

ANALYSIS OF THE CURRENT STATE OF ORGANIZATION OF LAND USE MANAGEMENT IN AGRICULTURAL ENTERPRISES

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Abstract. *The subject of the research* is to study the current state of organization of land use management in agricultural enterprises. *Methodology.* In the course of the study, general scientific methods were used, in particular, theoretical generalization; methods of analysis and synthesis and statistical analysis, the method of SWOT-analysis of opportunities and threats was applied, and the graphical method was used to visualize the results of the study. The aim of the article is to analyze the current state of organization of land use management in agricultural enterprises. *Conclusions of the study.* Thus, having systematized the factors that determine the peculiarities of the organization of land management in agricultural enterprises, three groups were identified: natural-climatic and geographical, organizational-economic, agrotechnical and agrochemical. Based on the SWOT analysis of land resources as an object of management, it is determined that the purpose of land resources management of agricultural enterprises is to ensure the efficient use of land as the main factor of agricultural production in the long term on the basis of reproduction of productive land and increase the sustainability of agricultural landscapes, taking into account the balance of public and private interests. It should be noted that all subjects of land relations have the opportunity to minimize the negative consequences caused by the manifestation of weaknesses of land resources identified on the basis of SWOT analysis. First of all, such opportunities are related to the increase of state support for agriculture and rural development; strengthening of state control over the targeted use of agricultural land and its reproduction; improvement of the financial condition of agricultural enterprises and intensification of their innovation activities; development of adaptive landscape farming systems; appearance on the market of innovations in the form of new breeding-genetic, technical-technological and organizational-managerial solutions that ensure the preservation and improvement of the consumer qualities of productive lands, as well as the prevention of their degradation.

Key words: land resources, land relations, agricultural enterprises, management of land resources, management organization of use.

JEL Classification: E20, H56, O10

1. Introduction

An indispensable condition for the comprehensive improvement of agricultural production, based on a variety of forms of ownership and management, is the effective and rational use of land resources, which brings to the fore the formation of land relations adequate to the market economy as the basis of production relations in agriculture regarding the implementation of land ownership. In the course of agrarian reforms, the problems of land use have become more acute: soil depletion and productivity of agricultural land are increasing, farming systems and production technologies are being disrupted,

reclamation and soil protection works have virtually ceased. In modern theory and practice of land resources management a special role belongs to a group of economic methods. Their essence is to determine the ways of influencing the material and property interests of land use entities aimed at the efficient use and preservation of the resource potential of land with the use of rent assessment tools, comparison of costs and results in the process of stimulating active and more productive economic activity.

The application of economic methods of land resources management in the agricultural sector of the economy has a number of specific features.

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Their purpose is the fastest possible adaptation of agricultural producers to qualitatively new conditions of management, as well as minimization of negative processes that worsen the possibilities of land use. Management methods should be adapted to regional conditions. The main methods are differentiation of land payments depending on the quality of land, location, type of use and composition of land. In addition, fines are sometimes applied for loss of soil fertility, erosion, violation of land and environmental legislation. In addition, in the theory and practice of land resources management there are various methods that differ in approaches and specific features of management, the degree of impact on the object of management, such as technical, technological, political, organizational, managerial, socio-psychological, etc.

The research of solving the problems of managing the use of land resources of agricultural enterprises is devoted to the work of many scientists, but the current situation in agriculture requires new ideas, assessment of ongoing processes, updating methods of economic recovery and its stabilization, improving the efficiency of land use. In this regard, a number of scientific, theoretical, methodological and practical problems need to be solved. Particularly acute are

the issues of objectively necessary priorities in the implementation of measures to manage the use of land resources, the principles and conditions for the implementation of these measures, the creation of a mechanism that will ensure the efficient use of land resources, and other organizational issues.

