#### NEWS

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#### I.D. Ashimova, A.S. Belgibaeva, M.S. Zakirova

Kokshetau state university named after Sh. Uakikhanov, Kokshetau, Kazakhstan indira1989\_80@mail.ru; anagul.belgibaeva@mail.ru; maral.1978@mail.ru

# FOOD SECURITY AS AN EFFECTIVE AND SUSTAINABLE BASIS OF THE ECONOMY DEVELOPMENTOF THE COUNTRY

**Abstract.** The purpose of the research is to study the issues of food security, its role in economic development of the country. Analysis of the current state of food security in Kazakhstan.Methodology - theoretical and methodological basis of research is the work of scientific and scientific works of domestic and foreign scientists in the field of determining the role and importance of agriculture in the solution of food problems of our country.In the article, the methodologies used systematic approach to data selection, methods of economic, statistical and comparative analysis, abstract and logical methods. The analytical work of the department was carried out on the basis of the official statistics of agriculture, published on the MNE website.Originality / value - a comprehensive analysis of the current state of food security of the country was carried out and recommendations and suggestions were formulated. Conclusions - the need for production support and recycling has been identified to encourage the primary producers to increase their competitiveness. Effective solutions to issues of food security were presented to reduce the dependence on imports of agricultural producers and increase access to food for the population.

**Keywords:** food security, agriculture, crop production, livestock, agro-industrial complex, productivity, consumers, economic security, food quality, sustainable development.

Economic security of the country is characterized by the state of the various spheres of activity. One of its key components is food security, which is characterized by the food security of the country, food quality, and is the basis of effective and sustainable economic development.

Food security issues have always been a priority in national politics, and food security has been viewed as an important condition for our state's survival and independence, and its effectiveness depends on social, political and inter-ethnic stability in society. In the context of the global financial crisis that has affected the agrarian sector of the economy, there is a real threat to global food security, which requires the elaboration of new mechanisms and mechanisms of its provision at the international and national levels. The main goal of the agrarian sector development is to be one of the most important priorities of the state economic policy, directly linked to the well-being and quality of life of the population. The main study of the research.

The term "food security" was introduced in 1974 by public practice, when the UN General Assembly approved international commitments to overcome the food crisis in the world. The World Food Security Council (UNFPA) has adopted a Food Safety Policy in line with the "Food Security Policy" as a result of integrated efforts to increase the production of essential foodstuffs, improve food supply and consumption systems, and eradicate hunger with higher food self-sufficiency level as the possibility of achieving [1].

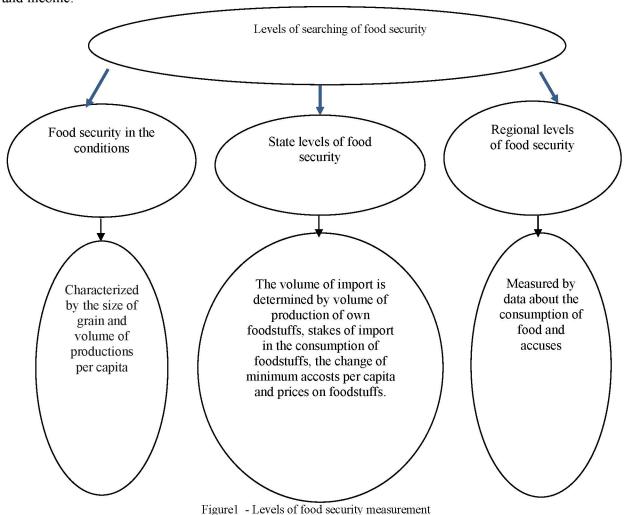
20-th century Changes in the understanding of the state of food security have been made. Food security is defined as not only the availability and sustainability of food in the global market, but also the food availability for all countries of the world to access foodstuffs and to actively and healthy. Comprehensive aspects of addressing food security issues are the main source of international support for the development of agriculture. I. Nazarenko, M. Tracy, I. G. Ushachev, E. B. Serov and so on in the works of researchers [2, P.57].

