

**SHEEP FARMS OF THE WEST KAZAKHSTAN REGION:  
PROBLEMS AND FACTORS OF INCREASING COMPETITIVENESS**

**БАТЫС ҚАЗАҚСТАН ОБЛЫСЫНЫҢ ҚОЙ ШАРУАШЫЛЫҒЫ:  
БӘСЕКЕГЕ ҚАБІЛЕТТІЛІКТІ АРТТЫРУ МӘСЕЛЕЛЕРІ МЕН ФАКТОРЛАРЫ**

**ОВЦЕВОДЧЕСКИЕ ХОЗЯЙСТВА ЗАПАДНО-КАЗАХСТАНСКОЙ ОБЛАСТИ:  
ПРОБЛЕМЫ И ФАКТОРЫ ПОВЫШЕНИЯ КОНКУРЕНТОСПОСОБНОСТИ**

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**Abstract.** *The aim* of this article is to assess the current situation in sheep breeding industry of the West Kazakhstan region and potential to improve its efficiency in the future. *Methods* – analysis of statistical data, their grouping, study of variational and dynamic series of distribution, relationship of economic phenomena. *Results* – the main activities of sheep farms in Western Kazakhstan are considered, a forecast is made for the consumption of meat and meat products. The authors note that this western territory of the republic belongs to the macro-region which is focused on oil and gas sector, engineering, food industry, construction industry, grain farming, livestock production and has significant opportunities for further sustainable socio-economic growth. *Conclusions* – the main problems of sheep breeding are the concentration of more than 60% of the livestock in private farms, their low productivity, lack of necessary working and living conditions, integration of sheep breeding sub-complex with textile and food industries, modern highly efficient technologies for processing raw materials, and lack of specialists. To solve these problems in the Republic of Kazakhstan, at the initiative of the National Association of Sheep Breeders of Kazakhstan, Shopan-ata, a sectoral program on development of sheep breeding has been developed, the purpose of which is to provide employment for rural residents and improve their well-being through the wide spread of entrepreneurship. The authors state that in sheep-breeding economic entities it is necessary to introduce a scientifically based organization of breeding business: raising young animals, improving feeding rations, systems and methods of keeping livestock, which will increase their productivity, product quality, while effectively using huge reserves of pastures for the seasons of the year.

Аңдатпа. Осы мақаланың мақсаты Батыс Қазақстан облысының қой шаруашылығы саласындағы қалыптасқан жағдайды және болашақта оның тиімділігін арттыру әлеуетін бағалау болып табылады. *Әдістері* – статистикалық мәліметтерді талдау әдістері, оларды топтастыру, таралудың вариациялық және динамикалық қатарларын, экономикалық құбылыстардың өзара байланысын зерттеу. *Нәтижелері* – Батыс Қазақстандағы қой шаруашылықтары қызметінің негізгі бағыттары қаралған, ет және ет өнімдерін тұтыну көлемдерінің болжамы жасалған. Авторлар республиканың бұл батыс аумағы мұнай-газ секторына, машина жасауға, тамақ өнеркәсібіне, құрылыс индустриясына, астық шаруашылығына, мал шаруашылығына бағдарланған макроөңірге жататынын және одан әрі орнықты әлеуметтік-экономикалық өсу үшін елеулі мүмкіндіктерге ие екенін атап көрсеткен. *Қортындылар* – қой өсірудің негізгі мәселелері - жеке қосалқы шаруашылықтарда малдың 60%-дан астамының шоғырлануы, олардың төмен өнімділігі, қажетті еңбек пен тұрмыс жағдайларының болмауы, қой шаруашылығының ішкі кешенін тоқыма және тағам өнеркәсібімен интеграциялау, шикізатты өңдеудің заманауи жоғары тиімді технологиялары, мамандардың жетіспеушілігі. Осы міндеттерді шешу үшін Қазақстан Республикасында Шоран-ата Қазақстан қой өсірушілер Ұлттық қауымдастығының бастамасы бойынша қой шаруашылығын дамытудың салалық бағдарламасы әзірленген, оның мақсаты ауыл тұрғындарын жұмыспен қамтуды қамтамасыз ету және кәсіпкерлікті кеңінен тарату есебінен олардың әл-ауқатын жақсарту болып табылады. Авторлар қой шаруашылығы субъектілерінде асыл тұқымды істі ғылыми негізделген ұйымдастыруды енгізу қажет деп тұжырымдаған: жас малды өсіру, азықтандыру рационын жақсарту, жыл мезгілдері бойынша жайылымдардың орасан зор қорын тиімді пайдалана отырып, олардың өнімділігін, өнім сапасын арттыруға мүмкіндік беретін малды ұстау жүйелері мен тәсілдерін жақсарту.

