



CODEN [USA]: IAJ PBB

ISSN: 2349-7750

INDO AMERICAN JOURNAL OF  
**PHARMACEUTICAL SCIENCES**<http://doi.org/10.5281/zenodo.3376269>Available online at: <http://www.iajps.com>

Research Article

**TRENDS IN THE DEVELOPMENT OF LIVESTOCK INDUSTRY  
IN RUSSIA AND KAZAKHSTAN**Gulnara Dzhancharova<sup>1</sup>, Salima Baduanova<sup>2</sup>, Marina Leshcheva<sup>3</sup>, Maxim Besshaposhny<sup>1</sup>,  
and Evgeny Rusanovsky<sup>3</sup>.<sup>1</sup>Russian State Agrarian University - Moscow Timiryazev Agricultural Academy, Moscow, Russia., <sup>2</sup>National center for biotechnology, Nur-Sultan, Kazakhstan., <sup>3</sup>Stavropol State Agrarian University, Zootekhnicheskij lane, 12, Stavropol 355017, Russia.**Article Received:** June 2019**Accepted:** July 2019**Published:** August 2019**Abstract:**

*The article presents an analysis of the development of the livestock industry in Russia and Kazakhstan. Positive dynamics in the number of pigs, horses and poultry stocks for 2010 - 2018 is observed in Russia, in the Republic of Kazakhstan for this period the number of cattle, sheep, horses and poultry has increased. The paper analyzes the trend of increased government support in two countries. The article contains an analysis of the development of production of the main types of agricultural products in Russia and Kazakhstan. Particular attention is paid to the study of the competitiveness factor of the livestock industry. The results of the analysis allow us to assess the level of the coefficient of comparative advantage of agricultural products in both countries, as well as to determine the degree of influence of various factors on this coefficient. The results of the study can be used in the development of a coordinated agri-food policy in the EAEU.*

**Keywords:** government support, livestock, livestock production, export potential, dairy products, dynamics, coefficient, price, market, competitiveness, EAEU.

**Corresponding author:**

**Gulnara Dzhancharova,**  
Russian State Agrarian University – Moscow,  
Timiryazev Agricultural Academy, Moscow, Russia.

QR code



Please cite this article in press Gulnara Dzhancharova et al., *Trends In The Development Of Livestock Industry In Russia And Kazakhstan.*, Indo Am. J. P. Sci, 2019; 06(08).

**INTRODUCTION:**

Implementation of the State Program for the Development of Agriculture and Regulation of Agricultural Product Markets for the period from 2013 to 2020. has a significant impact on the development of both agriculture and the entire agro-industrial complex of Russia. There are industries in which a high degree of market saturation has been achieved. Examples include poultry meat and pork markets. At the same time, the markets of milk and beef meat do not differ in high saturation of domestic products. Markets in which, in a sense, scarce resources exist, should become a priority for the state. As such, we can call the production of milk, beef meat.

In the Republic of Kazakhstan, the main directions of export policy in the agricultural sector of the economy are formulated in the State Program for the Development of the Agro-Industrial Complex of the Republic of Kazakhstan for 2017-2021 and in the Export-2020 Export Development and Promotion Program.

The development strategy of the agricultural sector, including its agricultural sector, is to ensure a steady increase in the production of food and agricultural products that are competitive in the global agri-food market. Due to the need to concentrate resources and create favorable investment opportunities for accelerated development of the most promising livestock farming sectors in agriculture, Russia and Kazakhstan are constantly improving their specialization. The most promising sectors include livestock, pig, and poultry. These industries have gained state priority.

Livestock in the agricultural sector occupies a special place, which is due to the significant share in the production of aggregate agricultural products. Subject to the necessary measures, the most promising industry is poultry farming. An egg, by its biological and economic nature, is the cheapest source of protein. Poultry is also the cheapest type of meat product.

The situation in livestock farming is more difficult. This is a relatively conservative industry, with a long herd reproduction period, requiring significant investments, therefore, limited livestock growth is possible with a more significant increase in productivity. With an increase in domestic production of beef and milk, imports persist, and for dairy products it is mainly cheese, milk powder and, to a lesser extent, animal oil.

