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Accounting And Analytical Development Support Of Dairy Cattle In The Krasnodar Region.

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ABSTRACT

The article discusses the main problems of accounting and analytical support for the development of dairy cattle breeding in the economic region. The organizational and economic factors of growth in the efficiency of the dairy cattle breeding industry are determined on the basis of the use of digital methods and tools for the formation, processing, grouping, interpretation, use, and storage of economic accounting information.

Keywords: dairy cattle breeding, efficiency descriptors, accounting and analytical support of management.

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INTRODUCTION

The economy of the national economy and the employment of the population of the region largely determines the development of the agro-industrial complex, represented by diversified agricultural and processing organizations and enterprises with a well-functioning infrastructure, as well as the growing number of peasant farms. It produces more than 80% of food products consumed by the population.

The geographical location and favorable climatic conditions due to the borders of the belts of temperate and subtropical climate predetermined the Krasnodar Territory leading role among the Russian regions in the production, processing of agricultural products and food supplies to the industrial centers of our country.

Objective: to determine the role and importance of accounting and analytical support for managing the development efficiency of the dairy cattle breeding industry in the region.

MATERIALS AND METHODS

The study was conducted on the basis of information data taken from statistical reports conducted by the Federal Statistics Service, the Ministry of Agriculture and the processing industry of the Krasnodar Territory, and materials from a special survey of pilot agricultural units of the Krasnodar Territory. In conducting the study, various methods of cognition, interpretation, systematization, and synthesis of accounting and analytical information were used.

RESULTS AND DISCUSSION

One of the main branches of animal husbandry in the Krasnodar region is dairy cattle breeding. Its products are a source of replenishment of the human diet with high-grade proteins, essential amino acids, and vitamins.

In order to assess the actual development of dairy cattle breeding in the Krasnodar region and in pilot organizations, the security of economic entities with agricultural lands should be considered, since this is the main means of production and the main source of animal feed (Table 1).

Table 1: Availability of agricultural land in the agricultural organizations of the Krasnodar region and pilot farms, ha

Year	Agricultural organizations of Krasnodar Region	Organizations under study Korenovsky district:		
		FSUE "Korenovskoe"	Kuban	FSUE "Berezanskoe"
2010	2583630	6699	8356	14602
2011	2614045	6699	8315	14811
2012	2850788	6699	8309	15047
2013	2500826	6699	8330	14940
2014	2520164	6699	8377	14748
2015	2504420	6691	8158	14542
2016	2469890	6691	8158	7293
2017	2365022	6699	8140	7305
2017 by % to 2010	91,5	100,0	97,4	50,0
2017 by % to 2016	95,8	100,1	99,8	100,2

The study found that in the agricultural organizations of the Krasnodar Territory and in the pilot organizations of the Korenovsk District, there was a variation in the area of agricultural land, either upward or downward. The main reason for the changes is, in our opinion, due to legal gaps in the land legislation, namely: at present, the owners of land shares that they received in 1989-1993 no longer work in farms, and their heirs (a significant number) Do not seek to enter into long-term leases with groups of agricultural

organizations. This leads to an unstable situation, a violation of crop rotations, an uncertainty of farms in the security of production of agricultural products with the land.

We carried out the analysis of the provision of agrarian formations with agricultural lands using aerospace monitoring developed by I. S. Kozubenko, O. A. Motorin [3]. The use of the comparative analysis method “traffic light” clearly demonstrates that the agrarian formations provide the higher organizations with insufficiently accurate information about the area of agricultural land (Figure 1).

	2010 г.	2011 г.	2012 г.	2013 г.	2014 г.	2015 г.	2016 г.	2017 г.
According to the form number 9 of the agricultural sector (annual)	8356	8315	8309	8330	8377	8158	8158	8140
According to space sensing data	8412	8402	8338	8328	8402	8211	8211	8148

Figure 1: Comparative analysis of agricultural land in the "Kuban" Korenovsky district

Figure 1 clearly shows the deviations in the area of agricultural land provided by the Kuban joint-stock company of the Korenovsky district in the annual accounting financial statements (form No. 9-AIC - annual) and according to the data of space sensing conducted by the Analytical Center of the Ministry of Agriculture of the Russian Federation [7]. From these indicators, it follows that the accounting and information support of the agricultural land management system should be adjusted when justifying and making management decisions. The impossibility of obtaining reliable data from economic entities of the agricultural sector on the actual size of agricultural land in the manner prescribed by law entails the absence of reasonable information about crop rotation, the use of plant protection products, the capacity of the machine and tractor fleet, etc. This makes it difficult to conduct a qualitative assessment and monitor the functioning efficiency agricultural production.