**Аннотация.** *Целью* данной статьи является оценка сложившейся ситуации в овцеводческой отрасли Западно-Казахстанской области и потенциала повышения ее эффективности в перспективе. *Методы* – анализа статистических данных, их группировка, изучение вариационных и динамических рядов распределения, взаимосвязей экономических явлений. *Результаты* – рассмотрены основные направления деятельности овцеводческих хозяйств в Западном Казахстане, составлен прогноз объемов потребления мяса и мясопродуктов. Авторы отмечают, что эта западная территория республики относится к макрорегиону, ориентированному на нефтегазовый сектор, машиностроение, пищевую промышленность, стройиндустрию, зерновое хозяйство, животноводство и имеет значительные возможности для дальнейшего устойчивого социально-экономического роста. *Выводы* – основными проблемами разведения овец являются концентрация более 60% поголовья в личных подсобных хозяйствах, низкая их продуктивность, отсутствие необходимых условий труда и быта, интеграции овцеводческого подкомплекса с текстильной и пищевой промышленностью, современных высокоэффективных технологий обработки сырья, нехватка специалистов. Для решения этих задач в Республике Казахстан по инициативе Национальной ассоциации овцеводов Казахстана Шоран-ата разработана отраслевая программа развития овцеводства, целью которой является обеспечение занятости сельских жителей и улучшения их благосостояния за счет широкого распространения предпринимательства. Авторы констатируют, что в овцеводческих хозяйствующих субъектах необходимо внедрение научно обоснованной организации племенного дела: выращивание молодняка, улучшение рационов кормления, систем и способов содержания скота, позволяющих повысить их продуктивность, качество продукции при эффективном использовании огромных запасов пастбищ по сезонам года.

**Key words:** agro-industrial complex, sheep breeding, livestock population number, forecast of consumption of meat and meat products, export channels, competitiveness, food security.

**Түйінді сөздер:** агроөнеркәсіптік кешен, қой шаруашылығы, мал басы, ет және ет өнімдерін тұтыну көлемінің болжамы, экспорт арналары, бәсекеге қабілеттілік, азық-түлік қауіпсіздігі.

**Ключевые слова:** агропромышленный комплекс, овцеводство, поголовье скота, прогноз объемов потребления мяса и мясопродуктов, каналы экспорта, конкурентоспособность, продовольственная безопасность.

**Introduction.** Sheep farming occupies an important place in the agro-industrial complex of Kazakhstan. Because the sheep farm provides valuable food and raw materials, such as meat, fat, wool, leather, fur, milk, which are necessary for the population and industry.

High achievements can only be achieved by introducing advanced scientific achievements into production. Over the past 30-40 years, many scientific innovations in the field of sheep breeding have begun to use technologies for accelerated breeding of high-yield

ding sheep breeds, production of high-quality products. If these innovations are effectively used by sheep breeders of the country, then sheep farming in Kazakhstan will develop rapidly and become a profitable industry [1].

At the present stage, sheep farming is developing very dynamically in the West Kazakhstan region of the Republic of Kazakhstan and it is an economically profitable industry in the field of animal husbandry in the conditions of natural pastures and hayfields. The akzhaik semi-fine-wool sheep breed of meat-wool direction, bred in these conditions, has a great future in this region. Among the breeds of sheep adapted to different conditions of the country, the akzhayyk sheep breed of meat and wool orientation occupies a special place. Because this breed of sheep is a meat-wool sheep breed that meets the demand of consumers of the West Kazakhstan region for lamb.

