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ASSESSMENT OF FIXED ASSETS REPRODUCTION IN AGRICULTURE

Dr. Alexander Valerevich Nikitin
ORCID: 0000-0003-1701-6909
Michurinsk State Agrarian University, Russia
nikitin@mgau.ru
Ph. D. (c) Tatiana Lvovna Larshina
Michurinsk State Agrarian University, Russia
ORCID: 0000-0003-3151-5771
pershina-tl@mail.ru
Ph. D. (c) Victoria Aleksandrovna Voropayeva
Michurinsk State Agrarian University, Russia
ORCID: 0000-0001-7292-2993
victoriya.voropaeva@yandex.ru
Ph. D. (c) Andrey Viktorovich Beketov
Michurinsk State Agrarian University, Russia
ORCID: 0000-0002-3127-7948
andrey_beketov@mail.ru
Lic. Daria Vyacheslavovna Selyanko
Michurinsk State Agrarian University, Russia
ORCID: 0000-0002-0941-749X
darikactk201@yandex.ru

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Abstract

The article discusses the methodological aspects of assessing the effective reproduction of fixed assets. The authors have systematized and supplemented indicators characterizing the fixed assets reproduction. The quantitative and qualitative characteristic of the level of fixed assets reproduction using the proposed system of indicators allows giving a comparative quantitative assessment of the degree of correspondence of the means of production of agricultural enterprises to the level of development of scientific and technological progress, as well as carrying out an economic assessment of the directions of the fixed assets reproduction and assessing the degree of the impact of the level of fixed assets reproduction of agricultural enterprises on improving the efficiency of the regional market of material and technical resources. The technique has been tested on the example of agricultural enterprises in the Tambov region.

Keywords

Reproduction – Fixed assets – Agriculture

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Introduction

Fixed assets are designed to improve the efficiency of live labor, and in some cases, to completely replace it[1]. In addition, they allow more efficient and rational use of all the resources involved in the production process, increase the production volumes, which, in turn, leads to lower costs.

Features of the agricultural industry and crisis in the economy are the main factors hindering the introduction of the latest technologies, machines and equipment in the domestic agricultural sector.

In order to develop agricultural enterprises, at the moment it is necessary to pay special attention to the process of fixed assets reproduction, including an assessment of its sources, conditions and level, as well as formulate proposals for improving methods and mechanisms for updating the material and technical base of farms.

The research is aimed at the formation of a mechanism for the efficient reproduction of fixed assets in agriculture in modern conditions, which determines their quantitative and qualitative state.

The subject of the research is the totality of economic relations arising in the process of fixed assets reproduction in agricultural enterprises.

Problem statement

Fixed assets reproduction is a significant factor in the development of agriculture. Different author's approaches and points of view are available allowing to assess the process of fixed assets reproduction using various indicators. The authors made a methodical attempt to supplement the indicators and systematize them in the areas of assessment of reproduction processes of fixed assets.

Materials and methods

The research is based on an analytical review of published scientific sources on this issue, as well as on the processing of data from annual reports on the financial and economic status of agricultural enterprises in the Tambov region and the State Statistics Service of the Russian Federation in the Tambov region concerning the fixed assets reproduction and generalization of the results. The object of the research is the features and problems of fixed assets reproduction in agriculture on the example of agricultural enterprises in the Tambov region.

Results

The study of the nature of the fixed assets reproduction and the opinions of various scientists[2] has allowed defining it as a complex, multifaceted process associated with the

[1] Ye. O. Knyazeva, "Teoreticheskiye aspekty vosproizvodstva osnovnykh fondov v selskom khozyaystve", Bulletin of the Orenburg State Agrarian University Vol: 4 num 32-1 (2011): 220-222

[2] Ye. M. Dusayeva, "Analiz vosproizvodstva osnovnykh sredstv v selskom khozyaystve Orenburgskoy oblasti", Bulletin of the Orenburg State Agrarian University Vol: 3 num 19-1 (2008): 94-

movement of fixed assets, continuously proceeding in enterprises, consisting in the renewal of fixed assets with different degree of efficiency and intensity and disposal of old ones.

Scientists-economists differently define the forms and types of fixed assets reproduction[3]. The most trendy is the allocation of narrowed, simple and expanded types of reproduction.

Each of these three types can be either intensive or extensive. The most innovative and ensuring sustainable development of the economy is intensive expanded reproduction.

The differences revealed during the study in the characteristics of the types of reproduction of fixed assets by technical, technological features, the circulation cycle of financial resources and the directions of their spending and their possible sources are systematized in Table 1.