2. Current state of organization of land use management in agricultural enterprises

Land relations are a special economic category not only because of the specifics of land as an object of common interest, but also because of its dual nature, that is, it participates in the reproduction process as a natural factor and as a commodity. In this regard, the aspects characterizing land resources can be divided into two groups: technological aspect (effective use of the natural potential of land) and socio-economic aspect (cost parameters) (Korobskaya, 2020; Popov, 2018).

When distributing land resources, the first group of interests is aimed at the functional and economic properties of the land fund: the scale, proportions and priorities of its distribution in accordance with the level of economic development; types of their intended use; intensity of exploitation, productivity, as well as environmental conditions.

Table 1

Distribution of the land fund of Ukraine by types of land in 2020 (Agropolit.com, 2020)

Oblast (region)	Agricultural land, thousand ha	of them:				
		arable	fallow	haymakers	pastures	perennial plantations
Vynnytsia	2012	1730	1	49	184	48
Volhynia	1048	672	0	162	202	12
Dnipro	2512	2127	0,03	17	314	53
Donetsk	2044	1654	1	43	289	58
Zhytomyr	1504	1144	41	119	178	22
Transcarpathian	451	200	0	94	129	27
Zaporizhzhia	2238	1901	0	83	216	38
Ivano-Frankivsk	621	401	2	82	121	15
Kyiv	1609	1321	13	101	117	57
Kropyvnytskyi	2032	1769	0	23	216	24
Luhansk	1907	1275	45	94	462	30
Lviv	1240	771	0,2	192	251	23
Mykolaiv	2000	1708	4	3	252	34
Odesa	2588	2077	27	51	351	82
Poltava	2167	1817	2	142	183	23
Rivne	922	658	3	126	124	11
Sumy	1695	1235	0,04	273	165	23
Ternopil	1035	851	3	24	145	14
Kharkiv	2361	1937	8	109	286	42
Kherson	1962	1780	0	10	150	23
Khmelnitskyi	1561	1326	0,7	91	105	38
Cherkasy	1450	1272	8	64	78	27
Chernivtsi	470	331	0	41	68	30
Chernihiv	2060	1456	22	297	262	24
Total in Ukraine	41329	32698	190	2294	5263	864

The most important type of land resources is agricultural land, which serves as the main means of production and subject of labor. They are subject to special protection and their transfer to other categories for non-agricultural needs is allowed only in exceptional cases.

The distribution of the land fund of Ukraine by types of land is shown in Table 1.

Currently, Ukrainians cultivate about one third of arable land in Europe, or 32.7 million hectares. Also, according to statistics, there are twice as many people per one inhabitant of Ukraine than per one European. In the structure of land holdings, the bulk of land is privately owned, about 31 million hectares, and 10.4 million hectares are in state and communal ownership. At the same time, about a third of the land, 32.7 million hectares, is under arable land. The largest amount of agricultural land is cultivated in Odesa, Zaporizhzhia and Kharkiv regions – more than 2 200 thousand hectares. The least land is owned by residents of Transcarpathian and Chernivtsi regions – less than 500 thousand hectares (Agropolit.com, 2020).

In Ukraine, land use is subject to payment. The purpose of the land payment is to stimulate the rational use, protection and restoration of land, increase soil fertility, formation of special funds to finance these measures, as well as filling local budgets.

The forms of payment for land are land tax and rent. The introduction of land tax is caused by the need to increase the efficiency of agricultural production through more rational use of land and other factors.

Local budgets in European countries are mostly filled with revenues from the taxation of real

estate (including land), the share of which reaches one third, or even exceeds half of all tax revenues of local budgets. In Ukraine, it is relatively low – only 13% (including almost 10% of the land payment) (Figure 1) (Tsina derzhavy, 2019).

The cost of land lease depends on the demand, the level of competition, the type of agricultural land, whether it is arable land, hayfields, pastures or perennial plantations, the quality of the land, as well as the level of awareness of potential buyers.