Work on the production of this breed of sheep began in the West Kazakhstan region in 1943 with the use of qigai sheep for local sheep, which was later formed as a result of the use of Lincoln, Romney-Marsh half-blood sheep imported from the Mynbayev experimental farm and appeared due to mutual breeding of hybrids on the continuous selection and selection basis [2].

**Material and methods of research.** In the course of the study, monographic, abstract-logical and economic-statistical methods were used. Guided by the principles of economic theory, the concepts of the organization of sheep breeding in the Republic of Kazakhstan are considered, the possibilities of effective organization of sheep breeding on the basis of domestic and foreign scientific works are determined. Methods of statistical and analytical analysis were used in the course of the study. In carrying out this analysis, the

reporting data of the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan statistical data and information contained in open information were used. Based on dynamic data, a trend model of lamb consumption volumes has been developed.

At the level of the republic, in providing food for animals due to drought, it is envisaged to organize the economy of crop production in the West Kazakhstan region on the basis of alignment with the use of modern agrotechnical technologies [3].

Currently, many industry experts are sounding the alarm and raising this problem. Chairman of the National Association of Sheep Breeders of Kazakhstan Shopan- ata Almazbek Sadyrbayev predicts that the shortage of food in the Mangystau region in 2021 will appear in other areas in the amount of a coefficient of +10. One of the main issues in the organization of the economy is the availability of labor resources [4]. At the state level, sheep farmers should be provided with state awards for fruitful work, a social package: from free medical care and placement of children in boarding schools to the possibility of admission to a preferential higher education institution.

**Results and their discussion.** The West Kazakhstan region belongs to the Western macro-region, where it specializes in the oil and gas industry, mechanical engineering, food industry, construction industry, grain and animal husbandry. Taking into account the country's policy of modernizing the agricultural sector and increasing production, as well as the opportunities of agricultural land in the West Kazakhstan region, agricultural indicators still need to be improved. The structure of the regional product for the West Kazakhstan region can be seen in the following table 1.

Table 1- Structure of gross regional product of the West Kazakhstan region, 2018-2020

Industries	2018		2019		2020	
	billion tenge	%	billion tenge	%	billion tenge	%
Total	2 790,7	100,0	2 946,4	100,0	2 736,0	100,0
Industry	1 439,7	51,6	1 400,3	47,5	1 233,6	45,1
Agriculture	81,6	2,9	96,6	3,3	119,6	4,4
Construction	116,6	4,2	151,2	5,1	155,5	5,7
Transport and warehousing	139,7	5,0	206,8	7,0	198,0	7,2
Wholesale and retail trade, repair of cars and motorcycles	227,8	8,2	271,1	9,2	261,3	9,6
Other	785,3	28,1	820,4	27,8	767,9	28,1

In the West Kazakhstan region, the largest share in the structure of gross regional product is accounted for by industry (45.1%), construction (5.7%), transport and ware-

housing (7.2%), wholesale and retail trade, repair of cars and motorcycles, respectively (9.6%). The share of agriculture in the structure of gross regional product of the

region is insignificant and it is 4.4 %. The fact that the population of the region is 661.3 thousand people makes it necessary to effectively organize local animal and crop production in providing food to the population of the region, and there are favorable natural and climatic conditions for this.

Sheep farming occupies a special place in providing food to the population of the region. According to the industrialization map of the Republic of Kazakhstan, the provision of financial and other support to agricultural entrepreneurs in order to support entrepreneurship leads to an increase in the number of entrepreneurs engaged in animal husbandry in the region.

In total, 8 708 agricultural entities are registered in the West Kazakhstan region, including 636 agricultural enterprises and 8 072 peasant (farm) farms [5].

From the data of table 2, we see the number of sheep in the West Kazakhstan region. The total number of sheep in the region in 2020 is 1 188 800 heads, which is an increase of 3.5% compared to the base year of 2016, although since 2018 there is a tendency to reduce the number of sheep. In some areas of the region, the number of sheep has increased, but in some areas adapted to basic animal husbandry, the number of livestock has decreased. We also see an increase in the number of sheep in the regional center of Uralsk.