Type / Signs	Narrowed	Simple	Expanded
Technology and equipment	Remain unchanged, which leads to a decrease in quality and a drop in production volumes	The volume and characteristics of manufactured products do not change	Technological improvements are taking place, the product range is expanding, and its quality is improving
Investment focus	Only the minimum necessary is refunded	Maintaining the current volume	The development of new production facilities, modernization and expansion of existing ones
The price of attracted resources	The most cheap sources are used. It is possible to use expensive sources for emergency "patching holes"	Preference is given to cheap sources, especially their own ones	A full range of financial resources is applied. For each project, the effectiveness of certain sources is determined in advance

Table 1
Distinctive features of the types of reproduction

99; A. S. Matiyevich, “Issledovaniye sushchnosti i sposobov vosproizvodstva osnovnykh fondov”, Bulletin of the science of Siberia Vol: 3 num 4 (2012): 188-192; A. Nikitin; N. Kuzicheva y N. Karamnova, “Establishing efficient conditions for agriculture development”, International Journal of Recent Technology and Engineering Vol: 8 num 2 (2019): 1-6 y A. Nikitin; N. Kuzicheva y N. Karamnova, “Establishing efficient conditions for agriculture development”, International Journal of Recent Technology and Engineering Vol: 8 num 2 (2019): 1-6.

[3] A. V. Nikitin; S. N. Trunova y V. A. Voropaeva, “The assessment of the effectiveness of the implementation of scenarios for the sustainable development of agriculture”, International Journal of Innovative Technology and Exploring Engineering Vol: 8 num 10 (2019): 3002-3005; I. A. Minakov y A. V. Nikitin, “Agricultural market development: Trends and prospects”, International Journal of Innovative Technology and Exploring Engineering Vol: 9 num 1 (2019): 3842-3847; S. A. Ogarkov, “Osnovnyye fondy selskogo khozyaystva”, Scientific Bulletin of the Russian Academy of Sciences RANEPA num 1 (2015): 27-33 y L. V. Popova, Vosproizvodstvo osnovnykh fondov na selskokhozyaystvennykh predpriyatiyakh: monografiya (Volgograd: Volgograd State Agrarian University, 2012).

When characterizing the type of fixed assets reproduction, it is important whether it is of extensive or intensive nature. Narrowed and simple fixed assets reproduction is considered to be of extensive nature, since in this case a serious economic effect does not have to be expected.

Extensive expanded reproduction is an increase in capacity with a decrease in the efficiency of production resources use.

New technologies and modern high-performance equipment are the main basis of intensive expanded reproduction of fixed assets. In this case, there is a decrease in the cost of production due to saving resources, increasing productivity and reducing losses.

In the study of types and nature of fixed assets reproduction, their qualitative and quantitative characteristics play an important role.

There are various points of view and approaches in assessing the quantitative and qualitative indicators of the fixed assets reproduction in agricultural enterprises[4]. In the course of the research, the authors have identified groups of indicators with which the process under study could be fully characterized. They can be divided into the following groups:

- equipment and availability;

- nature of reproduction;

- state and movement;

- reproduction efficiency, which includes the following areas: efficiency of fixed assets use and efficiency of investment sources.

Each of the presented groups has its own set of relative and absolute indicators (value-based and natural).

Natural indicators allow characterizing the technical level of fixed assets, their service life, qualitative and quantitative composition. These indicators are of great practical importance. On their basis, a production program is developed, the optimal parameters of the machine and tractor fleet are selected, taking into account the optimal load.

[4] A. M. Ableyeva, “Kolichestvennaya i kachestvennaya otsenka pokazateley vosproizvodstva osnovnykh fondov selskogo khozyaystva”, Bulletin of Belgorod State University num 1 (2014): 100-103; S. A. Gorlanov, “Metodicheskiy podkhod k otsenke effektivnosti vosproizvodstva v selskom khozyaystve”, AIC: Economics, Management num 8 (2012): 52-54; Ye. P. Pankratov, “Teoreticheskiye aspekty form i metodov vosproizvodstva osnovnykh proizvodstvennykh fondov stroitelstva”, Bulletin of the Russian Academy of Science num 6 (2015): 83-89; L. I. Pronyayeva, “Analiz protsessa vosproizvodstva osnovnykh sredstv v selskokhozyaystvennykh organizatsiyakh i napravleniya aktivizatsii investitsionnoy deyatelnosti v Orlovskoy oblasti”, Bulletin of Orel State Agrarian University num 1 (2010): 45-49 y A. V. Nikitin; A. A. Verkhovtsev; N. Y. Kuzicheva y N. P. Kastornov, “Assessment of developing of the grain market stability”, International Journal of Innovative Technology and Exploring Engineering Vol: 8 num 9 (2019): 2089-2096.