In the system of payments for land, rent is a market indicator to a greater extent than land tax. This is logical, since the practice of annual adjustment of rent rates for the use of land plots allowed most landlords to bring them in line with the level of demand for them.

For the state authorities that determine the amount of land taxation and other indicators of land value (cadastral value, market value), rent can serve as an indicator of the market value of land plots of different purpose and location in accordance with supply and demand. It should be emphasized that in foreign economic literature the concepts of rent are essentially perceived as identical. Indeed, all types of rents are essentially modified forms of land rent extraction, and fluctuations in land rent rates reflect trends in rent changes.

According to the results of research by scientists of the Institute of Agrarian Economics, the highest cost of renting one hectare of state-owned agricultural land is recorded in Kropyvnytskyi region – 8.4 thousand UAH, and the lowest – 0.9 thousand UAH – in Transcarpathian region (Figure 2) (Agropolit.com, 2019; Agropolit.com, 2020).

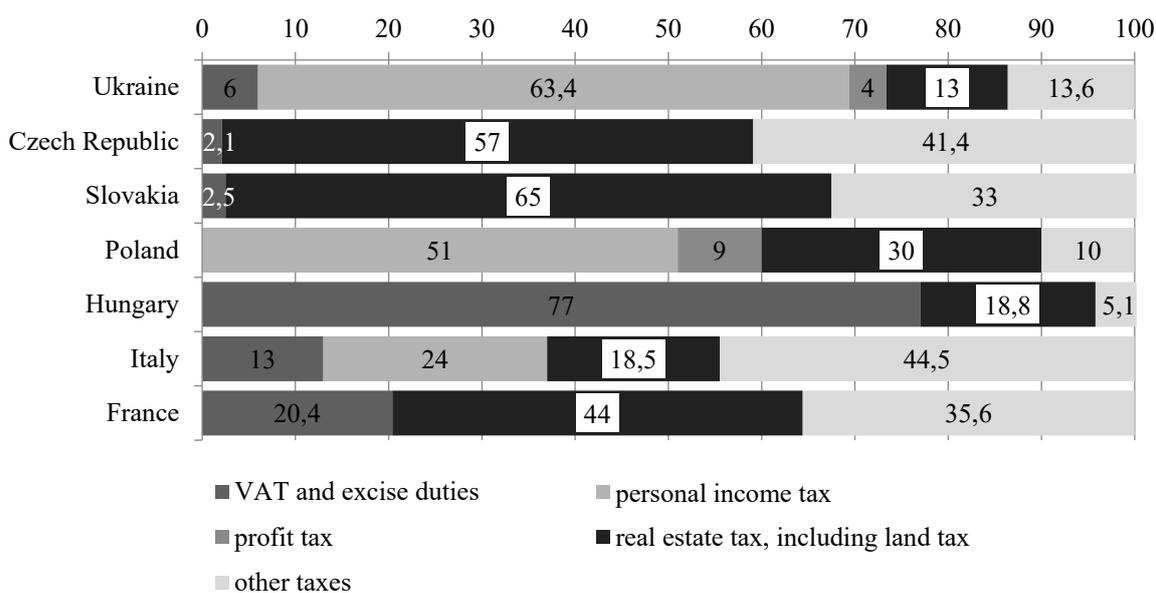


Figure 1. Structure of revenues to local budgets of European countries (in 2020), % (Tsina derzhavy, 2019)

