

UDC 658.2:658.51

DOI <https://doi.org/10.26661/2414-0287-2023-1-57-08>

## MANAGEMENT OF THE EFFICIENCY OF THE USE OF THE PRIVATE ASSETS OF ENTERPRISES OF THE AGRICULTURAL SECTOR AND DETERMINATION OF THE DIRECTIONS OF ITS INCREASE

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### **Key words:**

fixed assets, efficiency of use, material assets, accounting, analysis, agriculture, management

The article examines and analyzes the works of domestic scientists who studied the problems of effective use of fixed assets. Information about the concept of «main assets» is summarized and their features are indicated. It has been proven that the continuous process of functioning of any enterprise is achieved thanks to scientific and technical progress, and the main means are its material embodiment. It is noted that the level and rates of growth of agricultural products, increasing the economic efficiency of production in agriculture depend on the industry's provision of basic resources. The low supply of the economy with basic means leads to untimely execution of the most important technological operations, an increase in labor intensity and an increase in material and monetary costs for the production of a unit of production. It was determined that increasing the efficiency of the use of fixed assets of agricultural enterprises in Ukraine, first of all, requires the existence of a long-term action plan, which should be aimed at expanding the material and technical composition and improving the structure of fixed assets, increasing the profitability of their use. The indicators that characterize the efficiency of the use of fixed assets are determined and the characteristics of each of them are given. The relationship between the rate of return on capital and capital intensity is indicated. The conditions affecting the efficiency of the use of fixed assets at agricultural enterprises have been determined. It was revealed what data are used to calculate the production capacity of the enterprise and branches, planning the production program, reserves for increasing production on equipment, drawing up the equipment balance sheet. It has been established that the study of the state and use of the main means of production of agriculture makes it possible to carry out effective management of the main means of production, which will ensure the stable development of the industry as a whole. The state and efficiency of use directly affect the final result of the economic activity of enterprises in the agrarian sector and contribute to the improvement of all indicators: the growth of labor productivity, the increase of production output, and the reduction of the cost price. It has been proven that the effective use of fixed assets contributes to the acceleration of turnover of current assets. The better the fixed assets are used, the faster the current assets go through the production phase and the less need there is for their increase. Directions for improving the efficiency of the use of fixed assets are given. Groups of reserves, as well as measures of extensive and intensive improvement of the efficiency of the use of fixed assets, were considered. It has been revealed, thanks to which the development rates and increase in production efficiency are achieved.

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## УПРАВЛІННЯ ЕФЕКТИВНІСТЮ ВИКОРИСТАННЯ ОСНОВНИХ ЗАСОБІВ ПІДПРИЄМСТВ АГРАРНОГО СЕКТОРУ ТА ВИЗНАЧЕННЯ НАПРЯМІВ ЇЇ ПІДВИЩЕННЯ

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У статті досліджено та проаналізовано праці вітчизняних науковців, які вивчали проблеми ефективного використання основних засобів. Узагальнено інформацію про поняття «основні засоби» та зазначено їх особливості. Доведено, що безперервний процес функціонування будь-якого підприємства

**Ключові слова:**

основні засоби,  
ефективність використання,  
матеріальні активи, облік,  
аналіз, сільське господарство,  
управління

