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Economic and legal dimension of humanitarian demining of Ukraine: problem and research prospects

Економіко-правовий вимір гуманітарного розмінування України: проблеми та перспективи дослідження

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Abstract

In recent years, issues related to humanitarian demining of the affected territories in Ukraine have become increasingly urgent. In this context, the economic and legal aspects of humanitarian demining are of particular importance as they affect the possibility of rapid restoration of economic and other peaceful use of de-occupied territories. The authors focused on identifying the problems and highlighting the research prospects of the economic and legal dimension of humanitarian demining. It is considered in this

Анотація

Останніми роками дедалі більше актуалізуються питання, пов'язані з гуманітарним розмінуванням постраждалих територій в Україні. У даному контексті особливого значення набувають економіко-правові аспекти гуманітарного розмінування, оскільки вони впливають на можливість швидкого відновлення господарського та іншого мирного використання деокупованих територій. Авторами акцентовано увагу на виявленні проблем та висвітленні перспектив

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study as the first stage of the comprehensive restoration of the Ukrainian territories. The present paper proves the importance of forming economic and legal tools that will contribute to the development of conceptual approaches as well as scientific and practical proposals to ensure humanitarian demining in Ukrainian realities.

Keywords: humanitarian demining, mine action, explosive objects, restoration, de-occupied territories, spatial development .

Introduction

Security is one of the priority functions in any state in the world, which is implemented through a set of legislative and organizational measures in order to protect the vital interests of citizens, the state and society as a whole. Along with outstanding achievements in the field of innovative technologies, the number of mine weapons types is being scaled. The use of these weapons in armed conflicts leads to catastrophic consequences, in particular the death of civilians and the destruction of civilian infrastructure. As defined by the UN, the problem of demining is global in nature, as it requires the consequences elimination of armed conflicts that have already ended or are still ongoing. Therefore, any state to overcome the threat takes appropriate actions within the demining process, which can be humanitarian, military or operational. In this context, humanitarian demining allows mine action operators not only to detect and destroy explosive objects, but also to completely clear the territories and transfer them to the population and the authorities for further restoration and peaceful use.

The hostilities that began in the Eastern Ukraine in 2014 has actualized the need for research in the field of humanitarian demining, since the presence of mine hazard and unexploded ordnance is a serious threat to human safety along with other factors. Full-scale Russian invasion to our country in February 2022 led to an increase in the area of mined territories and multiplied the above problems. Representatives of state authorities and international organizations in their numerous statements and speeches offer ways to solve them. In addition, the affected territories (regions and territorial communities) also need effective humanitarian demining in terms of restoring their socio-economic potential, and this process can become

дослідження економіко-правового виміру гуманітарного розмінування, яке розглядається у даному дослідженні як перший етап комплексного відновлення територій України. Доводиться важливість формування економічного і правового інструментарію, який сприятиме розробленню концептуальних підходів та науково-практичних пропозицій щодо забезпечення гуманітарного розмінування в українських реаліях.

Ключові слова: гуманітарне розмінування, протимінна діяльність, вибухонебезпечні предмети, відновлення, деокуповані території, просторовий розвиток.

a reality only after demining. These and other arguments determine the relevance of the research, emphasize its timeliness and importance for the restoration of the affected territories.

The main **purpose** of the research is to analyze the problems in the field of humanitarian demining and highlight aspects that require theoretical understanding and further scientific and practical solution through the prism of economic and legal approaches to ensure the comprehensive restoration of Ukrainian territories.

Literature Review

The analysis of scientific literature shows that foreign experts mostly research the technical issues of humanitarian demining, as well as the theoretical foundations of this process within the state policy in the field of defence and civil protection. This is indicated by the conclusions and provisions presented in the scientific works of D. Ambruš et al., (2020), T. Bechtel et al., (2021), I. Cruz et al., (2018), T. Hasic (2004), N. Ibrahim et al., (2021), J. Killeen et al., (2022), etc.