Also, it is possible to note the works of domestic scientists: G. A. Kaliev, A. A. Kaygorodtsev, V. B. Grigoruk and others a comprehensive study of the food security of the population of the country. The main objectives of food security are:

- timely prediction, detection and prevention of internal and external threats, minimizing their negative consequences, and formation of strategic funds of safe and high quality food products;
- sustainable development of domestic foodstuffs production sufficient to ensure the food independence of our country;
- implementation and support of physical and economic accessibility of foodstuffs in the volume and assortment corresponding to rational standards of food consumption for each citizen of the country;
  - food safety [3].

There are different approaches to the factors affecting the food security of the country, region and population. A. Kaygorodtsev sees inadequate protection of human, community and the country's livelihoods due to the external and internal threats of vital interests and the supply of essential foodstuffs among foodstuffs. The economic and physical accessibility of food products should be individually produced by the country, independent of the foodstuffs imports, to ensure the quality and quantity of human life, including its low-income and vulnerable groups[4].

Let us illustrate three levels of food safety measurements (Figure 1). Levels of food safety measurements. Global food security. Food security at the state level. Regional food security. It is characterized by the size of grain reserves and volume of production per capita. The volume of imports is determined by the volume of production of own food, the share of imports in the consumption of food, the change in the minimum income per capita and food prices. It is measured by data on food consumption and income.



A.Belikov and O.Matveichev are well aware that the food security of the country is a constant ability of the state and society to provide access to food for the whole population, in the quantity and quality of the active and healthy life [5].

In his researches, G.A.Kaliev pointed out: "The notion of food security in the modern world is primarily related to hunger and malnutrition. At the same time, ensuring food security is primarily the development of a public interest defense strategy that includes, first of all, maintaining social stability in society, the primary need of humankind - nutrition; prevention of dependence on imports, development of own production of food products; balancing the structure of exports and imports and establishing a reserve fund for stabilization of food supply" [6, P.5].

Thus, the concept of "food security" should be regarded as a process of providing food to the population in accordance with physiological norms from a systematic point of view. In our view, the food security of the country should be understood as the provision of guaranteed and sustainable supplies of raw materials with the required foodstuffs, taking into account all external and internal factors of the processing industry and population. Food security of the country is determined by several factors (Figure 2).

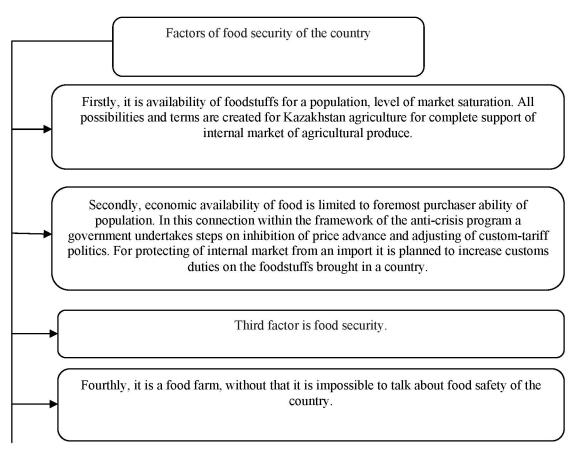


Figure 2 - Food security factors of the country

First of all, it is the availability of food for the population, i.e., the level of market saturation. All the opportunities and conditions are created for Kazakhstan's agriculture to fully support the domestic market of agricultural products. Secondly, the economic availability of food is limited primarily to the purchasing power of the population. In this regard, within the anti-crisis program, the Government is taking steps to curb price growth and to regulate customs and tariff policy. In order to protect the domestic market from import, it is planned to increase customs duties on imported food products in the country. The third factor is food security. Fourth, it is a food farm, without which it is impossible to talk about the country's food security.

In Kazakhstan in the 90-th of the XX century began to focus on food security. During the course of socio-economic reforms, the country's food security has become a real threat. The disruptive trade, financial, economic and industrial - economic relations created conditions for the production of agricultural raw materials and, consequently, food production in the country. This, in turn, led to a significant dependence on imports and a decline in food intake. All of the above have deteriorated the food security of the country.

The volume of gross agricultural output has grown substantially since the country gained independence (Table 1).