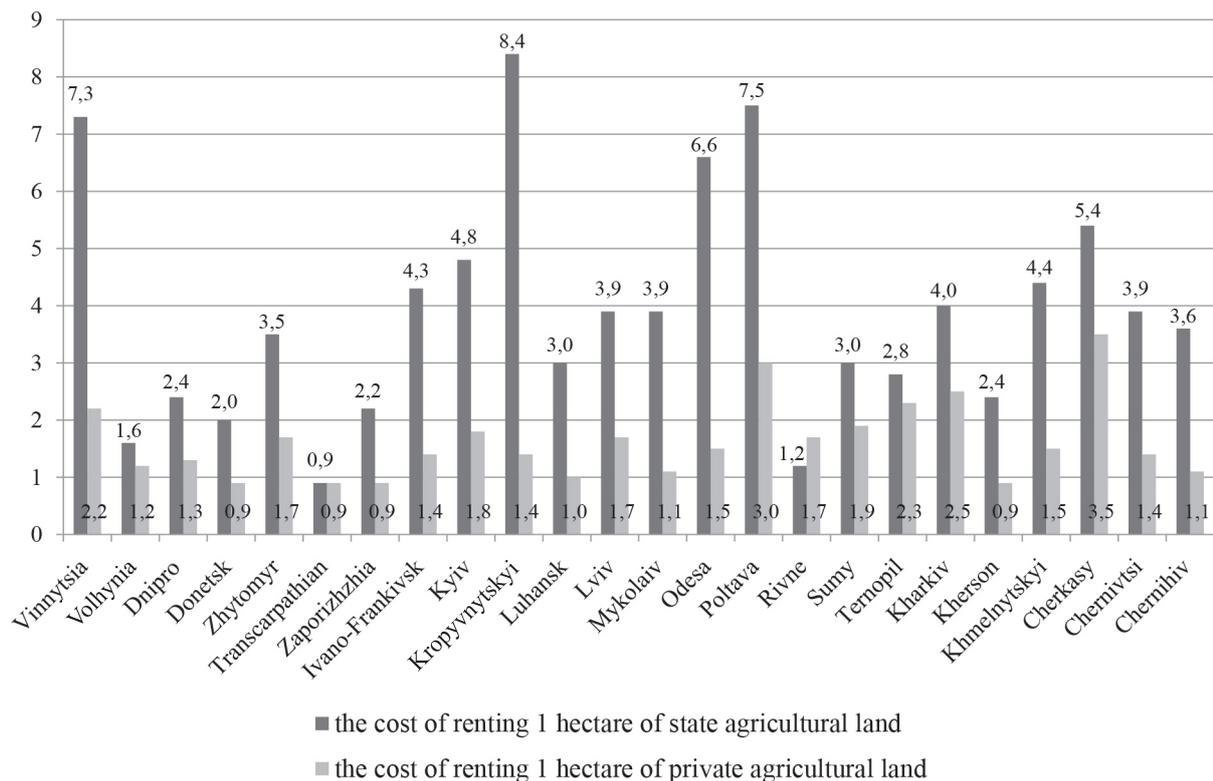


Figure 2. Average annual rent for state-owned land plots leased out at land auctions for the sale of land shares (units) by regions of Ukraine (2020), thousand UAH/ha

Thus, in Ukraine, the average annual rent for state-owned land plots leased at land auctions is 3431 UAH/ha, while the average annual rent for shares is 1613 UAH/ha.

Agricultural production involves the use of both productive land (agricultural land) and land on which objects related to the activities of agricultural entities are located. Ensuring the reproduction of productive lands is one of the priority tasks in the organization of management of the use of agricultural land resources. Reproduction of agricultural land resources is carried out in the process of their economic use. Withdrawal of land from economic turnover, as a rule, leads to its degradation associated with the loss of consumer qualities and increased costs necessary for their reintroduction into the production process.

The close intertwining of the processes of reproduction of agricultural land resources with the processes of agricultural production determines the dependence of the efficiency of reproduction processes on a set of various factors that affect their quality in different ways.

It is proposed to systematize the factors that determine the peculiarities of land resources management of agricultural enterprises by the following groups: natural-climatic and geographical, organizational-economic, agrotechnical and agrochemical (Table 2).

The organization of land use management in agricultural enterprises is considered as one of the functions of the farming system, which includes the introduction of crop rotations, soil cultivation, application of fertilizers and plant protection products, seed production, technological and technical support, land reclamation and environmental protection measures.