The availability of agricultural land is an important factor contributing to the breeding of cattle, both in the Krasnodar Territory as a whole and in the pilot organizations of the Korenovsky district. At the same time, the number of cattle in the region is steadily declining, which was the result of ill-considered agrarian reforms of 1990-1995. (Table 2).

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Table 2: Dynamics of livestock of the main herd of dairy cattle in agricultural organizations of the Krasnodar Territory and pilot organizations, goal

Year	Agricultural organizations of Krasnodar Region	Organizations under study Korenovsky district:		
		FSUE "Korenovskoe"	Kuban	FSUE "Berezanskoe"
2010	155468	850	520	375
2011	148769	892	520	375
2012	147803	916	520	375
2013	137957	1003	520	375
2014	128951	1091	520	375
2015	123493	1114	520	375
2016	123687	1186	520	375
2017	132104	1250	520	375
2017 by % to 2010	85,0	147,1	100,0	100,0
2017 by % to 2016	106,8	105,4	100,0	100,0

So, in the agricultural organizations of the Krasnodar Territory in 2017, the livestock of cattle of the main herd was 132.1 thousand heads, and in 2010 - 155.5 thousand goals. For eight years, the livestock has decreased by 23.4 thousand., Or 15.0%.

A similar trend is also observed in the organizations under study in the Korenovsk District. In the JSC "Kuban" and FSUE "Berezanskoe" the livestock of cattle is kept at the same level. At the same time, there is a decision of the Legislative Assembly of the Krasnodar Territory on the gradual growth of the population (in 2017, the growth of the population is planned to be 10.0%).

During the period under review, P.P. Lukianenko of the Russian Academy of Sciences increased the livestock population of cattle from 850 head in 2010 to 1250 head at the end of 2017. The increase was 400 goals or 47.1%.

The study of administrative documents regulating the activities of the Federal state unitary enterprises found that all economic entities subordinate to the Russian Academy of Sciences were recommended to gradually increase the number of cattle. The reason for non-compliance with the instructions of the FANO (Federal Agency of Scientific Organizations of Russia) of FSUE Berezanskoe is the lack of financial resources for the restoration of premises for livestock. In addition, as we noted above, this organization has not resolved the issue of agricultural land. However, work on the cultivation of young stock, which can be used to increase the livestock of the main herd in the organization is underway. This is evidenced by the output of calves per 100 cows, which, in principle, allows for the reproduction of the herd and its growth.

From 2010 to 2014, the cattle population in the agricultural formations of the Krasnodar Territory decreased annually by 11,756 heads. It is known that in 2014, economically developed countries imposed sanctions against Russia, which provide for limited food supplies to our country, including milk and dairy products. This was the reason for the growth of livestock animals in organizations and farms in the country and in the Krasnodar Territory. During the period from 2015 to 2017, the livestock of dairy cattle grew annually by more than 800 heads. This is evidenced by the equation of the aligned dynamic series: $y = 169383 - 11756x + 815.67x^2$. This polynomial equation almost exactly reflects the change in the studied indicator, since the coefficient of determination $R^2 = 0.8905$, or 89.1%.

Next, follow a load of cattle livestock on 1 hectare of agricultural land (Table 3).

