

of different fertilizers on a sugar beet. The use of fertilizers on agricultural cultures in many regions of our country proves their efficiency. Effective fertilizer the system of sugar beet is not only providing of plants but also influence on appearance of organs of plants nourishing elements in a certain period of development of plant.

**Keywords:** fertilizers mineral fertilizer, phosphoric fertilizer, sugar beet, efficiency, productivity, fertility of soil.

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### THE PRESENT STATE OF DEVELOPMENT IN THE MILK INDUSTRY OF KAZAKHSTAN

#### Annotation

The article defines the present state of development in the milk industry of the Republic of Kazakhstan. The work analysis the milk yield indicators for the period from January to September 2017.

**Keywords:** milk yield, milk industry of Kazakhstan, milking cows, yield efficiency.

Kazakhstan has experienced the economic development in the recent years [1]. Moreover, the government pays the significant interest for the growth of the living standards among the population [2]. The economic system of Kazakhstan or any other state works as the complex mechanism where development of one sector of the economy may become the potential for the growth in the related fields [3]. Moreover, the state of the agriculture is one of the indicators that may illustrate the overall state of how well the economy functions [4].

The milk industry is among sectors of the agriculture that may create the background for the future growth of GDP [5].

The figure below shows the state of milk yield for cows in different provinces of Kazakhstan for January-September 2017.

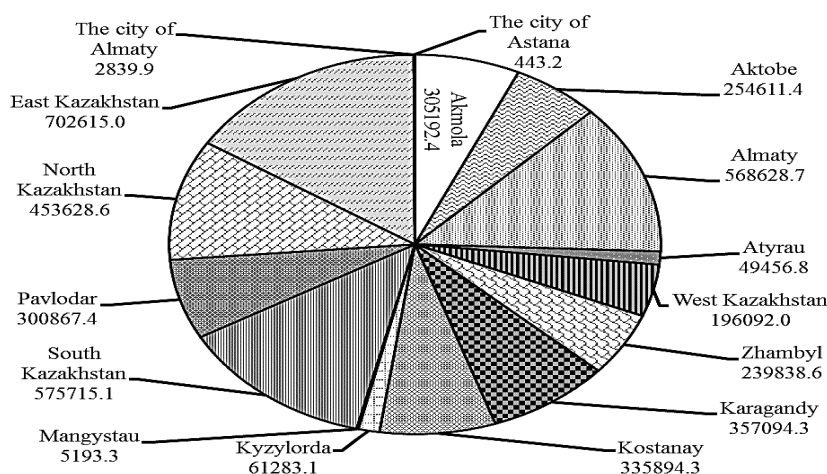


Figure 1 – The cow milk yield by provinces of the Republic of Kazakhstan from January to September 2017, tonnes.

Source - The Committee on Statistics, Ministry of National Economy of the Republic of Kazakhstan (2017) *Statistics of agriculture, forestry, hunting and fisheries*. Available: <http://stat.gov.kz/getImage?id=ESTAT236696> [Accessed: 4 October 2017].

The figure above shows that the highest indicator for cow milk yield for the period including all results between January to September 2017 belongs to East Kazakhstan province – 702615 tonnes or nearly 0.159% of the market share. The second place belongs to South Kazakhstan province - 575,715.1 which is 126899.9 tonnes.

The first quartile for the cow milk yield among provinces of the Republic of Kazakhstan for all months together between January to September 2017 is 58326.525 tonnes. Moreover, the third quartile for the same period for the milk yield given by cows is 381227.875 tonnes. Therefore, the interquartile range for all provinces of Kazakhstan while including both cities of Almaty and Astana is 322901.35 tonnes.

The figure illustrates how much the yield has changed in different provinces while comparing January-September 2017 with January-December 2016.