Particular attention in the management of land resources of agricultural enterprises has recently been paid to the systems of adaptive landscape farming, which allow to take into account the characteristics of each land plot involved in economic circulation, and to ensure the growth of agricultural landscapes sustainability and preservation of soil fertility.

Obviously, these factors have a complex impact on the reproduction of land resources, which makes it extremely difficult to reliably assess the individual level of impact of each of them. To assess the efficiency of land resources reproduction, it is proposed to use indicators that reflect changes in soil fertility, productivity of arable land and natural forage lands, the share of land subject to wind and water erosion, the proportion of land involved in economic turnover, the number of land disputes that arise and the effectiveness of their resolution, etc.

Table 2

Systematization of factors that determine the features of the organization of land use management at agricultural enterprises

Natural-climatic and geographical	Organizational and economic	Agrotechnical and agrochemical
Temperature regime	Intensity of use of productive land	Following the scientifically proved agricultural system
Topography and threats of wind and water erosion	Level of efficiency of land users functioning	Land processing technologies
Soil fertility	Level of development of technical and technological base of land users	Level of use of fertilizers and plant protection products
Moisture supply	Level of economic development of territories	Scale and effectiveness of environmental protection measures
Level of active solar radiation	Level of development of infrastructure and personnel support	Technologies for growing agricultural crops
Type of agricultural landscape	Level of investment attractiveness of agricultural production	Level of biologization of agriculture
Location relative to places of processing and sale of products	Availability of target programs for preserving soil fertility	Improving the productive qualities of natural fodder lands
Location relative to transport network locations	Quality of state control over land use and protection	Level of farming culture

3. Analysis of opportunities and threats to the organization of land use management in agricultural enterprises

The state, using a wide range of administrative and economic management methods, promotes the formation of an adequate institutional environment of land relations, which regulates the processes of land management, including their reproduction. The practically uncontrolled growth of land concentration in the hands of large agricultural enterprises, combined with the growing intensity of productive land use, necessitates a review of issues related to the organization of land use management of agricultural enterprises aimed at ensuring a balance of interests of the state, landowners and land users of agricultural land.

Land as a strategic resource of agricultural production has a number of features that determine its strengths and weaknesses as a factor of production, and requires an objective assessment of the possibilities of improving the efficiency of reproductive processes and identifying threats to the loss of land reproduction and its degradation.

The development of the national economy is impossible without the formation and implementation of an effective policy in the field of distribution and use of land resources. Formation of strategic directions of land use and land ownership is possible only with the help of modern research tools. The search for tools for strategic analysis of the formation, distribution and use of land resources makes it possible to assert that a wide range of analytical tools can be used to study the development of land relations and develop strategic goals for the long term: business advantage models, McNair's performance pyramid,

benchmarking, SWOT analysis, discriminant analysis, cluster analysis, PESTEL analysis, etc. (Dankevich, 2018).

SWOT analysis is one of the most common analytical methods that allows to comprehensively assess the strengths and weaknesses of the company, as well as the opportunities and threats affecting it.

Conducting a SWOT analysis is important because identifying opportunities and threats related to the organization of land management in agricultural enterprises should be the basis for turning opportunities into strengths and preventing the realization of threats by taking appropriate measures to prevent them (Table 3).

The strengths of agricultural land as an object of land resources management of agricultural enterprises are as follows: productive lands have natural reproductive potential, which can be increased in the process of their rational use in economic activity; in Ukraine, soils are characterized by a high level of natural fertility; diversity of soils and natural climatic zones allows to grow a wide range of crops; rural areas of zones with a high level of soil and agro-climatic potential are characterized by a high level of agricultural development; Increasing the efficiency of agricultural production has provided an increase in the quality of the material and technical base of agricultural enterprises and an increase in investment in the reproduction of productive land; the tendency to involve previously unused agricultural land in economic circulation (Sharyi, Tymoshevskiy, Mishchenko, Yurko, 2019; Kovaliv, 2016)