	Gross output of	including					
	agriculture, bln. tenge	crop production,	specificweigh	livestockproducts,	specificweight		
Years	in particular:	bln.tenge	t, %	bln.tenge	, %		
1993	6 045,7	3 541,1	58,6	1 907,3	31,5		
1994	113 611,3	73 330,4	64,5	33 767,5	29,7		
1995	208 919,2	107 409,5	51,4	91 681,3	43,9		
2000	404 145,9	223 503,3	55,3	178 542,8	44,2		
2005	749 077,8	389 526,6	52,0	355 786,3	47,5		
2010	1 822 074,1	895 425,2	49,1	920 777,3	50,5		
2015	3 307 009,6	1 825 236,7	55,2	1 469 923,1	44,4		
2016	3 684 393,2	2 047 580,8	55,6	1 621 541,4	44,0		
2017	4 070 916 8	2 249 166 9	55.2	1 810 914 1	44.5		

Table 1 - Volume of gross output in agriculture, mln.tenge,%

Note: [7] is based on the source.

If in 1993 the volume of agricultural production was 6,045.7 billion tenge, in 2017- 4 070 916.8 billion tenge. For example, in 2017 crop production amounted to 2 249 166.9 billion tenge, cattle breeding products - 1 810 914.1 billion tenge. Here the production of fodder, provision of quality veterinary services, preservation of healthy habitat, etc. difficulties may arise. It should be noted that in the vegetable growing still used old technique and technologies.

There are a number of advantages and perspectives of development among other branches of the national agricultural economy of Kazakhstan. The reason for this is the steady economic growth in recent years; Great resource potential of torn land and pastures; high competitiveness in the grain sector due to the wide spread; livestock breeding potential on the basis of high proportion of pastures and livestock and lower labor costs. Agrarian production indicators have improved compared to the level of 1990, but not by all branches of agriculture (Table 2).

Years	Grain crops (including rice) and leguminous crops (post- processing)	Oilseeds eeds	Among them: sunflower seeds (post- processing weight)	Potatoes	Vegetablesi nopensoil	Gardencrops	Sugar beet (post- processing weight)
1990	12,2		9,2	113,0	154,0	84,0	239,0
1995	5,0		2,9	84,0	101,0	59,0	91,0
2000	9,4	3,9	4,0	106,0	153,0	119,0	154,0
2001	12,2	5,7	6,0	133,0	166,0	127,0	173,0
2002	11,5	6,3	5,9	139,0	172,0	135,0	207,0
2003	10,8	7,1	6,8	139,0	177,0	144,5	210,4
2004	8,8	6,2	5,9	134,0	186,0	153,2	197,4
2005	10,0	7,0	6,3	150,0	196,0	159,3	209,2

Table 2 - Productivity of main agricultural crops, c / ha

2006	11,7	6,6	5,9	153,6	201,0	167,1	240,8
2007	13,3	7,2	5,9	155,8	211,0	171,7	248,9
2008	10,1	5,5	4,1	143,7	204,0	158,9	204,3
2009	12,6	6,5	5,7	160,0	218,7	161,1	182,9
2010	8,0	5,0	4,4	143,0	214,4	177,0	174,3
2011	16,9	6,7	4,6	167,2	222,9	186,1	188,2
2012	8,6	6,1	5,9	165,9	234,0	206,8	168,2
2013	11,6	8,0	7,0	181,5	238,7	212,4	267,7
2014	11,7	7,8	6,7	184,3	243,0	217,1	240,6
2015	12,7	8,1	7,6	185,5	245,8	221,0	232,5
2016	13,5	9,6	9,3	190,4	250,0	221,4	285,5
2017	13,4	9,7	10,2	194,2	253,7	224,2	274,4

Note: [7] is based on the source.

From 1990 to 2017, Kazakhstan has seen increasing yields of major crops. For example, during the analyzed period the productivity of cereal crops was 1.2 c / hectare, oilseeds productivity was 5.8 c / ha, potato yield was 81.2 c / hectare, vegetable yield was 99.7 c / hectare, yield of crops was 140.2 c / hectare, yield of sugar beet increased by 35.4 c / hectare (Table 2).

It is worth noting that the independence of the country did not achieve significant results in the years to improve the productivity of agricultural crops. During those years, the technology of vegetable growing in the greenhouse was well developed and began to use agricultural land and fields qualitatively. However, the lack of an innovative approach to the formation and development of new agricultural production, in particular, their equipment and technology introduction, provision of qualified personnel significantly reduces the performance of the financial sector.

Especially worrying that the country's livestock breeding has been deprived of its position in recent years and cannot provide the population with the fullest possible amount of produce (Table 3, Table 4).

