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FIXED ASSETS MANAGEMENT IN AGRICULTURAL ENTERPRISES

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Abstracts. *The article determined that the economic activity of agricultural enterprises is associated with fixed assets that make up the bulk of their capital. The study determined that the condition and efficiency of the use of fixed assets is an important factor in ensuring the competitiveness of enterprises. The article examines the features of fixed assets management in agricultural enterprises. The following main research methods were used in the article: comparison, monographic, abstract-logical, economic-statistical, methods of analysis and synthesis. Theoretical aspects of defining the economic essence of the concept of "fixed assets" and their classification are studied. The main problems of using fixed assets in modern agricultural enterprises are identified. The need for fixed assets for agricultural production for the period up to 2025 has been studied. The basic conditions of providing enterprises with fixed assets are determined. We are also established that in agricultural enterprises the management of fixed assets is carried out based on such approaches as a functional, process, strategic, systemic, situational, and integrated. It is determined that the purpose of fixed assets management is to ensure the production of competitive products and the formation of competitive advantages of the enterprise. The goals and objectives of fixed assets management at the strategic, tactical and operational levels are studied. Based on of the processed sources, the directions of increase of efficiency of use of fixed assets in the agricultural enterprises are offered: timely replacement of the outdated equipment; improving the organization of logistics of enterprises; use of modern effective systems of material incentives for employees; attracting investment resources of domestic and foreign investors to modernize the material and technical base of enterprises; application of leasing operations. The study investigated that the efficiency of fixed assets management of the enterprise can be considered from the standpoint of the efficiency of their use in economic turnover.*

Keywords: *fixed assets, agricultural enterprise, competitiveness, management*

Introduction. The production and economic activity of domestic agricultural enterprises are inextricably linked with the fixed assets that make up the bulk of their capital. It should be noted that the state and efficiency of the use of fixed assets are crucial in ensuring the competitiveness of enterprises and the formation of sustainable financial results. However, in Ukraine, there is a situation associated with insufficient investment in the renewal of fixed assets and their disposal at the enterprise. That is why there is a need for constant monitoring of fixed assets in order not only to find ways to improve their efficiency but also to improve the economic activity of the enterprise as a whole [9, p. 78].

Fixed assets are one of the most important factors in the production of any enterprise. They strengthen the material and technical base and create conditions for growth and improvement of social production. In our opinion, the rational use of fixed assets of the enterprise contributes to the improvement of all its technical and economic indicators, including – increase production, reduce its cost, complexity of production. That is why effective management of fixed assets will promote the development of the enterprise as a whole.

Analysis of recent researches and publications. Issues of fixed assets and analysis of the effectiveness of their use were considered by such domestic scientists as F. Butynets, N. Krichka, O. Yermakov, A. Cherep, M. Rybchenko, I. Mazurkevich, I. Petrova, and others. At the same time, the issues of measures aimed at improving the efficiency of management and the use of fixed assets in the enterprise determine the relevance of this study and require further study.

Purpose. The aim of the article is to study the theoretical and practical aspects of the use of fixed assets of domestic agricultural enterprises and areas of effective management of fixed assets of the enterprise.

Materials and methods of research. The following main research methods were used in the research process: comparison, monographic, abstract-logical, economic-statistical, methods of analysis and synthesis.

Results of the research and their discussion. The production potential of agricultural enterprises is determined by the quality of fixed assets, their age, the

degree of depreciation, and the rate at which they are renewed. Fixed assets provide the production process, determine the innovation of technologies, material, and energy consumption of production, product competitiveness, and the company's ability to develop the market. In the economic literature, the concept of "fixed assets" have several analogs, namely: fixed assets, fixed assets, fixed capital, means of labor, and so on. Currently, there is no single definition of "fixed assets" and a list of their components in accordance with applicable law. In the normative provision, there are several points of view on the interpretation of the concept of "fixed assets" (Fig. 1).