Foreign scientific literature also considers certain legal issues of humanitarian demining, namely the types and limits of responsibility of mine action operators, compliance with the requirements of environmental legislation in the process of demining, etc. Special attention should be paid to scientific research on the establishment and development of legislation in the field of humanitarian demining in post-conflict countries, especially in Colombia and Croatia. Scientific ways to solve the legal problems of humanitarian demining in Ukraine

can be justified taking into account some conclusions and approaches of D. Arias Henao & Ospina Perdomo (2020), T. Ban (2010), U. Hofmann & Rapillard (2017), P. Lodhammar (2013), J. Macías Montoya & Corcione Nieto (2020) and other authors.

The analysis of domestic scientific sources regarding the state and prospects for the use of land and resource potential of territories demonstrates that the basis of modern research is the works of I. Storonińska (Storonińska, 2022), T. Chaika (2022), etc. Theoretical aspects of humanitarian demining are studied by V. Horbulin (2022), T. Kurtseitov et al., (2020). These authors analyze the global problem of demining, substantiate the multifaceted nature of the situation related to the demining of Ukrainian territories as well as emphasize the importance of creating the latest technical means of detecting explosive objects. Economic accents of the territorial restoration in the war and post-war time are presented in the studies of V. Heets (2022), I. Zablodska et al., (2022), E. Libanova (2023) and other respected scientists.

At the same time, different legal issues in the field of humanitarian demining and mine action in general are revealed in the scientific works of H. Anisimova et al., (2023), R. Kirin (2020a, 2020b), R. Kotsiuba (2020), I. Lappo et al., (2023), N. Malysheva & Hurova (2022), S. Poteriako & Okipnyak (2022) and others.

It is worth noting that the presented scientific publications contain ideas, conclusions and data on other countries, which are useful for carrying out the tasks of this research. However, it should be taken into account that the results of these studies do not give a holistic view of the economic and legal provision of humanitarian demining for the comprehensive restoration of territories. Currently, the scientific vision of this issue remains mostly fragmentary. This explains the need for separate research due to the peculiarities of the socio-economic and environmental situation, the legal and economic system, as well as the legal regime of martial law in Ukraine.

Methodology

The authors use general and special methods and techniques of scientific research. The use of the dialectical method helps to find the truth through the diverse views of scientists. The study of individual elements of the system of economic and legal provision in their functional connection and dependence is carried out using the structural

and functional approach. The hypothetical methods are the basis for formulating assumptions about possible economic and legal ways for solving problems of humanitarian demining. The method of generalization makes it possible to justify the need for research on humanitarian demining in the context of sustainable development of territories. The study of humanitarian demining in the foreign and Ukrainian dimension is based on the unity of historical and logical. The method of abstraction is also important, because it is used to determine the role of humanitarian demining for the restoration of territories. The basis of the textual analysis of laws and other normative legal acts is the formal and legal method.

The basis of this research is the provisions of the theory of state power and local self-government organization, scientific works of foreign and domestic scientists on the features of humanitarian demining, the current normative legal acts of Ukraine regulating relations in the field of demining, information of state authorities, statistical and analytical data, the results of the authors' own research and developments.

Results and Discussion

Since 2014 Ukrainian territories are subjected to the destructive influence of Russian military aggression. The hostilities and activities of terrorist groups in the East of Ukraine resulted in significant contamination of the territories of Donetsk and Luhansk regions with mines, shells and other explosive objects. Open military invasion of the Russian Federation into Ukraine on February 24, 2022 led to even greater scaling and aggravation of the corresponding problem. According to the State Emergency Service of Ukraine, which performs demining tasks throughout Ukraine, the total area of territories contaminated with explosive objects is more than 174 thousand square kilometres (April 2023) (Ukrinform, 2023). This is almost a third of the Ukrainian territory. According to various estimates, a full range of humanitarian demining work can cost from 37.4 to 70 billion US dollars and last for decades (preliminary data from the World Bank and the National Council for the Recovery of Ukraine from the Consequences of the War under the President of Ukraine). Currently, the most polluted are Donetsk, Zaporizhzhia, Kyiv regions as well as partially Mykolaiv, Sumy, Kharkiv, Kherson and Chernihiv regions. At the same time, according to the estimates of the Ministry of Defense of Ukraine, there are 349 supposedly contaminated

and contaminated territories, half of which are agricultural lands. This situation poses significant threats to the functioning of agriculture and other sectors of the Ukrainian economy, hinders the comprehensive restoration of the territories affected by hostilities, delays the normalization of the population life and leads to the cessation of investments. The solution of the outlined problems has a clear correlation with the process of humanitarian demining, which forms today the priority agenda topic both at the national level and at the level of local territories (regions, territorial communities).

