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CONCEPTUAL PRINCIPLES OF EFFECTIVE LABOR MOTIVATION AS A PREMISE OF COMPETITIVE FUNCTIONING OF AGRICULTURAL ENTERPRISES¹

Summary

Purpose – Labor motivation plays a significant role in the successful development of an agricultural enterprise, because only creative workers who display initiative will be able to make the business entity effective and competitive in the market environment.

Research method – This caused the need to conduct an in-depth study of theoretical and methodological foundations of intensification of labor motivation of employees in agricultural enterprises as prerequisites for their competitive functioning. In the course of researching this issue, the authors of the article proposed a methodological approach, which envisages determining the productivity of labor based on the indicator of gross output at the prices of the current year.

Results – As a result, it was determined that the index of productivity in agricultural enterprises of the researched region is significantly higher than the similar figure of 2010 which was determined by the constant prices. At the same time, the correlation between the productivity growth rate and the wage in the period from 2016 to 2018 was respectively 1.031 – 1.269.

Implications / originality / value – The article and methodical provisions on the balanced scorecard according to the balanced scorecard concept (BSC) are further developed, which enables an in-depth analysis of the impact of certain aspects of business entities on such indicators as productivity and production efficiency, level of competitiveness, etc.

Keywords: labor motivation, work, efficiency, competitiveness, agricultural enterprise

JEL Classification: J31, J22, M54, Q12

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Introduction

In the conditions of current modernization of the Ukrainian economy, the success and competitiveness of enterprises in any industry, including agriculture, depend on the effective use of the available production resources by business entities. One of the most significant factors of economic development for domestic enterprises are labor resources with their creative potential, professional experience and knowledge.

It is considerably more difficult to manage human resources than other types of resources. It is connected with the existence of personal characteristics in people, which exert a significant impact on the effectiveness of their performance at work. Therefore, it is extremely important for enterprises to find different ways to improve productivity by increasing readiness and willingness of their employees to work creatively and fruitfully.

2. Analysis of recent research and publications

Research into the problem of labor motivation, effective personnel management and increasing the competitiveness of enterprises was carried out by both foreign and domestic scientists, namely: M. Albert, S. Bandura, G. Becker, P. Berger, D. Goddess, E. Boyko, A. Volgin, N. Hausner, V. Geets, O. Hetman, G. Dessler, I. Dolzhansky, M. Dolishniy, P. Drucker, O. Yermakov, I. Zaslavsky, G. Kulikov, A. Kolot, H. Lampert, I. Lukinov, M. Meskin, J. Auyer-Kriye, T. Prymak, M. Porter, A. Roone, G. Slezinger, M. Chumachenko, V. Shershnev, G. Shchelkin and others. The works of these scientists cover the theoretical and methodological bases of determination and estimation of labor motivation, effective management of personnel and competitiveness of enterprises as economic entities.

The purpose of this study is to substantiate the conceptual principles of effective labor motivation as prerequisites for competitiveness of agricultural enterprises in the modern market environment of the Ukrainian economy.

3. Presentation of main research material

Science and production practice have proven that responsible, highly organized and proactive employees strive for self-realization, professional growth and obtaining satisfaction from their achieved performance. In order to induce people to work qualitatively, appropriate mechanisms of labor motivation, which will cause the employees to work effectively for the benefit of the enterprise, are required.

A well-designed and organized motivation system is an effective tool for attracting new, creative staff and stabilizing staff turnover. Almost all managers of enterprises attach importance to the latter option – keeping the existing personnel, because it is most effective and least costly.

Considering the motivational mechanism of entrepreneurship in agriculture in the market economy, Vantukh [2008, p. 57] stated that motivational mechanism is an economic mechanism for the implementation and reproduction of unity of socio-economic functions of labor: as a means to a life that is functioning at each stage of its completion in a certain system of macro- and micro-economic coordinates. According to this author, motivation mechanism is a peculiar force of motivation. More precisely, it provides the conditions of self-stimulation, transforms the motivation from possibility into reality [Vantukh, 2008, p. 58].

The effective motivational mechanism provides a system of material and non-financial incentives.

Stimulation of labor in agricultural enterprises is based on the principle that the method of financial incentives combined with other forms of recognition of workers' merits can achieve the most desired result for the enterprise. Labor motivation is carried out in different forms, among which are the following: material compensation, cash and non-monetary rewards.