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Table 3: Number of animals of the main herd of cattle of the dairy direction on 1 hectare of agricultural land, goal

Year	Agricultural organizations of Krasnodar Region	Organizations under study Korenovsky district:		
		FSUE "Korenovskoe"	Kuban	FSUE "Berezanskoe"
2010	0,06	0,13	0,06	0,02
2011	0,06	0,13	0,06	0,03
2012	0,05	0,14	0,06	0,02
2013	0,06	0,15	0,06	0,03
2014	0,05	0,16	1,00	0,03
2015	0,05	0,17	0,06	0,03
2016	0,05	0,18	0,06	0,05
2017	0,06	0,19	0,06	0,05
2017 by % to 2010	100,0	146,2	100,0	250,0
2017 by % to 2016	120,0	105,6	100,0	100,0

The study found that per 1 ha of agricultural land accounts for less than one head of livestock of the main herd of the dairy direction [1]. Is it a lot or a little? Scientific recommendations on this issue are reduced to the rate of one head per hectare. With this ratio, the land is not depleted, provides animals with balanced feed, and in return receives an adequate amount of organic fertilizer in the form of manure.

Reducing number of animals on a hectare of agricultural land deprives the farms of the source of natural fertility, leads to the increasing use of mineral fertilizers, the cost of which is significantly (several times) higher, which in turn leads to an increase in the cost of finished products. The population of the region with a low load of animals per 1 ha naturally loses the required amount of dairy cattle breeding products. This is especially acute for children who need this natural food [8].

Table 4: Dynamics the dairy cattle productivity in the agricultural organizations of the Krasnodar region and pilot organizations

Year	Agricultural organizations of Krasnodar Region		Organizations under study Korenovsky district:					
			FSUE "Korenovskoe"		Kuban		FSUE "Berezanskoe"	
	milk yield per cow fodder, kg	output calves per 100 cows, a goal.	milk yield per cow fodder, kg	output calves per 100 cows, a goal.	milk yield per cow fodder, kg	output calves per 100 cows, a goal.	milk yield per cow fodder, kg	output calves per 100 cows, a goal.
2010	5399	104	6722	117	5608	90	6559	139
2011	5560	106	6780	108	5546	108	6565	125
2012	5769	102	7155	118	5863	83	6891	138
2013	5819	102	7622	111	5236	104	7064	130
2014	6111	100	7242	115	6188	97	7010	116
2015	6713	108	7368	103	6088	93	7010	113
2016	6522	108	7667	116	5383	98	7065	124
2017	6415	96	7834	106	6861	96	7030	116
2017 by % to 2010	118,8	92,3	116,5	90,6	122,3	106,7	107,2	83,5
2017 by % to 2016	67,4	88,9	102,2	91,4	127,5	98,0	99,5	93,5

Consequently, the content of policy documents on the development of animal husbandry in the Kuban reflects scientifically proven postulates, and they can be considered quite necessary for execution. Once again, we note that the constraint on the growth of livestock is the problem of landowners who have lost contact with agricultural production.

The study of the productivity of animals from the main herd of cattle from 2010 to 2017 inclusively shows that milk production per fodder cow as a whole in the agricultural organizations of the Krasnodar Territory and in pilot organizations of the Korenovsk district has a steady growth trend (Table 4).

So, in 2010, the milk yield per fodder cow in the agricultural organizations of the Krasnodar Territory was 5399 kg, in 2017 - 6415 kg. For eight years, milk production in agricultural organizations increased by 1016 kg, or by 18.8 percentage points. In the advanced organizations of the Krasnodar Territory (Krasnodar Uchkhoz FGBOU IN. I.T. Trubilin and others) the milk yield exceeded the 10,000 kg bar.

Extremely surprising were the indices of the yield of calves per 100 heads of cows, which exceeded 100 heads! From a biological point of view, the birth of twins in cattle is a rather rare phenomenon. What are the factors that have ensured such reproductive activity of cows in recent years, how does this affect the productivity of calves? Science knows that you cannot leave a chick out of twins if she was born with a calf.

The fact is that if heterosexual offspring is born, the heifer almost always remains barren.

The hormones of the bull still in utero suppress female hormones in a heifer and cause underdevelopment of the genitals. But same-sex twins are highly productive. Therefore, when reflecting this fact of economic life, the primary accounting documents should contain information about the birth of gender-opposite twins. The decomposition of the analytical accounting of the posting of calves of calves does not contain this information in economic accounting, and therefore in management accounting, as in zootechnical accounting, this information is extremely necessary [2].

