



Tools of labor productivity management at agricultural enterprises

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Abstract — The article is devoted to the consideration of labor productivity tools. At the current stage of economic development, the problem of increasing labor productivity and efficiency of labor resources use at agricultural enterprises is of great importance. The factors determining the level and dynamics of labor productivity growth in agriculture are identified and the main components of the assessment and classification of factors affecting the change in labor productivity are presented.

The analysis of the current state of labor productivity at agricultural enterprises in the region showed that the main reserve of its growth is to increase the stock, which requires the introduction of new technologies, varieties of zoned crops, livestock breeds and equipment in the production process.

Keywords — *Tools of labor productivity management, labor productivity factors, components of labor productivity assessment and analysis*

I. INTRODUCTION

The basis of material and social well-being of society can be considered a highly efficient agricultural sector. It is no accident that agricultural production is a priority industry in absolutely all developed countries of the world. The development of the agricultural sector ensures the food security of our country, as well as the receiving of proven, high-quality products, which is important for the life and health of our population.

At the current stage of economic development, the problem of increasing labor productivity and efficiency of labor resources at agricultural enterprises is of great importance, since in the conditions of market relations strong competition between enterprises is inevitable, which pushes them to improve constantly the quality of their products and reduce production costs [1]. Labor productivity in Russia is up to 30 times lower than the level of the European Union and the United States; such data are provided in the ministry of economic development of the Russian Federation. In the middle of the last century, productivity in Japan was 10 times lower than in the United States, and they are now the undoubted leaders [2]. It can be noted that increasing the level of labor productivity is the main basis of economic growth and progress.

The aim of the study is to identify the tools of labor productivity management and factors that determine the level and dynamics of its growth in agriculture, as a set of driving forces and reasons by which there is a conscious and purposeful impact on the productivity of labor.

II. METHODS AND RESULTS

A set of economic methods: monographic, analytical, economic and statistical was applied to solve the tasks of the study. Identification of factors determining the level and dynamics of labor productivity growth in agriculture was carried out on the basis of the study of static material and conceptual documents for agricultural development in the region. Confirmation of the conclusions and results of the study was carried out on the basis of the study of practical provisions and recommendations presented in modern works of domestic and foreign scientists on the problems of increasing productivity. As a result of achieving the research objectives, management tools, productivity were identified, cost parameters

Number of employees, people.	382	302	285	74,6	55	48	46	83,6
Worked by workers employed in all industries - total:								
a) thousand people - days	104	86	85	81,7	16	12	13	81,3
b) thousand people - hours	739	645	593	80,2	128	126	127	99,2
Revenue from sales of agricultural products, mln. rub.	422,3	444,4	426,9	101.1	38,6	60,8	35,1	90,8
Agricultural products produced:								
- per 1 employee, thousand rubles	1106	1471	1498	135,5	703	1266	763	60,3
- per 1 person - day, thousand rubles	4061	5167	5022	123,7	2416	5064	2699	53,3
- per 1 person - hour, rub.	571,5	688,9	719,8	125,9	302	482	276	57,3

From this table it can be seen that the number of employees decreases every year both in the district and at the enterprise. If we analyze the changes in labor productivity for the period 2015-2017 in the Aban district, we can see a tendency to increase the production of commodity products per 1 person by 35.5% [10].

Labor productivity per 1 employee and per 1 person – day, per 1 person - hour increases steadily during the study period by 23.7 and 25.9 %, respectively. This may be due to several reasons: the introduction of new technologies, so milking machines, new harvesters, etc.; stimulation of workers by increasing wages; reducing the number of workers, whereby the load per 1 person increases, etc.

Labor productivity in agriculture remains one of the most significant indicators of production efficiency. At the macro level, it indicates not only the effectiveness of the use of labor, but also it is one of the important indicators in determining the policy in the field of its payment. To some extent, the level of labor productivity may indicate the competitiveness of products [14, 20]. The main in the study of labor productivity is the law of the ratio in the growth rate of labor productivity and wages. The essence of the law is that productivity growth should outpace wage growth. In this case, we can talk not only about the development of the enterprise, but also about its ability to stay "afloat" in crisis periods [17]. Next, consider the ratio of growth rates in labor productivity and wages in the studied objects (table 2).

Table 2 - Growth rates of productivity and wages in agricultural enterprises of Aban district

Indicators	Aban district			JSC «Molokanovka»		
	2015	2016	2017	2015	2016	2017
Hourly labor productivity, rub.	571,5	688,9	719,8	302	482,3	276,4
Growth rate of hourly labor productivity, %	-	120,5	104,5	-	159,7	57,3
Increase rate of hourly labor productivity, %	-	20,5	4,5	-	59,7	-42,7
Hourly wage, rub.	51,8	62,2	71,2	49,9	61,7	70,3
Growth rate of hourly wages, %	-	120,1	114,5	-	123,6	113,9
Increase rate of hourly wage, %	-	20,1	14,5	-	23,6	13,9
Increase rate in labor productivity to wage growth	-	-	0,3	-		-3

In the agricultural enterprises of Aban district the tendency of growth in labor productivity and its payment is noticeable. In 2017, hourly productivity increased by 4.5 % compared to 2016. At the same time, the payment of 1 person per hour for the same period increased by 14.5 %. The increase in labor productivity by 1% of the increase in wages in the reporting year was 0.3 [3, 15].

On JSC «Molokanovka» productivity per hour decreased by 57.3 %, the growth rate is negative. At the same time, the payment of 1 person per hour for the same period increased by 13.9 %. The increase of labor productivity to wage growth in the reporting year was -3.

For the entire analyzed period, the economic law that wage increases should be accompanied by a faster increase in labor productivity in agricultural enterprises of the Aban district is not maintained.

IV. CONCLUSIONS

Staffing is one of the main topics in the study of systemic problems in agricultural development. Staffing is of strategic importance in the formation of agriculture innovative potential [21]. Improving the level of technical equipment at the enterprises of the Aban district, including JSC "Molokanovka", is the

material basis for productivity growth. In this situation, technological progress, which is expressed in the increase of the number and quality of agricultural machines, is an important process of successive replacement of live labor by the work of the most active part of the fixed assets, which are machines and other equipment [18, 22].

In the process of production activities, many agricultural enterprises experience a constant short-term need for money in order to purchase raw materials, pay for fuel, provide respite to buyers, and stimulate workers to improve productivity. This requires working capital (own working capital), the importance of which for the economy is that it is considered one of the main sources of current needs coverage in the financing of current assets [16, 23]. It is also necessary for the growth of capital labor, as the main reserve to increase productivity in the studied enterprises, through the introduction of new technologies, varieties of crops, livestock breeds, and equipment in the production process.

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