The Government of Ukraine faces an urgent task to formulate a comprehensive policy in the field of humanitarian demining. It is impossible to build effective cooperation with European business without this policy. At the meeting between First Deputy Prime Minister of Ukraine – Minister of Economy of Ukraine and Head of EU Service for Foreign Policy Instruments, which took place on May 9, 2023, key elements of the relevant policy were announced. These include: updating national mine action standards; an effective national mine action program with priority areas; creating a market for demining services, competition between demining operators, involvement of as many international operators as possible with the financial support from international partners; educational and communication campaigns; active involvement of innovative technologies.

Humanitarian demining is a priority in the restoration of de-occupied territories of Ukraine, taking into account its complex nature, which involves examining the entire territory where hostilities continued, and includes inspecting the territory, identifying dubious areas and places with mines, remnants of other explosive devices as well as clearing them. At the same time, the preliminary analysis of the foreign studies demonstrates the unity in scientific views on the nature of humanitarian demining, where the security aspect prevails over the complexity and durability of the process. The validity of this approach is confirmed by successful cases based on the restoration of post-conflict territories in Bosnia and Herzegovina, Serbia, Croatia and other countries.

European guidelines on humanitarian demining play a significant role in Ukraine, which is ensured not only by adapting successful practices, but also by implementing program tools. Specifically, an extrabudgetary program of the Organization for Security and Co-operation in Europe to support Ukraine in overcoming

urgent challenges has been implemented since November 2022. This program applies to humanitarian demining. In February 2023, the Prime Minister of Ukraine also announced the European Union program on humanitarian demining of the de-occupied Ukrainian territories worth 25 million euros.

The issues of this study are also important for international organizations dealing with humanitarian demining. This is confirmed by analytical materials and other publications of the UN Mine Action Service (UNMAS) within the Department of Peace Operations, the Geneva International Centre for Humanitarian Demining (GICHD), the International Committee of the Red Cross (ICRC), etc., which reflect the legal, organizational, technical and coordination features of humanitarian demining in different countries of the world.

In order to adapt foreign experience of humanitarian demining to Ukrainian realities, domestic specialists rely not only on the specified scientific and analytical materials, but also on the results of their own research. Most of the studies are devoted to the systematization of the legal framework for mine action in Ukraine, theoretical and applied aspects of the formation of its content, economic and environmental legislation, contractual relations in the field of mine action (Kirin, 2020a; Anisimova et al., 2023), mechanisms of state management in this field in Ukraine (Poteriaiko & Okipnyak, 2022), the legal status of the Mine Action Centre (Lappo et al., 2023), legal aspects of the disarmament of Ukraine in accordance with the Convention on the Prohibition of Anti-Personnel Mines (Kotsiuba, 2020), detection and cataloging the locations of waste generated as a result of military operations (Malysheva & Hurova, 2022) as well as other important issues.

The conclusions presented in the Vision of the Economic Department of the National Academy of Sciences of Ukraine on the post-war revival of Ukraine are also the basis for this study (Post-war revival of Ukraine, 2022). Representatives of all scientific institutes of the Department explored key opportunities and threats within the most important spheres of life and proposed directions for the revival of Ukraine, including national security and defense, critical infrastructure development and a competitive sustainable economy, integrated development of territories, environmental restoration, etc. The issues of demining objects and clearing the territory of ammunition are also considered in the Vision as part of the necessary key changes in the

environmental management and the use of natural resources.

The evaluation of the newly adopted Ukrainian legislation in the field of mine action by foreign scientists who are well aware of the situation in other countries and have a sufficient basis for comparison deserves special attention. In particular, H. Garbino positively assessed the adoption of the Law of Ukraine of December, 06 2018 No. 2642-VIII "On Mine Action in Ukraine", since, despite the beginning of Russian armed aggression back in 2014, Ukraine did not have special legislation in this field until 2019 (with the exception of separate bylaws). At the same time, the researcher noted a number of problems that need to be solved in Ukraine both for the implementation of the Law and related acts of legislation, and for the purpose of their further improvement. For example, the Law of Ukraine "On Mine Action in Ukraine" raised serious concerns among donors, because Article 8 states that "donor-sponsored financial resources are credited to a special fund of the state budget under the relevant budget programs". This restriction complicates the receipt of donor funds intended for humanitarian demining (Garbino, 2019).