A special survey of veterinarians and zootechnicians of the Federal State Unitary Enterprises of the Korenovsky District has established that intensive technologies for the exploitation of animals negatively affect the reproductive function of the breeding stock. The fact is that the intensification of the use of cows is the reason for reducing the operation period of a milch cow from 8-10 years to 3-5 years. A short period of economic life of dairy cows, an intensive level of feeding, a high level of artificial insemination "wears out" the biological potential of animals, leads to their depletion [6]. This leads to the fact that the most productive period does not exceed 5-6 years, further cows are rejected, replacing the replacement young. At the same time, there was a positive correlation between milk yield with the reproductive ability of animals fertilized with the use of embryo transplantation.

Using data from scientists of the Federal State Unitary Enterprise “Korenovskoye” KNIISKh im. P.P. We investigated the reproductive capacity of animals with the subsequent determination of the efficiency of using cows by calculating the amount of under-received products in the form of milk and calves (Figure 2).

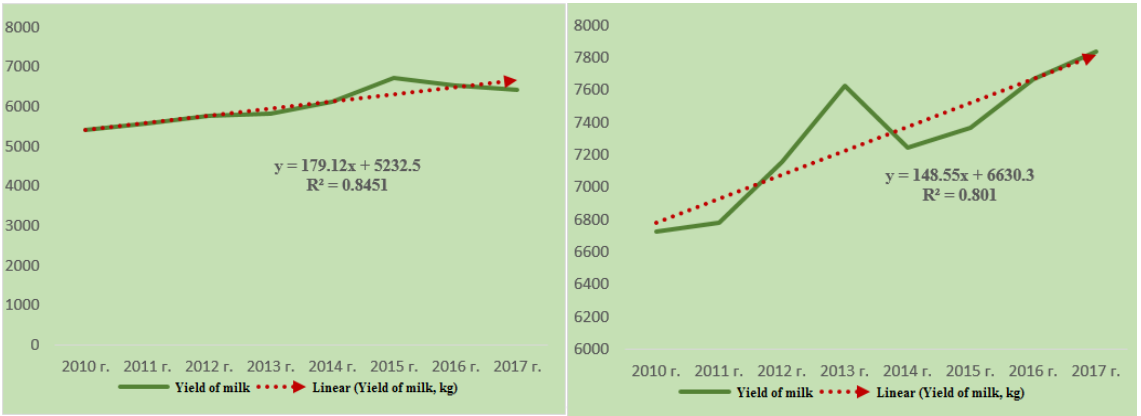

Figure 2: The level milk production of the main herd, kg

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It is noted that the relationship between the main indicators was determined by calculating the correlation coefficient (R). The magnitude of the influence of the factor on the studied parameters was determined by the method of univariate analysis of variance. It was found that with an increase in milk production, the main indicators of the reproductive ability of cows (service period, interval period, the coefficient of reproductive ability and insemination index) decreased by 10-12%. Cows with milk yield up to 7000 kg of milk showed the highest breeding rate in the herd (5-6), insemination index (1.8), calves yield (95.0%) and the smallest total losses from the lost production in the form of milk and calves.

To more fully realize the potential productivity of cows, which is 7000-10000 thousand kg of milk or more, it is necessary to improve the conditions of feeding and housing.

