



IMPROVING EFFICIENCY BY APPLYING INNOVATIONS IN THE LIVESTOCK SECTOR IN UZBEKISTAN

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A B S T R A C T	KEY WORDS
<p>The article presents the ways to increase productivity by applying innovations in livestock farming. Animal husbandry is one of the leading sectors of agriculture in Uzbekistan. Meat, milk and egg products of the population provide industry with leather, wool and other raw materials. At present, when market relations are being formed, providing the population of the Republic with high-quality, ecologically clean and cheap livestock products is one of the important tasks. There are many branches of animal husbandry, such as cattle breeding, sheep breeding, poultry breeding, sheep breeding, fishing, and beekeeping. Therefore, the main tasks of the development of these industries are to establish a solid feed base, to continuously provide livestock with various servitamin, protein-rich, nutritious feeds throughout the year, to properly organize breeding-selection work, from advanced work experiences and achievements in science. effective use, new techniques that save costs, increasing the level of mechanization and automation of production processes as a result of the introduction of innovative and effective technologies, the widespread introduction of modern advanced technologies into practice and the specialization of farms in the formed production, and other factors were taken into account. Test examples are provided.</p>	<p>Agriculture, innovation, economy, farm, feed, nutritious crops, logistics, productivity, animal husbandry, meat, milk and egg products, industry, leather, wool, plant breeding, cattle breeding, sheep breeding, poultry, livestock, fisheries, beekeeping</p>

Introduction

Agriculture, especially animal husbandry, plays an important role in the sustainable development of the economy. In our country, meeting the needs of the population for livestock products, ensuring the availability of meat, milk, eggs, fish and other products in the markets is considered as one of the priority tasks.

Animal husbandry is an important component of the country's agriculture. Appropriate and effective placement of livestock industries directly affects the positive solution of labor distribution in the

republic. Taking into account the natural and economic conditions of the regions and the market requirements, it is necessary to place and develop the branches of cattle breeding, sheep breeding, fishing, beekeeping, and duck breeding. Because meat, milk, wool, leather, honey and other products are grown for food and processing industry enterprises in these sectors.

Production and consumption of meat and milk per capita in the republic is below medical standards. It cannot provide the necessary amount and standards for the human body. Therefore, the government of the republic has adopted large programs, laws, decisions and various regulatory documents aimed at the development of livestock breeding in the country, and is implementing a number of measures to implement them.

As a result of gradual reforms in the agricultural sector of our country, the process of increasing productivity by applying innovations in farms specializing in animal husbandry was carried out [4,5]. In this, the availability of labor resources of the regions of the country, the specialization of farms in animal husbandry and other factors were taken into account.

2. LITERATURE REVIEW:

The great achievements in agriculture are the result of well-thought-out and consistent measures implemented by our government, taking into account the specific characteristics of our republic and the accumulated rich experiences, as well as the best practices of world practice.

There are many branches of animal husbandry, such as cattle breeding, sheep breeding, poultry breeding, sheep breeding, fishing, and beekeeping. Therefore, the main tasks of the development of these industries are to establish a solid feed base, to continuously provide livestock with various servitamin, protein-rich, nutritious feeds throughout the year, to properly organize breeding and selection work, to use advanced work experiences and achievements in science. effective use and wide introduction of modern advanced technologies into practice. The great achievements in agriculture are the result of well-thought-out and consistent measures implemented by our government, taking into account the specific characteristics of our republic and the accumulated rich experiences, as well as the best practices of world practice.

The number of livestock and poultry in the Republic of Uzbekistan by all economic categories is presented in Table 1.