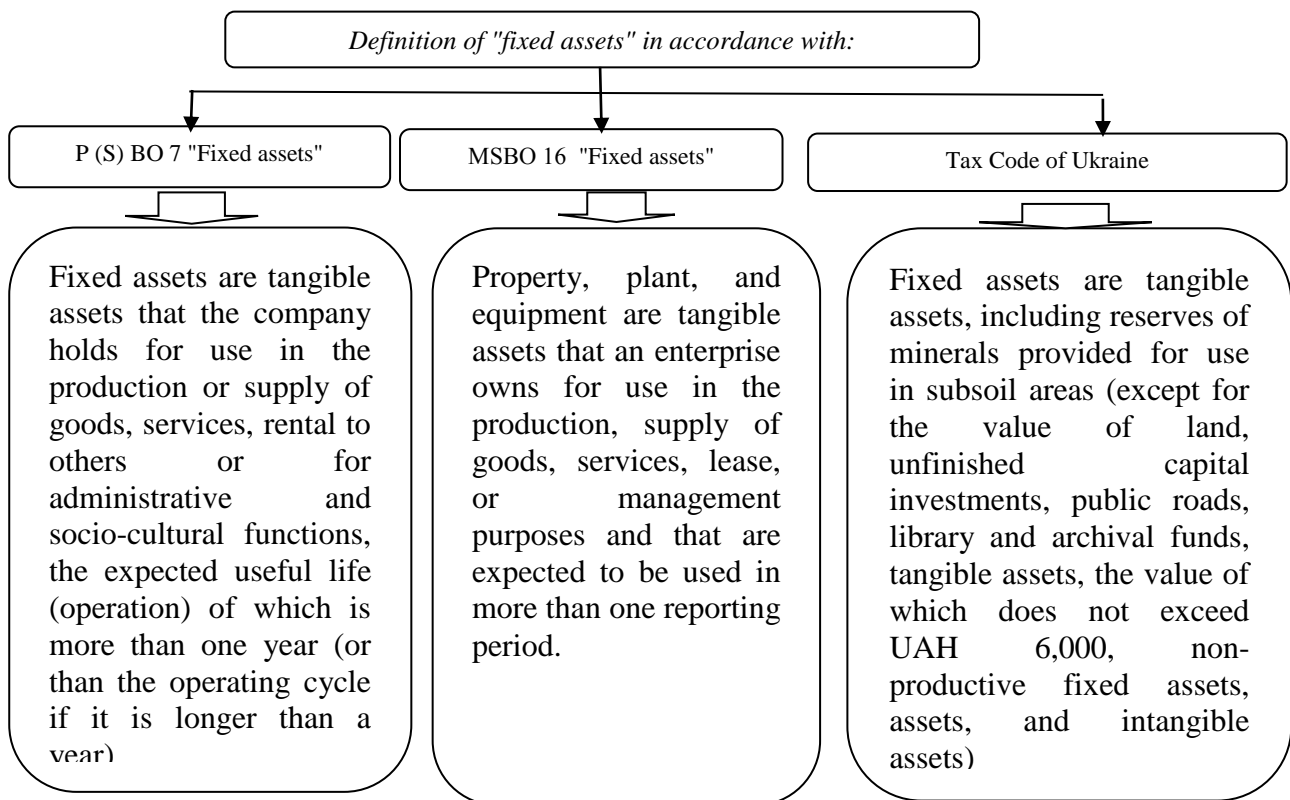


Fig. 1. The essence of the concept of "fixed assets" in accordance with the regulations of Ukraine

Source: created by the author based on [2; 6; 10]

It should be pointed out that domestic scientists allocate two approaches to the interpretation of the economic essence of fixed assets, namely:

- 1) fixed assets are identified with tangible assets or tangible assets;
- 2) fixed assets are defined as means of labor.

According to the current standard classification, fixed assets are grouped by their industries, functional purpose, use, affiliation, and physical composition [5].

It is important to note, that fixed assets are used in economic activities for a long time and gradually lose their value due to physical wear. At the same time, the transfer of the value of fixed assets to products or services is due to depreciation. That is, the management of fixed assets is mostly reduced to ensuring a timely increase in the efficiency of their use [4].

It has to be noted that in 2018 in the agricultural enterprises of Ukraine the actual availability of fixed assets per 1 hectare of land was only about 20% of their regulatory needs.

In addition, it is necessary to emphasize, that the average German economy with a similar production specialization and concentration of production per 1 hectare of agricultural land has 9.4 times more machinery and equipment than the average in Ukraine. The level of transport provision of German farms is 10.4 times higher than the domestic one [12].

It has to be noted that at the beginning of 2018 in Ukraine the cost of fixed assets was 251 dollars per 1 hectare of agricultural land. At the same time, a similar indicator in Poland exceeded the Ukrainian 20.1 times, in Great Britain – 25.2 times, in the Czech Republic – 25.6 times, in Hungary – 31.7 times, in France – 33.5 times, and in Germany – 88.4 times [11].

