



Significant aspects of foreign experiences in establishing services for the livestock field

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Abstract: Currently, one of the most important issues is the development of animal husbandry, in particular, meeting the population's demand for milk and meat products. Many positive results are being achieved in the field as a result of the creation of a number of opportunities for the development of animal husbandry in our republic and the study of the experiences of foreign countries.

Key words: products, livestock field, cattle breeding, cows, agriculture, milk production, livestock genetics, livestock industry, dairy products, livestock farms.

Introduction

Increasing the production of livestock products in the republic is one of the most important issues in the continuous supply of food products to the country's population today. At the same time, increasing the income of rural families through the development of the cattle breeding network and its service system, the processing of livestock products and the possibility of solving economic and social issues by alleviating the employment problem in the region will be greatly expanded. However, at the same time, the breed and genetic characteristics of livestock do not allow a sharp increase in milk and meat products in the republic.

According to the analysis, about 2.6 mln. more than one head of cows are being cared for, and their annual milk yield is 1700 kilograms on average. If we compare this indicator with the indicators achieved in developed countries, it can be seen that there are great opportunities. For example, in the country of Israel, which has accumulated great experience in the field of animal husbandry and is one of the leading countries in the world, the milk yield of cows is on average 11,000 kg, and the milk yield of the best breed cows is 12,000 kg.

If we compare these numbers with the indicators of 60 years ago, we will witness a 5-6 times increase. The natural climate in the territory of the State of Israel changes sharply from north to south and is close to the climate of Uzbekistan in many respects. The south of the country is arid and desert occupies the main part. Precipitation is very unevenly distributed throughout the year, the main part of precipitation falls in the north of the country, and its annual amount varies from 1000 mm to 8 mm in the south.

There are no distinct seasons in the country and it can be divided into rainy and non-rainy seasons. The rainy season is around November-April, and the dry season is around May-October. A special feature of the country in the management of agriculture is that only 8% of the population lives in villages (61% in Uzbekistan).

The country has a total of 440,000 hectares of agricultural land, of which 181,000 hectares (41.1%) are irrigated. Although the warm and subtropical climate is favorable for the cultivation of

citrus fruits, fruits and vegetables, grapes, and cotton, but due to water shortage, the area of cotton has been decreasing in recent years.

Water resources can be identified as the main limiting factor in the development of agricultural industries. Due to the shortage of water, technologies for processing urban wastewater and turning seawater into fresh water are also widely used. Due to the establishment of a single water pipeline system from the north to the south of the country in order to efficiently use water, it became possible to expand the agricultural arable land from 30 thousand hectares in 1948 to the current 181 thousand hectares.

In agriculture, only 8% of land is private property, and 92% of land is social property. Agricultural families lease land for up to 49 years.

Agriculture does not play a significant role in the country's economic development. The share of agriculture in the country's gross domestic product has been decreasing since 1996 and was 1.9% in 1996, 1.7% in 2002, and 1.5% in 2015.

The development of the livestock sector is constantly in the state's attention. First of all, it is manifested in such directions as the support of scientific research conducted in the field of animal husbandry, the allocation of direct subsidies for breeding work.

In particular, a producer protection system has been established by setting the minimum price of milk produced by agricultural enterprises through the "Milk Council" established at the country level. By allocating USD 700 directly from the state budget for each breeding bull, it encourages the purchasing agricultural enterprise to purchase breeding stock. In this way, the state protects livestock farms from buying livestock of unknown origin, but of lower value.

There are a total of 100,000 cattle in the country, and the annual milk production volume is 1 billion liters, and the average annual milk yield per cow is 11,000 liters.

There are a total of 1,000 livestock farms in the country, of which 42% are concentrated in Moshavs and 58% in Kibbutzim (2015). Each pastoralist Moshav connects up to 800 pastoralist families.

