British Journal of Global Ecology and Sustainable Development
Volume-35, December- 2024
ISSN (E): 2754-9291

DEVELOPMENT OF LIVESTOCK FARMING IN AGRICULTURE

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Abstract
The article presents methods for developing cattle breeding in agriculture, methods for obtaining high-quality meat. It covers such issues as the task of increasing the number of cattle, determining the number of cows and calves that need to be left for the breeding core.

Keywords: Cattle breeding, strait, breeding core, concentration, breeding, cattle breeding, cattle.

Introduction

Cattle breeding plays a significant role in the national economy and is one of the leading branches of animal husbandry. It is widespread in various natural and economic zones and makes a significant contribution to the total volume of livestock products in terms of meat and milk. Cattle produce valuable products such as milk and meat, as well as edible and technical oil; in many countries of Asia and Africa, cattle are used as livestock, and mainly cattle dung is used to fertilize fields.

Cowhide is used to make leather and technical leather, while cowhide is used to make chrome and other soft leather. It also produces a number of by-products, such as bone, horn, wool, gut, and hide.

In the cattle diet, relatively inexpensive forages such as hay, grass, forage, as well as food industry waste (meal, bran, chaff, etc.) play a large role. Due to their biological characteristics, cattle eat a lot of plant foods and food waste rich in fiber and make good use of them. It should be noted that they can convert non-protein nitrogenous substances (carbamide, some ammonium compounds) into animal protein, and more than a third of the cattle's protein needs can be met with such substances. Their similar economic and biological characteristics have created the conditions for the rapid development of cattle breeding as an important branch of animal husbandry.

Currently, more than 300 breeds of cattle are bred in different parts of the world. Cattle breeding is being developed in different directions depending on the natural and economic conditions of individual regions. Cattle breeding is mainly developed in dairy farming areas, in regions where the population of cities and industrial centers is supplied with freshly milked milk and dairy products, and in areas where there are specific conditions for milk production.

In the steppe-desert regions, rich in natural pastures, cattle breeding is mainly developed in the direction of beef production. In these regions, the main, and in many

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cases the only product of cattle breeding is meat. Cows are often not milked, and calves are raised freely.

Beef cattle breeding is mainly developed in the southern and central regions of Kazakhstan, Kyrgyzstan, the lower Volga region, the North Caucasus and Siberia, including Buryatia, the Tuva Autonomous Region and some other regions. In these regions, cattle breeding is mainly developing on a natural feed base. In some regions, cattle breeding is developing in the direction of milk-meat and meat-milk production, taking into account natural and economic conditions. Milk is the cheapest and most valuable product obtained from animals. The milk productivity of cows depends on the breed, as well as on the conditions of feeding, keeping and use. However, the milk yield of cattle of the same breed, kept in the same conditions, is not the same, but depends on the age of the animal, individual characteristics under the influence of heredity, and growing conditions.

The milk yield of cows is expressed in terms of the quantity and quality of milk produced at a specific time, for example, during lactation, or in some cases, the lifetime productivity of the animals is taken into account.

Milk contains all the easily digestible nutrients necessary for the growth of a young organism. The value of milk as a food product is determined by the presence of large amounts of protein, fat, vitamins, and various minerals in its composition.

There is a large difference between cattle breeds in terms of the chemical composition and nutritional value of milk (Table 1).

Table 1 Average composition of milk from different breeds of cows

Cattle breed	Number of cows	Lactatsia Milk produced during 300 days (kg)	Milk composition, %				Protein per 100g of fat (g)	1 liter of milk nutritional value (kcal)
			dry matter	oil	protein	sugar substance		
qora-ola	715	4250	12.18	3.42	3.25	4.90	95.0	704
Holmakor	1112	4850	12.53	3.68	3.28	4.95	89.1	733
Kizilchol	163	3386	13.68	3.82	3.48	4.66	91.0	744
Yaroslav	605	3600	1306	4.00	3.51	4.79	87.7	769
Simmental	442	3502	1373	3.89	3.32	4.80	85.3	749
Kostroma	601	4960	13.09	3.88	3.56	5.12	91.6	774
Jersey	89	3038	15.40	5.87	4.08	4.78	69.5	981

Additional coefficients have been developed to calculate milk productivity in various economic zones. They allow, based on data obtained at a short time during the lactation period, to determine the amount of milk produced during the entire lactation. The composition of milk and its nutritional value also depend on the lactation period, the health of the animals, the conditions of their feeding, keeping, and other factors. Milk production and excretion. Milk production depends not only on the work of the mammary gland, but also on other organs. The central nervous system, digestive, circulatory, and endocrine glands play a particularly important role in the functioning

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of the mammary gland. Milk production is regulated by the nervous and humoral systems.