Every year the need for fixed assets for agricultural production in all categories of farms. Thus, scientists from the Institute of Agrarian Economics have calculated the regulatory needs for fixed assets for agricultural production for the period up to 2025. These calculations were performed using data on the promising areas of crops and crop yields, livestock, and their productivity, production volumes of certain products. The regulatory need was determined from the calculation of the value of fixed assets at the end of 2018. The total cost for all categories of farms in 2020 will be 1734.4 billion hryvnias, and in 2025 - 2224.4 billion hryvnias (Table 1).

Table 1. Regulatory demand for fixed assets for agricultural production for the period up to 2025, billion hryvnias

Types of assets	Availability of fixed assets in agriculture at cost		Regulatory need for basic types of production					
			Agricultural enterprises		Households		All categories of farms	
	Year							
	2018		2020	2025	2020	2025	2020	2025
fact	planned							
Buildings, structures, transmitting devices	166,4	418,4	553,3	706,0	228,0	291,0	781,3	997,0
Machines and equipment	114,5	287,0	392,7	512,0	162,0	206,7	554,7	718,7
Vehicles	27,9	69,3	85,8	109,6	35,4	45,2	121,2	154,8
Productive cattle	44,3	44,3	60,0	76,5	24,9	31,7	84,9	108,2
Perennial plantings	8,3	8,3	12,2	15,7	4,9	6,4	17,1	22,1
Measuring instruments, tools, etc.	38,1	96,3	124,0	158,2	51,2	65,4	175,2	223,6
Total	399,5	923,6	1228,0	1578,0	506,4	646,4	1734,4	2224,4

Source: created by the authors based on [11].

Such indicators can be achieved with a sufficient level of investment in agricultural enterprises and effective management. However, the current level of investment and a lack of highly qualified managers constrain the attraction of fixed assets in agricultural enterprises [3]. It should be noted that in 2018, the actual availability of fixed assets per 1 hectare of land in agricultural enterprises compared to their regulatory needs was only about one-fifth [11].

That is why the issue of effective management of fixed assets in agricultural enterprises is extremely important. Furthermore, in the management of fixed assets use the following approaches: functional, process, strategic, systemic, situational and integrated. The choice of approach in the management of fixed assets depends on many factors, among which the most important: the size of the enterprise, the powers of the manager, the life cycle of the enterprise and the product offered to the market, the scope of the enterprise, and so on. The main purpose of the management of fixed assets is to ensure the production of competitive products in an amount that allows

you to maintain or develop the existing market position of the enterprise through the formation of competitive advantages.

The goals and objectives of fixed asset management are shown in Fig. 2.

Management of fixed assets is a complex process that focuses on preventing losses and creating the conditions for the effective operation of the enterprise. Effective management of fixed assets of agricultural enterprises allows us to provide competitive advantages of the enterprise and to optimize expenses for the production of agricultural products. Fixed asset management tools are a set of methods, techniques, and means of managerial influence that ensure the pace of reproduction in accordance with the development of scientific and technological progress, form the optimal structure of fixed assets and ensure the intensification of production processes and allow effectively directed use of fixed assets to ensure competitive production volume that meets the requirements of the market for quality.