If we pay attention to the history of achievements in the field of livestock field in the State of Israel, these results (11,000-12,000 liters of milk production) have been achieved for 60 years. That is, in 1939, the average milk yield from one cow was 2,800 liters, and by 2015, it increased to 11,000 liters on average. The following are the main reasons for achieving these results:

- the basis of the development of the livestock sector is the creation of local livestock breeds and offspring based on the practice of livestock genetics as a result of long-term and effective complex work;

- the basis of services in the field of veterinary medicine is material interest. In particular, the allocation of 1 cent from the price of every liter of milk produced in the country to the scientific laboratory engaged in the prevention and treatment of livestock diseases created the basis for attracting the best specialists to work in the laboratory;

- feeding of each cow in livestock farms according to an individual plan according to the amount of milk produced, created a basis for maintaining productivity;

- feed is delivered to cattle in the form of a concentrate. Feed preparation is not carried out directly on the livestock farm, but is prepared by specialized feed preparation entities and sold to the livestock industry. Although fodder is produced and sold by separate organizations, the price of fodder is controlled by the Association of Cattle Breeders of the Country and the Dairy Council;

- veterinary care is systematically provided, and a qualified veterinarian conducts double control at each farm. Through the computer sensors installed on the body of each cow, all information about their general condition is sent to a single computer bank created for the country, and thus the health of all (110 thousand) cows is under computer control;

- once a month, milk samples taken from each cow are sent to the central laboratory, together with the quality indicators of the milk, the symptoms of the disease are detected in advance and countermeasures are taken;

Milk grown in the country is fully processed. Milk is sold pasteurized in one-liter bottles, and the range of processed milk products is very wide. Kibbutzim and Moshavs turn the milk they produce into finished products through their own processing plants, and they also own the proceeds from the sale.

Each dairy farm receives money in proportion to the fixed price, depending on the quality of the milk it produces, which is determined by a centralized inspection. The problem of finding a buyer for the manufacturer has been solved. Because the amount of production is limited by the quota, it is not possible to produce surplus.

Scientists work directly on the orders of livestock farms to solve practical problems. Each field is specialized, and it is not encouraged for a specialist to be a "universalist" by knowing a little about all fields. Livestock is a fundamental field of science funded by the state. It is also noteworthy that because of long-term selection and breeding work, high-yielding breeds of livestock that correspond to the existing natural and climatic conditions of the country have been created.

Even now, while the breeding work is carried out continuously, the production and the scientists of the fields of veterinary medicine and biogenetics have been established, and the system of financial incentives for the field of science is also worth studying.

In France, the regulation of the field of development of the livestock industry is carried out by many laws, and various administrative bodies, scientific research centers, and public institutions participate in this process. In particular, the following main structures related to the provision of services to the livestock industry operate in the French Ministry of Agriculture:

- In the "Management of Production and Exchange" - the Department of Livestock Industry and Livestock Products Issues, Departments of Breeding and Product Producers and Market Organization operate and provide services to the livestock industry;

- "Department of quality issues" - works mainly within the department of providing veterinary services to the livestock sector;

- "Department of Agricultural and Industrial Products Issues" includes the Department of Machinery and Equipment for Cattle Care and the Department of Use of Livestock Products to provide various advice to farmers;

- "Department of coordination of the activities of enterprises processing livestock products" - they are engaged in the development of the field of processing livestock products and organization of providing advice to farmers in this regard;

The "National Institute of Agronomic Research", which operates under the influence of the French Ministry of Agriculture and the Ministry of Science, is of great importance in the field of scientific support of the livestock sector. Departments dealing with livestock genetics, livestock feeding and care at the institute develop recommendations for farmers. Also, the role of 4 Institutes of Agriculture and Veterinary Institute in the issue of scientific support of the animal husbandry sector is incomparable.

The country's State Association for the Improvement and Breeding of Livestock Breeds (YupRA) has established relevant services in the field of livestock breeding and providing zooveterinary services to farmers. Poultry breeding, cattle breeding, sheep and goat breeding, and pig breeding institutes operate in separate areas.

In France, the "Agriculture" law adopted in 1962 creates a legal basis for the provision of services within the framework of various associations, working together in matters that are difficult for producers of livestock products to do independently.

Such associations solve complex issues such as production, sale and provision of services to the livestock sector, including 50 percent of the products grown in the field of cattle breeding, pig breeding and poultry farming. Alternatively, these associations also carry out the issue of sale of breeding cattle in the domestic and foreign markets (associations belonging to the national federations of livestock and meat products).