At present, it is advisable to use natural conditions and increase the number of livestock grazing for the available feed consumption, i.e., use cheap natural fodder without deep processing such as hay and silage.

At the moment, issues of achieving self-sufficiency in the regions with staple foods are becoming more relevant. There is an adequate need for the development of own agricultural production, which increases the standard of living and employment of the rural population. The problem of improving the provision of the country's population with biologically complete livestock products through its own production is a key one in the sustainable development of agricultural enterprises and in ensuring the country's food security. In the total volume of agricultural production, the share of livestock production is 44%.

The development of domestic animal husbandry plays an important role in providing countries with animal products. In this regard, the substantiation of the forecasted livestock production volumes is of particular importance.

**MATERIAL AND METHODS:**

In the course of the study, analytical, statistical, systemic and calculation-constructive methods were used. As a source of information, we used the data presented on the official websites of the Federal State Statistics Service of the Russian Federation [1], the Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan [2], and the EEC of the Eurasian Economic Commission [3].

**RESULTS AND DISCUSSION:**

As of 2018, the number of cattle in Russia amounted to 18294 thousand heads, which is 13% less (20671 thousand heads) than in 2010. This indicator in Kazakhstan reflects a positive increase in livestock numbers from 6095 to 6764 thousand heads (+ 11%). A similar trend in the number of cows in Russia is a decrease of 12%, in Kazakhstan an increase of 19%. The opposite situation is observed for the number of pigs in Russia for 2010-2018, the growth amounted to 34%, in Kazakhstan, in turn, this indicator decreased by 38%. There is a tendency towards an increase in the number of sheep and goats in both countries: in Russia the growth was 11%, in Kazakhstan this indicator increased by 6%. In the analysis of the dynamics of the development of the livestock industry, the poultry market is of particular interest, as the most affordable in the price segment of purchasing power. The maximum growth is observed in this market: in Russia an increase of 31%, in Kazakhstan an increase of 22%.

The rapid growth in the production and consumption of poultry meat is caused by factors such as: the integration of industrial production, the use of innovative technologies and the profitability of production. The price of poultry meat has fundamentally changed over several decades; poultry meat has moved from the price category of the premium class to the most affordable segment. At the

same time, if in Russia the production of poultry meat has reached the level of saturation and increasing exports, then Kazakhstan has a lot of work to meet domestic demand. The volume of poultry meat production per person in Russia is almost 33 kg. In Kazakhstan, this figure is almost 3 times lower and amounts to 10 kg.

Table 1: The number of livestock of the main types of farm animals (thousand heads)

Country / Years	2010	2011	2012	2013	2014	2015	2016	2017	2018
Cattle									
Russia	20671	19968	20111	19930	19564	19264	18992	18752	18294
Kazakhstan	6095	6175	5702	5690	5851	6032	6184	6413	6764
Cows (including)									
Russia	9 026	8 844	8 976	8 859	8 661	8 531	8 408	8 264	7 951
Kazakhstan	2 717	2 751	2 522	2 592	2 735	2 835	2 999	3 210	3 362
Pigs									
Russia	17 231	17 218	17 258	18 816	19 081	19 546	21 507	22 028	23 076
Kazakhstan	1326	1344	1204	1032	922	885	888	834	815
Sheep and goats									
Russia	21 986	21 820	22 858	24 180	24 337	24 711	24 881	24 844	24 389
Kazakhstan	17 370	17 988	18 092	17 633	17 561	17 915	18 016	18 184	18 329
Horses									
Russia	1 375	1 341	1 362	1 379	1 375	1 373	1 374	1 381	1 404
Kazakhstan	1 439	1 528	1 607	1 686	1 785	1 938	2 070	2 259	2 416
Poultry									
Russia	433	449	473	495	494	527	547	567	567
	703	296	388	159	959	327	195	400	200
Kazakhstan	32 687	32 781	32 870	33 474	34 173	35 020	35 633	36 910	39 900

Source: According to the Federal State Statistics Service of the Russian Federation, the Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan

From the point of view of the development of the industry, Kazakhstan is promising precisely an increase in the number of small cattle and horses, as this allows the development of pasture land. At the moment, the republic is one of the five countries in the world in terms of pasture size and ranks first in terms of security per unit of animal. Particular attention should be paid to the production of mutton, since the costs, according to experts, are equal to the costs of poultry meat production. Consequently, the republic has competitive advantages in the market of mutton at low cost and the presence of huge natural pasture feeds [3].