With the help of value indicators, accounting and analysis of the results of using fixed assets in monetary terms take place. Moreover, it is possible to predict the need for capital investments, plan tax payments, and develop an enterprise development strategy[5].

Many scientists note that due to the constant rise in the cost of fixed assets, it is difficult to evaluate them in terms of value in dynamics[6].

Ogarkov S.A. pays special attention to coefficient analysis. It represents a wide range for studying the condition, movement, renewal and growth of fixed assets[8].

Given the current economic conditions, the authors consider it expedient to single out a separate group of indicators - the nature of reproduction, which determines its type.

The most popular is to determine the type of reproduction using the coefficient of intensity of fixed assets renewal (Cint.renFA), which is the ratio of the value of fixed assets that were disposed in the period under study to the renewed ones.

In the authors' opinion, this indicator does not fully reflect the inflationary processes taking place in the economy. In this regard, it is appropriate to use the inflationary adjustment and the formula for calculating the coefficient of intensity of fixed assets renewal to convert to a system of indicators:

$$\begin{cases} \text{If } FA_{ren} \neq 0, \text{ then} & C\ int.renFA = \frac{FAdisp \times (1+(\frac{Inf}{100})}{FAren}; \\ \text{If } FA_{ren.} = 0,\ FA\ disp = 0, \text{ then} & Cint.renFA = (1 + (\frac{Inf}{100}); \\ \text{If } FA_{ren} = 0,\ FA\ disp \neq 0, \text{ then} & Cint.renFA = FAdisp \times (1 + (\frac{Inf}{100}). \end{cases}$$

where Cint. renFA is the coefficient of intensity of fixed assets renewal taking into account inflation;

FA disp is the cost of disposed fixed assets in the year under study;

FA ren is the cost of renewed fixed assets in the year under study.

Inf is the level of inflation (deflation) in the period under study, %;

Based on the value of the coefficient of intensity of fixed assets renewal, reproduction by type may be:

- simple - if Cint.renFA = 1,

[5] T. L. Larshina, "Kolichestvennaya i kachestvennaya otsenka vosproizvodstva osnovnykh sredstv v selskom khozyaystve", AIC: Economics, Management num 2 (2016): 87-93 y T. L. Larshina, "Metodicheskiye podkhody k otsenke vosproizvodstvennogo protsessa osnovnykh fondov", Bulletin of the Michurinsk State Agrarian University num 2 (2015): 112-121.

[6] K. I. Starostina, Nauchnyye aspekty effektivnogo vosproizvodstva osnovnykh fondov stroitelnogo predpriyatiya (Penza: PGUAS, 2012) y Yu. V. Chutcheva, Upravleniye protsessom vosproizvodstva sredstv proizvodstva v APK: monograph (Moscow: Publishing Center FGOU VPO MGAU, 2011).

- expanded – Cint.renFA <1,
- narrowed - if Cint.renFA > 1.

In the study of the reproduction process, it is necessary to take into account both qualitative and quantitative renewal of fixed assets. As an indicator of quantitative changes, the authors propose to use the growth rate of fixed assets, and as an indicator of qualitative changes –the growth rate of capital productivity over the period under study. The calculation methodology is shown in Table 2.

Name of indicator	Calculation formula	Symbols
The growth rate of fixed assets (CgFA)	$\frac{\text{FAe-FAb}}{\text{FAb}}$	FAb - initial cost of fixed assets at the beginning of the analyzed period; FAe - initial cost of fixed assets at the end of the period under study.
Capital productivity gain (Cpg)	$\frac{\text{CPn} - \text{CPn} - 1}{\text{CPn} - 1}$	CP_{n-1} - capital productivity of fixed assets for the previous period; CP_n - capital productivity of fixed assets for the period under study.

Table 2
The methodology for calculating the quantitative and qualitative indicators of fixed assets reproduction

The proposed indicators allow the division of enterprises into six groups according to the type of fixed assets reproduction. This allows assessing quickly the state of the reproductive process in the organization and developing a set of strategic measures for its improvement (Table 3).