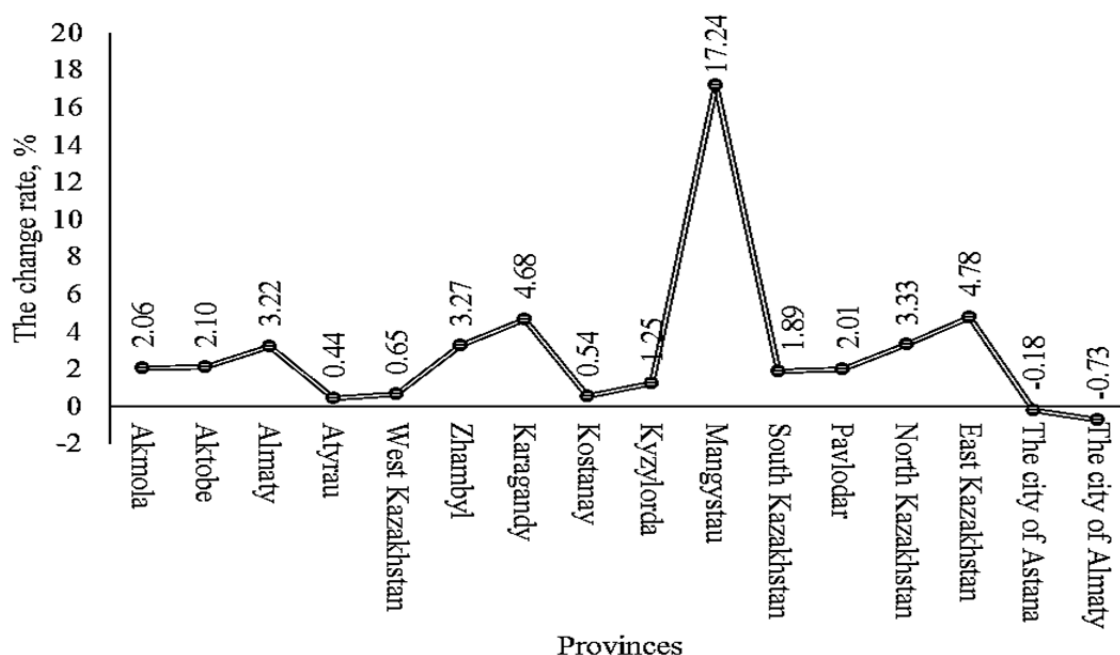


Figure 2 – The yield change rate of cow milk in different provinces of Kazakhstan between January-September period of 2017 and January-December period of 2016, %.

Source - The Committee on Statistics, Ministry of National Economy of the Republic of Kazakhstan (2017) *Statistics of agriculture, forestry, hunting and fisheries*. Available: <http://stat.gov.kz/getImage?id=ESTAT236696> [Accessed: 4 October 2017].

The figure above shows that the highest growth between January-September 2017 and January-December 2016 takes place in Mangystau province – rise by nearly 17.24% or increase by 763.5 tonnes.

There are no other provinces in the Republic of Kazakhstan that shows growth above 5% except Mangystau province. The second place for the rate of growth belongs to East Kazakhstan province – 4.78%, which is followed by Karagandy province – 4.68%.

On the other hand, the biggest decline occurs in the city of Almaty – negative change by 0.73%. Moreover, no decline is notified outside of two major cities of Kazakhstan: Almaty and Astana.

The figure below shows how much milk yield are given by cows in different provinces of Kazakhstan.