Milk is formed from blood substances, which are processed in the mammary gland and become components of milk (AA Solovev). The mammary gland is supplied with blood; for example, 500 liters of blood must pass through the udder to produce 1 liter of milk.

The secretory epithelium, which consists of alveoli and cells in the milk ducts, selects only those nutrients that pass from the blood to the mammary gland that are needed to produce certain components of milk.

Milk proteins (casein, albumin and globulin) are synthesized in the mammary gland. Casein is not found anywhere else in nature except in milk. Milk also contains protein-enzymes and complex proteins-lipoproteins that form the shell of fat particles. Milk fat differs in its composition from animal body fat, blood plasma and food fat. It contains up to 60 different fatty acids. Some of these acids are found only in milk.

Neutral fat and blood plasma fatty acids serve as a source for the formation of milk fat, which is formed from dietary fat and fat, which are synthesized from intermediate products formed from the breakdown of proteins and carbohydrates.

The products of carbohydrate digestion in the foregut, especially acetic acid, are important precursors of milk fat. Up to 80% of the acetic acid circulating in the blood is absorbed by the mammary gland. Both glycerol and fatty acids are synthesized from this acid.

Milk sugar (lactose) is the only carbohydrate in milk, synthesized only in the mammary gland and formed from blood glucose absorbed by the mammary gland.

The secretion of the mammary gland is closely related to the secretion and delivery of milk. Milk is collected in the milk alveoli, which are formed by the milk ducts, which enlarge and form milk ducts that open into separate cisterns in each quarter of the udder. From the cistern of the mammary gland, the milk passes into the teat cistern and then into the teat duct. The complex system of compartments (alveoli, milk ducts, cisterns, etc.) in which milk is collected from one milking to the next is called the "cup" of the mammary gland.

The lactation reflex occurs in two phases. In the first phase (neuro-reflex phase), after the nipples are stimulated, milk is released from the ducts into the cistern within 1-4 seconds. The second phase (neurohormonal phase) is due to the effects of the hormones oxytocin and acetylcholine on the myoepithelial cells of the alveoli.

The milking reflex lasts for a short time - about 5-6 minutes, after which the hormonal effects lose their activity and the milking state disappears, regardless of whether the cow is milked or not.

Weaning rate is one of the hereditary traits. Therefore, selecting and breeding animals based on this trait is of great scientific and practical importance.

Lactation

Unlike many other glands, the mammary gland is not always active, but rather during certain periods. The period from calving to weaning is called lactation. The period from

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weaning to the next calving is called weaning. The period from weaning to the next calving is called the dry period. The period from calving to the next calving is called the service.

In cultured cows, the lactation period lasts 300 or more days, while the dry period lasts 45-60 days. Cows give birth to one calf per year. The amount of milk produced per day during one lactation is not the same. Changes in the amount of milk produced on certain days, decades, or months during the entire lactation period can be visualized as a lactation curve. The lactation curve varies from cow to cow. Most often, the milk produced increases until 30-40 days after calving, then it does not increase for some time, stabilizes, and then gradually decreases. After 5-6 months of lactation, milk production decreases significantly.

The position of the lactation curve depends on the level of lactation and the individual characteristics of the animals, their physiological state, as well as feeding and housing conditions.

Studies conducted on various breeds of cattle have shown that milk yield, fat content, and milk protein content are hereditary traits, but many factors that are not passed down from generation to generation can also affect their variation.

The influence of various factors on the quantity and quality of milk. The level of milk productivity of cattle and the composition of milk depend on heredity, the physiological state of the animal, feeding, care and use. Of the factors affecting milk productivity and its quality, the breed of cattle, age, duration and periods of lactation, calving, sexual maturation, etc. are of great importance. The external environmental conditions that affect them include feeding, care, care, climate, etc.

In our country, mixed-milk and meat-producing cattle are the most common, but herds that produce only milk or meat are also found.

These cattle are mainly light yellow, yellow-brown, red in color with a white head. Cows of this breed are large (height at the withers 130-135 cm), well-proportioned (body length 153-162 cm), strong bones (paw circumference 18.5-20 cm). The head is large, the height is of medium length, the chest is deep, the shoulders are broad, the rump is sometimes raised. The muscles are well developed, the skin is thick. The udder is mostly round, well developed.

Defects in the structure of the body: the shoulders are more drooping, the hind legs are incorrectly located, and the chest is not sufficiently developed for the width. Calves weigh 36-45 kg at birth, the average weight of cows is 560-620 kg, bulls - 850-1000 kg. Each cow produces 3000-3500 kg of milk, the fat content is 3.9%. Simmentals from Ukraine and the Central Black Soil Zone are distinguished by their highest productivity, they produce 3500-4100 kg of milk, the fat content reaches 3.7-3.9%.