Name of indicator		Reproduction nature	
		Intensive $\text{Cpg} \in (0; +\infty)$	Extensive $\text{Cpg} \in (-\infty; 0]$
Type of reproduction	Expanded $\text{CgFA} \in (0; +\infty)$	1 group	2 group
	Simple $\text{CgFA} = 0$	5 group	6 group
	Narrowed $\text{CgFA} \in (-\infty; 0)$	3 group	4 group

Table 3
Qualitative and quantitative groups to determine the type of reproduction

In order to compare various agricultural enterprises simultaneously in terms of quantitative and qualitative state of fixed assets reproduction, it is possible to use a generalizing integrated index of fixed assets reproduction (Iri).

At the same time, the values of the above-mentioned fixed assets growth rates and capital productivity growth ratios for the studied set of enterprises are transferred to the interval from 0 to 1 using the x-index. For more correct comparison of enterprises taken together, the authors suggest using the level of fixed assets reproduction (Lri). The methodology for calculating the indicators proposed for use is presented in Table 4.

Name of indicator	Calculation formula	Symbols
Fixed assets reproduction index (Iri)	$Iri = \sqrt{IgFA * IgCP}$	IgFA- fixed assets growth index; IgCP- capital productivity growth index.
Weighted average generalized index of fixed assets reproduction of agricultural organizations of the region at cost (Ia.r.)	$Ia.r = \frac{(\sum_{i=n}^{n} Iri_i * FAH_i)}{\sum_{i=1}^{n} FAH_i}$	FAH_i - initial cost of fixed assets i-th agricultural enterprise; n - number of agricultural enterprises in the region.
The reproduction rate of fixed assets (Rr)	$Rr = \frac{Iri_i}{Ia.r}$	

Table 4

The methodology for calculating the general indicators of quantitative and qualitative state of fixed assets reproduction

The proposed methodology for studying the process of fixed assets reproduction in agricultural enterprises allows grouping according to qualitative and quantitative characteristics, and ranking the studied economic entities.

During the period under study, i.e. in 2015-2017, there was an expanded reproduction of fixed assets in agricultural enterprises of the Tambov region (Table 5).

Indicators	Years					
	2015		2016		2017	
	fixed assets in general	including: machinery and equipment	fixed assets in general	including: machinery and equipment	fixed assets in general	including: machinery and equipment
Cost of fixed assets disposed, RUB mln	2,202.6	667.2	2,694.5	1,096.5	3,321.6	1,012.5
Cost of fixed assets renewed, RUB mln	11,953.3	4,588.9	30,055.6	13,745.1	30,674.8	14,175.4
Coefficient of the intensity of renewal	0.18	0.15	0.09	0.08	2.52	2.52
Inflation intensity coefficient	0.21	0.16	0.09	0.08	0.11	0.07

Table 5

The dynamics of fixed assets reproduction in agricultural enterprises of the Tambov region

Characterizing the process of fixed assets reproduction, it can be noted that the coefficient of intensity of their renewal sharply increased in 2014-2015. It indicates a significant slowdown and unevenness of the process of expanded reproduction. The same trend has the coefficient of intensity of renewal of machinery and equipment which is the

most important part of active fixed assets, its level was slightly lower than in general fixed assets.

The distribution of agricultural enterprises in the Tambov region by type of reproduction according to the proposed methodology for 2015-2017 showed that when calculating the coefficient of intensity of renewal without taking into account inflation in the region, the number and proportion of enterprises with simple reproduction of fixed assets for the period of research decreased, respectively, from 22 to 14 or from 8.9% to 5.6%. At this time, the number of enterprises with narrowed reproduction of fixed assets increased in absolute terms from 23 to 32 or from 9.3 to 12.9% (Table 6).

The use of the coefficient of the intensity of fixed assets renewal, taking into account inflation in 2015-2017, showed that all agricultural enterprises with simple reproduction of fixed assets moved into the narrowed group, and made up 18.9% of all enterprises included in the aggregate.

Thus, in the course of the study, it was found that the majority of agricultural enterprises in 2015 - 2017 were related to the expanded type of reproduction. Nevertheless, the use of the coefficient of intensity of fixed assets renewal does not allow forming a sufficient understanding of the quality of the reproduction process.

