

CONSERVATION OF DEGRADED AND TECHNOLOGICALLY CONTAMINATED LANDS OF UKRAINE DAMAGED AS A RESULT OF MILITARY AGGRESSION OF THE RUSSIA: PROBLEMS OF LEGAL REGULATION

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Annotation. The article is devoted to the study of the problems of legal regulation of conservation of degraded and technogenically polluted lands of Ukraine, which were damaged as a result of Russian hostilities.

The article states that the military aggression of the Russian Federation has transformed the territory of Ukraine since 2014 into a military-technologically tense region of Europe. These events caused catastrophic consequences for the state of land resources and soils of the state. It was found that the constant use of military means of destruction is a powerful polluter of the soil cover and poses a direct threat to the population.

It has been proven that one of the important factors that will contribute to the restoration of the condition of lands and soils in Ukraine after the end of hostilities is the use of land conservation, which is a powerful measure of land and soil protection, will contribute to the restoration of soil fertility and their further use.

It is noted that to date there are certain deficiencies in the legislation of Ukraine in the field of conservation of technogenically polluted and degraded lands that have been violated as a result of the military aggression of the Russian Federation.

The article establishes the expediency of supplementing the provisions of the Land Code of Ukraine and the Law of Ukraine "On Land Protection" with the concept of technogenically polluted and degraded lands damaged as a result of military operations. It is noted that it seems appropriate to introduce a special legal regime for man-made and degraded lands subject to conservation as a result of hostilities and emergency situations.

Conclusions were made about the necessity of conservation of technologically polluted and degraded lands that were damaged as a result of hostilities. The expediency of adding provisions to the land legislation of Ukraine regarding the protection and rational use of this type of land has been proven.

Key words: land protection, conservation of land, degraded and technologically contaminated lands, legal regulation of land conservation, technologically contaminated lands as a result of military actions.

1. Introduction.

The land fund of Ukraine is 60.4 million hectares and is characterized by an extremely high level of economic development, which determines the intensive impact of anthropo- and technogenesis on the surrounding natural environment, including land resources. The greatest danger to the natural environment and public health is soil contamination with radionuclides, heavy metals, etc. [1].

Military operations cause a powerful impact on all components of the natural environment, in particular on land resources and soils.

However, scientific developments in the field of monitoring and ecological-geochemical assessment of the state of soils in the conditions of military conflicts are of a fragmentary nature, which makes it necessary to solve the problem of geochemical analysis and assessment of the ecological state of territories that have suffered destruction due to military actions.

The military aggression of the Russian Federation, which has continued since 2014, has turned the territory of Ukraine into a military-technologically tense region of Europe with devastating consequences for the environment and significant violations of the soil cover and land resources of the state.

Contamination of both agricultural land and other categories of land caused serious socio-economic and ecological consequences for the country as a whole, as well as for the safety of the population.

Soil cover has always been a hostage of military activity, since its destruction is directly related to the purposeful task of damaging land resources to achieve a specific military goal, namely: bombing, construction of fortifications, etc. At the same time, the consequences of such destructive activities often remain less obvious during military operations, and in the future may have a long-term impact on the soil environment [2, p. 43].

The assessment of the ecological and geochemical state of the territory of the military-technogenic load showed that almost all types of military-technogenic load are powerful polluters of the soil cover. This situation is explained by the specifics of military influences, characterized by the use and exploitation of weapons systems and military equipment.

Military and man-made impacts cause specific contamination of the soil environment. Along with emissions of organic pollutants, including polyaromatic hydrocarbons and polychlorinated biphenyls, military activities are closely related to soil contamination with heavy metals [3, p. 83].

In addition, the lands where hostilities took place pose a direct threat to the population, as they may contain explosives, remnants of explosive equipment, dangerous chemical and biological compounds.

Thus, one of the important reasons for man-made pollution of lands and their degradation in Ukraine is: long-term hostilities in one territory, constant use of powerful means of destruction, lack of rehabilitation measures for its restoration.

At the same time, the improvement of the condition of damaged lands and soils as a result of the military aggression of the Russian Federation, especially in the temporarily occupied territories of the country, is possible only after the end of hostilities.

One of the important factors that will contribute to the recovery of lands and soils in Ukraine that suffered as a result of the war is the use of conservation of this type of land with the aim of their further rehabilitation, improvement and introduction into agricultural circulation.

The purpose of land conservation is to restore the fertility and useful properties of soils with their subsequent introduction to use for agricultural and other purposes.

Despite the existing legislative framework, to date there are certain shortcomings in the legislation of Ukraine in the field of conservation of technogenically polluted and degraded lands that have been violated as a result of the military aggression of the Russian Federation.