Table 3 - Production of basic types of products of stock-raising

Years	Meat (in live weight), thousand tons	Growthrate,%	Meat (in slaughter), thousand tons	Growthrate,%	Milk, thousandtons	Growthrate,%
1990	2 633,7	×	1 559,6	-	5 641,6	-
1995	1 773,8	67,3	984,8	63,1	4 619,1	81,9
2000	1 054,1	40,0	569,4	36,5	3 730,2	66,1
2001	1 054,2	40,0	585,1	37,5	3 922,9	69,5
2002	1 080,7	41,0	595,8	38,2	4 109,8	72,8
2003	1 127,8	42,8	613,7	39,3	4 316,7	76,5
2004	1 200,1	45,6	654,3	41,9	4 556,8	80,8
2005	1 252,0	47,5	675,9	43,3	4 749,2	84,2
2006	1 327,3	50,4	724,5	46,4	4 926,0	87,3
2007	1 381,6	52,5	752,0	48,2	5 073,2	89,9
2008	1 433,8	54,4	778,5	49,9	5 198,0	92,1
2009	1 453,0	55,2	794,1	50,9	5 303,9	94,0
2010	1 501,2	56,9	834,4	53,5	5 381,2	95,4
2011	1 511,5	57,4	838,1	53,7	5 232,5	92,7
2012	1 509,4	57,3	844,7	54,2	4 851,6	85,9
2013	1 548,7	58,8	871,0	55,8	4 930,3	87,4
2014	1 602,5	60,8	900,2	57,7	5 067,9	89,8
2015	1 651,1	62,7	931,0	59,7	5 182,4	91,9
2016	1 702,0	64,6	960,7	61,6	5 341,6	94,7
2017	1 794,4	68,1	1 017,6	65,2	5 503,4	97,5

Note: [7] is based on the source.

If in 1990 meat (in live weight) was 2633,7 thousand tons, in 2017 it is 68,1% (1794,4) of this indicator; In 1990 meat (slaughter) amounted to 1559.6 thousand tons, in 2017 it was 65.2% (1017.6); In 1990, milk amounted to 5641.6 thousand tons, in 2017 it was 97.5% (5503.4) of this indicator. So far, low levels of livestock production have been observed. In this connection it is shown that the people of the country cannot be fully satisfied with their products.

Table 4 - Production of main types of livestock products

Eggs, mln. a Growthrate,% Wool, Growthrate,%

Years	Eggs, mln. a piece	Growthrate,%	Wool, thousandtons	Growthrate,%	Karakol, a thousandpieces	Growthrate,%
1990	4 185,1	=	107,9	-5	1 821,4	-
1995	1 840,8	43,9	58,3	54,0	1 145,2	62,9
2000	1 692,2	40,4	22,9	21,2	129,9	7,1
2001	1 855,3	44,3	23,6	21,9	124,4	6,8
2002	2 102,1	50,2	24,8	22,9	127,6	7,0
2003	2 276,7	54,4	26,8	24,8	164,5	9,0
2004	2 316,8	55,3	28,5	26,4	145,6	7,9
2005	2 514,0	60,0	30,4	28,2	191,9	10,5
2006	2 494,7	59,6	32,4	30,0	129,3	7,1
2007	2 664,2	63,6	34,2	31,7	90,6	4,9
2008	2 989,1	71,4	35,2	32,6	115,0	6,3
2009	3 306,4	79,0	36,4	33,7	78,8	4,3
2010	3 720,3	88,9	37,6	34,8	49,4	2,7
2011	3 718,5	88,8	38,5	35,7	42,0	2,3
2012	3 673,4	87,7	38,4	35,6	43,6	2,4
2013	3 896,0	93,0	37,6	34,8	24,3	1,3
2014	4 291,2	102,5	37,8	35,0	20,1	1,1
2015	4 737,0	113,2	38,0	35,2	7,1	0,4
2016	4 757,2	133,7	38,5	35,7	4,3	0,2
2017	5 103,0	121,9	39,0	36,1	8,1	0,4

Note: [7] is based on the source.