Swiss breed. The Swiss breed was created in the mountainous regions of Switzerland; it was brought from the east, the remains of which were found in Switzerland and Italy. This breed of cattle, which was bred through long-term selection, is well adapted to local conditions.

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The Swiss breed gradually spread from Switzerland to Germany, Italy, Austria, France, Czechoslovakia, Spain, America, and South Africa.

Due to the fact that the Swiss breed is bred in farms with different natural and economic conditions, and the breeding, cultivation and maintenance systems are carried out in different directions, the cattle of the Swiss breed in different countries acquire their own characteristics. In our country, mainly dairy varieties are raised, but there are also types that produce only milk or meat-milk.

In many mountainous regions, the Swiss breed is recommended for use in improving the breed of jays. In the Fergana Valley, in the districts of Andijan and Namangan regions, the Swiss breed has been used for this purpose for many years.

In addition to Kazakhstan and Kyrgyzstan, the Swiss breed is also successfully used in Tajikistan and Turkmenistan.

The Olatov cattle are similar in color and exterior to the Swiss breed, but differ in being somewhat shorter and having a relatively shorter and more compact body.

The roof-like structure of the skull is a structural defect. The animals are hardy and well adapted to mountainous conditions.

Cows produce 28,000-3,500 kg of milk (fat content 3.8-4%), their live weight is 500-550 kg, and bulls - 850-1,040 kg. Olatov cattle have good meat quality, with a post-slaughter yield of 53-55%.

It is planned to breed this breed of cattle on farms in Kazakhstan and Kyrgyzstan, as well as in Tajikistan and Uzbekistan.

Uzbek jaydari cattle. Most of the relatively few jaydari cattle in Uzbekistan are zebu-like cattle. These cattle were created in ancient times by crossing Kyrgyz and Kazakh cattle brought to Uzbekistan from the north with zebu cattle from the south.

The influence of the zebu on the exterior of the cattle is noticeable in bulls, whose humps are often bulging and fat. Cows do not have such bulging. In addition, the influence of the zebu is also noticeable in the specific structure of the cattle's head.

Uzbek Zebu-like cattle are between 105-112 cm tall, with a body length of 132 cm and a foot circumference of 15.2 cm. They are small in size, mature late, and grow slowly compared to cultivated meat breeds. However, older cattle produce good meat.

The zebu-like jaydar cattle of Tajikistan, especially those of the steppe and mountainous zones, are smaller in size than the Uzbek jaydar. According to V.A. Trofimovsky, the Turkmen jaydar is slightly larger. However, in general, the zebu-like cattle of this republic do not differ from each other in terms of productivity.

Adult cows have a live weight of about 230 kg, and during the lactation period, an average of 850 kg of milk is produced from each cow. The fat content of the milk is 4.2-4.5%.

In the regions of Uzbekistan adjacent to Kazakhstan and Kyrgyzstan, the Jaidari cattle of these republics are also found. Their productivity is 10-15% higher than that of Zebu cattle. When well-fed, Zebu cattle can produce 1000-1500 kg of milk.

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Conclusions and Suggestions

Cattle breeding plays a significant role in the national economy and is one of the leading branches of animal husbandry. It is widespread in various natural and economic zones and makes a significant contribution to the total volume of livestock products in terms of meat and milk. Cattle produce valuable products such as milk and meat, food and technical oil; in many countries of Asia and Africa, cattle are used as livestock, and mainly cattle dung is used to fertilize fields.

The skins of mature cattle are used to make hides and technical leather, while the skins of young cattle are used to make chrome and other soft leather. A number of by-products are obtained from it, such as bone, horn, wool, gut, and hide.

Currently, there are about 400 different breeds of cattle in the world. Some breeds, such as the Dutch, Shorthorn and Swiss, have gained global importance and are distributed on all continents. The milk yield of cows depends on the breed, as well as on the conditions of feeding, keeping and use.

In our country, all breeds of cattle are used for meat production. However, double-productive and semi-dairy cattle are very common, from which both milk and meat are obtained. However, scientific research has shown that it is practically impossible to combine high milk and meat productivity in one organism. Therefore, specialized dairy and meat livestock breeding has been developing effectively in recent years.

Each farm has a breeding and production group of female cattle. Based on the tasks of culling and replenishing the herd, the number of cows and calves left for the breeding nucleus is determined . If the herd is simply restored, the number of cattle in the first issue of each year does not change, while 50% and more of the cattle are allocated to the breeding group, and up to 70% in the case of expanded restoration.

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