

BREEDING OF GOATS WITH DIFFERENT PRODUCTIVITY AND THEIR SIGNIFICANCE IN AGRICULTURE AND HUMAN HEALTH

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Abstract

The article is devoted to the analysis of directions in breeding goats of different productivity and their role in modern agriculture, as well as the significance of goat farming for human health. The main productive types of goats - dairy, meat, down, and wool - are considered, along with their biological and economically valuable characteristics. Special attention is paid to the nutritional and therapeutic value of goat farming products, primarily goat milk and products of its processing. The study concludes that goats have high adaptability and that the development of the sector is highly promising under conditions of sustainable agriculture.

Keywords: Goat farming, goat productivity, dairy goats, meat goats, goat milk, agriculture, human health.

Аннотация:

Статья посвящена анализу направлений разведения коз различной продуктивности и их роли в современном сельском хозяйстве, а также значению козоводства для здоровья человека. Рассматриваются основные продуктивные типы коз - молочные, мясные, пуховые и шерстные, их биологические и хозяйственно полезные особенности. Особое внимание уделяется питательной и лечебно-профилактической ценности продукции козоводства, прежде всего козьего молока и продуктов его переработки. Делается вывод о высокой адаптивности коз и перспективности развития отрасли в условиях устойчивого сельского хозяйства.

Ключевые слова: козоводство, продуктивность коз, молочные козы, мясные козы, козье молоко, сельское хозяйство, здоровье человека.

Introduction

Goat farming is one of the oldest branches of animal husbandry and continues to play an important role in the agricultural economy of many countries. Goats are distinguished by their high adaptability to various natural and climatic conditions, low feed requirements, and resistance to a number of diseases. These characteristics make goat breeding especially relevant for regions with limited feed resources and difficult farming conditions.

In recent decades, interest in goat farming has increased not only due to food security concerns, but also in the context of healthy nutrition. Goat farming products are considered a valuable alternative to

traditional livestock products, which determines the need for scientific analysis of productive directions in goat breeding.

Depending on their economic purpose, goats are divided into several main productive types.

Dairy goats are characterized by high milk productivity and a long lactation period. Goat milk has a high content of easily digestible proteins, fats, and mineral substances. It has a fine-dispersed fat structure, which facilitates digestion and absorption by the human body.

Dairy goat farming is widely practiced both in industrial farms and in household plots, as it does not require significant investments and provides quick economic returns.

Meat goats are bred mainly for the production of goat meat, which is characterized by dietary properties, low fat content, and a high level of protein. Goat meat is recommended for people with cardiovascular diseases and metabolic disorders.

The development of meat goat farming is especially relevant in regions with pasture-based livestock systems, where goats effectively utilize natural forage lands.

Down and wool goats are valued for the production of high-quality down and wool used in the textile industry. Goat down is characterized by softness, low thermal conductivity, and high durability of products.

This direction has significant economic importance for certain regions and contributes to the development of handicraft production and processing of agricultural raw materials.

Goat farming in Uzbekistan is an important part of the livestock sector and agriculture as a whole. Livestock production occupies a significant share of the country's agrarian economy, ensuring a large portion of meat and dairy production and supporting employment. According to analyses, the livestock sector as a whole provides up to 46% of the total agricultural output of Uzbekistan and is a key source of income for rural households.

As of July 1, 2024, the total number of sheep and goats in all categories of farms exceeded 3.65 million head, reflecting a 5.1% increase compared to the previous year. Most of this livestock is kept in farmer and household farms, which emphasizes the importance of small-scale farming.

Goats in Uzbekistan are actively used for the production of valuable meat and milk. In 2024, total production of mutton and goat meat reached a record 475.2 thousand tons in live weight, with a significant share - 432.8 thousand tons - produced by household and small farmer farms.

Such production volumes indicate a substantial contribution of goat farming to national food security, especially in regions where pasture livestock farming is traditionally developed.

Goats are resistant to various natural conditions and undemanding in feeding, which makes them profitable for keeping on small land plots owned by farmers and household producers. The majority of small ruminants, including goats, are kept in household farms - approximately 78% of all sheep and goats are raised in this manner.

This means that goat farming is not only a source of food, but also an important economic resource for rural families, increasing their incomes and resilience to economic risks. Household farms actively supply meat and milk to local markets, strengthening the food base of regions.

In some regions of Uzbekistan, initiatives are being undertaken to modernize goat farming. For example, in the Akhangaran district, with technical support from international programs, an intensive goat farm was established, aimed at providing high-quality goat milk for dietary and therapeutic nutrition of the population.

This indicates that alongside traditional pasture-based goat keeping, more technologically advanced and integrated production systems are also being developed.

The significance of goat farming in Uzbekistan's agriculture is difficult to overestimate. It:

- contributes to food security through meat and milk production;
- supports employment and incomes of the rural population, especially in household farms;
- promotes diversification of agricultural production and sustainability of the agrarian economy;
- becomes a focus of modernization initiatives and international cooperation.

Thus, goat farming not only strengthens the agricultural sector of Uzbekistan, but also plays an important socio-economic role in the life of rural communities.

Special attention in scientific research is paid to the impact of goat farming products on human health. Goat milk has a number of biological advantages. It causes allergic reactions less frequently, contains less lactose compared to cow's milk, and has a favorable calcium-to-phosphorus ratio.

Products made from goat milk, such as cheeses and fermented dairy products, help normalize intestinal microflora and strengthen the immune system. In medical nutrition, goat milk is used for gastrointestinal diseases, anemia, and during recovery after serious illnesses.

Goat meat and products derived from it also have high nutritional value and can be considered part of a rational and balanced diet.

Modern trends in agriculture oriented toward environmental sustainability create favorable conditions for the further development of goat farming. Growing demand for functional food products and organic produce contributes to increasing interest in goat milk and meat.

Promising directions include:

- selective improvement of goat productivity;
- introduction of modern feeding and housing technologies;
- development of processing of goat farming products;
- promotion of goat products as elements of healthy nutrition.

Breeding goats of different productivity occupies an important place in the agricultural system and has significant importance for human health. The versatility of goats, their high adaptability, and the value of their products make goat farming a promising branch of animal husbandry. Under conditions requiring sustainable development of the agrarian sector and improvement of population nutrition quality, the role of goat farming will continue to increase, which necessitates further scientific research and practical implementation of obtained results.

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