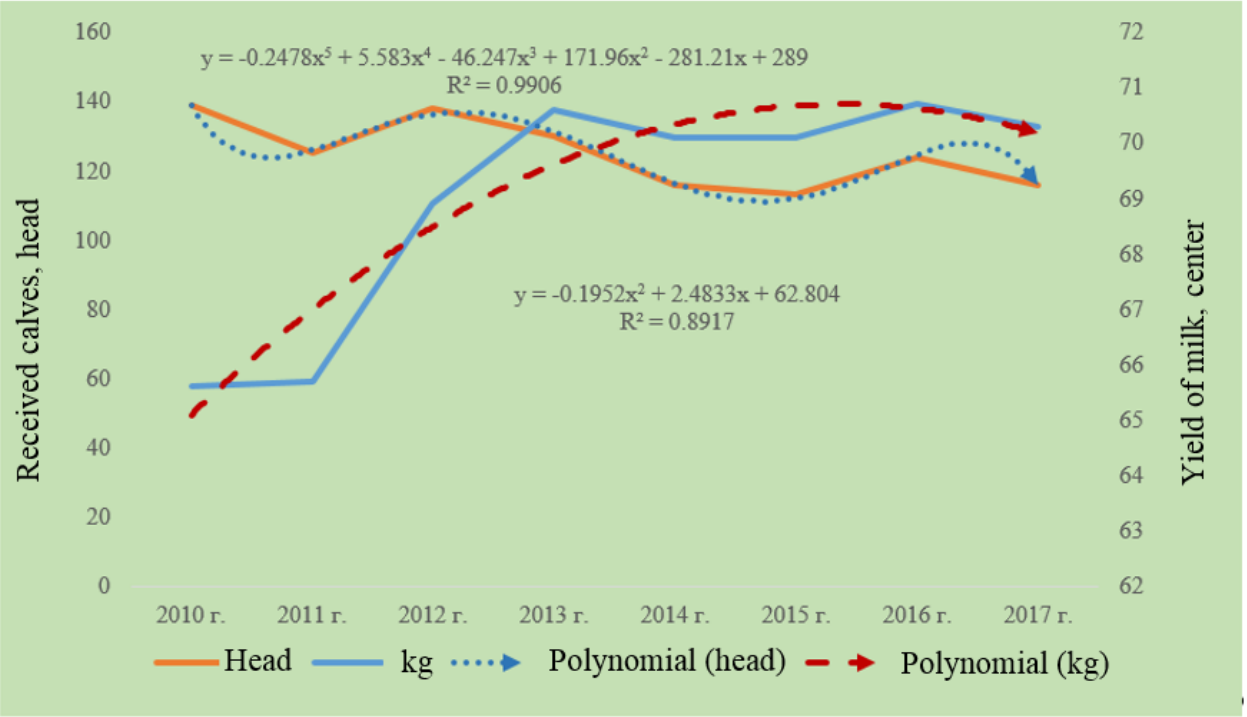

Figure 3: Reflection of the correlation dependence of the dairy and reproductive productivity of cows in the Federal State Unitary Enterprise "Korenovskoye" KRIH. P.P. Lukjanenko of the Russian Academy of Sciences

In Figure 3, one can clearly trace the growth dynamics of the milk productivity of cows of the main herd in agricultural organizations of the Krasnodar Territory and the FSUE "Korenovskoye". In organizations of the region milk yield increased annually by 179.12 kg, this is indicated by the linear equation of the aligned dynamic series: y = 5232.5 + 179.12 xx.

The main reason for such high productivity of cows is the factor of intensive turnover of the herd, reducing the biological period of reproduction.

The data in Table 5 indicate that the time lag of using cows in the main herd (from the moment of transfer to the moment of culling) in the agricultural organizations of Krasnodar Krai and in the farms of the Korenovsk district is decreasing. Only in the FSUE "Berezanskoe" KNIISH them. PP Lukjanenko of the Russian Academy of Sciences, the duration of the exploitation of cows (a biological asset) in 2017 increased slightly. This once again confirms the conclusion that the intensity of the use of cows in the present period is quite high, less than the biologically possible period of 3-4 years.

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Table 5: Time lag of using cows of the main herd, years

Year	Agricultural organizations of Krasnodar Region	Organizations under study Korenovsky district:		
		FSUE "Korenovskoe"	Kuban	FSUE "Berezanskoe"
2010	6,8	5,9	7,2	5,1
2011	6,4	6,1	6,8	5,0
2012	6,9	6,0	6,7	4,8
2013	6,7	5,8	6,6	4,4
2014	6,3	5,7	6,3	5,1
2015	6,1	5,4	6,0	5,2
2016	5,8	5,0	5,9	5,0
2017	5,4	5,1	5,4	5,5
Deviation (±) 2017 from 2010	-1,4	-0,8	-1,8	0,4
Deviation (±) 2017 from 2016	-0,4	0,1	-0,5	0,5

The change in the number of livestock of the main cattle of the main herd and their productivity are the dominant factors of the growth of the gross milk production and the production of the livestock of calves (Table 6).