Table 1 The number of livestock and poultry by all economic categories in the Republic of Uzbekistan (a thousand heads)

Indicators	2018 year	2019 year	2020 year	2022 year	2022 year to 2018 relative to in percent, %
Cattle with large horns	12181,4	12471,0	12814,1	12949,7	106
including:					
farms	575,8	615,9	662,2	708,3	123
dekhan farms	11461,2	11675,4	11983,3	12071,7	105
organizations performing agricultural activities	144,4	179,7	168,6	169,7	117
also cows	4217,3	4336,5	4626,0	4663,5	110
including:					
farms	193,9	210,3	230,1	249,6	128
dekhan farms	3983,3	4085,0	4351,2	4366,4	110
agricultural enterprises	39,9	41,2	44,7	47,5	119

sheep and goats	19697,9	20640,9	21580,5	21906,9	111
including:					
farms	1518,9	2166,9	2461,7	2691,8	177
dekhan farms	16516,5	17369,9	18034,7	18064,1	109
agricultural enterprises	1662,5	1104,1	1084,1	1151,0	69
birds	67037,7	74870,1	86374,8	87859,7	131
including:					
farms	7745,6	9263,2	12146,8	12299,1	122
dekhan farms	41568,1	44197,0	47637,2	51611,2	124
agricultural enterprises	17724,0	21409,9	26590,8	23949,4	135

Proper organization of the production of concentrate feed in our country and its delivery to consumers is an urgent issue of today. 90 percent of the meat and milk produced in our country is produced on farms. In order to improve the supply of concentrate feed to farms producing livestock products, it is necessary to organize fodder sales branches in the regions with the participation of feed producing enterprises, and to optimize the types of payment in the branches.

Livestock development is one of the first level tasks facing agriculture. To successfully solve this task, the following complex measures have been developed:

- establishment of a solid fodder base of livestock breeding and rational use of fodder;
- breeding of all types of livestock and poultry;
- improvement of breeding work in cattle breeding in order to increase the productivity of herds and to adapt cattle to feed on the basis of industrial technology;
- improving the use of veterinary services and artificial breeding services due to the expansion of the network of service points;
- personal assistant, organizing auctions for the sale of breeding stock to farmers and farms.
- expansion of micro-crediting possibilities of auxiliary and peasant farms to facilitate the purchase of cattle,
- creation of new breeds of livestock and improvement of existing breeds, development of theoretical and practical methods for management of various fields of livestock breeding, and on this basis, giving ample space to the work experience of advanced zootechnics and animal husbandry in the introduction of rational methods of breeding and feeding of livestock.

It has been scientifically proven that about 60% of the increase in milk productivity of cows depends on the feeding factor. Based on this, the demand for feed during the year is 30-35 centners of feed units for each conditional head of the population, 45-50 centners of feed units for breeding cattle, foreign 55-60 centners of feed for cattle of the mentioned breeds.

On the basis of the achievements of science and advanced experience, to ensure that the yield of nutritious crops from each hectare of the main crop area is 6-7 tons of feed units, from intermediate crops to 4-5 tons of feed units and from repeated crops to 3-4 tons of feed units, a total of 8-10 tons of feed units necessary.

In order to increase the productivity of food crops, it is recommended to use high-yielding varieties and hybrids and to introduce advanced technologies.

Currently, one of the main factors of increasing livestock production is the wide implementation of modern advanced technologies in personal assistants, farmers and farms.

Introduction of modern technology and scientific achievements in the field for the comprehensive development of animal husbandry, increasing the level of use of equipment, raising the quality of human capital is one of the important issues of today.

To sustainably ensure the needs of the population of the republic for food products, to fill the domestic consumer market with food products produced in our country, to rapidly establish compact processing enterprises equipped with modern high-performance equipment and technology, mainly in rural areas, on this basis, new work in the regions of the republic for the purpose of forming places, providing more people with work, increasing their income and well-being

The activity of processing meat and dairy products on an industrial scale and producing finished products will be carried out only by business entities organized in the form of a legal entity.

The level of milk production can be increased by 30% by artificial insemination with productive bulls. Calves obtained as a result of artificial insemination can reach a live weight of 410-450 kilograms in 15-16 months if intensively fed from the age of 7-8 months, which increases the level of meat production by 30%.

Equipping soft feed factories with innovative technologies for the production of quality feeds can reduce energy and labor costs by up to 30 percent. This, in turn, leads to a decrease in the price of fodder.