Table 2- Number of sheep in the West Kazakhstan region, 2016-2020

Industries	thousand heads					
	2016	2017	2018	2019	2020	% ratio for 2020/ 2016
West Kazakhstan region	1 149,1	1 155,6	1 147,9	1 130,6	1 188,8	103,5
Akzhaik district	211,5	218,8	223,1	222,2	215,9	102,1
Bokeyordinsky district	105,1	92,3	92,6	87,6	89,7	85,4
Burlinsky district	23,6	21,0	21,3	17,6	19,4	82,4
Zhangali district	166,5	168,8	160,5	153,1	160,2	96,2
Zhanibek district	62,1	66,8	68,0	59,4	60,3	97,1
Baiterek district	54,7	54,6	55,8	56,6	58,4	106,7
Kaztalovsky district	219,4	227,0	228,6	231,0	250,2	114,0
Karatobinsky district	68,9	69,0	62,9	63,9	76,8	111,5
Syrym district	84,3	78,4	77,0	77,0	82,0	97,2
Taskalinsky district	57,2	59,1	56,3	60,1	70,5	123,4
Terektinsky district	61,1	61,6	63,8	63,1	63,7	104,3
Chingirlau district	30,7	33,1	33,1	33,7	35,3	115,0
Uralsk city	4,2	5,0	4,9	5,3	6,3	150,2

The share of sheep in the region is concentrated in Akzhayyk, Kaztalovsky and Zhangalinsky districts. We see a tendency to reduce the number of sheep in Bokeyorda and Burlinsky districts. In Bokeyordinsky district, the number of sheep decreased by 14.6% compared to the basic year, in Burlinsky district-by 17.6%, and the number of sheep decreased (2,7-3,8%) in Zhangala, Zhanibek, and Syrym districts.

This situation can be explained by the fact that due to the pandemic in recent years,

the population is beginning to adapt to horse breeding due to the increased demand for horse products. Baiterek and Chingirlau districts account for the smallest share in the number of sheep, which is explained by their specialization in crop production depending on the natural and climatic conditions.

The number of sheep in the categories of farms engaged in sheep farming in the West Kazakhstan region can be seen in the figure 1.

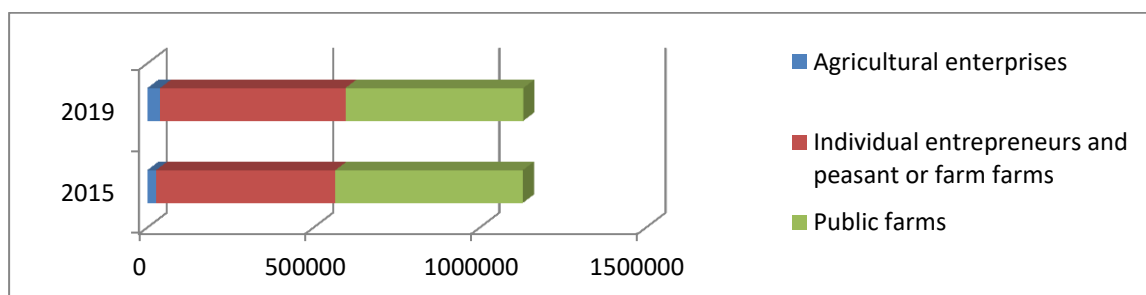


Figure 1 - Number of sheep and goats by farm category, heads

In the region, there is an increase in the number of sheep in agricultural enterprises and peasant (farm) farms by economic categories. Of the total number of sheep in the reporting year, 60 401 numbers were owned by 5,1% in agricultural enterprises, 583 658 numbers were owned by 49% in peasant (farm) farms, and 544 741 numbers were owned by 45,8% in public farms. The presence of the main share of sheep in peasant farms and private public farms is also determined as a deterrent to the development of sheep farming at the expense of small enterprises. In public farms, the number of sheep in the reporting year decreased by 5.08% compared to the base year. In general dynamics, we can see that the public has also begun to turn to horse breeding in agriculture.

