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PECULIARITIES OF NON-AGRICULTURAL LAND MANAGEMENT

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Summary

The article analyzed modern legislation and the state of industrial lands. The ecological, economic and social components of sustainable development have been studied. Proposals for the rational use and protection of industrial lands have been developed. Much attention is paid to the ecology of production.

The goal is to generalize theoretical knowledge regarding the management of industrial lands, their special condition, and ways of rational use and protection of these lands are proposed.

In this study, methods of analysis, monographic, abstract-logical and graphical methods were used, which made it possible to reveal the main results and draw conclusions.

***Keywords*:** management, state regulation, land resources, rational use, land protection, industrial land.

Introduction

Issues related to the rational use and protection of land are always relevant, as human activity usually causes a negative impact on the natural environment. Although industrial lands are not particularly valuable, the activities carried out on them must be safe and meet the sustainable development conditions. The main problem is environmentally safe production, which is carried out on such lands and must fully comply with standards, certain norms and regulations. In Ukraine, industrial lands are not only in state ownership, but also in communal and private ownership, and therefore require special regulation to protect against environmental threats. Environmental problems have no boundaries, and therefore every production, every city, every country must comply with environmental standards in order not to create threats for subjects of land and other relations.

The purpose of the work is to generalize theoretical knowledge regarding the management of industrial lands, their special status and to offer ways of rational use and protection of these lands.

To achieve the purpose, the following tasks were defined: to analyze modern legislation and the industrial lands condition; to investigate ecological, economic and social components of sustainable development; to develop offers for the rational use and protection of industrial lands.

The main goal of land resource management is to solve the problems of rational use and protection of land through the organized, purposeful activity of the economic entity in the conditions of market-type land relations. The concept of "management" is used to characterize any systems, such as biological, economic, ecological, social and technical ones.

One of the main issues of land resource management in modern market relations is the land holdings formation, land uses of various functional exploitation.

In the field of land policy of Ukraine, a special place belongs to the problem of land relations state regulation and land resources management. A significant number of domestic scientists investigated the issue of state management in the field of land relations in their works. Thus, O. Daciy, Y. Dorosh, G. Sharyy, M. Shchuryk in their research came to the conclusion that in order to successfully advance in the direction of sustainable territory development, it is necessary to improve state regulation that will contribute to the rational land use and protection of various categories and functional use [1-4]. According to T.M. Priadka, land resource management is a systematic, conscious, purposeful influence of the state and society on land relations and land use process. This action is based on the knowledge of objective regularities in order to ensure the rational and effective functioning of using and protecting the country's land resources process. A.M. Tretiak has a different opinion, believing that the management of land resources is management that is oriented not on development, but on support, functioning of the managed system, which should be qualified as regulation. [5,6].

It is widely known that the object of land resources management is the entire land fund, administrative-territorial units, land plots of individual land holdings and land uses that differ in the nature of exploitation, legal status, land category or functional use of land resources, as well as land plots or their parts.

In our study, the object was chosen as a land plot in the category of land for industry, transport, communication, energy, defense and other purposes, on which there is a quarry for the extraction of ilmenite placer ores.

Lands for industry, transport, communications, energy, defense and other purposes are an independent category of lands within the lands of Ukraine. Their legal regime is determined by regulations, which are concentrated in the Civil Code (Chapter 13) and a number of other regulatory acts. According to Art. 65 of the Civil Code, industrial,

transport, communications, energy, defense and other purposes are recognized as land plots granted in accordance with the established procedure to enterprises, institutions and organizations for the implementation of relevant activities [5].

The main feature of their legal regime is the provision of rational, ecologically balanced land use during the exploitation of various non-agricultural objects. The legal regulation peculiarities of the use and protection of certain land types included in this category are determined by the specifics of their intended purpose. According to Art. 23 of the Civil Code of Ukraine for the construction of industrial enterprises, housing and communal facilities, railways and highways, power transmission and communication lines, main pipelines, as well as for other needs not related to agricultural production, mainly non-agricultural land is provided or agricultural land of inferior quality.

Enterprises, institutions and organizations, i.e. legal entities, can be the subjects of the rights to the specified lands. State enterprises, institutions and organizations of industry, transport, communication, energy, defense and other branches of public production are mostly permanent users of the mentioned lands. This situation is fully justified, since industry, transport, energy, communications, defense are mainly the sphere of state activity. At the same time, the possibility is not excluded when the bearers of land rights in these cases are also non-state, for example, communal legal entities. Here it is only important that the activities determined by the purpose of these lands are carried out by legal entities that are endowed with special (statutory) legal capacity. The use of these lands by the named subjects is also not excluded under the terms of lease.