досягається завдяки науково-технічному прогресу, а основні засоби є його матеріальним втіленням. Зазначено, що рівень і темпи зростання сільськогосподарської продукції, підвищення економічної ефективності виробництва в сільському господарстві залежать від забезпеченості галузі основними засобами. Низька забезпеченість господарства основними засобами призводить до несвоєчасного виконання найважливіших технологічних операцій, росту трудомісткості і збільшенню матеріально-грошових витрат на виробництво одиниці продукції. Визначено, що підвищення ефективності використання основних засобів сільськогосподарських підприємств в Україні, перш за все, передбачає наявність довгострокового плану дій, що має бути спрямований на розширення матеріально-технічного складу та вдосконалення структури основних засобів, підвищення рентабельності їх використання. Визначено показники, які характеризують ефективність використання основних засобів та наведена характеристика кожного з них. Зазначено залежність між показником фондівдачі та фондомісткості. Визначено умови, що впливають на ефективність використання основних засобів на сільськогосподарських підприємствах. Виявлено, які дані використовують для розрахунку виробничої потужності підприємства і галузей, планування виробничої програми, резервів підвищення виробництва на обладнанні, складання балансу обладнання. Встановлено, що дослідження стану і використання основних виробничих засобів сільського господарства дає можливість здійснювати ефективне управління основними виробничими засобами, що дозволить забезпечити стабільний розвиток галузі в цілому. Стан і ефективність використання безпосередньо впливають на кінцевий результат господарської діяльності підприємств аграрного сектору і сприяють поліпшенню всіх показників: зростанню продуктивності праці, збільшенню випуску продукції, зниженню собівартості. Доведено, що ефективне використання основних засобів сприяє прискоренню оборотності оборотних засобів. Чим краще експлуатуються основні засоби, тим швидше оборотні засоби проходять фазу виробництва і тим менше потреба в їх прирості. Наведено напрями підвищення ефективності використання основних засобів. Розглянуто групи резервів, а також заходи екстенсивного та інтенсивного підвищення ефективності використання основних засобів. Виявлено, завдяки чому досягається забезпечення темпів розвитку та підвищення ефективності виробництва.

**Statement of the problem**

Depending on one or another organizational and legal form, enterprises have basic means that characterize its material base and determine the technical level of production. The general result of the enterprise's activity depends on how effectively the means of labor available at the enterprise are used, on their condition, and is an important prerequisite for the development of the agricultural sector.

Today, one of the urgent tasks of modern enterprises that have expensive equipment at their disposal is the need to ensure its safety and efficient operation. Important in solving this task is the implementation of a management system for fixed assets, which make up the main part of the production process and allow to increase the production capacity of the enterprise due to the use of modern information technologies, without resorting to the purchase of new equipment. Today, there are a large number of indicators of the efficiency of the use of fixed assets, methods of assessing their condition and models. In order to solve the problem of effective management of fixed assets, we suggest considering directions for managing the efficiency of the use of fixed assets at agricultural enterprises.

**Analysis of recent studies and publications**

The subject of in-depth research by domestic and foreign economists is the theoretical aspects of the essence of fixed assets, aspects of formation, increasing the efficiency of their use and their reproduction, since the activities of enterprises are inextricably linked with their availability, condition and use for the production process. The problems of effective use of fixed assets were studied in their works by such scientists as I.A. Blank [1], V.M. Boyko, P.G. Vashkiv [2], F.F. Butynets [3], N.V. Dovhalyuk [4], I.O. Budishcheva, I.G. Ustinova [5], A.G. Zahorodniy, and G.L. Voznyuk [6] and others.

**Objectives of the article**

The purpose of the article is to determine the efficiency of the use of fixed assets of agricultural enterprises and to identify directions for its improvement, since thanks to the effective use of fixed assets and the study of factors influencing its change, the competitiveness of the enterprise is ensured, its functioning and the production process are supported.

**The main material of the research**

The economic essence of fixed assets is that they repeatedly participate in the production process, transfer

part of their value to finished products; in the process of selling products, depreciation of fixed assets accumulates at the enterprise in the form of a depreciation fund, the funds of which are directed to the restoration of existing (current and major repairs) or the purchase of similar new types (investments) of fixed assets [7].

Each of the scientists interpreted the concept of «main means» in their own way in their works. Table 1 shows the characteristics of fixed assets:

Summarizing the interpretation of scientists, we can come to the conclusion that fixed assets are tangible assets that the enterprise keeps for the purpose of using them in the process of its activity, the expected period of operation of which is more than one year (or the operating cycle, if it exceeds one year), and its the cost is transferred to the finished product in parts.

The continuous process of operation of any enterprise is achieved thanks to scientific and technical progress, and fixed assets are its material embodiment, therefore, analyzing their condition and efficiency of use is one of the most important aspects. The level and rates of growth of agricultural products, increasing the economic efficiency

of production in agriculture depend on the industry's supply of basic resources. The low supply of the economy with basic means leads to untimely execution of the most important technological operations, an increase in labor intensity and an increase in material and monetary costs for the production of a unit of production [8].

Increasing the efficiency of the use of fixed assets of agricultural enterprises in Ukraine, first of all, requires the existence of a long-term action plan, which should be aimed at expanding the material and technical composition and improving the structure of fixed assets, increasing the profitability of their use.