At the same time, land resources as a factor of production give rise to a number of problems related

Table 3

Matrix of SWOT analysis of opportunities and threats to the organization of land use management in agricultural enterprises

Strengths	Weaknesses
<ul style="list-style-type: none"> – productive lands have natural reproductive potential, which can be increased in the process of their rational use in economic activity; – in Ukraine, soils are characterized by a high level of natural fertility; – the diversity of soils and climatic zones allows to grow a wide range of crops; – rural areas of zones with high soil and agroclimatic potential are characterized by a high level of agricultural development; – increase in the efficiency of agricultural production is ensured by the growth of the quality of the material and technical base of agricultural enterprises and the increase in investments in the reproduction of productive lands; – the tendency to involve previously unused agricultural land into economic circulation 	<ul style="list-style-type: none"> – diversity of soils and climatic conditions that require diversification of farming systems and constant adaptation of agricultural technologies to changing economic conditions; – uniqueness of each land plot, which requires consideration of specific features in the organization of use and reproduction, implementation of measures for the conservation and development of agricultural landscapes; – limited capacity of agricultural enterprises to develop and implement a strategy for the transition to adaptive landscape farming systems; – the presence of certain contradictions between the environmental and economic efficiency of reproductive processes, which require a compromise between the possibilities of increasing the intensity of land use and increasing the sustainability of agro-ecosystems by reducing the level of anthropogenic pressure; – lack of an effective system of state regulation of reproduction of productive lands and stimulation of land users and landowners to increase their fertility; – underdevelopment of the land market and land mortgage system, which significantly reduces the consumer properties of land as an element of the subsystem of financial support of economic activity.
Opportunities	Threats
<ul style="list-style-type: none"> – increasing the volume of state support for agriculture and rural development; – strengthening state control over the targeted use of agricultural land and its reproduction; – improving the financial condition of agricultural enterprises and intensifying their innovative activities; – development of adaptive landscape farming systems; – appearance of innovations in the market in the form of new breeding and genetic, technical, technological, organizational and managerial solutions that ensure the preservation and improvement of consumer qualities of productive lands, as well as prevention of their degradation. 	<ul style="list-style-type: none"> – almost uncontrolled concentration of agricultural land in the hands of large agricultural enterprises; – the presence of a significant number of land plots that are not registered in the cadastre, which leads to the existence of the shadow sector of land use and lack of proper control over the reproduction of land resources; – the possibility of reducing state support for agriculture; – imbalance between large, medium and small forms of agricultural production leads to a decrease in the efficiency of reproduction of land resources of farms and households; – reduction of the rural population and its labor potential

to the organization of land use management in agricultural enterprises, which can be defined as weaknesses. These include the diversity of soils and climatic conditions that require diversification of farming systems and constant adaptation of agricultural technologies to changing economic conditions; the uniqueness of each land plot, which requires consideration of specific features in the organization of use and reproduction, implementation of measures for the conservation and development of agricultural landscapes; limited capacities of agricultural enterprises to develop and implement a strategy for the transition to adaptive landscape farming systems; the presence of certain contradictions between the ecological and economic efficiency of reproductive processes, which require a compromise between the possibilities of increasing the intensity of land use and increasing the sustainability of agro-ecosystems by reducing the level of anthropogenic

pressure; lack of an effective system of state regulation of reproduction of productive lands and stimulation of land users and landowners to increase their fertility; underdevelopment of the land market and land mortgage system, which significantly reduces the consumer properties of land as an element of the subsystem of financial support of economic activity (Dankevich, 2018).

It should be emphasized that all subjects of land relations have the opportunity to minimize the negative consequences caused by the manifestation of the above-mentioned shortcomings of land resources. First of all, such opportunities are related to the increase of state support for agriculture and rural development; strengthening of state control over the targeted use of agricultural land and its reproduction; improvement of the financial condition of agricultural enterprises and intensification of their innovation activities; development of adaptive

landscape farming systems; appearance on the market of innovations in the form of new breeding-genetic, technical-technological and organizational-managerial solutions that ensure the preservation and growth of consumer qualities of productive lands, as well as the prevention of their degradation.