The sizes of land plots provided for the needs of industry must be comprehensively justified and as minimal as necessary. They are determined according to state norms and project documentation approved in the prescribed manner. In connection with the fact that the construction of industrial facilities is carried out, as a rule, over a long period, the allocation of the corresponding land plots is carried out in stages, taking into account the order of construction and the actual development of the land. The land rights and obligations of the enterprise when carrying out the relevant activity are regulated by the departmental management acts of land use of relevant type industrial enterprises.

The use of land by enterprises of the mining industry is characterized by certain features, which are due to the fact that the right to use the corresponding land plots is inextricably linked with the right to use the subsoil. These features concern, in particular, the emergence of land rights. Thus, the law establishes that the provision of land plots to enterprises of the mining industry for the needs related to the use of subsoil is carried out, firstly, after registration in the established order, the right to use the subsoil, and secondly, after the restoration of the land according to the approved reclamation project on previously developed areas within the established terms.

Object and research methods

The research used the following methods: analysis, monographic method, abstract-logical method and graphical method. The method of analysis was applied in highlighting the characteristics of industrial lands in the land relations system; monographic method was applied while determining the effectiveness of offered solutions that ensure rational land use and protection; the abstract-logical method was used in determining the essence of industrial lands management and their special condition; the graphic method was used in the construction of the figures.

The object of the study was a land plot on which there is a quarry for the extraction of ilmenite placer ores.

Ukraine has more than 60 million hectares of land. 42.7 million hectares of them - more than 70% - is agricultural land. At the same time, we are talking about very fertile soil. About 40% of agricultural land in Ukraine is chernozem.

Lands within the territory of Ukraine are characterized by different purposes. The main target purpose of land is the main and only criterion for differentiating land into separate categories that have a special legal regime. The peculiarities of the lands legal regime of each category are determined by the specifics of their purpose. Figure 1 shows the lands composition of Ukraine by categories.

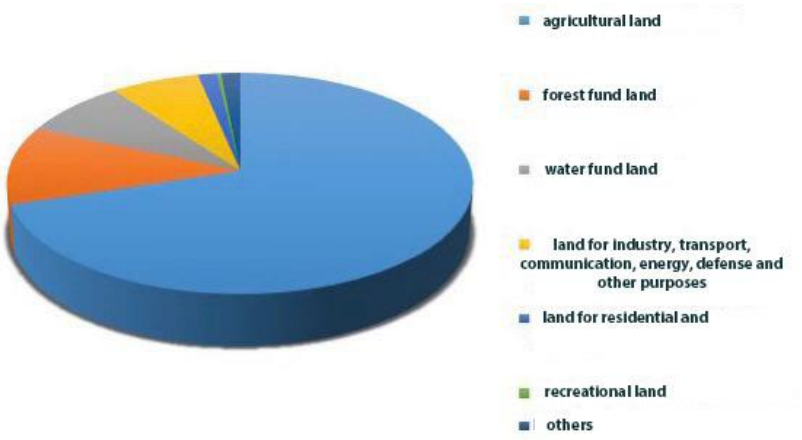

Figure 1. The lands composition of Ukraine by categories

From this diagram, it can be seen that industrial, transport and communication lands occupy not very large territories, compared to agricultural lands.

A land plot on which a quarry for the extraction of ilmenite placer ores for the production of ilmenite concentrate is located was chosen as the object of the study. This land plot is located on the territory of the Korobchyna Village Council, Novomyrhorod District, Kirovohrad Region. The area of the Korobchyna Village Council is 7,547.00 hectares. The population is 872 people. The construction of an ilmenite quarry and a mining and beneficiation plant is underway near the village. The area of the Korobchyna settlement council territory, Novomyrgorod district, Kirovohrad region is pictured in figure 2.

Figure 2. Lands of the Korobchyna settlement council, Novomyrgorod district, Kirovohrad region

From the western edge of the Korobchyne deposit, it extends in the southwest direction for 5.5 km, its width is 2.5 km. The complex consists of a quarry with a minimum operating life of 35 years and a beneficiation factory, where sand will be enriched using screw and magnetic separators.

