

The effect of improving the quality of products in livestock breeding by innovative methods

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Resume. The article looks at creative methods to raise product quality and increase agricultural productivity in the cattle industry. Simultaneously, the efficiency indicators for raising animal breeds and raising feed quality in order to produce high-fat milk were examined. Modern assessment techniques and quality performance requirements must be thoroughly understood while creating, delivering, and planning high-quality goods.

Key words: animal husbandry, cattle breeding, intensive method, product quality, feed unit, diet, breeding, selection, milk, economic efficiency, cost, profit, profitability.

Recently, the demand of consumers for quality products is increasing day by day. Because at present, domestic markets of Uzbekistan are in great demand for high-quality products imported from abroad. Our main goal is to increase and fill the domestic market with high-quality products produced by us, and to increase the export potential of Uzbekistan.

By improving the quality of the product, its shelf life will be extended, the cost and labor costs will be reduced, the competitiveness in the world market will increase, the economy of the enterprise will improve and the consumer's demand will be fully satisfied. That is why product quality is an object of planning and management in the economy.

Cattle breeding is an important component of agriculture, supplying almost all dairy products and 60-70% of meat necessary for full nutrition of people.

The rations and type of feeding of agricultural animals it is necessary to take into account the systems of their feeding and the structure of production, the quality of feeds, their cost and the coefficient of beneficial effect.

In the following years, due to the insufficient low level of production of dairy and meat products in our republic, an increasingly large proportion of these foods are brought in at extreme cost.

Livestock sectors produce about 34% of gross agricultural output. More than 90% of it is supplied by small households. So, very few are on farm contributions.

Livestock is one of the important sectors of the economy, which provides the population of the country with important valuable and high-calorie food products. In addition, livestock farms deliver raw materials for the production of products such as light industry, in particular shoes, clothes and furniture, and other things necessary for everyone.

Now let's look at the level of food supply for the population in 2022. Current data shows that Uzbekistan has significant deficiencies in livestock production per capita. Including the provision of milk, beef and poultry is in a state somewhat lower than the World Health Organization's standards. This situation further strengthens the above points on the development of livestock.

The question of improving product quality and increasing its competitiveness is of great importance for the further development of the economy of our republic, including the livestock industry. In the production, supply and planning of high-quality products, it is necessary to be familiar with modern evaluation methods and standards of quality indicators.

In the field of livestock development, work is being carried out to increase the gene pool of livestock breeds and increase meat productivity, and to introduce innovative technologies to expand the fodder base through the use of genetic methods. Innovative development of animal husbandry is first of all directly related to the intensification of production, as a result of the use of improved innovative techniques and technology, as well as new forms of production and labor organization, the effective and full use of available resources ensures an increase in labor productivity.

In the intensive way of increasing the volume of products, attention is mainly focused on increasing

labor productivity, that is, the farm is involved in the production of vitamin-rich fodder, science-technical achievements without changing the number of livestock. As a result, the cost of 1 unit of product decreases, as well as the volume of products increases.

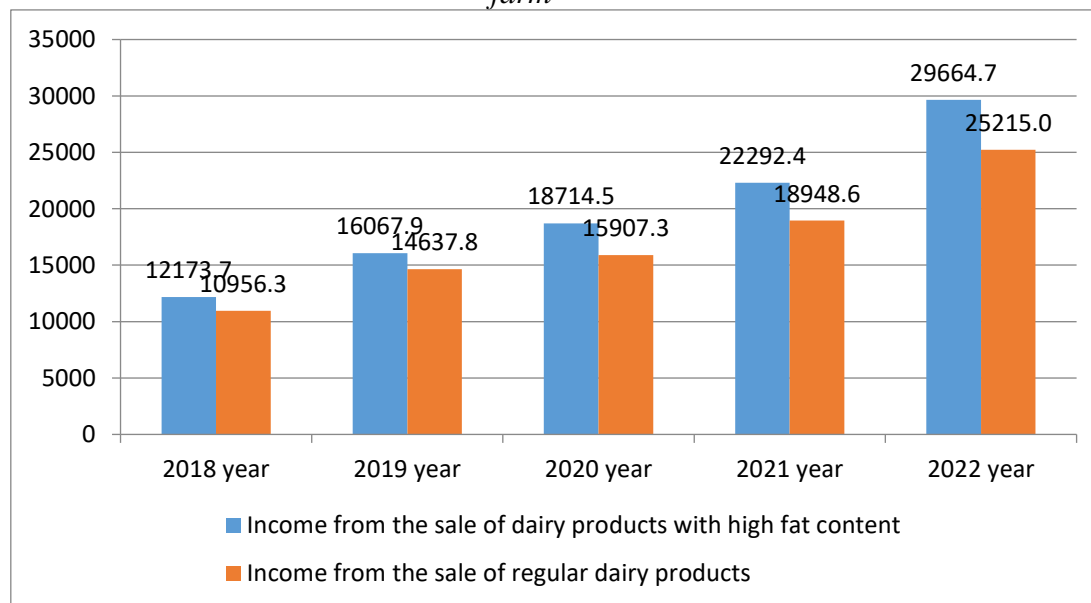
Fodder unit is a unit of measurement that determines the nutritional value of fodder fed to cattle. It is equal to 1 kg of dry oats content of the feed unit. The nutritional value of other forages is compared to this. For example, 1 kg of dry alfalfa is 0.5; barley 1.15; 1 kg of corn is equivalent to 1.4 nutrient units. In cattle, the nutritional value of one feed unit, determined by fat accumulation, is equal to 150 g of internal fat accumulation or 1414 kcal. In addition to the unit of nutrition, digestible protein, calcium, phosphorus, carotene and vitamins are also controlled when evaluating the nutritional value of forage. In practice, special tables are used that indicate the nutritional value of fodder. In the USA, Germany, UK and other countries it is evaluated based on the digestible nutrients in the feed.