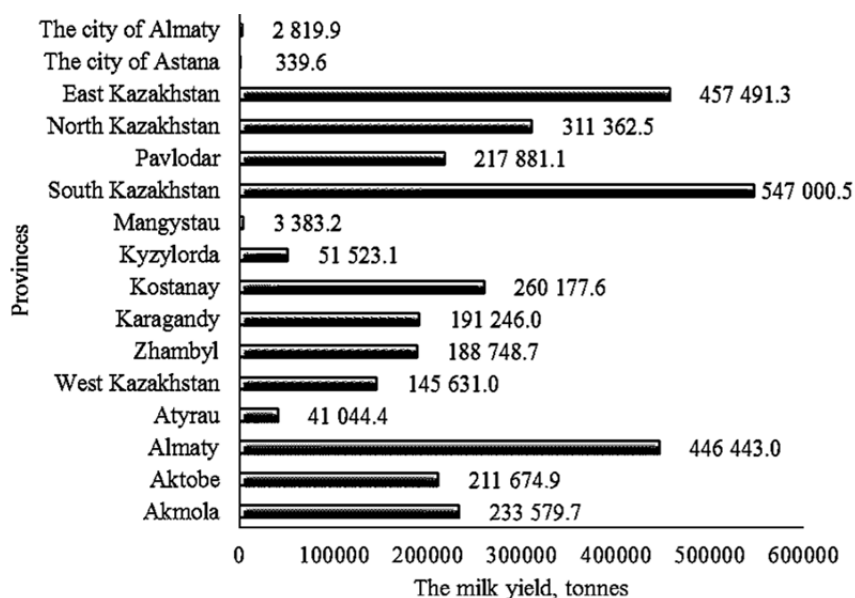


Figure 3 – The milk yield from cows according to provinces of the Republic of Kazakhstan from the private households for the period between January and September 2017, tonnes

Source - The Committee on Statistics, Ministry of National Economy of the Republic of Kazakhstan (2017) *Statistics of agriculture, forestry, hunting and fisheries*. Available: <http://stat.gov.kz/getImage?id=ESTAT236696> [Accessed: 4 October 2017].

The figure above shows that the highest indicator for the private households in terms of how high is the cow milk yield is in South Kazakhstan province – 547000.5 tonnes. The figure below shows how the same indicator changes in January-September 2017 compared to January-December 2016.

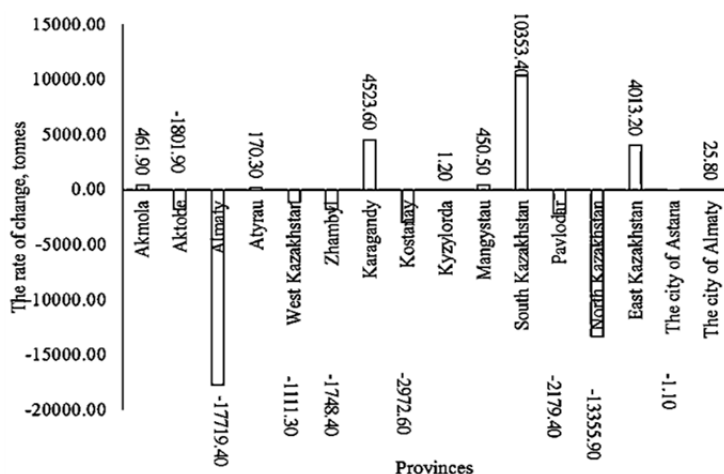


Figure 4 – The change rate for cow milk yield from Kazakhstani private households between January-September 2017 and 2016, tonnes

Source - The Committee on Statistics, Ministry of National Economy of the Republic of Kazakhstan (2017) *Statistics of agriculture, forestry, hunting and fisheries*. Available: <http://stat.gov.kz/getImage?id=ESTAT236696> [Accessed: 4 October 2017].

The figure above shows that the biggest rate of change happened in South Kazakhstan province – rise by 10353.40 tonnes or nearly increase by 0.00019%. On the other hand, the lowest rise took place in Kyzylorda province – increase by 1.20 tonnes.

The figure below shows how much milk yield on average one cow is giving in provinces of Kazakhstan.