Figure 3 shows the land fund distribution of Korobchyna Village Council, Novomyrgorod District, Kirovohrad Region by main types of land as of January 1, 2022.

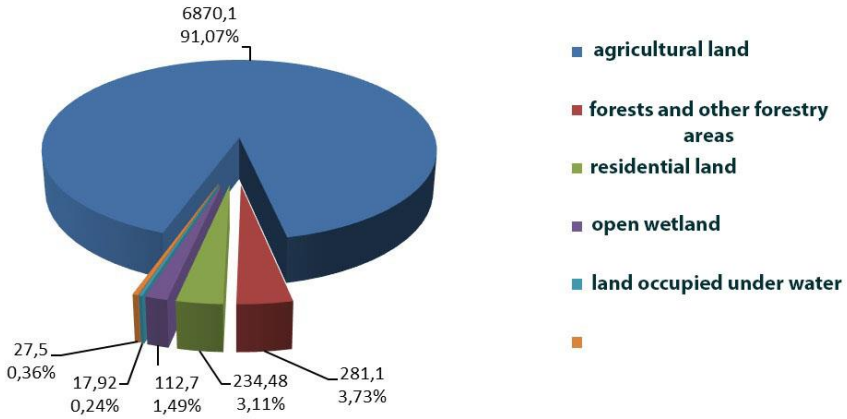

Figure 3. The land fund distribution of Korobchyna Village Council, Novomyrgorod District, Kirovohrad Region by main types of land (as of January 1, 2022.)

An important structural link of the economic complex of the district is industry. The specific gravity of PCF “Velta” LLC in the total production volume of industrial products is 97%, and the enterprise’s planned capacity of ilmenite concentrate reaches up to 300,000 tons per year. Thanks to the development of (this) industrial production, a competitive industrial complex of the district can be created

PCF "Velta" LLC is a responsible and a socially oriented company, it takes care of people with whom it develops its own business and cares for the natural environment in which it works. This company also constantly invests in the development of the region.

Results of the study

The studied plot of land was put up for auction, and after the land auction, it was leased to PCF "Velta" LLC for a period of 30 years.

The size of the land plot is 31.37 hectares. The main commercial products of the enterprise are ilmenite concentrate, iron titanate FeTiO3. Ilmenite is a valuable ore for obtaining titanium and its derivatives: pigment titanium

dioxide, titanium slag, sponge titanium. Figure 4 shows the situational plan of the site for the location of PCF "Velta" LLC. This figure was created in the AutoCad program. The initial information was the data of a geodetic surveys.

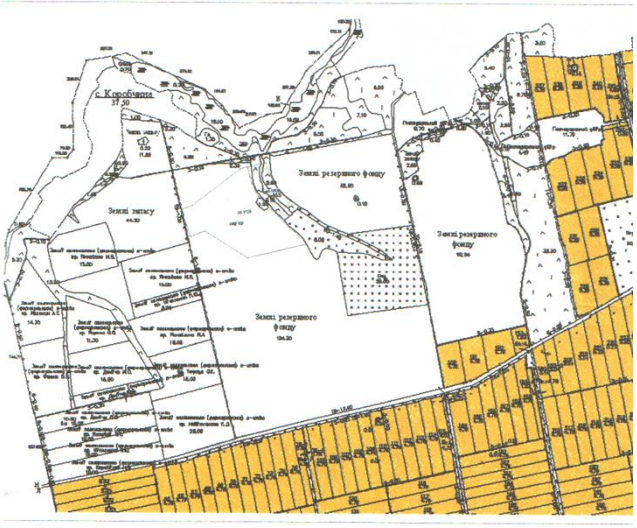

Figure 4. The situational plan of the site for the location of PCF "Velta" LLC

Social and economic justification of decisions. The construction of a plant for the production of ilmenite concentrate 0.7 km from the inhabited part of the village is planned on the territory of PCF “Velta” LLC. In structural solutions, preference will be given to quickly mounted metal structures and the most modern air conditioning systems. The biggest height of the raw materials and finished products storage buildings will be 12 m. It is also planned to build administrative and household premises, which include an administrative building, a canteen for employees, a medical center, and recreation rooms.