Agricultural enterprises in the form of fixed assets reproduction	Number of enterprises with Cint. renFA		Number of enterprises with Cint.ren. Inf	
	units	in% of the total number of enterprises	units	in% of the total number of enterprises
2015				
simple	22	8.9	0	0.0
expanded	202	81.8	202	81.8
narrowed	23	9.3	45	18.2
2016				
simple	18	7.1	0	0.0
expanded	216	85.4	216	85.4
narrowed	19	7.5	37	14.6
2017				
simple	14	5.6	0	0.0
expanded	203	81.5	202	81.1
narrowed	32	12.9	47	18.9

Table 6
Grouping of agricultural enterprises of the Tambov region
by type of fixed assets reproduction

The reproduction of fixed assets is a continuous process of their renewal at the quantitative and qualitative level that corresponds to the goal, development of the opportunities and external conditions of the enterprise.

For further research on the nature of the reproduction process, only those enterprises were taken for which analysis in dynamics over 2 years was possible.

Studies conducted to determine the type of fixed assets reproduction using the methodological approaches proposed above allowed distributing enterprises in six groups according to quantitative and qualitative characteristics depending on the growth rate of fixed assets and the growth rate of capital productivity (Table 7).

Groups	Number of enterprises, units .	Share in the total population,%	Fixed assets growth rate	Capital productivity gain	Generalizing integral index of fixed assets reproduction	Reproduction rate
2015						
1 Group	161	65.2	0.2503	0.3342	0.1802	1.0583
2 Group	41	16.6	1.1388	-0.2169	0.1626	0.9550
3 Group	21	8.5	-0.1946	0.6066	0.1356	0.7966
4 Group	9	3.6	-0.0264	-0.3701	0.0792	0.4650
5 Group	11	4.5	0	0.3638	0.1570	0.9220
6 Group	4	1.6	0	-0.1395	0.1112	0.6533
Total	247	100.0	0.1835	0.2776	0.1718	1.0088
2016						
1 Group	41	16.2	0.3952	0.2434	0.2176	1.264
2 Group	175	69.2	0.3669	-0.2510	0.1503	0.8677
3 Group	11	4.3	-0.2211	0.4693	0.1676	0.9678
4 Group	8	3.2	-0.1205	-0.2741	0.1209	0.6984
5 Group	6	2.4	0	0.7301	0.2241	1.2939
6 Group	12	4.7	0	-0.3344	0.1199	0.6925
Total	253	100	0.2997	-0.0957	0.1759	1.0159
2017						
1 Group	21	8.4	0.1884	0.1478	0.5919	1.1464
2 Group	182	73.1	0.1924	-0.3247	0.5095	0.9869
3 Group	9	3.6	-0.1585	0.2821	0.5133	0.9941
4 Group	23	9.3	-0.2155	-0.5395	0.3512	0.6801
5 Group	1	0.4	0	0.5945	0.6083	1.1781
6 Group	13	5.2	0	-0.4225	0.4497	0.8711
Total	249	100	0.1081	-0.2724	0.5050	0.9781

Table 7
Assessment of agricultural enterprises of the Tambov region
on the nature of the fixed assets reproduction

The first group was formed by agricultural enterprises with an intensive nature of expanded reproduction, in which there was a positive tendency for the growth of fixed assets and capital productivity.

However, agricultural enterprises should constantly pay attention to the ratio of growth rates of capital productivity and fixed assets. It is necessary that the growth rate of capital productivity is higher than the growth rate of fixed assets.

Consequently, there is a process of accelerated replacement and renewal of fixed assets, timely decommissioning of obsolete and worn out means of labor. This is a prerequisite for improving the use of existing facilities and increasing the efficiency of production as a whole. Intensive expanded reproduction of fixed assets involves the implementation of this process in the most effective and rational forms and methods.

In 2015, this group included 161 agricultural enterprises in the Tambov region or 65.2% of the total number. However, in 2016 and 2017 their number sharply decreased, which was due to the fact that the ratio of growth rates of capital productivity and fixed assets changed, most agricultural enterprises moved to the second group of enterprises with extensive expanded reproduction.

In this group of enterprises, with an increase in fixed assets, capital productivity decreases, i.e. characterizing the process of fixed assets reproduction, it can be noted that the ratio of growth rates of fixed assets and the efficiency of their use is violated.

The change in capital productivity is also associated with what the investments were directed to. The decrease in capital productivity in 2016 -2017 was caused by the intensive growth in the value of fixed assets due to their renewal. Therefore, capital productivity is a complex integrated indicator, the level of which is formed under the influence of various reasons and factors. This needs to be first taken into account when determining the need for investment, establishing an effective proportion between the intended volume of production and the growth dynamics of fixed assets, as well as between labor productivity and its capital-labor ratio.