The motivation mechanism is based on the aggregate of three factors: labor market, state regulation and application of collective labor agreements. Each link has a corresponding weight in the overall regulatory system. State regulation ensures minimum level of income for employees in accordance with the minimum wage. Regulation of all questions of remuneration is carried out on the basis of the employment contract, which constitutes an agreement between the employer and employees. The function of direct wage regulator is performed by the labor market, because it is on it that the specific price of different types of work is formed.

The main elements of the mechanism of effective labor motivation are subjects and objects of management, a set of principles, criteria, methods and results of effective management of personnel motivation system, implementation and use of management stages in the motivation system.

Effective labor motivation is based on the law of fair distribution of the participation of employees in the activity and consists in the application of economic incentives: remuneration and participation in profits and property. The effect of economic incentives is based on wages, bonuses, surcharges, benefits, etc.

The growth of productivity provides a salary, and it is possible to raise it through allowances, surcharges and fair assignment of premiums. The effectiveness of stimulating the influence of remuneration depends on gender, age, target priorities, qualifications and competence of the staff.

In most cases, the workers themselves choose the factors that motivate them to work in a particular enterprise. They determine their needs, motives, suggestions for positions and the organization of jobs. Because of this, it is very difficult to find a universally appropriate approach and to define an individual effective system of motivation of personnel in the economic entities.

It is important to note that material motivation is slightly inferior to intangible motivation. Employees consider the presence of material motivation as such and pay more attention to the additional bonuses that the employer offers to them [Hryshchenko, Chernova, 2011, p. 105].

In order to build a modern system of motivating personnel it is very important to determine the main motives which compel specialists to work effectively. For the system of motivation of personnel to be appropriate it should include full feedback for achieving the goals of business entities.

An effective system of motivation of personnel should be oriented not only on buying the time of employees, but also on buying exceptionally effective results of their work, as well as on providing in advance the possible demographic reasons and on minimizing risks in personnel management [Shilnikova, 2015, p. 115].

Thus, the system of labor motivation involves the development of concrete methods, levers and mechanisms that stimulate the activities of personnel, thanks to which achieving the most desired targets of the enterprise is possible. The main difficulty in dealing with this issue lies in the fact that an increase in training and competence of employees, as a rule, leads to the growth and diversification of their needs.

The task of the head of the company is to provide the employees with certain incentives to encourage active, creative work, to increase their interest in work, to gain satisfaction from the obtained results, to attempt to combine achieving their personal goals with the goals of the enterprise. The system of labor motivation will be effective only if modern forms and methods of staff stimulation are applied.

The structure of the motivation of work includes:

- needs that the employee wants to satisfy;
- the values that are able to meet this need;
- labor actions that are necessary to obtain the goods;
- price – costs of material and moral nature, which are related to labor activities [Kramarenko, Kholoda, 2003, p. 80].

The theoretical-methodological basis of the conceptual approaches is common in the economic theory of the concept. They reflect certain aspects of motivation and are the basis for creating the concept of staff motivation, in particular: the welfare concept, the concept of economic development stages and the concept of social exchange [Zakharchin, Lubomudrova, 2011, p. 164].

In theory and practice of management, the concept is generally accepted as the basis for human resources management laid motivation. The motivation to work effectively is of particular importance. It is a decisive factor in the enterprise's performance and productivity, which directly lead to an increase in production efficiency in the enterprise.

The attention of scientists, as a rule, is focused on the study of the structure and dynamics of motivation of work as well as the analysis of motivation as a process of formation of values and interests, internal stimulation of workforces.

The development of motivation system in agricultural enterprises should take into account internal and external motives of employees, clearly determining the relationship between execution of work, of result and internal satisfaction with this result.

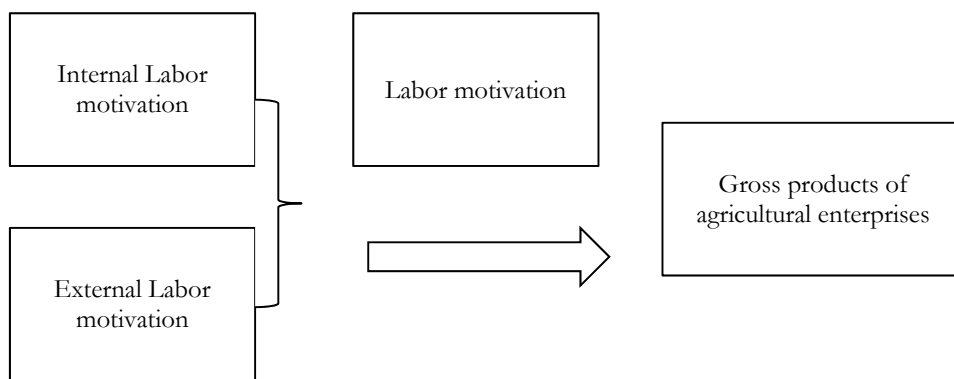
Production activity of agricultural enterprises is determined by production of gross production, which is the initial result of interaction of production factors,