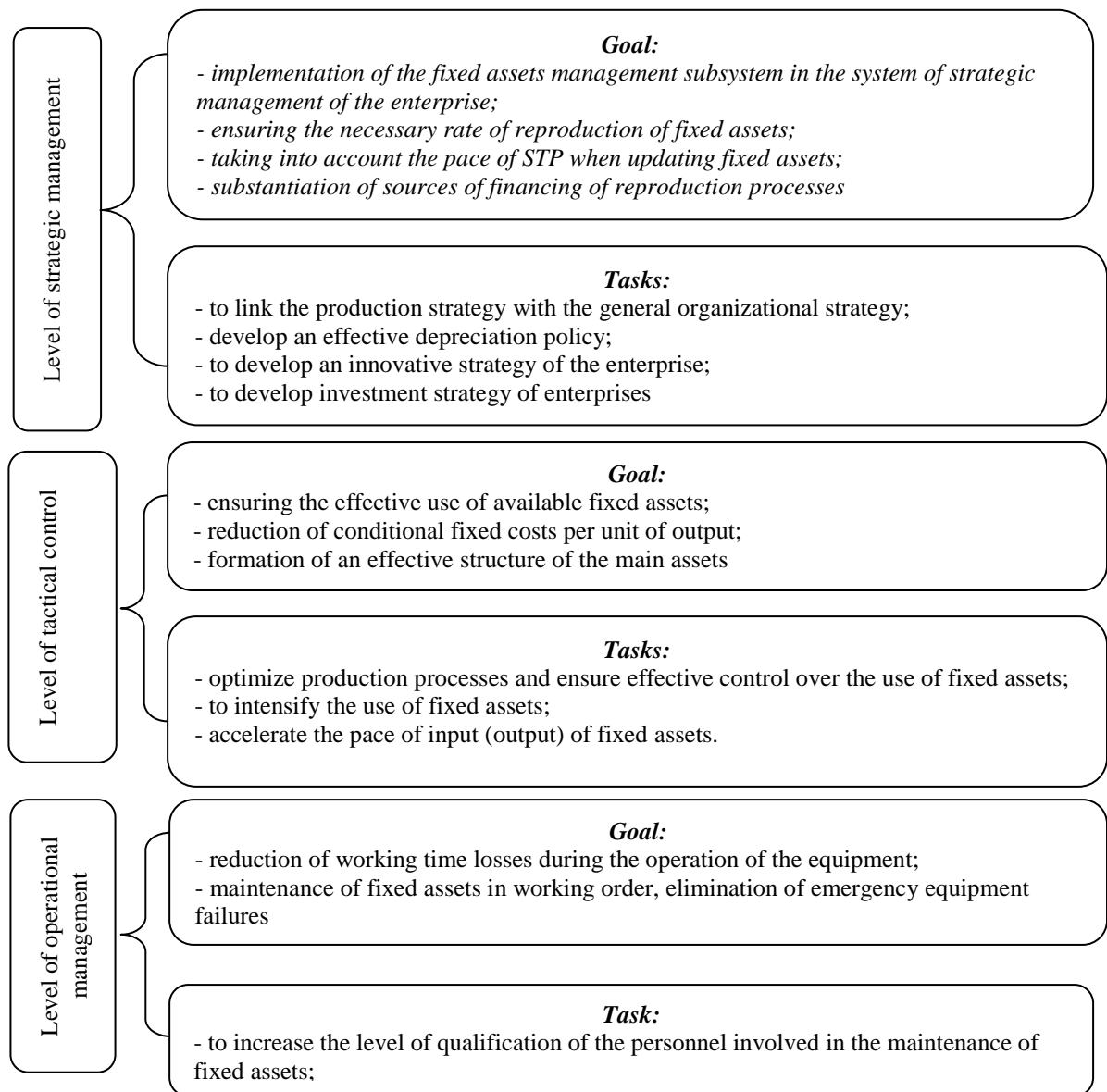


Fig. 2. Goals and objectives of fixed assets management

Source: created by the author based on [3; 5;11].

An important point in the management of fixed assets is to assess the effectiveness of their use. This process is based on a variety of approaches based on a system of cost and quality indicators. Qualitative indicators include intensive and extensive use of basic equipment, use of production capacity. Cost indicators are: return on assets, capital intensity, growth rates of output, growth rates of fixed assets, capital adequacy, and labor productivity [9, p. 79].

The sequence of stages of analysis of the efficiency of fixed assets in agricultural enterprises is of great importance, it allows you to explore and analyze

the effectiveness of management of fixed assets. We propose to analyze fixed assets in a certain sequence [1, p. 102]:

1. Analysis of the composition and structure of fixed assets;
2. Analysis of the capacity of the enterprise, compliance with its production program of the enterprise;
3. Analysis of the technical condition of fixed assets;
4. Analysis of the movement of fixed assets;
5. Analysis of the economic efficiency of fixed assets;
6. Factor analysis of the efficiency of fixed assets;
7. Preparation of conclusions and draft management decisions to increase production and return on assets.

In order to increase the use of available fixed assets by managers of agricultural enterprises should develop specific measures to improve the use of fixed assets, the practical application of which will allow using of the existing reserves of the enterprise to improve their efficiency.

The priority areas for improving the efficiency of fixed assets at the enterprise are [8]:

- timely replacement and mobilization of obsolete equipment, organization of accelerated commissioning of purchased new equipment;
- improving the organization of logistics of enterprises and maintenance of modern machine systems;
- introduction of progressive forms of organization of production and labor;
- application of modern effective systems of material incentives for workers and engineers;
- attracting investment resources of domestic and foreign investors to modernize the material and technical base of enterprises;
- wide application of leasing operations.