In the second group of enterprises with extensive reproduction of fixed assets, as a rule, longer service lives of fixed assets and a high degree of their obsolescence and deprecation are observed. This requires additional costs for overhaul, modernization. As a result, production becomes more capital-intensive, less efficient, requiring large costs for the production of a unit of production. In 2015, this group included more than 16.6% of enterprises (41 agricultural enterprises), in 2016 and 2017 – 175 (69.2%) and 182 (73.1%) agricultural enterprises, respectively.

The studies allowed establishing a number of factors that influenced the transition of enterprises from the first group to the second: modernization and acquisition of modern expensive fixed assets; enterprises received less profit due to force majeure circumstances; a large number of fixed assets were purchased at the end of the year and the return on their use was possible only in the following year.

The third group is represented by agricultural enterprises in which the value of fixed assets decreases, but there are positive dynamics in the growth of capital productivity. These enterprises rationally approached the organization of the use of fixed assets: they wrote off unnecessary, not used for the main production, or outdated fixed assets. This allowed them to increase return on assets. However, it should be controlled so that the increase in capital productivity is not only due to the disposal of fixed assets, but also due to the increase in production. In the Tambov region, the number of such agricultural enterprises decreased over the period under study from 21 (8.5%) in 2015 to 9 (3.6%) in 2017 of the total number.

The fourth group was formed by agricultural enterprises with negative values of capital productivity growth and fixed assets growth; they have the worst situation in terms of fixed assets reproduction. These enterprises need first to ensure that the rate of decline in return on assets does not exceed the rate of disposal of fixed assets. In 2015, there were 9 (3.6%) agricultural enterprises in the Tambov region, unfortunately, their number increased to 23 or 9.3% in 2017.

In 2015, the fifth group included 11 agricultural enterprises, and in 2017, one enterprise remained. These are enterprises in which there was no movement of fixed assets, but they effectively used existing fixed assets and were able to increase capital productivity.

The sixth group is represented by 4 agricultural enterprises, in which the value of fixed assets did not change, but at the same time there was a decrease in capital productivity.

The calculations showed that when determining the type of reproduction using the coefficient of renewal intensity taking into account inflation, all agricultural enterprises of groups 1 and 2 had expanded reproduction of fixed assets, and agricultural enterprises of groups 3, 4, 5 and 6 had narrowed reproduction.

It should be noted that during the transition from the extensive to the intensive direction of development, there are no clearly defined boundaries. This is a complex and lengthy process in which both groups of factors are closely intertwined. Each agricultural enterprise is characterized by a different degree of manifestation and development of intensive factors of reproduction of funds, which is determined by industry characteristics and features of reproduction of the total use value of its fixed assets.

According to the studies, the weighted average generalized index of fixed assets reproduction of agricultural enterprises in the region in 2015 amounted to 0.1718, and in 2017, it decreased to 0.5050. The authors calculated the level of fixed assets reproduction for each agricultural enterprise for the period under study, which made it possible to build their rating on this indicator and to reveal that in 2015, 121 agricultural enterprises had a level of fixed assets reproduction higher than the regional average, and 126 agricultural enterprises had a level of fixed assets reproduction lower than the regional average; in 2016, 182 and 71 agricultural enterprises, and in 2017, 25 and 124 agricultural enterprises, respectively.

The studies confirm that the use of both the coefficient of the intensity of renewal taking into account inflation and the system of quantitative and qualitative characteristics give the same result in determining the type of reproduction for each particular agricultural enterprise.

Conclusion

It follows from the foregoing that a quantitative and qualitative characteristic of the level of fixed assets reproduction using the proposed system of indicators allows the following:

– to give a comparative quantitative assessment of the degree of conformity of the means of production of agricultural enterprises to the level of development of scientific and technological progress;

– to carry out an economic assessment of the directions of the fixed assets reproduction;

– to assess the degree of influence of the level of fixed assets reproduction of agricultural enterprises on improving the functioning of the regional market of material and technical resources.

Therefore, the use of the proposed methodology in assessing the process of fixed assets reproduction allows fully assessing the current state and efficiency of reproduction and developing scientifically sound directions for improving the organizational and economic mechanism of fixed assets reproduction of agricultural enterprises.

The process of fixed assets reproduction of an agricultural enterprise should be carried out in accordance with its goals, interests, and take into account the influence of subjective and objective factors. Therefore, given the specific business conditions, various options for the fixed assets reproduction of the enterprise are possible based on the type and forms of reproduction.

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