material and cost basis of other final results. In the natural form it represents everything produced during the year, the primary products of crop production, livestock and fish farming, and in cost — rated at comparable prices of the corresponding year [Andriychuk, 2013].

The essence of gross production also consists in the results of work, which are directly determined by the motivation of each employee to work effectively. It is shown schematically in chart 1.

CHART 1

Influence of motivation of work on the increase in gross output



Source: own elaboration based on: [Israilov, 2013, p. 13].

External motivation of work in the field of production has a great scientific and practical significance, since it depends on the level of labor productivity in the enterprise, and, eventually, the competitiveness of manufactured products.

Increasing the level of productivity is a prerequisite for efficient production-economic activities of agricultural enterprises as well as an increased payment for employees. In this study, we focus on the compliance of the rate of growth in wages with productivity. In theory, the prerequisite for effective management should be the outgrowth of productivity compared to its payment. Consider this correlation as exemplified by the indicators of production and economic activity of agricultural enterprises in Ternopol region, which is the most powerful region in western Ukraine in terms of agricultural potential (table 1).

TABLE 1

**The ratio of growth of productivity and remuneration
(the cost of gross product is determined at 2010 prices)
in the agricultural enterprises of Ternopol region**

Indicators	2014	2015	2016	2017	2018	Difference (2018-2014)
Fund of remuneration, UAH MN.	305	362	438.3	725.7	1071.8	766.80
Average number of regular employees in agriculture	11554	10315	9209	10040	10669	-885.00
Dynamics of average monthly wage in agriculture, UAH	2202	2927	3966	6024	8371	6169
Gross products at cost of UAH MN.	5403.95	6687.9	8023.2	9636	11821.7	6417.8
Produced gross production, UAH MN (Prices 2010 March)	4814.6	4130.2	4444.1	5354	5701.8	887.2
The 1st Employee Annual fund of working hours	1864	1815	1824	1832	1856	-8.
Annual fund of working hours, thousand people hours	21536.7	18721.7	16797.2	18393.3	19801.7	-1735
Annual fund of wages at the 1st employee, UAH	26397.8	35094.5	47594.7	72280.9	100459.3	74061.5
Labor productivity on the 1st the average yearly employee (gross production on sobivrtosti), Thousand UAH	467.71	648.37	871.23	959.76	1108.04	640.33
Labor productivity on the 1st the average yearly employee (gross production in the prices of 2010 g), Thousand UAH	416.704	400.407	482.582	533.267	534.427	117.72
Labor productivity index	*	0.961	1.205	1.105	1.002	*
Labor remuneration index 1st employee	*	1.329	1.355	1.519	1.390	*
Coefficient of labor and productivity ratio	*	1.383	1.124	1.375	1.387	*
Relative savings (-) or overspending (+) Fund wages E (p)	*	9725.3	5259.85	19695.56	28008.79	*

Source: own elaboration based on: [Statistical yearbook Agriculture..., 2017, p. 246; Statistical yearbook Agriculture..., 2018, p. 245; Statistical yearbook Agriculture..., 2019, p. 235; Statistical bulletin Number of ..., 2017, p. 38; Statistical bulletin Number of ..., 2018, p. 31; Statistical bulletin Number of ..., 2019, p. 48].

As we can see from table 1, during the last five years, the wage index in agricultural enterprises in the researched region was growing more rapidly than the labor productivity index. Consequently, relative overspending fund wages in business entities.

The relative savings (overspending) fund wages E (p) in the enterprise is determined by the formula [Dyachenko, Lapa, 2016, p. 41]:

$$E(p) = \pm \frac{FLP(C_{val}-1)}{C_{val}},$$

where:

FLP – Payroll fund in the company

C_{val} – coefficient value of wages and productivity

It should be noted, however, that the indicator of labor productivity per one average annual employee was determined based on the constant price of the year 2010. Therefore, we consider it advisable to determine the productivity of labor using the index of produced output at prices of the current year. For this purpose, we will use the price indexes of agricultural products in recent years with respect to 2010.