The growth in production of the main agricultural products, in particular livestock and poultry for slaughter, increased in Russia by 48% from 7167 to 10,585 thousand tons, the growth in Kazakhstan amounted to only 27%, from 834 to 1,058 thousand tons. The dynamics of milk yields in Russia can be described as being in the period of stagnation since a

decrease of 4% is observed. At the same time, in Kazakhstan there is an increase of this indicator by 5%. However, despite the positive dynamics in Kazakhstan, there is a lack of local production and the main supplier of dairy products is Russia. It should be noted that the production process for milk production is associated with many direct and indirect factors that have a significant impact on production, such as the level of efficiency of production processes and technological equipment in the dairy industry. Some researchers include products such as butter and dairy cheeses in livestock production indicators. It should be noted that these products belong to the category of processing, the production of this group of goods is designed for the domestic market. For example, the volume of butter production per person in Russia is 1.8 kg, in Kazakhstan this figure is 0.9 kg, in the export-oriented republic of Belarus this figure is 12.6 kg with a high share of export in production of -67%. A similar situation on the cheese market in Russia is 3.2 kg, in Kazakhstan - 1.4 kg, in Belarus - 21.1 kg, the share of

exports in production is, respectively, 5.4%, 7.7% and 75%.

Table 2: Livestock production (on all categories of farms)

Country / Years	2010	2011	2012	2013	2014	2015	2016	2017	2018
Cattle and poultry for slaughter (thousand tons in slaughter weight)									
Russia	7 167	7 520	8 090	8 544	8 925	9 565	9 899	10 319	10 585
Kazakhstan	834	838	845	871	900	931	961	1 017	1 058
Milk (thousand tons)									
Russia	31 847	31 646	31 756	30 529	30 791	30 797	30 758	30 185	30 640
Kazakhstan	5 381	5 233	4 852	4 930	5 068	5 182	5 342	5 503	5 642
Pigs									
Russia	17 231	17 218	17 258	18 816	19 081	19 546	21 507	22 028	23 076
Kazakhstan	1326	1344	1204	1032	922	885	888	834	815
Eggs (million pieces)									
Russia	40 599	41 113	42 033	41 286	41 860	42 572	43 559	44 829	44 891
Kazakhstan	3 720	3 719	3 673	3 896	4 291	4 737	4 757	5 103	5 575

Source: According to the Federal State Statistics Service of the Russian Federation, the Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan

The increase in egg production in Kazakhstan for the studied years amounted to 50% (an average of 6.2% per year), in Russia by only 11% (an average of 1.4% per year). It should be noted that the egg production

per person in Russia (about 300 eggs) is the highest compared to the countries of the Eurasian Economic Union.

Table 3: Livestock product competitiveness analysis

Products / Country	Price per kg (rub.)		Competitiveness ratio		Coefficient of comparative advantage		The share of exports in primary production (%)	
	Russia	Kazakhstan	Russia	Kazakhstan	Russia	Kazakhstan	Russia	Kazakhstan
Beef	247	195	1,08	1,08	-2,1	-0,5	1	0,2
Pork	154	125	0,54	0,75	-1,2	0	1,2	0,3
Mutton	190	248	0,51	1,56	0	0,1	0,3	0,5
Poultry meat	96	129	0,55	1,57	-0,2	-1,9	3,4	3,3
Milk	38	31	0,49	0,53	-0,3	-0,2	0,8	3,9

Source: According to the Federal State Statistics Service of the Russian Federation, the Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan

The analysis of average annual producer prices, presented in table 3, shows the types of goods with a low price. According to the results of the analysis, we can conclude that the most competitive prices in Russia are the prices of mutton and poultry. In turn, in Kazakhstan such are the prices of beef, pork and milk.