The sheep is the most useful that make the most effective use of natural pasture lands, providing the necessary and inexpensive products there, is sheep. The sheep's jaw is pointed, the lips are thin, and the shovel teeth are sharp. Therefore, sheep are short

and tend to eat a variety of small herbs. It also eats a variety of weeds well. According to research institutions, 570 species of 600 species of weeds are eaten by sheep, 81 species by horses, and 56 species by cows [6].

Sheep quickly settle down when moving from one place to another. Due to this property, the sheep breed is resistant to all areas with very cold or hot weather. Sheep can be grazed both in the mountains and on the drained sands. The most useful property of sheep is its rapid maturation and fecundity. Sheep give lambs at the age of about 5 months. Therefore, if the conditions of feeding, grazing and care agreed, sheep can give lambs twice a year or three times in two years. Sheep also give lambs to more twins. Due to these natural features, the abundance of products that it provides, it is a very useful animal for the farm [7].

In the following table 3 we see young animals from sheep in the West Kazakhstan region.

Table 3 - Young sheep received in the West Kazakhstan region, 2016-2020

	2016	2017	2018	2019	2020	% ratio for 2020/ 2016
Lambs	552,1	573,0	574,3	581,5	586,8	106,3
Obtained lambs per 100 females						
Lambs	85,0	87,0	88,0	90,0	88,0	103,5
Note: developed by the authors on the basis of statistical data						

Receipt of young sheep increased by 6.3% in 2020 compared to the base year of 2016. The number of offspring per 100 females also increased by 3.5%. This indicates an increase in the total productivity of sheep in the region.

One of the main products from sheep is wool. The West Kazakhstan region is one of the largest regions of the Republic engaged in breeding sheep breeding with the most valuable breed fund of the breed-edilbay meat-fat and akzhaiyk meat-wool breeds.

The akzhaiyk meat-wool sheep breed occupies a leading position among dual-direction sheep breeds in Kazakhstan in terms of the number and level of productivity. The results of research work showed that 86.1% of the total number of sheep belong to the preferred type [8].

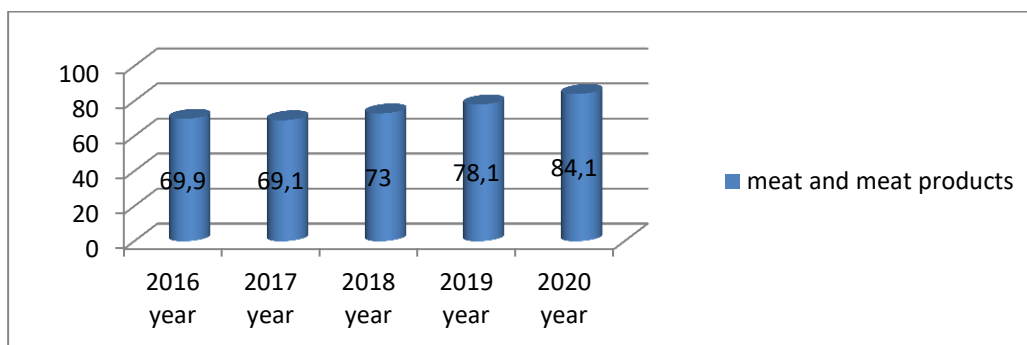
In general, the volume of wool production in the region increased by 53.4 tons or 2.7% in the reporting year 2020 compared to the base year 2016, although there is a tendency to reduce wool production in some areas. In

Akzhayyk, Bokeyordinsky and Burlinsky districts, there was a decrease of 7%, 19.2% and 31.9%, respectively. This can be explained by the decrease in the number of sheep in these areas. Due to the decrease in the number of livestock, the volume of its output also decreases.

The creation of new processing enterprises based on wool production and its organization on an innovative basis should become one of the main tasks for the future.

Kazakhstan has all conditions for the development of the meat industry. In this regard, the country has developed a national program for the development of animal husbandry [9]. Mutton production is included in the top 15 potential types of products in the national program for the development of meat cattle breeding. On the basis of the program, 100 thousand family farms with 600 heads of sheep will become the basis of the industry [10].

The volume of meat consumption in the West Kazakhstan region can be seen in the figure 2.