The production of livestock products and the rational use of fodder depend on the quality and quantity of fodder given to cattle, the demand of animals for feed and farm conditions. Cattle are fed according to the established norm. Both underfeeding and overfeeding can have a negative effect on animals. The current feed rate recommended for practical use is based on the general demand of animals for nutrients and is expressed by a feed unit; besides digestible protein, calcium, phosphorus, carotene, table salt norms, about 30 different biologically active substances and supplements are used, depending on the type of animal - enzymes, vitamins, carbohydrates, microelements.

Taking into account the consumption of about 0.5 feed units to produce 1 liter of high-quality milk with a fat content of 4%, the feed rate for dairy cows is calculated. The feed rate is not constant, it is reviewed and changed if necessary, depending on the conditions and the production plan.

Strong feed (concentrated) is an important reserve to increase the share of the nutrient unit in the feed. According to the Research Institute of livestock, poultry and Fisheries of Uzbekistan, compared with the same amount of grain mixture, 100 kg of fully balanced feed fed to livestock allows you to get an additional 25-30kg of milk, 3-4kg of meat, 75-90 eggs.

Figure 1. Income change (mln UZS) in the production of dairy products with high fat content in the farm



Source: statistics of farm in Andijan region

It is explained by the fact that the growth of the gross production of milk and meat in recent years is superior to the growth of total production costs in the same period as factors of economic efficiency increase in the analyzed farm. In fact, as it was mentioned above, the income from the sale of milk has increased by 2.43 times and the income from the sale of meat has increased by 2.5 times due to the production of quality products. The total production costs increased by 2.22 times in 2018-2022. As a result, rentability was ensured at 22.7% due to the production of milk products with high fat content.

It is necessary to pay special attention to the technological factors in the development and effective

organization of the livestock industry in the current and future periods when market competition is intensifying. Increasing the production of quality products in cattle breeding, increasing the productivity of animals depends to a large extent on the supply of mixed feed, which is considered the most important and decisive element of the technology of animal care. That's why, in our opinion, it is advisable to build factories with the capacity to supply livestock with sufficient and standard mixed fodder with the participation of foreign investors.

After all, due to the stable development of livestock breeding in Uzbekistan, increasing the number of livestock with a constant growth trend based on the possibility (power) of creating a quality feed base that can provide a standard level, and increasing their productivity per capita production of quality livestock products such as milk, meat, eggs at the level of medical standards and provision of other sectors of the economy with raw materials of the livestock sector at the expense of domestic resources is of significant socio-economic importance.

It is known that fodder and other types of feed make up the main weight of livestock production costs. Therefore, in the development of animal husbandry, including cattle breeding, the first priority is to strengthen the feed base of the industry, identify and plan its internal and external sources of production, form and diversify infrastructure entities related to feed supply, structural and organizational and taking into account the importance of the role of technical and technological measures, it is necessary to recognize the need for their rational use.

In order to implement the innovative development of livestock industries at the republican level, to form and support the system of training and supply of qualified personnel with higher education suitable for each direction of the sector's activity, to provide material and The step-by-step implementation of measures such as the implementation of mechanisms of moral stimulation is of significant economic and social importance.

A number of innovative mechanisms for the production of high-quality dairy products ensure an increase in efficiency. In particular, it is necessary to increase the weight of dairy cows in the farm herd by 60-70%, to sell bulls under 1 year old for breeding. Also: - it is necessary to achieve a level of fat content of milk above 3.6%. For this, it is necessary to revise the diet of cows, to maintain the microclimate of the farm at the required level; - improvement of agrotechnical breeding and selection of animals with high milk fat content in the herd of cows; - strict adherence to personal hygiene of milkers; - full compliance with all zoohygienic requirements during milking of cows; - wash, disinfect and rinse milking containers and storage containers after each milking; - cooling of freshly milked milk to +4...+5°C; - it is recommended to fully equip milk laboratories and make maximum use of them.

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