Therefore, it seems appropriate to investigate the problems of legal regulation of the conservation of degraded and technologically damaged lands that were violated as a result of the military actions of the Russian Federation.

2. Analysis of scientific publications.

The problems of legal regulation of conservation of degraded and technologically polluted lands in Ukraine were the subject of research by the following scientists, namely: O.V. Vasyliuka, L.O. Dovbysha, D.I. Dobryak, O. Holubtsova, M.O. Horina, O.P. Kanasha, N.V. Kuzina, V.M. Kulika, A.G. Martyna, S.O. Osyp, A. Sploditel, S. Chumachenko.

3. The purpose of the work.

The purpose of the article is to study the problems of legal regulation of the conservation of degraded and technologically polluted lands of Ukraine, which were damaged as a result of hostilities, and to establish ways of improving this problem.

4. Presenting main material.

Environmentally safe land use is one of the necessary conditions for the sustainable development of the environment and society as a whole. The current crisis state of Ukraine's land resources necessitates the need for significant changes in nature management [4, p. 166].

The wars of the 21st century cause extremely heavy damage to the environment, including land resources and soils. The use of powerful military equipment and huge amounts of ammunition lead to soil damage in large areas of the state. The peculiarity of land pollution during military operations is that all categories of land in Ukraine, without exception, that were in the zone of hostilities, are damaged.

Thus, part of the lands damaged as a result of military operations cannot be used for their intended purpose and must be taken out of circulation, as it has a significant content of chemicals, ammunition residues, including damage to the natural structure of the soil.

The Russian-Ukrainian war, in particular after the full-scale invasion in February 2022, is characterized by the use of the entire possible arsenal of weapons systems, military equipment and ammunition. All types of military man-made load cause heavy pollution and destruction of the soil cover. All types of ammunition used in war are characterized by the formation of a shock wave and explosion products that spread into the natural environment. As a result, soil deformation occurs in all directions of shock wave propagation. Thus, the main source of pollution during hostilities are explosion products and ammunition fragments [2, p. 37].

In connection with this, there is a primary accumulation of pollutants in the soil with subsequent redistribution both in the soil itself and in other environments - surface and underground waters.

Disturbances of soil cover as a result of hostilities are divided into two groups according to the time of manifestation: primary (occurring directly during hostilities - mechanical deformation of soil cover; thermal pollution; cluttering of the soil surface) and secondary (those manifested in the post-war period - flooding, salinization, erosive processes, pyrogenic degradation - failure to implement strategic measures of planned restoration) [2, p. 57].

Thus, part of the lands affected as a result of military operations turn into degraded and technologically polluted, cannot be used for their intended purpose and must be taken out of circulation, as they contain a significant list of dangerous substances, namely: chemical compounds, ammunition residues.

Therefore, soil restoration planning should be based on a detailed study of a specific area, determination of the level of pollution and damage.

In accordance with the provisions of Ch. 28 of the Land Code of Ukraine - (hereinafter LCU), part of the lands of Ukraine belong to man-made polluted (Article 169 LCU) and degraded (Article 171 LCU). Thus, technogenically polluted lands include lands polluted as a result of human economic activity, which led to land degradation and its negative impact on the environment and human health (Article 169 of the Civil Code). When using technogenically polluted lands, the peculiarities of the mode of their use are taken into account. Degraded lands are: the surface of which is disturbed due to earthquakes, landslides, karst formation, floods, mining, etc.; land plots with eroded, overmoistened, with high acidity or salinity, soil contaminated with chemical substances and others (Article 171 of the ZKU) [5].

It should be noted that the provisions of the Civil Code do not contain the concept of man-made polluted and degraded lands that have been contaminated as a result of military action and armed aggression. Considering the above, it is expedient to add the concept of technogenically polluted and degraded lands contaminated as a result of military operations to the provisions of the Civil Code. This type of land includes land contaminated as a result of hostilities, armed aggression, emergency situations, characterized by a significant content of chemicals, ammunition residues, has damage to the soil cover of the territory and has a negative impact on the environment and people's health.

Thus, part of the lands damaged as a result of military operations cannot be used for their intended purpose and must be taken out of circulation, as it has a significant content of chemical substances, ammunition residues, including damage to the natural structure of the soil.

Technogenically polluted and degraded lands that have been polluted as a result of military operations are subject to conservation and require the introduction of a special legal regime.