According to the proposed methodical approach, indicators of performance growth and wages in agricultural enterprises of Ternopol region are given in table 2.

As can be seen from table 2 data, the productivity Index in agricultural enterprises of the researched region is significantly higher than the similar figure which was determined by the constant prices of 2010. It should also be noted that despite this, the ratio of the smaller unit (0.895) was observed only in 2015. In the period from 2016 to 2018, this indicator had the value of more units and varied in accordance with the range from 1.031 to 1.269.

According to this methodological approach, the noted situation indicates that the payment of the Agrarians in the region grows more rapidly than their performance and consequently the expenses of the payroll fund arise. Thus, the motivation of employees of the studied enterprises in Ternopol region decreases. It should be noted, however, that the level of wages in the structure of gross production of agricultural enterprises was very low.

The level of wages with its performance is logical. But it turns out that the salary in Ukraine is low not only abstract but inadmissible low in relation to low productivity [Diyesperov, 2012, p. 78].

Due to the above, it is possible to conclude that, at the present stage, the higher rates of growth in the wage index, compared with the index of labor productivity, are quite natural.

TABLE 2

The ratio of growth of productivity and remuneration (the cost of gross product is determined at current prices) in agricultural enterprises of Ternopol region

Indicators	2014	2015	2016	2017	2018	Difference (2018-2014)
Produced gross production, mln. (Prices 2010 March)	4814.6	4130.2	4444.1	5354	5701.8	887.20
Agricultural production price indexes in relation to 2010 p	1.464	2.262	2.466	2.75	3.01	1.54
Produced gross output at prices of the current year, UAH MN.	7050	9344.16	10959.2	14721.36	17135.62	10085.6
Labor productivity on the 1st the average yearly employee (gross production at prices of the current year), Thousand UA	610.2	905.88	1190	1466	1606	995
Labor productivity Index	*	1.485	1.314	1.232	1.095	*
Labor Remuneration Index 1st employee	*	1.329	1.355	1.519	1.390	*
Coefficient of labor and productivity ratio	*	0.895	1.031	1.233	1.269	*
Relative savings (-) or over-spending (+) Fund wages E (p)	*	-4102	1450	13648	21271	*

Source: own elaboration based on: [*Statistical yearbook Agriculture...*, 2017, p. 246; *Statistical yearbook Agriculture...*, 2018, p. 245; *Statistical yearbook Agriculture...*, 2019, p. 235; *Statistical bulletin Number of ...*, 2017, p. 38; *Statistical bulletin Number of ...*, 2018, p. 31; *Statistical bulletin Number of ...*, 2019, p. 48].

Meeting the needs of employees in agricultural enterprises depends on the working conditions, the level of security, mechanization and automation of production, the level of safety, the amount of money meant for wages and development of social sphere. The directions of motivational influence on employees of the enterprise are determined by the accepted production program, level of labor organization and management. Each employee tries to satisfy their needs, on the other hand the enterprise management offers them a certain reward. The closer is the value convergence of motivational factors concerning the fruitful work and the reward offered in the company, the higher the level of satisfaction of the employee's needs. Conversely, if the value of motivational factors and remuneration diverge, this system of motivation of work is unacceptable.

The motivational system must be closely related to the competence approach and anticipate the connection between the presence and acquisition of competence

of an employee on the one hand and the reward system – on the other [Yermakov, Lychuk, 2015, p. 162].

An effective system of labor motivation and an individual approach to each employee will certainly lead to increased production efficiency, and therefore to the competitive functioning of agricultural enterprises. However, at the present stage of the creation of the employee motivation system, it is necessary to understand that a perfectly developed motivational mechanism is half the battle. It should also be successfully implemented. It is possible only if you understand the strategy of enterprise development by all its employees [Kosheliupov, Kravchenko, 2008, p. 128].

Cheban [2015, p. 104] rightly notes that an effective instrument for the implementation of enterprise development strategy can be the balanced scorecard, or the concept of balanced scorecard (BSC). In essence, the balanced scorecard is a mechanism for creating the relationship of strategic ideas and decisions with operational tasks, a way to forward the activities of the entire company (or group) to their achievements.

The balanced scorecard helps businesses deal with two key issues: effectively assess the company's performance and implement a strategy [Niven, 2004, p. 3].

According to Niven [2004, p. 10], indicators selected for the balanced system are a tool for executives to acquaint their subordinates and other stakeholders with the results and factors of activity through which the company performs its mission and strategic objectives.