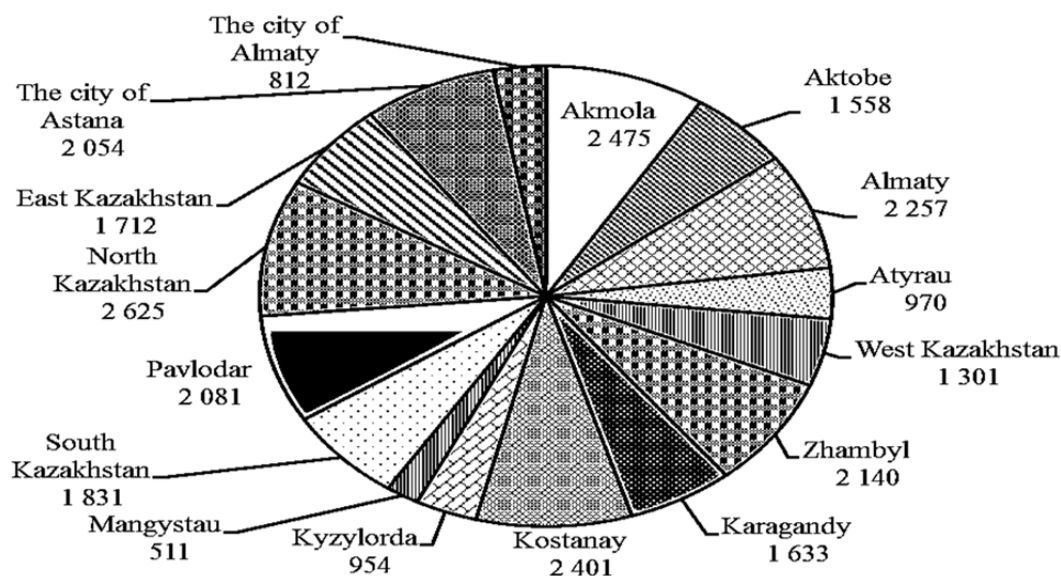


Figure 5 – The average milk yield per one milking cow in the Republic of Kazakhstan according to different provinces, kg

Source - The Committee on Statistics, Ministry of National Economy of the Republic of Kazakhstan (2017) *Statistics of agriculture, forestry, hunting and fisheries*. Available: <http://stat.gov.kz/getImage?id=ESTAT236696> [Accessed: 4 October 2017].

The figure above shows that the highest average milk yield for one milking cow including big agricultural enterprises, medium farming enterprises and the private households is in North Kazakhstan province – 2625 kg.

Figure 5 shows that the first quartile for the average level of milk yield from one milking cow for the period including all months between January to September 2017 is 1218.25 kg. Moreover, the third quartile for the same indicator for January-September 2017 is 2169.25 kg. Therefore, the interquartile range for the level of milk yield on average among different provinces of Kazakhstan equals to 951 kg.

The median indicator for the average milk yield per one milking cow among provinces is 1771.5 kg.

The figure below shows that the average level of milk yielded per one milking cow in the private households.