Table 6: Dynamics of production of main and related products of dairy cattle in agricultural organizations of the Krasnodar Territory and pilot organizations of Korenovsky district

Year	Agricultural organizations of Krasnodar Region		Organizations under study Korenovsky district:					
			FSUE "Korenovskoe"		Kuban		FSUE "Berezanskoe"	
	milk, c	litter, head	milk, c	litter, head	milk, c	litter, head	milk, c	litter, head
2010	8393065	162115	57136	994	29160	468	24598	522
2011	8271604	157547	60482	962	28837	560	24618	467
2012	8525807	151169	65544	1084	30490	430	25843	509
2013	8027077	140041	76446	1110	27228	542	26490	488
2014	7880116	128952	79010	1258	32180	506	26287	434
2015	8290214	133560	82082	1148	31658	481	26288	423
2016	8067470	133302	90932	1380	27991	507	26492	464
2017	8474378	127431	97921	1325	35678	501	26362	435
2017 by % to 2010	101,0	78,6	171,4	133,3	122,4	107,1	107,2	83,3
2017 by % to 2016	105,0	95,6	107,7	96,0	127,5	98,8	99,5	93,8

The gross milk production in agricultural organizations of the Krasnodar Territory is increasing from year to year. Thus, in 2010, 8393065 centers of milk were needed in the region, in 2017 milk yield reached 8474378 centers. The increase in gross milk yield over eight years was 81313 centers or 1.0%. Note, however, that the growth of gross milk yield occurred with a simultaneous decrease in the average annual livestock of animals of the main herd of the dairy direction. In 2010, the average annual livestock population of the main herd was 1,55468 heads, and in 2017, as we have already noted, the average annual livestock decreased by 23,364 heads and amounted to 132,104 heads.

Perhaps such a trend would have pleased the population of the Krasnodar Territory, but we only note that fewer and fewer agrarian formations are engaged in breeding dairy cattle [7]. This situation provokes us to, at the legislative level, bring to the landowners quotas for the purchase of milk from a unit of agricultural land: if you own the land - be kind in the market set milk quota!

When choosing the typical organizations for the study, we are faced with the problem of finding business entities that would be engaged in dairy cattle breeding. Previously, the constraint on the growth of

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livestock in the Kuban region was the lack of trained personnel capable of animal husbandry. The present time is characterized by other conditions: there seem to be people in villages and farms who could be engaged in the production of livestock products, but only the owners of the land and property complex of economic entities are not interested in the existence of the livestock industry. It is easier to engage in crop production (grain, sunflower, etc.) - less care, and a decent income.

The economic entities remaining on the milk and dairy products market are striving to increase the intensification of the industry and to equip the production with high-tech equipment. This, in turn, leads to an increase in labor productivity in the industry (Figure 4).