Special indicators are used to analyze the provision of the enterprise and the state of fixed assets, to determine the effectiveness of their use. The main ones are: return on capital, capital intensity, capital adequacy and profitability of fixed assets. In the table 2 gives the characteristics and calculation formulas for each indicator of availability, condition and efficiency of the use of fixed assets:

It should be noted that under normal operating conditions of the enterprise, the return on capital tends to increase, and the capital intensity tends to decrease.

Table 1 – Characteristics of fixed assets

Source	Definition
Blank I.A. [1]	Fixed assets are a set of material assets in the form of labor tools, which repeatedly participate in the process of production and commercial activity and transfer their value to products in parts.
Boyko V.M., Vashkiv P.G. [2]	Fixed assets are a set of means of labor that function in the field of material production in an unchanged natural form for a long time and transfer their value to a newly created product in parts as they wear out
Butynets F.F. [3]	Fixed assets are tangible assets that the company holds for the purpose of using them in the process of production or supply of goods, provision of services, leasing to other persons or for the implementation of administrative and socio-cultural functions, the expected period of useful use (exploitation) of which is more than one year (or operating cycle if it exceeds one year).
Dovhalyuk N.V. [4]	Fixed assets are the tangible assets of an enterprise of any form of ownership, which are repeatedly used in production cycles, retain their natural form, transferring their value to manufactured products in parts, the term of which exceeds one year (or operating cycle), intended for operation by the enterprise itself, for leasing to other individuals or legal entities, which in aggregate makes it possible to receive economic benefits for the enterprise.
Zahorodniy A.G., Voznyuk G.L. [6]	Fixed assets are material assets that the company forms with the purpose of using them in the process of production or supply of goods, provision of services, leasing to other persons or for the implementation of administrative and socio-cultural functions and the expected useful life of which exceeds one year.

Table 2 – Indicators of the condition and efficiency of the use of fixed assets

Indicator	Characteristic	Calculation formula
Fund return	It characterizes the efficiency of the use of fixed assets. It reflects the amount of manufactured products per one hryvnia of fixed assets	$V_p / F_k$
Fund capacity	It characterizes the security of the enterprise's fixed assets	$F_k / V_p$
Armed forces	Shows the amount of fixed assets per employee	$F_k / Ch$
The coefficient of real value of fixed assets in the property of the enterprise	Reflects the specific weight of the residual value of fixed assets in the total value of the enterprise's property	$F_z / M$
Coefficient of wear of fixed assets	Shows the degree of depreciation of fixed assets	$Z_o / F_k$
Coefficient of suitability of fixed assets	Shows part of fixed assets suitable for operation	$1 - K_z$
The rate of renewal of fixed assets	Shows the share of introduced fixed assets in their total cost	$F_u / F_k$
The coefficient of disposal of fixed assets	It characterizes the intensity of disposal of fixed assets	$F_v / F_k$
The coefficient of growth of fixed assets	Shows the degree of increase in fixed assets in the reporting period compared to the previous period	$(F_v - F_u) / F_k$
Profitability of fixed assets	Determines the degree of use of fixed assets	$P_b / F_k \times 100\%$

**Note:**  $F_k$  is the balance sheet value of the main means of production;  $V_p$  – cost of manufactured products;  $F_z$  – the residual value of the main means of production;  $M$  – the value of the enterprise's property;  $Z_o$  – the amount of wear and tear of the main means of production;  $Ch$  – average number of employees;  $F_u$  – the cost of the main production assets introduced;  $F_v$  – the cost of removed main production assets;  $K_z$  – coefficient of wear of the main means of production;  $P_b$  – is the total profit of the enterprise.

For effective management of fixed assets, their evaluation is of great importance. In the practice of accounting and analysis of fixed assets, in-kind and monetary forms are used. When evaluating fixed assets in kind, the number of machines, their productivity, power, the size of production areas and other quantitative values are established. These data are used for calculating the production capacity of the enterprise and industries, planning the production program, reserves for increasing production on equipment, drawing up the equipment balance sheet. For this purpose, inventory and certification of equipment, accounting for its disposal and receipt are carried out. Objects of fixed assets form the basis of any production, in the process of which products are created, services are provided and work is performed.