Developed by the authors on the basis of statistical data

Figure 2 - Volume of average per capita consumption of meat and meat products per year of the population of the West Kazakhstan region, kg [lk.5]

The volume of per capita consumption of meat and meat products increased by 20.31% in the reporting year compared to the base year according to the meat Union.

Production of sheep and goat products in West Kazakhstan region completed the

reporting year with a profit of 25.1%. We see a decrease in the overall dynamics of sheep and goat production at agricultural enterprises (table 4).

Table 4 - The level of profitability (loss) of sheep and goat production at agricultural enterprises, 2016-2020 [lk.5]

	2016	2017	2018	2019	2020	percent % ratio for 2020/ 2016
West Kazakhstan region	20,4	36,1	19,7	35,3	25,1	123
Akzhaik district	27,3	32,6	25,0	52,6	26,8	98,5
Burlinsky district	47,8	-	8,2	-	-	-
Zhangali district	2,6	32,4	42,7	28,5	-	-
Zhanibek district	53,9	-	26,9	-	3,2	5,9
Baiterek district	98,4	54,7	84,8	91,4	-	-
Kaztalovsky district	12,9	62,0	20,6	71,9	65,4	507
Karatobinsky district	-	-	39,3	66,9	122,6	-
Syrym district	7,6	9,9	9,1	3,8	-	-
Taskalinsky district	3,8	9,3	-28,2	-7,2	11,1	292,1
Terektinsky district	18,3	21,4	24,9	-78,4	64,2	350,8
Chingirlau district	-5,7	-	-	44,4	81,4	-1 428
Uralsk city	20,8	59,4	37,5	-	-	-

The overall decline in the level of profitability in 2020 was due to a shortage of feed, which is associated with drought in some areas of the region, and a decrease in the number of livestock due to the pandemic. In 2019, the end of the sheep industry in Taskala and Terektinsky districts near the regional center of Uralsk with losses of -7.2% and -78.4%, respectively, occurred due to the reduction of the number of livestock due to low pasture fertility and lack of feed for agricultural enterprises. Due to the good establishment of sheep farming by agricultural enterprises in Akzhayyk, Zhanakala, and Baiterek districts, the farms completed their activities with an effective result in the reporting year.

To optimize the ability of income sources for their services, we consider economic and mathematical analysis. When conducting economic and mathematical analysis, an important place is occupied by the description of the values of the features to be studied. X1, X2, ..., HT,...it can be expressed as a sequence of values. Such a sequence is called a temporary sequence. The basis of economic and mathematical analysis is knowledge of the specific features of the studied objects.

Using the described method, the components of Trend models were determined based on data on the consumption of meat and meat products in the West Kazakhstan region for 2016-2020.

According to figure 3, the volume of meat and meat products consumption in the West Kazakhstan region for 2016-2020 was 68% in 2016; 69.1% in 2017; 73% in 2018; 78.1% in

2019 and 84.1% in 2020, respectively. According to forecasts, this figure will grow by 3.7% in 2026.