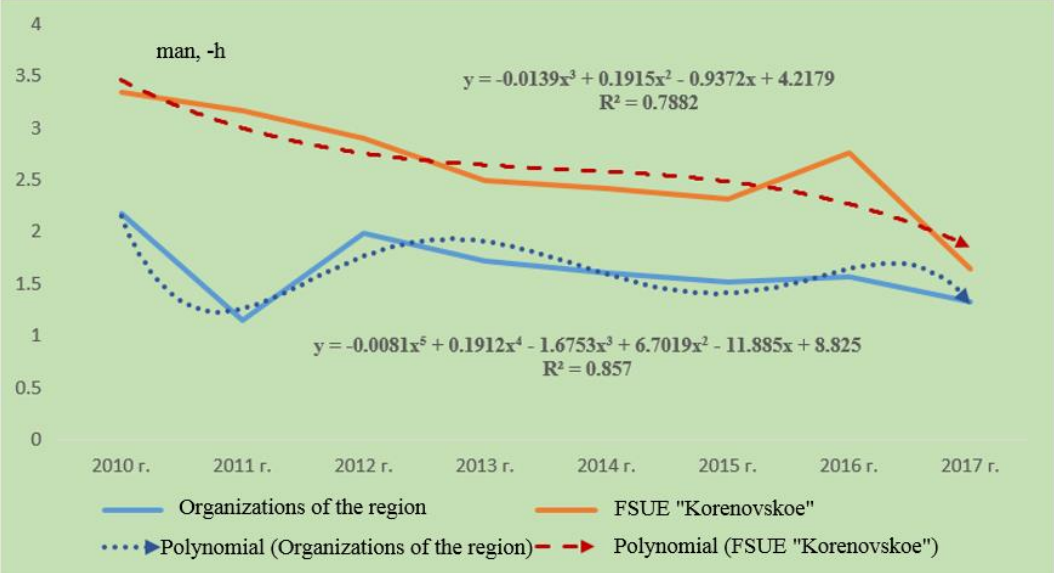

Figure 4: Laboriousness of production of 1 centner of milk in the agricultural organizations of the Krasnodar Territory and in the Federal State Unitary Enterprise "Korenovskoye", man-hours

Thus, in the agricultural organizations of the Krasnodar Territory, the labor intensity of the production of 1 quintal of milk decreased from 2.17 man-hours in 2010 to 1.32 man-hours in 2017: labor productivity increased 1.6 times.

The most significant reduction in the labor intensity of milk production was achieved at the Federal State Unitary Enterprise "Korenovskoye" Krasnoyarsk Scientific Research Institute of Chemical Industry named after P.P. Lukjanenko of the Russian Academy of Sciences: from 3.34 man-hours to 1.64 man-hours per 1 c of milk, or the labor intensity was reduced by 1.70 people-h.

Only in the FSUE "Berezanskoe" KNIISH them. PP Lukianenko of the Russian Academy of Sciences, the labor intensity of milk production in 2017 was higher than the labor intensity of 2010 by 0.23 man-hours, or by 8.1%.

Figure 4 shows that the labor intensity of milk production in agricultural organizations of the Krasnodar Territory is significantly lower than in the FSUE "Korenovskoye" KNIISH them. P.P. Lukjanenko of the Russian Academy of Sciences.

In the present period, when considering the labor intensity of the production of finished products of works or services, it is necessary to analyze the capital-labor ratio, as there is no dualism of opinions on this issue: such a study of the problem allows us to establish the rationality of the costs of economic entities to invest in the industry.

All surveyed organizations the number of personnel serving the main herd of dairy cattle is gradually decreasing with a simultaneous increase in the average annual value of fixed production assets. Such a ratio of these factors inevitably leads to an increase in the capital-labor ratio.

However, we note that life does not always work as planned. Thus, in the Kuban JSC, the capital-labor ratio for the studied time fractal has significantly increased: if in 2010, the average annual worker accounted for 981 thousand rubles. fixed assets, then in 2017 - already 2617 thousand rubles or the increase is equal to 1636 thousand rubles. The growth rate is 2.7 times. At the same time, the labor intensity of the production of 1 centner of milk in 2010 was 2.61 man-hours, and in 2017 - 1.82 man-hours. The decrease in labor intensity is 0.79 man-hours. The rate of reduction of labor intensity is - 1.4 times. Comparing the rate of change of these indicators, we see that the growth rate of the capital-labor ratio is significantly higher than the growth rate of labor productivity. Consequently, the management of a joint stock company should pay attention to a more rational direction of funds for investments [5].

It is known that one of the generalized indicators of the efficiency of the production of finished dairy cattle is the cost of milk and offspring (Table 7).

Table 7: Cost of 1 centner and profitability of milk production in agrarian formations of the Krasnodar Territory and pilot organizations, rub.

Year	Agricultural organizations of Krasnodar Region		Organizations under study Korenovsky district:					
			FSUE "Korenovskoe"		Kuban		FSUE "Berezanskoe"	
	the cost of 1 kg, rub.	profitability,%	the cost of 1 kg, rub.	profitability ,%	the cost of 1 kg, rub.	profitability ,%	the cost of 1 kg, rub.	profitability ,%
2010	1122	25,6	1187	21,9	964	55,5	1180	8,2
2011	1323	18,1	1160	36,8	1157	36,2	1229	7,2
2012	1368	14,6	1157	31,3	1193	34,4	1230	34,8
2013	1499	18,0	1228	44,3	1380	37,0	1484	9,0
2014	1622	39,7	1465	60,2	1391	72,7	1540	6,4
2015	1783	27,8	1635	38,8	1496	54,6	1802	6,9
2016	1979	23,8	1817	19,9	1908	31,2	2034	2,4
2017	1989	38,9	1735	56,8	1740	67,1	2142	2,7
2017 by % to 2010	177,3	x	146,2	x	180,5	x	181,5	x
2017 by % to 2016	100,5	x	95,5	x	91,2	x	105,3	x