For the implementation of this project, monetary investments in the amount of 72 mln. euros, which are investors' funds are needed. To date, 80% of the amount has been found and construction is scheduled to begin at the end of 2023. The payback period of the project is 1.8 years. Thus, having evaluated the performance indicators of PCF "Velta" LLC, as well as the main results of the project implementation, it should be noted that this production of ilmenite concentrate is a fairly profitable and promising line of business and, given the current economic conditions, is interesting for investors. It is worth noting that the implementation of this project will contribute to the creation of new jobs, in particular, the solution to the problem of unemployment, and will allow to attract young people to participate in this construction and production.

In order to make the right management decision, it is necessary to have the necessary information about the object of management, which should be reliable, timely, objective, and the most complete. The basis of information blocks formation of land management data is a number of initial provisions that determine the content of management aspects and are reflected in the general model of management. The final result of land ownership formation, land use of industrial production lands is an increase in income to the local budget of the Korobchyna Village Council due to the payment of rent for plots with a total area of 313,700 square meters in the amount of $10,163.97.

When designing this industrial production, much attention is paid to environmental issues. The enterprise is designed in such a way that the negative impact on the surrounding natural environment is minimized, as evidenced by the following facts: ore beneficiation takes place without the use of any chemicals and solely due to the physical properties of minerals; the company will carry out land reclamation on the used areas; the maximum concentration of pollutants is twice as low as permissible according to sanitary and hygienic standards; production does not affect the level and purity of groundwater in nearby settlements. The flow of surface water from the quarry area to the river bed that flows nearby and into small drains is completely excluded; in order to rationally use natural waters, the enterprise uses them in a closed cycle. As an environmentally-oriented company, PCF "Velta" LLC will carefully monitor the possible radioactivity of minerals and conduct systematic inspections of air and water pollution, create socio-economic, ecological and other conditions for increasing the level of health development in the region.

In general, the ecological situation of industrial lands in the regions of Ukraine is also affected by the manifestation of ecological and geographical problems. The following are typical among them:

- decrease in reserves of minerals, depletion of resources, decrease in their quality and diversity;
- danger of environmental disturbance due to mining;
- change in the structure of land resources as a result of land acquisition for economic needs and development, as well as due to the development of negative processes in landscapes;
- decrease in soil fertility due to leaching of humus, salinization, flooding;
- pollution by heavy metals, pesticides and other substances;
- reduction of reserves and pollution of surface and underground water as a result of increased water intake, introduction of pollutants into water bodies in the process of production and management of public utilities;
- air pollution and changes in its composition due to industrial and other emissions into the atmosphere;

- reduction of plant and animal diversity and changes in its genetic pool;
- reduction of biological productivity of landscapes;
- deterioration of geohygienic and sanitary-epidemiological conditions of human life and the existence of living organisms.

These problems arose because the structure of the branches of the national economy of Ukraine, which had been developing for decades, did not correspond to their integral potential in many regions. At the same time, the objective needs and interests of the people who lived here and the ecological capabilities of the specific territory were not taken into account. The leading branches of the national economy are energy, mining and coal mining, chemical industry and engineering. Physically and morally outdated equipment in these industries led to intensive use of energy, water, land, and sometimes uncontrolled emissions of pollutants into all components of nature. Annually, about 1.5 billion tons of primary raw materials are involved in the production process and the volume of waste from these industries is about 15 billion tons. Thus, for Ukraine today, the condition of production development is the main environmental-forming factor. We emphasize that the nature condition in Ukraine is critical and in some of its regions the degradation is irreversible.

Conclusion

Therefore, in order to guarantee environmental safety and to rationally use and protect land resources, in our opinion, it is necessary to improve the system of environmental monitoring and introduce sanctions for violators, even up to personal criminal liability. Mandatory audits must be conducted at all polluting enterprises, as well as at environmentally hazardous facilities - waste storage facilities, storage facilities, old landfills and old chemical warehouses. The requirements of local self-government bodies to conduct environmental audits should be a law for enterprise managers and the conclusions of ecologists should be mandatory and available to all environmental protection bodies, local authorities, public organizations and the population. It is important that local and regional structures in the field of ecology and rational use and protection of natural resources work side by side with professional ecologists. The offered construction project of the plant for the ilmenite concentrate production of PCF “Velta” LLC is an example of an enterprise that realizes the importance of its growth on the basis of sustainable development. And the fact that this enterprise is ecologically oriented, an enterprise that cares about the improvement of social indicators and economic growth of people only proves the prospects of such management in the future.

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