TABLE 3

Balanced scorecard of PAP “Agroprodservice”

Perspective	Strategic goal	Indicator	Target Value	Recommended actions
Finance	Increase sales volumes	Income (proceeds) from sales of products	Increase by 15% in comparison to 2017	Diversification Sales Markets
	Accelerate the turnover of finished products	The period of turnover of finished products in warehouse	Decrease by 10% in comparison to 2017	Expand the product range, attract new customers
	Increase production volumes	Volume of produced crop production	Increase by 15% in comparison to 2017	Increase sowing area, productivity, use of modern technologies
	Increase volume of livestock products production	Volume of produced crop production	Increase by 10% in comparison to 2017	Increase the number of CATTLE and pigs, the use of modern technologies
	Increase volume of processing products	Volume of manufactured products processing	–	Commissioning of the plant for the processing of soybeans at full capacity, the diversified distribution of markets

Perspective	Strategic goal	Indicator	Target Value	Recommended actions
Clients	Retention of existing buyers	Number of resales	–	Responsible attitude to work with permanent partners
	Expanding the acquired customer base	Number of new customers	–	Search for new partners, introduce a system of new clients Registry
	Increasing the level of customer satisfaction	Product delivery time, product quality	Decrease by an average of 15% in late-spring hours until 2017	With a modern fleet using modern technology
Business processes	Increase productivity of work	Output per worker	Increase by 10% in comparison to 2017	Training of employees, application of modern technologies
	Ensure product quality at the appropriate level	Growth of the finished export volume. Products	–	Sale of products in the EU countries
	Ensure further production introduction of new products	Profit from the sale of new types of products	Increase by 20% in comparison to 2017	Mastering the production of new products
Staff	Improve staff motivation	Number of initiative, key workers	–	Develop and implement a system of staff motivation, which includes various methods of stimulation. The motivation system should be brought to the staff
	Optimize staff painting production	Number of those working in production	–	Stimulating the existing employees and searching for the new qualified ones
	To enhance the efficiency of an activity of the enterprise by improving the management and motivation of the personnel	Increase in production volume and product quality	Increase by 10% in comparison to 2017	Introduction of new information and analytical technologies of management with the use of modern computer technologies

Source: own elaboration based on: [Shevchuk, 2009, p. 163].

The sequence of development of the business strategy with the use of the balanced scorecard model is demonstrated on the example of PAP “Agroprodservice”, which unites 22 economic entities with almost 37 thousand hectares of sown areas of Ternopol, Ivano-Frankovsk, Lvov and Kherson regions. The main activity there is the crop, including winter wheat, barley, soybeans, rapeseed, corn, sunflower and sugar beet. To develop a balanced scorecard in the PAP “Agroprodservice”, a multi-

functional group was created, which included the general director and its deputy, chief accountant as well as heads of activities. Through meetings and lengthy discussions, it was determined that the balanced system of indicators should become a necessary economic tool for the effective development of this business structure (table 3).

As it is evident from the data provided in table 3, in PAP “Agroprodservice” the indexes of efficiency of the enterprise activity are connected with mechanism of motivation of the personnel, as evidenced by indicators of productivity and efficiency of production, which are quite high. This, in turn, provides a decent level of wages, bonuses as well as other types of material and intangible incentives.

4. Conclusions

Extremely important measures of successful management are: motivating employees of agricultural enterprises, making innovative decisions in the process of agrarian production, stimulating personnel’s actions aimed at improving the efficiency of production and economic activity and increasing the competitiveness of economic entities.

Research has shown that, according to the existing methodological approach, when the index of productivity in agricultural enterprises was determined at constant prices in 2010, the wages of agricultural staff in the Ternopil region were growing at a higher rate than their productivity. Therefore, we propose the use of a methodical approach in which labor productivity is determined by the gross output at prices of the current year. As a result, the labor productivity index in agricultural enterprises of the researched region is much higher than the same indicator, determined at constant prices (in 2018 – 1,095 and 1,002 respectively). The ratio of growth rates of labor productivity and wages measured by the proposed approach in the period from 2016 to 2018 was respectively 1,031, 1,233 and 1,269.

The concept of balanced scorecard is an effective tool that allows the analysis of the communication of production and economic activity of subjects with indexes of productivity and production efficiency. Methodical provisions of this concept on the balanced scorecard were further developed on the example of PAP “Agroprod-service”.

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