Land conservation is one of the important measures of land and soil protection. Land protection is a system of legal, organizational, economic and other measures aimed at rational use of land, prevention of unjustified extraction of agricultural and forestry land, protection from harmful anthropogenic influence, reproduction and increase of soil fertility, increase of productivity of forestry land, provision of a special regime use of land for nature protection, health, recreational and historical and cultural purposes (Article 162 of the ZKU). The tasks of land protection are to ensure the preservation and reproduction of land resources, the ecological value of natural and acquired qualities of land (Article 163 of the Civil Code). Also, the soil of land plots is an object of special protection (Article 168 of the Civil Code) [5].

Conservation of degraded and polluted lands is a nature protection measure and it is aimed at protecting lands and increasing soil fertility. Conservation means a system of measures for the temporary removal of degraded and unproductive arable land from intensive agricultural use (rehabilitation) and the irreversible transfer of these lands to other areas (transformation) [6, p. 86].

Conservation of degraded and technogenically polluted lands has a positive effect on the formation of ecologically safe agrolandscapes and is one of the most expedient environmental protection measures to create a favorable natural environment.

The conservation of man-made and degraded agricultural lands is a set of works that includes the collection, systematization and analysis of initial data on the quantitative and qualitative characteristics of the lands of the region, the development of criteria for their conservation based on the requirements for the optimization of agricultural landscapes. The directions of conservation of degraded soils can be as follows: afforestation, liming, use for pastures [4, p. 166].

According to Art. 172 of the Civil Code [5], as well as Art. 51 of the Law on Land Protection, degraded and unproductive lands, the economic use of which is ecologically dangerous and economically inefficient, are subject to conservation. Man-made contaminated land plots, on which it is impossible to obtain ecologically clean products, are also subject to conservation, and the presence of people on these land plots is dangerous for their health.

In our opinion, it seems appropriate to supplement the content of the above articles with the following provisions, namely: man-made polluted, degraded and unproductive lands, the economic

use of which is ecologically dangerous and economically inefficient, as well as lands contaminated with chemical substances as a result of military actions, are subject to conservation from which it is temporarily impossible to obtain ecologically clean products, and the presence of people on these land plots is dangerous for their health.

Also, it seems appropriate to introduce a special legal regime for man-made and degraded lands subject to conservation as a result of hostilities and emergency situations. The establishment of a legal regime on the above-mentioned types of land will allow determining a certain procedure for the use and protection of man-made and degraded lands, which is aimed at ensuring effective restoration, land protection and ensuring a safe state of the natural environment.

Therefore, the legal regime of man-made and degraded lands subject to conservation as a result of hostilities and emergency situations is a special procedure for the regulation of land relations established by law, aimed at restoring the state of man-made and degraded lands that have been violated as a result of hostilities, the application of measures, aimed at protecting lands, ensuring their safe use and restoration.

The Resolution of the Cabinet of Ministers of Ukraine "On the Approval of the Land Conservation Procedure" – (hereinafter the Resolution) dated January 19, 2022 No. 35 defines the organizational principles for the conservation of degraded and unproductive lands, the economic use of which is ecologically dangerous and economically inefficient, as well as man-made contaminated land plots on which it is impossible to obtain ecologically clean products, and the presence of people on these plots of land is dangerous for their health [7]. According to the Decree, conservation is subject to: land plots contaminated with chemical substances as a result of emergency situations and/or armed aggression and hostilities during martial law.

5. Conclusions.

Soil protection is a system of measures aimed at improving the condition of the land, reducing ecologically dangerous indicators in the soil, conservation of man-made and degraded land. Protection of lands and soils is of particular importance for ensuring the safety of the population and restoration of land resources during and after hostilities.

The military aggression of the Russian Federation, which began in 2014 and turned into a full-scale war in 2024, caused a powerful impact on all components of the natural environment, in particular on land resources and soils, turning the territory of Ukraine into a military-technogenically stressed region of Europe.

The military-technogenic load on the land resources of the country consists in mechanical, physical and chemical effects on the soil, which causes special consequences inherent in certain actions, namely: deformation of the soil cover, waterlogging, contamination by products of combat activities, changes in the natural physical and chemical parameters of the soil cover [2, p. 37].

One of the important factors that will contribute to the restoration of the state of lands and soils in Ukraine, which suffered as a result of the war, is the use of conservation of man-made polluted and degraded lands for the purpose of their further rehabilitation and improvement.

In the legislation of Ukraine, there are certain shortcomings of legal regulation in the field of conservation of technogenically polluted and degraded lands that were violated as a result of the military aggression of the Russian Federation. In order to improve the legal regulation of the conservation of man-made polluted and degraded lands, it seems appropriate to supplement the content of the land legislation with the concept: conservation of man-made polluted and degraded lands and to introduce a special legal regime for this type of land.

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