If in 1990 the egg was 4185.1 mln. in 2017 it will make 121.9% of this figure (5103.0); In 1990 the wool amounted to 107.9 thousand tons, in 2017 it is 36.1% (39.0); In 1990 the Karakol is 1821,4 thousand units, in 2017 - 0,4% of this indicator (8,1). Fodder base is a significant obstacle for the effective development of livestock in the country. In the structure of variable crop rotation of fodder crops, it is approximately 3 times less than the norm (for example, 30% instead of 11%) and 1 conventional livestock recommended by zoo technical norms is 2 times less than fodder units. At the same time, about 85% of pastures at the degradation step are [8].

Import and export of agricultural and food products is an important sector of the global economy. For the purpose of ensuring food security and conservation of the environment, the most developed countries of the world undertake an active public policy in support of agriculture. Without the state support, the effective functioning of the agricultural complex is complicated. Although each state has its own support, state support in developed countries is regulated in the normal order, i.e. assistance is provided in the form of regulated quotas, quotas, subsidies, tax relief, low interest loans and subsidies [9, P.86].

At present, there are a lot of difficulties in the work of breeding of state-owned animals in Kazakhstan. Individual farms with a predominantly breeding status have no experience in organizing work related to feeding and livestock breeding. The crisis in the economy also affected the development of the intermediary industries and the manufacturing industry. Particularly, production and processing of products, production of chemicals and fertilizers, agricultural machinery, logistics and transport services, etc. p. serious issues arose in industry.

It should be noted that one of the factors that hinders the development of livestock breeding is the importation of pedigree livestock to the country, which is not adapted to local conditions. As a result, the proportion of pedigree livestock herd in the herd has dropped significantly, and the share of cattle has increased by 4.1%, poultry - by 19.2%, pigs - by 6.8%, sheep - by 7.3%, and in the US and Canada this figure is 20-30% level. That is, a substantial amount of money was spent, and as a result, it was not justified [10, P.831].

In recent years, the population has been evacuated from rural areas, which negatively affects the development of the industry. The reason for the decline in the level of livelihoods of the rural population is the inadequacy of the quality of social services in rural areas, low wages and seasonality in agriculture. Hence, due to lack of quality of life in the village and the situation in the agricultural sector of the economy, there is a recession. Consequently, the food security and food market issues in Kazakhstan are largely dependent on internal factors.

External factors adversely affecting the food security of the country include: transparency of the republican economy and lower competitiveness of the food market of Kazakhstan. The transparency of Kazakhstan's economy and the process of integration of the country into the global economic system are both negative and positive. For example, participation in the global division of labor has a positive effect on the development of agriculture, but the increase in the share of imported foodstuffs in the total amount of foodstuffs consumers poses a threat to the food and security of the country.

In the conclusion we would like to note, thatin the present time the state of food security of the country is not satisfactory. Food security indices are not fully implemented. These figures are higher than the other regions of the Central Asian region of Kazakhstan. Economic accessibility indicators indicate a steady improvement in the situation over the past few years, indicating an important opportunity to increase the level of food security. In the near future, the main factor for the improvement of the situation is the increase in per capita income and the growth of per capita GDP.

In order to support the food security of the country, systematic and radical measures are needed: improving the legal framework for food security based on a systematic approach; control and regulation of exports and imports by main strategic types of food, reduction of imports of domestic producers; improving the system of economic relations in the field of production, purchase, primary and deep processing, storage, transportation and sale of agricultural products, etc. p. Development of the existing wholesale food market, optimization of their activity on the experience of foreign countries, creation of wholesale markets in rural areas, involving local producers.

Improvement of personnel, scientific, legal and information support system of the agro-industrial complex. In order to increase economic accessibility and price competitiveness of domestic food in domestic and foreign markets: flexible taxation, tax and other benefits to agricultural producers, increase of investment attractiveness of agro-industrial complex; It is necessary to monitor the implementation of financial improvement measures taken within the strategic development of the agro-industrial complex.

But it should be noted that in recent years, the situation in agriculture has been significantly improved, but not enough, to create all the necessary conditions for the state to improve food security. One of the main tasks of the state is to ensure effective development of agriculture, as the products produced in the agricultural sector of the national economy are the main source of people's livelihood. In this regard, we believe that this important strategic sector of the economy should be implemented at the state level, as economic aid from the most developed countries of the world.