The availability of quality and affordable feed increases the purchasing power of economic entities. Livestock fed with high-quality feed will increase productivity, save heifers' calving time, and reduce the cost of female bodies during the period before parturition. An investment in a single service sector in animal husbandry has an impact on the overall development of the sector. [1-2].

The application of innovation to the livestock processing industry creates an opportunity to produce high-quality exportable products. Application of innovative technology reduces energy consumption and manual labor costs. Product export increases the company's income and creates an opportunity to expand production and provide financial incentives to employees. Such an environment is also formed in product suppliers.

The norm of daily use of carbon mineral nutrient supplement is given in Table 2.

Table 2 The rate of daily use of carbon mineral nutrient supplement

№	Indicators	1 day per head of cattle (grams)
1	For large horned cattle	275-570
2	Calves from 1 to 6 months	65-130
3	Calves are 7 to 12 months old	150-270

Innovative technologies are used in livestock development in farms. Carbon mineral feed supplement "Felutsen" is used in the feed.

Table 3 below shows the effect of carbon mineral feed additive "felutsene" on animal live weight.

Table 3 Effect of carbon mineral feed additive "Felutsene" on livestock live weight

№	Months	Group			
		Control		Experience	
		X+Sx	CV, %	X+ Sx	CV, %
1.	Before the experiment	334,0 ± 4,7	4,7	336,0 ± 3,6	3,8
2.	1	358,0 ± 4,4	4,34	366,2 ± 3,8	3,6
3.	2	384,0 ± 4,8	4,0	398,4±3,7	3,4
4.	3	414,3±4,2	3,9	431,8 ±4,6	3,6
5.	Changes in livestock live weight	80,3		95,8	

An additional gain of 80.3 kg was achieved when cattle were fed on a normal feed ration and 95.8 kg of additional growth was achieved when fed with feed supplemented with UMO.

Through the comprehensive innovative development of animal husbandry, it is possible to increase the amount of production in animal husbandry and significantly reduce the cost of products.

Table 4 analyzes the performance of cattle fed with carbon mineral feed additives.

Table 6 Performance of cattle fed with carbon mineral feed additives (per head of livestock)

№	Indicators	In a normal feed ration	Feed with added UMO additives	The difference (+; -)
1.	Additional growth (kg)	80,3	95,8	15,5
2.	Cost of goods sold. (soum)	521950	620100	98150
3.	Cost (Soums)	438580	505620	67040
4.	Profit (soum)	83370	114480	31110
5.	Rate of return (%)	19	23	

The yield rate of cattle fed on a normal feed ration was 19% compared to 23% when fed with feed supplemented with UMO, and the yield rate increased by percent when cattle were fed with feed supplemented with UMO. As a result of innovative technologies, livestock efficiency increases, the profit of the farm increases, the cost decreases, and synergistic efficiency increases.

In order to reduce the cost of products and achieve high synergistic efficiency in personal assistants, farmers and farms producing livestock products, it is necessary to implement the following:

- complex mechanization, increasing labor productivity;
- consistent intensification, increasing livestock productivity;
- to improve the use of working capital, to maximally reduce the consumption of feed for the production of one unit of product;
- improvement of product quality, organization of production of goods;
- centralization of networks, proper organization of specialization and deployment;
- consistent application of best practices and scientific achievements;
- commercialization of the field, strengthening of cooperative relations between product manufacturers;
- to save labor and material funds, reduce research spending, administrative management costs and other unnecessary costs as much as possible.

In order to achieve synergistic efficiency in animal husbandry, it is necessary to ensure the parallel development of several factors affecting the development of animal husbandry.

Summary

To ensure economic stability in animal husbandry, to try to spend every soum rationally and appropriately, that is, to save material, money and labor costs, thereby reducing the cost of the products grown, to use all the means of production available in the animal husbandry network effectively throughout the year, to ensure that all work is done at the right time, with high quality - implementation of productive breeds of livestock, reducing the disparity between the prices of industrial enterprises used in agriculture and agricultural products, increasing the level of mechanization and automation of production processes and reducing the cost of live labor as a result of the introduction of new cost-saving techniques, innovative and effective technologies, zooveterinary activities should be carried out qualitatively and efficiently.

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