It should be noted that in order to increase the efficiency of fixed assets at the enterprise it is necessary to develop a number of measures aimed at innovative development of production capacity by accounting for fixed assets at fair value, the

introduction of component depreciation, redistribution of costs in the cost structure, use of innovative methods of depreciation, valuation of assets, as well as the choice of the type of efficiency of fixed assets [9].

It should be pointed out that [7] in order to effectively manage modern agricultural enterprises offers:

- introduction of progressive organizational and technological measures;
- increase the coefficient of variability, which can be achieved by applying the optimal schedule of the enterprise, including an effective plan for repair and adjustment works;
- more intensive use of equipment;
- implementation of scientific and technological progress measures;
- advanced training of working staff;
- economic incentives for key and auxiliary workers, which provides for the dependence of wages on output and product quality.

At the same time, we agree with the opinion [9] that the areas of improving the management of fixed assets of agricultural enterprises can be divided into three groups.

1. Technical improvement of means of labor, which includes: technical re-equipment and implementation of flexible production systems; replacement of obsolete machinery and equipment; automation of auxiliary and service productions; development of innovation potential.

2. Increasing the service life of machinery and equipment in the enterprise, which is achieved through the elimination of idle equipment; reduction of terms of equipment repair, and reduction of downtime.

3. Improving the organization and management of agricultural production: the introduction of scientific organization of labor and production; accelerating the achievement of design productivity of fixed assets put into operation; improving the provision of material and technical resources; improving production management based on the involvement of coaxial information systems; development of material interest of workers, which helps to increase production efficiency [3].

Conclusions and future perspectives. Thus, the research of the category "fixed assets" revealed that the main criteria of their recognition are: materiality; purpose, and useful life. The economic essence of fixed assets is a defining characteristic of their importance in ensuring the functioning and development of production. According to research by domestic scientists, in recent years the value of fixed assets of agriculture has increased more than 2.4 times from 167.3 up to 399.5 billion hryvnias. However, the demand for fixed assets in agricultural enterprises is also gradually increasing. Thus, the total cost of fixed assets for all categories of farms in 2020 will be 1734.4 billion hryvnias, and in 2025 it will be 2224.4 billion hryvnias. The procedure for analyzing the fixed assets of enterprises contributes to the achievement of effective results and allows you to make optimal management decisions. The management of fixed assets is influenced by many factors, both internal and external, but the main, in our opinion, are the peculiarities of production conditions and the specifics of economic activity. Also, the effectiveness of the management of fixed assets of the enterprise can be considered from the standpoint of the effectiveness of their use in economic turnover.

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УПРАВЛІННЯ ОСНОВНИМИ ЗАСОБАМИ В СІЛЬСЬКОГОСПОДАРСЬКИХ ПІДПРИЄМСТВАХ

Г. Харченко, М. Маковський

Анотація. У статті досліджено особливості управління основними засобами в сільськогосподарських підприємствах. Розглянуто теоретичні аспекти щодо визначення економічної сутності поняття «основні засоби» та їхньої класифікації. Визначено основні проблеми використання основних засобів у сучасних сільськогосподарських підприємствах. Досліджено потребу в основних засобах на виробництво сільськогосподарської продукції на період до 2025 року. Визначено основні умови забезпечення підприємств основними засобами. Встановлено, що в сільськогосподарських підприємствах управління основними засобами здійснюється на основі таких підходів, як: функціональний, процесний, стратегічний, системний, ситуаційний, інтегрований. Визначено, що метою управління основними засобами є забезпечення випуску конкурентоспроможної продукції та формування конкурентних переваг підприємства. Досліджено цілі та завдання управління основними засобами на стратегічному, тактичному та операційному рівнях. Запропоновано напрями підвищення ефективності використання основних засобів у сільськогосподарських підприємствах: своєчасна заміна застарілого

устаткування; удосконаленню організації матеріально-технічного забезпечення підприємств; використання сучасних ефективних систем матеріального стимулювання працівників; залучення інвестиційних ресурсів вітчизняних і зарубіжних інвесторів для модернізації матеріально-технічної бази підприємств; застосування лізингових операцій тощо.

Ключові слова: *основні засоби, сільськогосподарське підприємство, конкурентоспроможність, управління*