An important sector of the Canadian livestock industry, recognized by the world, is the dairy sector, and the country has great competitiveness in the world market in terms of the quality of dairy products. In this regard, the fact that the control system over the quality of milk and dairy products introduced in the country covers not only milk processing but also dairy farms is a guarantee of success.

Also, the progress achieved in improving the breed of cattle and the technological capabilities of Canada's milk processing industry have determined the country's place in the world market. As a result, the country today steadily exports high-yielding dairy cows to countries such as North America, China, Japan, Mexico, Korea and Brazil.

The average annual amount of milk produced from one cow is 9422 kilograms (1650 kg in Uzbekistan), the average protein content in milk is 3.2% and the fat content is 3.8%, making it one of the most developed countries in the world in this field.

"Dairy Farms Association" and "Canadian Milk Processing Association" established in Canada provide farmers with market information, organize important services related to the development of the livestock industry, and protect the interests of farmers before the country's leadership.

The activity of the "Canadian Dairy Commission" (KUIPP) is especially important for the country's position in the world dairy market. This commission collects and processes information on changes in the demand and supply of milk and dairy products in the domestic and foreign markets, and regularly provides professional advice to farmers.

In Canada, the issue of scientific support in the field of animal husbandry is formed within the framework of universities. In particular, in order to carry out research on the diversification of dairy products, milk producing farms, milk processing industrial enterprises and universities have formed an alliance with the participation of relevant departments and are working in cooperation.

The fact that government support for the livestock sector is well established in almost most developed countries is one of the issues worth studying. In particular, in the USA, Japan, and the countries of the European Community, the allocation of subsidies to agriculture amounted to 220, 11,319, and 1,099 USD per hectare of agricultural land, respectively.

It is known that the Netherlands is one of the countries that has achieved great success in the field of livestock. The production of meat and dairy products is considered the main link of agriculture, and the main producers are family farms.

But at the same time, the service system is implemented by associations based on the principles of cooperation. In particular, it is the responsibility of the cooperatives to provide advice on the establishment of livestock farmers' production and sales activities, to provide various services, and to coordinate breeding activities.

If we look vertically at the system of providing services to farmers producing livestock products in the country, the lowest link is carried out by farms and their cooperatives, cooperative associations, and the Department of Livestock and Breeding of the Dutch Ministry of Agriculture.

In this section, livestock farms are engaged in the production of products for the market, cooperatives are responsible for the issues of product sales, product processing, sale of finished products, introduction of advanced scientific and technical achievements in the field of animal husbandry to farms, as well as in the field of processing, zootechnics and veterinary services.

while the Department of the Ministry of Agriculture is engaged in defining the strategic directions of the development of the livestock industry in the near future and in the future.

In Finland, as well as in other countries located in the northern part of the European Union, the majority of farms are engaged in the cultivation of livestock products. This can be seen from the fact that only 15% of the country's total 2,200,000 hectares of arable land is planted with food crops, while the rest is planted with fodder crops for livestock feed.

Agricultural cooperatives are of great importance in providing services to the livestock industry, carrying out large-scale information dissemination on livestock markets, and developing activities for the development of the livestock industry. In particular, the subsidies intended for state support of the livestock industry reach farmers through cooperatives.

In Finland, farmers' livestock cooperatives are of incomparable importance in creating conditions for growing products, in selling the grown products, and in delivering advanced scientific and technical achievements to farmers. Farmers contact their cooperatives directly for the sale, processing, supply of material and technical resources, crediting of production, as well as the use of special services.

The role and significance of cooperatives can be seen in the fact that 75% of meat products and 92% of dairy products grown in the country reach consumers through cooperatives, 50% of fertilizers, 65% of fodder, and 40% of machinery and fuel are supplied to farms by cooperatives.

It can also be seen in the example of Great Britain that cooperatives have the main weight in the organization of the service sector for farmers. Farmers' cooperatives are entrusted with tasks such as selling products, providing farmers with material and technical resources, and providing farmers with marketing information about the market.

