMZ member countries on development of agribusiness.

[Nevmatulina Z.A. Development of agro-industrial complex in Kazakhstan in the context of a common economic space. *Life Sci J* 2014;11(12s):853-857] (ISSN:1097-8135). http://www.lifesciencesite.com. 185

Keywords: CU, CFMZ, agro-industrial business, agro-industrial complex, global agricultural market, Kazakhstan

Introduction

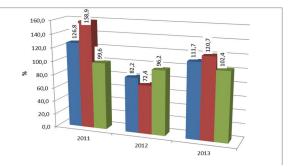
The increasing growth rate of world population and depletion of cultivated land leads to the intensification of competition in the global agricultural market. The current situation requires a coordinated agricultural policy aimed at encouraging native farmers, as well as use of the technology achievements and exchange of experiences accumulated by the CU and CFMZ member countries.

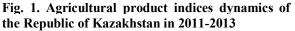
For the Republic of Kazakhstan, the issues on integrative interaction with the countries of the former Soviet Union and the Eurasian space are of great strategic importance. Regional economic integration is one of the most important factors in improving the sustainability of the national economy in the context of globalization and increasing competition in the global market [1].

The first successful example of regional economic integration between the countries of the former Soviet Union was a project of establishing the Customs Union launched in 2010.

In 2012, when major integration project on establishing the common economic space of Russia, Belarus and Kazakhstan was launched, the Customs Union has been transformed into a higher form of integration. With the signing of the Treaty on the establishment of the Eurasian Economic Union (EEU), member countries shifted gears to a qualitatively new level of integration, which holds great promise in the field of agro-industrial business. Implementation of coordinated agricultural policy will allow increasing the competitiveness of agricultural products in domestic and foreign markets, increase profitability of agriculture and provide in general food security of CFMZ member countries.

Since the establishment of the Customs Union of the Eurasian Economic Community, the development of agriculture in the Republic of Kazakhstan achieved notable results. Thus, in 2013 the average growth rate of agricultural production over a period from 2011 to 2013 amounted to 4,4% [2]. In 2013, the growth of agricultural production by 11,7% as compared to the previous year provided a positive trend of GDP (Fig. 1).





At that, the volume of livestock output amounted to 1064,3 billion Kazakh tenge (an increase amounted to 2,4% comparing with the previous year), crop output amounted to 1313,0 billion tenge (20,7%).

Note, however, that this growth was achieved "thanks" to the fact that in 2012 a decline was recorded at 17,8% due to the drought. This circumstance suggests that, despite the relatively high growth rates of certain agriculturesectors, in general, in terms of food security of the country, development of agriculture in the Republic of Kazakhstan cannot be called a reliable and sustainable.

Over three years of the integration, agricultural exports volume from the Republic of Kazakhstan increased by 25,7% from 1771,6 million USD in 2011 to 2226,1 million USD. The volume of exported agricultural products from the Republic of Kazakhstan to the CU and CFMZ countries has increased by 3,7 times [3].

At the same time, the import reliance of Kazakhstan on certain types of agricultural products and food remains quite high. In 2013 the total import of goods of agricultural origin has reached the highest level over the previous years and amounted to 2633,8 million USD [4]. The total import of agricultural products to the CU and CFMZ countries amounted to 1807.1 million USD.

In the external turnover of agricultural products, raw materials and food, import is the dominant component that is responsible for the negative trade balance. The balance of foreign trade in the country's agro-industrial market has a negative value (except of that in 2012), and following the results of 2013 is - 407,7 million USD. The balance of mutual trade of the Republic of Kazakhstan with the CU and the CFMZ countries is also negative, though in 2013 it was reduced by 122,1 million USD comparing to 2011 (Table 1).

Table 1. Foreign and mutual trade volumes of EUand CFMZ member countries

				Changein 2013/2011	
Indicator	2011	2012	2013	+/-	Growth rate, %
Total export of agricultural products , million USD	1771,6	2892,8	2226,1	454,5	125,7%
Total import of agricultural products , million USD	2311,1	2371,0	2633,8	322,7	114,0%
Balance, million USD	-539,5	521,8	-407,7	131,8	75,6%
The coverage ratio of exports to imports	0,77	1,22	0,85	0,08	-
Export of agricultural products to the CU countries, million USD	129,1	216,5	473,5	344,4	366,8%
Import of agricultural products to the CU countries, million USD	1584,8	1743,3	1807,1	222,3	114,0%
Mutual trade surplus with the CU countries, million USD	-1455,7	-1526,8	-1333,6	122,1	91,6%
The coverage ratio of export to import in mutual trade with the CU countries					
	0,08	0,12	0,26	0,18	-

At the same time, we should note the positive dynamics of the quantum of export from the Republic of Kazakhstan to the CU and CFMZ

countries in 2013. This concerns butter (an increase of 8,9 times), flour (9,8 times), cultivated cereals (9,3 times), as well as dairy products, such as buttermilk, yogurt and kefir (4,3 times).