The competitiveness of agricultural products in foreign markets is determined by using the results of the analysis of the coefficient of comparative advantage.

The comparative advantage coefficient is an assessment of the competitiveness of products based

on export and import volumes, negative values indicate a weak position of both countries.

The competitiveness of the goods of a given country is determined not only by their competitive advantages, but also by a set of factors at all levels that determine the advantages of the goods of this particular country on the world market. The absence or loss of such advantages will adversely affect the sale of goods of this country. With an increase in the income level of the population, the demand for domestic products in the domestic market increases, however, expanding export volumes still remains an important task [5].

**CONCLUSION:**

The study showed that at present, the potential of the agricultural sector for all factors of its development is huge and, if favorable conditions are created, it can ensure the country's food independence and become one of the leading exporters in a number of agricultural products and food products.

In modern conditions, countries cannot completely abandon imports, since in the coming years, producers of the two countries are not able to fully ensure the level of consumption of food products of the population. Therefore, it is necessary to determine the needs of countries in different types of meat and meat products, to identify opportunities to meet these needs at the expense of their own producers.

Targeted support is needed for individual industries to achieve a balance between supply and demand. Of particular importance and relevance is the state policy of accelerated import substitution and increasing exports of agricultural products.

In animal husbandry, the main attention should be paid to the use of resource-saving technologies and the latest scientific developments, optimization of resource potential. In particular, in dairy farming, priority should be given to the introduction of innovative technologies and the improvement of breeding. The priority direction for increasing the competitiveness of beef should be the cultivation of specialized meat breeds with an average daily increase in cultivation and fattening up to 1200-1300g. And feed consumption per 1 kg of growth up to 7.5-8 feed units.

The implementation of national projects in the two countries contributed to reducing recession and increasing livestock numbers, increasing livestock production. This trend is especially pronounced in Kazakhstan and this is due to the earlier adoption of the national agricultural project. In recent years, as a result of state support for livestock breeding, there has been a tendency for livestock and poultry productivity to increase. Despite the positive trends in recent years, the general situation of beef cattle breeding remains difficult and it will take another years to reach the level of indicators in 1990. It is necessary to further concentrate the available capital on their development, which will help to create conditions for a rapid rise in the competitiveness of priority sectors [4, 6].

The share of exports in primary production indicates that some types of agricultural products are at the stage of self-sufficiency, but their level is not sufficient to

achieve a high level of export for development in the international market. In relation to Russia, these types of products include poultry and pork. For Kazakhstan, these include poultry meat and milk.

Timely awareness of strengths and weaknesses, active and focused work on forecasting and preventing possible threats to the future development of the industry are a reliable guarantee of further growth in the competitiveness and effectiveness of the agricultural sector in Russia and Kazakhstan.

**REFERENCES:**

1. Federal State Statistics Service of the Russian Federation. Official site. Available at: <http://www.gks.ru>.
2. Statistics Committee of the Ministry of National Economy of the Republic of Kazakhstan. Official site. Available at: <http://stat.gov.kz>.
3. Overview of production indicators of the agro-industrial complex of the member states of the Eurasian Economic Union for 2018. 2018. Moscow, Russia: Department of Agro-Industrial Policy of the EEC.
4. Dzhancharova G.K. Development of economic integration in the agricultural sector (based on materials from Russia and Kazakhstan): The dissertation for the degree of candidate of economic sciences. 2010. Moscow, Russia: Russian State Agrarian University.
5. Kiselev S.V. Priority improvement of state support for agriculture in modern conditions. Materials of the conference "Agricultural sector of Russia; development strategy" in the framework of the III Moscow Economic Forum, 2017: 54-60.
6. Dzhancharova G.K. The current state of the crop industry in Russia and Kazakhstan. Scientific-theoretical and production journal "Agricultural Science", 2018; # 7-8: 68-70.