In the United States, the livestock industry is primarily served by cooperatives. The state provides comprehensive practical assistance to farmers in the creation of cooperatives in the field of production and sale of livestock products. At the same time, in the USA, farmers are less protected by the state than in the countries of the European Community, and changes in the market price of such products are almost uncontrollable. In the consumer market, the protection of consumers' interests and compliance with environmental laws are prioritized by the state, and conditions for strong competition among producers are created, which allows production efficiency to increase compared to Europe.

In particular, since 1968, about 90 percent of the meat grown by poultry farms has reached the consumer through cooperatives based on contracts concluded with processing enterprises, now production is carried out on the basis of full contracts.

In the United States, cooperatives with the participation of agricultural enterprises undertake the performance of all services in the process, from the cultivation of the product to its delivery to the consumer, within the framework of cooperation of poultry processing industry, feed manufacturing enterprises, and poultry farms.

Changes in the market demand for livestock products and technical and technological development are rapidly changing the requirements and conditions in the food industry and trade system.

The very complex requirements imposed on food products by modern markets require livestock producers to adapt to these requirements. Only cooperatives with a special service system and specialists can effectively adapt to such requirements. In the contract concluded with farmers within the framework of service cooperatives, product volume, quality, price, delivery period, type of livestock, breed, quantity and consumption of mineral fertilizers for fodder crops, volume of livestock maintenance services are planned.

In this case, cooperatives provide the farmer with qualified advice related to the livestock

industry, organize services in various directions, in most cases, the farmer does not need other tools than the land area, a certain amount of initial investment, livestock buildings, equipment and his own labor force. Production services are almost entirely carried out within the framework of the cooperative system. Cooperatives undertake to provide the farmer with credit, market information, special transportation and other services, and the cooperative is formed to serve its members.

At the same time, it should be noted that the activities of farmers' cooperatives are becoming increasingly multidisciplinary. At the same time, cooperatives are becoming structures engaged in material and technical support, selling products, providing various services to farmers, and processing livestock products.

So, in conclusion, if we pay attention to the experience of developed countries, manufacturers are using the advantages of cooperation in order to cope with market competition.

Although the provision of services to the livestock sector in foreign countries is organized within the framework of the unique characteristics of each country, the following can be distinguished as important aspects for Uzbekistan:

- in conjunction with the constant control of the development of the livestock industry by the state, it is possible to see the direction of helping to improve the quality of services by supporting non-governmental organizations in the form of cooperatives in adapting farmers' activities to the market. Also, the basis of the development of the livestock sector is the economic incentive measures used by the state;

- control over the quality and safety of livestock products grown in the country is very strong, and it is difficult for individual farmers to meet the high level requirements, so the development of professional cooperatives is given importance;

- the results of harmonizing the interests of farms producing livestock products, branches engaged in breeding of livestock, product processing units, scientific-research sector in the field of zoo-veterinary and trade are the main foundation in the development of the livestock sector;

That is why in the future in our republic, the establishment of a service system for farmers by cooperatives or similar structures with a deep specialization in the field of animal husbandry, the organization of breeding issues, the cultivation of nutritious fodder, as well as other types of services, should remain the main problem.

In conclusion, we can say that the increase in milk productivity is explained by the increase in breeding work and the import of purebred livestock. If we conclude from the above, it is happening at the expense of the development of farmers and farms to meet the needs of the country's population for dairy products. However, creating a solid feed base, improving the quality of service, and increasing production per 100 hectares of agricultural land requires. In addition, according to the analysis, in 2008-2018, there was a 31.9% increase in the number of veterinary centers in the republic. In 2008, there were 2,162 centers, and by 2018, there were 2,851 centers. Provision of services for artificial insemination of livestock by zoo-veterinary centers is developing. In particular, in 2008, 617,200 cows were artificially inseminated, in 2010, 1,325,100 cows were inseminated, and by 2018, 2,830,000 cows were inseminated. It is noteworthy that the number of imported seeds is decreasing while the number of cows is increasing.

Also, the prices of services provided to Livestock Farms have their influence on the production process and quality. According to the analysis of the price of services provided in monographic studies, 53 percent of participants rate the price of consulting services as average, 18 percent as high, and 29 percent as low. Among the respondents, 68 percent consider the value of veterinary services to be average, 23 percent consider it high, and 9 percent consider it low.

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