

OPPORTUNITIES TO INCREASE EFFICIENCY THROUGH THE USE OF INNOVATIONS IN LIVESTOCK IN FARMS

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A B S T R A C T	K E Y W O R D S
The article presents the possibilities of increasing productivity by applying innovations in livestock farming.	agriculture, innovation, economy, farm, food, nutritious crops, logistics, productivity, animal husbandry.

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 industries.

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.

Materials and methods.

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-selection work, from advanced work experiences and achievements in science. effective use and wide introduction of modern advanced technologies into practice.

The dynamics of the increase in the number of cattle on farms in the Republic of Uzbekistan in 2017-2020 is presented in Table 2.

Table 2

Growth in the number of cattle on farms in the Republic of Uzbekistan in 2017-2020, thousand heads¹

Areas	years					
	2017 year	2018 year	2019 year	2020 year	year 2020 in 2020 compared to 2017	
					+, -	%
Karakalpakstan	31,6	45,8	50,8	55,2	23,6	175
Andijan	39,3	41,7	46,6	53,4	14,1	136
Bukhara	61,0	65,5	68,7	72,9	11,9	120
Jizzakh	26,0	31,4	36,9	41,7	15,7	160
Kashkadarya	59,4	61,1	67,4	74,3	14,9	125
Navoi	24,7	24,6	26,2	33,2	9	134
Namangan	23,5	21,5	21,8	22,4	-1,1	95
Samarkand	63,2	67,5	76,3	77,2	14	122
Surkhandarya	50,4	45,7	42,9	45,2	-5,2	89
Syrdarya	29,0	22,6	21,6	24,3	-4,7	84
Tashkent	60,1	70,7	79,3	76,5	16,4	127
Ferghana	46,3	46,5	51,8	56,5	10,2	122
Khorezm	61,3	60,2	59,4	61,7	0,4	101
Total	575,8	615,9	662,2	708,3	132	123

According to the table, the total number of cattle in 2020 was 575.8 thousand and reached 708.3 thousand in 2020. In 2020, compared to 2017, the number of cattle increased by 23%. The annual increase in the number of cattle in the republic satisfies the population's demand for meat and dairy products, and provides industry with raw materials.

The main reason for this is that the government of the republic brought cattle from abroad in order to provide livestock food products. About 46-47% of the gross agricultural product is grown in the livestock sector. About 90 percent of it is supplied by households. At the moment, the main attention is paid to the production

¹Prepared based on the information of the State Statistics Committee of the Republic of Uzbekistan of ecologically clean products in cattle breeding. For this, it is important to preserve, store and care for them at the required level, that is, to create "comfortable" conditions for them.

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 as well as commercialize intensive technologies.

Table 3 The need for coarse and juicy feed and their supply in farms and agricultural enterprises, thousand tons²

Types of food	Requirement	Practical	%
Hay	515	350,9	68
Straw	487	1491,2	306
Senage	695	389,5	56
Silos	949	568,9	60
Nutritious beets.	223.0	0,4	0,18
Green mass	3738,2	1690.5	45
Total feed (thousand t)	6607.2	4491	67
Conditional 1 head of feed (centner)	1507,0	1011,4	67
	21,7	14,5	67

It is of urgent importance to increase the elite, I-reproduction early and hybrid seeds of food crops and seeds of intermediate crops. In this regard, it is appropriate to strengthen the activity of the primary seed production of nutritious crops at Nav-originators (scientific research institutes in the field), and to strengthen the material and technical base of farms specializing in the regional production of nutritious crops in all regions.

It is important to increase the amount of corn grown in the main and secondary fields. Further development of selection-breeding work in sheep and goat breeding, improving the breeding and productivity characteristics of existing sheep and goat breeds, increasing high-yielding breeding flocks in breeding farms, and increasing the weight of calves in the flock are important activities. 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

2Prepared based on the information of the Ministry of Agriculture of the Republic of Uzbekistan 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 coordinate the establishment of new enterprises using mini-technologies and compact equipment for the processing of meat and dairy products, as well as service points for the preparation of raw milk, in the regions of the republic in 2017-2022 in order to create places, provide more people with work, and increase their income and well-being .

A good result is that the activities related to the processing of meat and dairy products on an industrial scale and the production of finished products are 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.

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

Table 4 The rate of daily use of carbon mineral nutrient supplement

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

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

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

Table 5 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	95,4	15,5
2.	Cost of goods sold. (suum)	521950	620100	98150
3.	Cost (Soums)	438580	505620	67040
4.	Profit (suum)	83370	114480	31110
5.	Rate of return (%)	19	23	

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

CONCLUSION:

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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