High import reliance cannot guarantee stable saturation of the domestic market and the country's food security for several reasons [5].

First, the contract prices of import for items, such as sunflower seeds, flour, wheat, barley, cheese and cottage cheese, poultry, as well as condensed and powdered milk and cream exceed the export price (Fig. 2) [6].

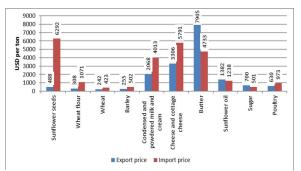


Fig. 2. Comparison of the average contract prices of export and import for basic food and agricultural raw materials in the Republic of Kazakhstan in 2013, USD per ton.

At the same time, unlike Russia and Belarus, Kazakhstan exports products, such as butter, milk and non-condensed cream at a price higher than import price.

In general, over the past decade, global food prices have increased by 1,9 times. However, since 2011 agricultural markets return to more stable conditions after a period of unusually high prices; currently, a downward trend is observed for basic food product groups (Fig. 3).

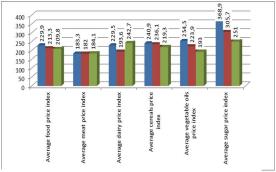


Fig. 3. Dynamics of average food price indices over 2011-2013 [7]

According to the "FAO-OECD (Food and Agricultural Organization -Organization for Economic Cooperation and Development) Agricultural Outlook" for 2013-2022 [8], on amidterm horizon, prices for crop and livestock products will increase by 15-40% due to the slowdown of production and increasing demand, including demand for biofuels.

The second reason, negatively affecting the sustainability of food provision in the Republic of Kazakhstan, is increasing intensity of the adverse impact of bioclimatic conditions (droughts, dry winds, heavy rains, hail, frost, hurricanes, etc.). This in turn leads to an imbalance between climate, water resources and agricultural production.

Since 2004, in Kazakhstan, drought happens every even year, and the average temperature over the last decade has increased by 0,36 degrees. Droughts occurred in 2010 and 2012 caused considerable damage to agriculture. Thus, for example, due to dry season in 2012, grain crop was lost on 94 hectares, and country's grain-raising farms suffered serious losses. Drought almost over the entire territory of Kazakhstan led to a decline in crop farming by 27,6% that also affected the livestock, where decline in output was 3,8%. In general, agricultural production fell by 17,4% [9].

The third reason, explaining why the import cannot guarantee sustainable food security, is the depletion of natural resources and reduction in stocks of fertile soils for agricultural production.

Every year, the world population increases by 120-130 million people. According to the UN forecast, the world population will reach 8,1 billion people by 2025, while 9,6 billion people by 2050 [10]. However, providing human with food and other biological products needs farming of an average 0.4 hectares of land per person. Suppose, agriculture had not applied intensive technologies, then providing food to the total population of the world would have required to farm about 32-34 million hectares of land annually. It's impossible to imagine such a pace of new land development, since this would lead to the depletion of all agricultural land reserves. In fact, food growth rate is two times inferior to population growth rate [11]. It is expected that the most intricate situation in terms of food supply will take place in Southeast Asia, where the growth of the main types of agricultural production has not kept pace with population growth.

Due to the increasing world population growth rate and depletion of cultivated land, it is expected that the competition in global agricultural market will be stiffened. The current situation requires a coordinated agricultural policy aimed at encouragement of native farmers, use of the technology achievements and exchange of experiences accumulated by CU and CFMZ member countries.

Main directions of integrative interaction that meet the interests of all CU and CFMZ member countries are reflected in the Concept of concerted (coordinated) agricultural policy, approved by the Resolution of the Supreme Eurasian Economic Council at the level of heads of state [12].

Despite the progress made in the integration of agro-industrial complex, the CU and CFMZ member countries are still experiencing similar problems in matters relating to the agro-industrial sector and food security. For this reason, it is necessary to continue joint efforts towards developing a coordinated agricultural policy within the Union State, as well as the Customs Union and the Common Economic Space. Moreover, the development of cooperation in the field of agribusiness with the regions of Russia and Belarus is of particular relevance.

Board of the Eurasian Economic Commission approved the draft action plan on implementation of the concept of a concerted (coordinated) agricultural policy in the Customs Union.

The plan consists of three groups of measures in terms of their objectives and tasks [13]. In the first place there are measures aimed at removing barriers in mutual trade. This field includes the development of international treaties in the field of livestock breeding and seed production. They provide for alignment in matters of breeding and exchange of breeding animals, graded identification methods for agricultural plant seeds, and mutual recognition of the relevant documents.