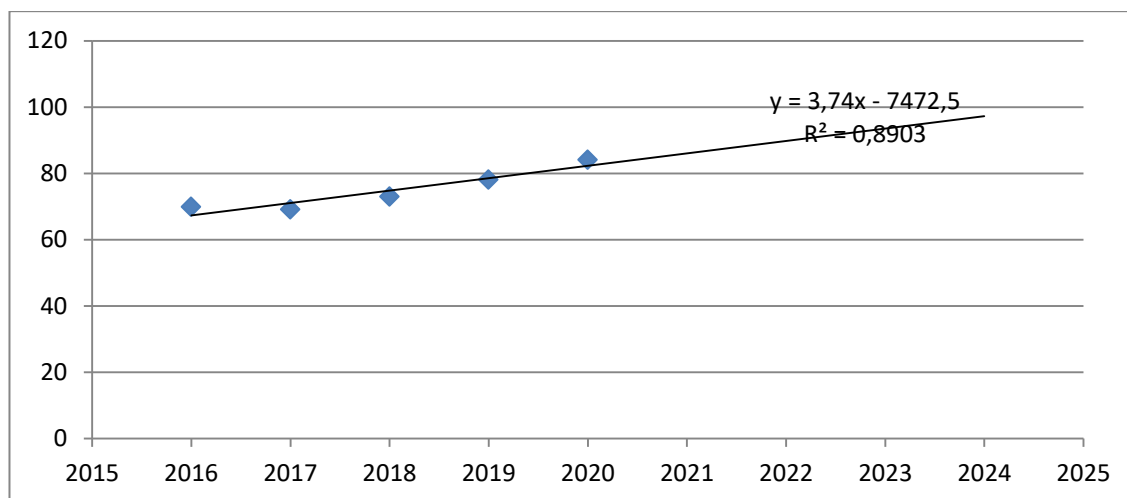


Figure 3 - Forecast of meat and meat products consumption in the West Kazakhstan region, as a percentage [лк.5]

### Conclusion

1. Although state support has been provided, the mechanism for obtaining it has not been improved. Most peasant (farm) farms do not receive subsidies due to the presence of small farms, limited financial capabilities and non-compliance with the state requirements, illiteracy and bureaucracy in local executive bodies.

At the same time, the main problems in the organization of sheep farming at present are the concentration of more than 60% of the number of sheep in private subsidiary farms, low productivity, low working and living conditions, lack of specialists and poor pastures around the village. At the same time, the main problem is the lack of integration between sheep farming and the textile and food industries, as well as the violation of the raw material preparation infrastructure.

In order to solve these problems, a sectoral program for the development of sheep farming was developed in the Republic of Kazakhstan on the initiative of the «National Association of Sheep Breeders of Kazakhstan Shopan- ata». The purpose of the program is to provide employment for rural residents and improve their well-being through the formation of mass sustainable entrepreneurship in sheep farming.

2. One of the main tasks in the livestock industry at present is to work not only to increase the number of livestock, but also to improve the quality, increase the average live weight. In this connection, it is necessary to increase state support in investment subsidies, as well as provide credit resources with a low interest rate for the development of these feedlots.

3. In animal husbandry, the main task is to solve the problem of a stable fodder base by bringing the share of forage crops in the crop rotation to scientifically based norms as part of measures to diversify sown areas. The key point for efficient land use will be the development of a modern system for monitoring land use processes using methods for determining the agrochemical composition of the soil.

### References

- [1] Траисов, Б.Б. Кроссбредные мясо-шерстные овцы Западного Казахстана: монография / Б.Б. Траисов, Н.А. Балакирев, Ю.А. Юлдашбаев, Т.Н. Траисова, Б.К. Салаев. - М.: Издательство РГАУ-МСХА, 2019. - 297 с.
- [2] Бозымов, К.К. Акжайкская мясо-шерстная порода овец и пути ее улучшения : монография / К.К. Бозымов, Б.Б. Траисов, А.Н. Баяхов. - Уральск: Западно-Казахстанский аграрно-технический университет им. Жангир хана, 2014. - 229 с.



[3] Tarshilova, L.S., Ibyzhanova, A.J., Yerzhanova, Z.K., Sultanov, A.U., Amangaliyeva, Z.K. Differentiating role of agro-climatic conditions in the development of grain farming in the region // Journal of Advanced Research in Law and Economics.- 2016.- Vol. 7.- Issue 5.- P. 1193-120.

[4] Kenzhin, Z., Erzhanova, Z., Sultanova, M., Beisembayeva, G., Amangaliyeva, Z. The ways to improve the human resource management in order to optimize the migration processes within the ces member countries // International Journal of Applied Business and Economic Research.- 2016.- Vol. 14.- Issue 9.- P. 5737-5754.

[5] Батыс Қазақстан облысының статистикалық жылнамалығы [Электрондық ресурс], -2021.-URL: //https://stat.gov.kz (қаралған күні: 16.01.2022).

[6] Сабденов, Қ. Қой шаруашылығының тиімділігін арттыру / Қ. Сабденов, Ә.М. Омбаев, С. Шауенов, О. Исламов, Б. Құлатаев.- Шымкент: «Жебе» баспа үйі. -2010, 84 б.