И.Д.Ашимова<sup>1</sup>, А.С. Бельгибаева<sup>2</sup>, М.С.Закирова<sup>3</sup>

## АЗЫҚ-ТҮЛІК ҚАУІПСІЗДІГІ ЕЛ ЭКОНОМИКАСЫНЫҢ ТИІМДІ ЖӘНЕ ТҰРАҚТЫ ДАМУЫНЫҢ НЕГІЗІ РЕТІНДЕ

Аннотация. Елдің экономикалық қауіпсіздігі әр түрлі қызмет салаларының жағдайымен сипатталады. Оның маңызды құрамдас бөліктерінің бірі елдің азық-түлікпен қамтамасыз етілу деңгейімен, тамақ өнімдерінің сапасымен сипатталатын азық-түлік қауіпсіздігі және ол экономиканың тиімді және тұрақты

дамуының негізі болып табылады.Халықты азық-түлікпен қамтамасыз етуге байланысты мәселелер эрқашан ұлттық саясаттың басым бағыты ретінде болды, ал азық-түлік қауіпсіздігі мемлекеттің өмір сүруі мен тәуелсіздігіміздің маңызды шарты ретінде қаралды, оны шешу тиімділігіне қоғамдағы әлеуметтік, саяси және ұлтаралық тұрақтылық тәуелді.Экономиканың аграрлық секторына да әсерін тигізген әлемдік қаржы дағдарысы жағдайында жаһандық азық-түлік қауіпсіздігіне нақты қатер туындады, бұл халықаралық және ұлттық деңгейлерде оны қамтамасыз етудің қазіргі бар тетіктерін реформалауды және жаңа тетіктерін әзірлеуді талап етеді.Аграрлық секторды дамытудың басты мақсаты — ел халқының әл-ауқаты мен өмір сүру сапасының өсуіне тікелей байланысты мемлекеттік экономикалық саясаттың маңызды басымдықтарының бірі болуы тиіс.

**Түйін сөздер:** түлік қауіпсіздігі, ауыл шаруашылығы, өсімдік шаруашылығы, мал шаруа-шылығы, агроөнеркәсіп кешені, өнімділік, тұтынушылар, экономикалық қауіпсіздігі, тамақтың сапасы, тұрақты даму.

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## И.Д.Ашимова, А.С. Бельгибаева, М.С.Закирова

Кокшетауский государственный университет им.Ш. Уалиханова, кафедра «Экономики и учета», г. Кокшетау, Республика Казахстан

# ПИЩЕВАЯ БЕЗОПАСНОСТЬ КАК ЭФФЕКТИВНАЯ И УСТОЙЧИВАЯ ОСНОВА ЭКОНОМИЧЕСКОГО РАЗВИТИЯ СТРАНЫ

Аннотация. Цель настоящего исследования - изучить результаты пищевой безопасности, ее роль в экономическом развитии страны. Анализ пищевой безопасности в государствесвидетельствует о том, что в Казахстане присутствует ряд проблем, которыенужно срочно решить. Теоретической и методологической основой исследования послужили научные трудыказахстанских и зарубежных ученых в сфере сельского хозяйства и пищевой безопасности нашей страны. В статье былиспользован систематический метод, а также методы экономического, статистического и сравнительного анализа, абстрактные и логические методы. Аналитическая работа при написании данной статьи осуществлялась на основании официальной статистики сельского хозяйства, опубликованной на вебсайте. Были сформулированы рекомендации и предложения, сделан всесторонний анализ пищевой безопасности страны. В заключении авторы подчеркнули необходимость производственной поддержки и переработки вторичного сырья. Эффективные решения проблем пищевой безопасности зависят от сокращения зависимости от импорта сельскохозяйственных продуктов и увеличения доступа населения к продуктам.

**Ключевые слова:** пищевая безопасность, сельское хозяйство, производство урожая, домашний скот, агроиндустриальный комплекс, продуктивность, потребители, экономическая безопасность, качество пищи, устойчивое развитие.

#### Information about authors:

Ashimova I.D. - candidate of economy sciences, senior teacher, chair of economy and accounting, Kokshetau state university named after Sh. Uakikhanov, Kokshetau, Kazakhstan;

Belgibaeva A.S. - candidate of economy sciences, senior teacher, chair of economy and accounting, Kokshetau state university named after Sh. Uakikhanov, Kokshetau, Kazakhstan;

Zakirova M.S. - master of economy sciences, chair of economy and accounting, Kokshetau state university named after Sh. Uakikhanov, Kokshetau, Kazakhstan

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