The second group includes measures, which involve the improvement of information and analytical work, increasing the effectiveness of existing mechanisms in the field of agricultural policy. These include sections of the plan, such as "Forecasting in the agricultural sector", "State support for the production and processing of agricultural products" and "Integrated information support of member countries on agribusiness", which include both methodological and institutional measures.

The third group includes the measures providing for joint and coordinated actions of CU and CFMZ member countries, as commercial entities, in the agricultural sector. These include the following sections of the plan: "Common agricultural market regulation", "Development of agricultural products and food exports" and "Scientific and innovative development of the agro-industrial complex". The following are the most promising areas for regional cooperation on the development of agribusiness in the CU и CFMZ member countries:

1) Increased development of cross-border cooperation between regions with similar natural climatic conditions.

This may be relevant, for example, for the North-Kazakhstan Region, as well as for Kurgan, Tyumen and Omsk regions of the Russian Federation, the East Kazakhstan Region and Altai Territory, West Kazakhstan Region and Orenburg, Astrakhan, Volgograd, Saratov and Samara regions of Russia. Within this interaction, the regions may establish joint seed reserve funds, pool resources to construct agricultural facilities, including the technical and logistics facilities, coordinate personnel training, etc.

2) Improving the sustainability of agricultural production through the development and implementation of measures aimed at adapting agricultural production to climatic fluctuations.

Droughts in 2010 and 2012 in Russia and Kazakhstan have shown the vulnerability of agriculture under the increasing impact of global warming, and especially the danger in the case, if the efforts to mitigate the adverse effects on the environment will continue to be ineffective. In addition, droughts very vividly demonstrated a lack of investment into mechanisms to help farmers and citizens in general, especially in vulnerable communities, in adapting to climate change.

Governments of CFMZ member countries should formulate and implement clear and consistent adaptation strategies in agriculture for each specific region in the country. One should consider the opportunity that at some point it may become necessary to make large-scale changes in the agricultural specialization of regions, as well as in their land-use and crop production patterns. For example, to increase winter crops in arid regions, to reconstruct the existing irrigation systems, and to develop irrigated agriculture.

In this case, the reconstruction of the irrigation system must be accompanied by measures to rationalize water use by the widespread introduction of water saving technologies (such as snow retention, reducing unproductive evaporation, and drip irrigation).

3) Creating a common market of livestock breeding and selection of agricultural plants seeds.

As of May 12, 2014, in the Republic of Kazakhstan there are 6,774 operating breeding farms. Among them only 4,696 farms meet the specified criteria [14]. The total demand for pedigree beef bulls is 2,752 heads. Poultry industry in the Republic of Kazakhstan has neither own breeding centers, nor

poultry breeding plants and hatchers for egg and meat chickens. This causes the need of acquisition of industrial livestock by breeding material of foreign origin [15]. To reduce dependence of livestock on import in the Republic of Kazakhstan, it is necessary to establish domestic pedigree breeders.

The main barriers preventing the development of the livestock industry include the lack of a unified regulatory framework for CU and CFMZ member countries on evaluation of breeding livestock and animal identification, as well as a common mechanism for the monitoring of certain diseases that constraints the competitiveness of the agricultural products in foreign markets. In crop farming there is no mutual recognition of plant varieties and means to protect them that in turn affects the import and delivery of the products in the territories of CU and CFMZ countries.

In order to eliminate the barriers in mutual trade of pedigree products, the Eurasian Economic Commission prepared in April 2014 a draft agreement on the policy in the field of livestock breeding in member countries of the Customs Union and the Common Economic Space. The main cooperation patterns in this sphere are based on maintaining the uniform register of varieties and hybrids of agricultural plants, pedigree animals and breeding achievements in the field of animal husbandry, unified framework for the assessment of animals breeding value, etc.

4) Enhancing partnership between CFMZ member countries in basic research on agrarian policy.

At present, joint research on improving the efficiency and sustainability of agricultural production is necessary. In the context of this scientific and methodological interaction. coordination of research under the new conditions will be extremely important. From the perspective of organizational measures this concerns mutual involvement of our scientists in the research councils of the economy sector of the social sciences department and the economy sector of the sciences department. agricultural From the perspective of scientific and methodological coordination, this implies a joint roundtable discussions, symposia, methodological seminars, preparation of joint publications, exchange of scientific information on relevant problems and development of joint solutions to meet the interests of all CFMZ countries.

Conclusion

In conclusion, it should be noted that currently the integration processes within the CFMZ member countries in the agricultural sector have reached a new, higher quality level of development. Activating joint work and establishing mutually beneficial cooperation will allow CFMZ countries to reduce their dependence on import, ensure food security, as well as implement the existing potential to enter the agricultural production into worldwide markets, including highly-processed products.

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8/3/2014