[7] Тореханов, А. Қой шаруашылығын дамытудың мүмкіндіктері [Электрондық ресурс]. - 2013.- URL: https://aqiqat.kazgazeta.kz/news/1849 (қаралған күні: 20.01.2022).

[8] Бозымов, К.К. Акжайкская мясо-шерстная порода: история, современность: монография / К.К. Бозымов, Б.Б. Траисов, К.Г. Есенгалиев. - Уралск: Западно-Казахстанский аграрно-технический университет им. Жангир хана.- 2018. – 315с.

[9] Баранина. Обзор ВЭД [Электронный ресурс].-2021.-URL:// https://meatunion.kz/rus/ (дата обращения: 18.02.2022).

[10] Смагулов, Д.Б. Пути повышения экономической эффективности овцеводческой отрасли на западе Казахстана / Д.Б. Смагулов, М.Б. Окумбекова // Наука и образование. - 2020. - Ч. 1.-№ 3-1 (60). - С. 128-133.

### References

[1] Traisov, B.B., Balakirev, N.A., Yuldashbaev, Yu.A., Traisova, T.N., B.K. Salaev (2019). Krossbrednie myaso\_sherstnie ovci Zapadnogo Kazahstana [Cross-bred meat and wool sheep of Western Kazakhstan]. M.: RGAU-MSHA Publishing House. 297 p.

[2] Bozymov, K.K., Traisov, B.B., Bayakhov, A.N. & Nasambaev E.G. (2014). Akjaikskaya myaso\_sherstnaya poroda ovec i puti ee uluchsheniya [Akzhaik meat and wool breed of sheep and ways to improve it]. Uralsk: ZKATU im. Zhangir Khan. 229 p. [in Russian].

[3] Tarshilova, L.S. Ibyzhanova, A.J., Yerzhanova, Z.K., Sultanov, A.U. & Amangaliyeva, Z.K. (2016). Differentiating role of agro-climatic conditions in the development of grain farming in the region. Journal of Advanced Research in Law and Economics, Volume 7, Issue 5, 1 September, 1193-120.

[4] Kenzhin, Z., Erzhanova, Z., Sultanova, M., Beisembayeva, G. & Amangaliyeva, Z. (2016). The ways to improve the human resource management in order to optimize the migration processes within the CES member countries. International Journal of Applied Business and Economic Research, Volume 14, Issue 9, 5737-5754.

[5] Batis Qazaqstan oblisiniñ statistikaliq jilnamaligi [Electronic resource] (2021). Available at:https://stat.gov.kz (date of access: 16.01.2022) [in Kazakh].

[6] Sabdenov, K., Ombaev, A.M., Shauenov, S., Islamov., Kulataev B. (2010), Qoi şaruashaşlyǵynyñ tiimdiligin arttyru [Improving the efficiency of sheep breeding]. Shymkent Publishing House "Zhebe". 84 p. [in Kazakh].

[7] Torekhanov A. Qoi şaruashaşlyǵyn damytudyñ mümkindikteri [Electronic resource].- 2013.- Available at: https://aqiqat.kazgazeta.kz/news/1849 (date of access: 20.01.2022) [in Kazakh].

[8] Bozymov, K.K., Traisov, B.B. Esenkaliyev, K.G. & Nasambaev, E.G. (2018). Akjaikskaya myaso\_sherstnaya poroda\_istoriya\_sovremennost\_[Akzhaik meat and wool breed: history, modernity]. Uralsk: ZKATU im. Zhangir Khan, 315 p. [in Russian].

[9] Baranina. Obzor VED [Review of IEA] (2021). Available at: https://meatunion.kz/rus/ (date of access: 18.02.2022).

[10] Smagulov, D.B. & Okumbekova, M.B. (2020). Puti povisheniya ekonomicheskoi effektivnosti ovcevodcheskoi otrasli na zapade Kazahstana [Ways to improve the economic efficiency of the sheep breeding industry in the west of Kazakhstan]. Gylym zhane bilim, 3-1 (60), Part 1, 128-133 [in Russian].

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