There are also a number of systemic problems that threaten the reproduction of land resources. Among them, the following threats should be highlighted: almost uncontrolled concentration of agricultural land in the hands of large companies; the presence of a significant number of land plots not registered in the cadastre, which leads to the existence of the shadow sector of land use and lack of proper control over the reproduction of land resources; the possibility of reducing state support for agriculture; imbalance between large, medium and small forms of agricultural production leads to a decrease in the efficiency of reproduction of land resources of farms and households; reduction of the rural population and its labor potential (Ibatullin, Stepenko, Sakal, 2012).

The organization of land use management in agricultural enterprises should be focused on the fullest use of their strengths and available opportunities to improve the efficiency of their use, which minimize the negative impact of conditions and threats that adversely affect the reproduction of productive land (Miroshnychenko, 2010; Dekhtyarenko, Drapikovskiy, Ivanova, 2009). Most scholars study the changes in the impact of governance in the context of war and globalization (Pryshchepa, Kardash, Yakymchuk, 2020; Irtyshcheva, et etc., 2022; Vyshnevskaya, et al., 2022).

On this basis, the purpose of land use management of agricultural enterprises is to ensure the efficient use of land as the main factor of agricultural production in the long term on the basis of reproduction of productive land and increasing the sustainability of agricultural landscapes, taking into account the balance of public and private interests.

It is proposed to highlight the following as priority tasks for the organization of land use management in agricultural enterprises:

- Conducting a comprehensive inventory of agricultural land with the definition of real boundaries of land plots, their registration in the cadastre and delimitation of property rights;
- completion of re-registration of land shares into specific forms of ownership of specific land plots;
- formation of land market infrastructure, strengthening state control over the level of concentration of productive land in individual owners, ensuring transparency of all land transactions;
- development of institutional environment for regulation of land relations and public control over land turnover and efficiency of its use;

- development of a system of motivation of landowners and land users in preserving soil fertility and consumer properties of productive lands;
- identification of land plots that require immediate environmental protection measures and minimization of anthropogenic load, as well as development of measures to improve agricultural landscapes;
- development of a wide range of scientifically based modern farming systems, taking into account the natural and climatic characteristics of specific territories and the production direction of economic entities;
- development of recommendations on the location of agricultural production by territories and categories of economic entities, which ensure the increase of efficiency of productive land use.

The implementation of these tasks requires the concentration of efforts and resources of all subjects of land relations, but it should be noted that certain functions of the organization of land use management in agricultural enterprises also belong to the competence of the state, which within the framework of land policy determines the strategy of productive land use and their reproduction.

4. Conclusions

Thus, having systematized the factors that determine the peculiarities of the organization of land management in agricultural enterprises, three groups were identified: natural-climatic and geographical, organizational-economic, agrotechnical and agrochemical. Based on the SWOT analysis of land resources as an object of management, it is determined that the purpose of land resources management of agricultural enterprises is to ensure the efficient use of land as the main factor of agricultural production in the long term on the basis of reproduction of productive land and increase the sustainability of agricultural landscapes, taking into account the balance of public and private interests.

It should be noted that all subjects of land relations have opportunities to minimize the negative consequences caused by the manifestation of weaknesses of land resources identified on the basis of SWOT analysis. First of all, these opportunities are associated with an increase in state support for agriculture and rural development; strengthening of state control over the targeted use of agricultural land and its reproduction; improvement of the financial condition of agricultural enterprises and intensification of their innovative activities; development of adaptive landscape farming systems; appearance of innovations in the market in the form of new breeding and genetic, technical, technological, organizational and managerial solutions that ensure the preservation and improvement of consumer qualities of productive lands, as well as prevention of their degradation.

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