The efficiency of agricultural production is largely determined by the structure of the main means of production. The activity of agricultural enterprises is possible only if the objects of fixed assets form a complex, organized, coordinated structure as a whole.

The study of the state and use of the main means of production of agriculture makes it possible to carry out effective management of the main means of production, which will ensure the stable development of the industry as a whole. The state and efficiency of use directly affect the final result of the economic activity of enterprises in the agrarian sector and contribute to the improvement of all indicators: the growth of labor productivity, the increase of production output, and the reduction of the cost price.

The efficiency of the use of fixed assets is based on the strategy of machine-technological support for the production of agricultural products and gradual technical rearmament and increasing the competitiveness of products. The introduction of new intensive resource-saving, soil-protecting technologies makes it possible to increase crop yields, animal productivity, increase labor productivity, but at the same time minimize fuel and fertilizer consumption. However, the production potential of agriculture continues to decline. This is evidenced by the high degree of wear and tear of the main production facilities, the significant exceeding of the standard service life of the equipment, and the reduction of the volume of investments in fixed capital [7].

Agriculture is a fairly capital-intensive sector of the economy. Due to the brevity of the working period of its active funds and the seasonality of production, it cannot function properly and develop in the absence of the necessary investments.

The conditions of the market economy encourage the constant search for reserves to increase the efficiency of the use of fixed assets. More complete and rational use of fixed assets and production capacities of the enterprise contributes to the improvement of all its technical and economic indicators: increase in labor productivity, increase in return on capital, increase in production output, reduction in its cost price, savings in capital investments. Effective use of fixed assets helps to accelerate the turnover of current assets. The better the fixed assets are used, the faster the current assets pass the production phase and the less need there is for their increase [2, 405].

Reserves for improving the efficiency of the use of fixed assets can be divided into two groups – intensive and extensive.

The intensive directions of increasing the efficiency of the use of fixed assets include the automation and mechanization of production, technical rearmament, modernization of the enterprise, improvement of technological processes, reduction of the duration of the operational cycle of production, the use of progressive forms of organization and production management; increasing the educational and qualification level of industrial and production personnel [9].

Extensive directions for increasing the use of fixed assets include the following: reduction of equipment downtime due to timely provision of raw materials, materials, semi-finished products, etc., improvement of the quality of equipment repairs and maintenance; increasing the number of machine-changes of equipment operation and reducing the number of non-working equipment, introduction of additional equipment [9].

It should be noted that one of the most effective directions for improving the efficiency of the use of fixed assets is their renewal. Today, Ukrainian enterprises face a number of problems regarding the introduction of new equipment, since the domestic industry is in a rather difficult financial situation, which has affected the increase in the number of unprofitable enterprises. In crisis conditions, to solve these problems, enterprises need effective support from the state, namely the establishment of export-import relations, the creation of a favorable investment climate in the country.

Ensuring the pace of development and increasing the efficiency of production is achieved under conditions of intensification of reproduction and rational use of existing fixed assets and production capacities of enterprises. These processes contribute to the constant maintenance of the appropriate technical level of each enterprise, and also allow to increase the volume of production without additional investment resources, to reduce the cost of products due to the reduction of specific depreciation and costs of maintenance of production and its management, to increase return on capital and profitability.

### Conclusions

Therefore, based on the above, it can be stated that increasing the efficiency of the use of fixed assets is one of the leading tasks of agricultural enterprises and is a significant reserve for optimizing production, which consists in achieving certain results at the appropriate level of development of productive forces compared to labor costs used for creation of products. Areas of increasing the efficiency of the use of fixed assets must be chosen independently by the enterprise, based on its condition, functioning and the influence of external and internal environmental factors.

The work on managing the efficiency of the use of fixed assets should be carried out regularly and in stages, which involves assessing the state of fixed assets, developing a long-term action plan taking into account the situation at the enterprise at the time of the analysis, monitoring timeliness and, if necessary, adjusting the strategy chosen by the enterprise.

In order for the use of fixed assets to be economically profitable, it is necessary not only to monitor its technical condition, but also to attract specialists, to study production markets, to attract specialists from the marketing department, to increase the level of production specialization.

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