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**OPTIMIZATION OF TECHNOLOGICAL PROCESSES OF PREPARATION OF FEED TO ENSURE THE QUALITY AND COMPETITIVENESS OF PRODUCTS OF THE ENTERPRISE**

**Introduction.** In the aspect of international and national transformation processes, one of the most important strategic issues of the Ukrainian state is the definition of promising areas of production management, in particular product quality management. The modern economy puts the company in quite tough conditions of competition, which will put those who have products in terms of quality will prevail. Under these conditions, quality management becomes one of the defining aspects of the overall management of the enterprise. To meet the consumer market, the establishment of systematic production within a specified period, reducing its cost, determining a reasonable price for buyers, which would reimburse the costs of producers, contributing to maximum profits, it is necessary to achieve the proper level of product quality, maintain and constantly work on its improvement.

**Purpose.** Development of recommendations to improve the competitiveness of dairy products, by ensuring a sustainable level of quality and reduce the cost of preparation and distribution of animal feed, taking into account the volume of production..

**Methods:** кnowledge, scientific generalization, comparative analysis, system-structural method.

**Results.** To create a model of optimization of technological processes of preparation and preparation of feed for feeding, its algorithm is developed that offers optimization of technological decisions to carry out, proceeding from requirements of production technology to costs of its implementation and the functional indicator of quality of process on the basis of its modeling, with determination of influence of a condition of a forage and working bodies of the equipment.

The adequacy of the proposed model of conversion of feed energy into cow – milk production is confirmed by the dependence of daily milk yield on the feed exchange energy. Model of optimization of parameters of technological processes includes the following blocks: harvesting and preparation of feed, feed conversion in production animals, and accounting and cost optimization.

By results of researches of the academician of Ukraine O.G. Bogdanova for daily milk yield of 20 kg is required 163,0 MJ metabolizable energy; according to O.P. Kalashnikova - 168,0; according to O.K. Тriscinа - 202,4; and model - 189,3 MJ.

Optimization of parameters of competitive production is carried out by optimization of parameters of technological processes of production by minimization of Prime cost of the main production at certain indicators of quality of milk – fat and protein. This is the essence of the concept of competitiveness of dairy products on the example of JSC PZ "Steppe" Kaminsko-Dneprovsky district of Zaporizhzhya region.

For determination of optimum technology of preparation of forages to animals it is expedient to define the place and share participation in its influence on economic indicators of all production. To do this, consider the structure of the cost of milk production, made in the quality system ISO 9000 series.

Analysis of the production costs of dairy products for 400 cows, determined by the developed method, shows that of all the production processes on the farm the most expensive are the processes of the pre-production stage, which when valued at 64,50%, where fodder is 89,9%.

The production of 400 cows on the farm itself accounts for 26,27% of the total cost, including 2,98% of the total cost of keeping animals.

For the preparation and distribution of feed accounts for 10,14% of the cost.

The importance of the feasibility of technological improvement of feed preparation processes confirms that their implementation can increase the productivity of cows by 9-18% and reduce feed losses by 7-12%.

Analysis of the cost structure of production elements, submitted in matrix form according to (2,5), shows that the greatest weight of costs has components of EMG-materials for an animal which generally are forages-58,16% and EMO-materials for fixed assets-13,52%. Materials for fixed assets, fuel and lubricants.

Analysis of the cost components of stationary and mobile technologies for feed preparation on farms in 200-1000 cows show that they are most determined by the materials for fixed assets (energy and spare parts for equipment) and the size of capital investments in technology.

The cost analysis of the lines of feed preparation shows that labor costs are estimated at 10,13-11,69%; fixed assets-29,05 – 32,08%; materials-56,33-60,82%.

The main share of energy costs - is the cost of the lines of stem feed (41,6-43,3%) and distribution of feed mixture (20,0-25,5%). The line of root crops requires no more than 16%, the line of compound feed, and mixing - 7,5-8,0%.

Having determined the average indicator of specific energy costs, which is 0,0847-0,0686 MJ / MJ, and comparing it with the indicators for the processes of processing of components of the diet, it can be concluded that the technological solutions of the processes of processing of coarse stalk feed and root crops do not meet the requirements of today, since the indicators for these processes exceed the average. This once again confirms the need to improve their technological solutions.

**Conclusion.** The analysis of different levels of production costs of livestock products and technologies of preparation and distribution of animal feed on dairy farms of different sizes identified ways to improve the technology in the direction of the use of mobile technology of preparation and distribution of feed mixtures using feed mixers.

The developed algorithm for optimization model of parameters of technological processes of preparation of feed, which is based on a method of determining influence on the productivity of animals dietary composition and cooking quality components of a forage mixture will determine the best technological solution of the preparation and distribution of forages on dairy farms.

The efficiency of operation and development of enterprises is largely determined by the possibility of system management of production at the levels of technology, organization of production and economy. This is especially important in the creation of new and reconstruction of existing enterprises for the production of milk, where large financial investments are needed. It is possible to minimize or eliminate the risks of non – repayment of such investments provided that the international quality system ISO 9000 is used in the management system, which, considering the life cycle of products at 11 stages – from marketing to disposal-at the second stage involves the design of products, which is most appropriate to carry out modeling of its production. This approach ensures the production of competitive dairy products with the highest probability.