If we abstract from the influence of cost on the profitability of milk production, then we see how the level of the selling price affects this indicator. The researched organizations of the Korenovsky district sell the main share of milk to the Korenovsky milk-canning combine (KMKK). At the same time, KMKK dictates its price for the purchase of milk: at a reduced price, the share of milk sales to the combine decreases, the profitability of production decreases. In the next quarter, the collective of the plant seeks to attract at the cost of the farm for the realization of only its produced milk, the profitability of which in the farms is growing.

Another factor in the growth of milk profitability in the period from 2014 to 2015 inclusive is, as we have already noted, sanctions against our state. During this period, the milk market was drastically released and government support for the industry increased, which led to an increase in the profitability of dairy production.

The lowest level of profitability was observed in the study period in FSUE “Berezanskoe” KNIISKh. P.P. Lukjanenko of the Russian Academy of Sciences where profitability does not exceed the 10% threshold. In the course of the study, it was established that a commercial entity can only carry out production and financial activities on the basis of self-sufficiency if the level of profitability exceeds 30-35%. Consequently, in the FSUE “Korenovskoye” there are problems that should be solved by the management of the farm. The production

conditions of FSUE Berezanskoe are similar to those of FSUE Korenovskoye, therefore this state unitary enterprise should use the accumulated experience of an advanced economy.

CONCLUSION

Thus, as a result of assessing the development of the dairy cattle breeding industry in the agricultural organizations of the Krasnodar Territory and in the studied farms of the Korenovsky district, it has been established that the region remains favorable for the breeding of dairy cattle. To do this, organizations have trained qualified personnel who are able to pose and solve milk production problems using the methods and tools of the digital economy. Organizations have the necessary property for livestock, constantly improve it through technical renewal. The only drawback identified by us in the course of the study should be considered the factor of security of farms with agricultural land, but this is a legislative problem. It must be raised and solved, otherwise the farms will not gain confidence in the construction of their plans and projects for the development of animal husbandry.

Without pretending to comprehensively solve the problem, we consider it necessary to establish quotas for the production of dairy cattle breeding products for agricultural landowners, and from the state to provide subsidies for the development of the agricultural business only to those who execute this solution.

In general, we note that the production of milk in the Krasnodar Territory has a tendency to grow while simultaneously reducing the livestock population of the main herd of the dairy direction. The main source of such growth is the intensive use of the biological characteristics of animals, in particular, the use of transplantation of embryos of highly productive animals.

During the period from 2010 to 2017, the cost of production of dairy cattle breeding has significantly increased, and profitability has not yet reached a level that allows production and financial activities to be self-sustaining and self-financing.

The study found that the effectiveness of the functioning of agrarian formations should be evaluated on the basis of management accounting descriptors provided by the management system to cost centers and responsibility centers. At the macro level of management, the criterion for the efficiency of agricultural production is the compliance of production volumes with the parameters of the Doctrine of Food Security of the Russian Federation. The main criterion for the efficiency of agricultural production at the meso and micro levels is the economic efficiency of the business processes of production and financial activities, ensuring sustainable expanded reproduction and social well-being of staff. Economic accounting and management accounting descriptors allow analysts to perform detailed analysis. However, at the same time, in modern conditions, further coherently integrated development of the information field of business entities is necessary, which is necessary to substantiate and make management decisions.

In assessing the effectiveness of the development of dairy cattle breeding as a methodical research platform, we used the theory and postulates of the process-based method of accounting and cost control. The process-based method forms a fundamentally new classification of factors affecting production efficiency, which provides the basis for the application of resource-saving technologies and lean management. The process-based method of cost accounting enhances the role and responsibility of managers of cost centers, considering in the contour of their management impact not only internal but external production factors with respect to an economic entity.

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