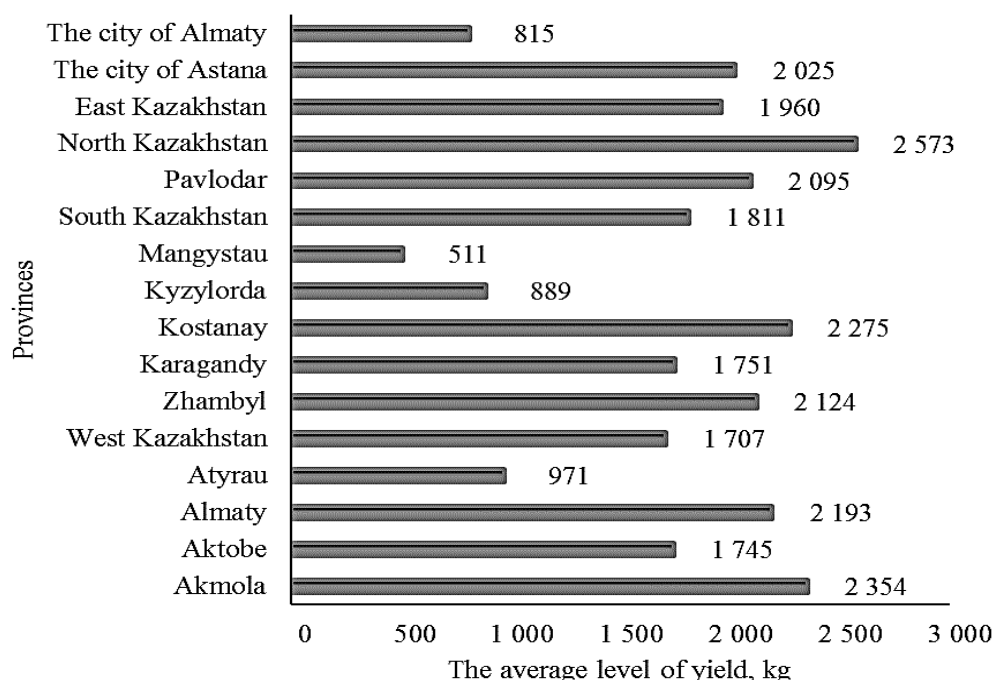


Figure 6 – The average level of yield per one milking cow for the private households in different provinces of Kazakhstan for January-September 2017, kg

Source - The Committee on Statistics, Ministry of National Economy of the Republic of Kazakhstan (2017) Statistics of agriculture, forestry, hunting and fisheries. Available: <http://stat.gov.kz/getImage?id=ESTAT236696> [Accessed: 4 October 2017].

The figure above shows that the highest indicator among the private households for January to September 2017 belongs to North Kazakhstan province – 2573 kg, which is followed by Akmola province – 2354 kg. The median value for the private households equals to 1885.5 kg.

In conclusion, East Kazakhstan province shows the highest output of milk yield while North Kazakhstan has the highest efficiency - 2625 kg on average per one milking cow. Moreover, South Kazakhstan province shows quite strong positions both in terms of the production and also efficiency level for the cow milk yield.

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## НЫНЕСННЕ СОСТОЯНИЕ РАЗВИТИЯ В МОЛОЧНОЙ ИНДУСТРИИ КАЗАХСТАНА

### **Аннотация**

Данная статья описывает нынешнее состояние развития в молочной индустрии Республики Казахстан. Данная работа анализирует индикаторы удоя молока на период с января по сентябрь 2017 г.

**Ключевые слова:** удой молока, молочная индустрия Казахстана, дойные коровы, коэффициент отдачи.

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## ҚАЗАҚСТАННЫҢ СҮТ ИНДУСТРИЯСЫНДАҒЫ ДАМУДЫҢ БҮГІНГІ КЕЗДЕГІ ЖАҒДАЙЫ

### **Аннотация**

Бұл мақала Қазақстан Республикасының сүт индустриясындағы дамудың бүгінгі кездегі жағдайын түсіндіреді. Бұл жұмыс сүт сауым көрсеткіштерін 2017 ж. қаңтардан қыркүйекке дейін мерзімі үшін талдайды.

**Кілт сөздер:** сүт сауымы, Қазақстанның сүт индустриясы, сауын сиыр, қайтарым коэффициенті.

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## ҚАЗАҚСТАНДА АЗЫҚ-ТҮЛІК ҚАУІПСІЗДІГІН ҚАМТАМАСЫЗ ЕТУДІҢ КЕЙБІР МӘСЕЛЕЛЕРІ

### **Аңдатпа**

Азық-түлік қауіпсіздігі елдің ұлттық қауіпсіздігінің құрылымдық бөлігі болуы кездейсоқ емес, өйткені ешбір мемлекет ұлттық, сонымен қатар экономикалық қауіпсіздікке, алдымен халықтың сапалы азық-түлікке деген қажеттілігін қамтамасыз етпей жете алмайды. Мақалада Қазақстан Республикасында азық-түлік қауіпсіздігін қамтамасыз ету және АӨК тұрақты дамуын қамтамасыз ету мәселелері қарастырылған.

**Кілт сөздер:** азық-түлік қауіпсіздігі, агроөнеркәсіптік кешен, азық-түлік импорты, азық-түлік экспорты, азық-түліктің физикалық қол жетімділігі, азық-түліктің экономикалық қол жетімділігі, азық-түлік нарығы, аграрлық сектор.