The accumulated scientific and analytical material contains significant results and forms the basis for further development of problems in the field of humanitarian demining. At the same time, most specialists propose measures and actions regarding humanitarian demining, which are purely technical. They do not pay enough attention to the role of demining as the first stage in the restoration of the affected territories as well as economic and legal issues of its implementation. Furthermore, legal studies do not always take into account the peculiarities of the situation in Ukraine in the context of a full-scale Russian invasion. This necessitates the revision of existing approaches and means of regulation.

Humanitarian demining is a task that requires a systematic and effective solution at the national and local management levels, since appropriate measures are vital for the comprehensive restoration of regions and territorial communities affected by the war. Information on the need for demining should be included in the programs for the comprehensive restoration of regions and communities in accordance with the Resolution of the Cabinet of Ministers of Ukraine of October, 14 2022 No. 1159 "On Approval of the Procedure for Development, Public Discussion, Approval of Programs for the Comprehensive

Restoration of Region, Territorial Community (its Part) and Amendments to them" (Resolution No. 1159, 2022).

In the Draft Recovery Plan for Ukraine developed by the National Council for the Recovery of Ukraine from the Consequences of the War in August 2022 the issues of demining Ukrainian territories are considered in an inextricable connection with other post-war tasks within the sections "Audit of war damage", "Recovery and development of infrastructure", "Construction, urban planning, modernization of cities and regions", "New agrarian policy". For instance, demining is a necessary step for conducting an inspection of the damaged housing stock and assessing the damage, carrying out repair work on houses that have suffered minor damage, restoring and developing transportation by maritime and inland water transport, restoring the tourism sector.

It should also be noted that demining issues are included in the Government's Priority Action Plan for 2023, which was approved by the Order of the Cabinet of Ministers of Ukraine of February, 14 2023 No. 221-p (Order No. 221-p, 2023). The direction "Security and Defense" of the Plan includes the demining of de-occupied territories to restore normal living conditions of the population and reduce risks from explosive objects. It should be noted that the direction "Rebuilding of the country" provides for the development of the Procedure for classifying territorial communities and regions as the functional type "restoration territory". It also provides for the creation of the Procedure for the development, implementation and monitoring of a plan for the restoration and development of regions and plans for the restoration and development of territorial communities. These steps are key to creating an effective regulatory framework for planning the restoration and development of both regions and territorial communities. It has already been emphasized that humanitarian demining is the first stage in the process of comprehensive restoration of the territories affected by the war, which makes the reconstruction of housing stock and critical infrastructure possible. Consequently, the study of the economic and legal aspects of humanitarian demining is extremely important.

The trend towards the formation and systematization of legislation on mine action, taking into consideration international treaties and the best world experience, has emerged since the special Law of Ukraine "On mine action in Ukraine" was adopted. This Law (as amended on

May, 06 2023) establishes key terminology, defines goals, principles, main components, objects and subjects, sources of funding for mine action in Ukraine, specifies national interests in the relevant field, contains rules for helping victims and transferring responsibility for the cleared territory. The Law of Ukraine "On Mine Action in Ukraine" also sets rules for state regulation and management, economic activity, international cooperation, as well as responsibility for violations of legislation in the field of mine action. However, as Ukrainian scientists emphasize, the Law does not take into account a number of key aspects of mine action that require proper regulation at the level of law (Kirin, 2020b). Firstly, it means full implementation of the Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction of 1997 (Ottawa Treaty), which has been ratified by the Law of Ukraine of May, 18 2005 No. 2566-IV.

The problem of building an effective institutional mechanism, delimiting the functions and powers of different subjects regarding state regulation and management in the field of humanitarian demining remains open for further scientific research. The establishment of the National Mine Action Authority by the Cabinet of Ministers of Ukraine in December 2021 greatly facilitated the coordination of the activities of ministries and other central and local executive bodies, local self-government bodies, enterprises and organizations involved in activities in the field of mine action. However, the issue of optimal distribution of tasks and powers between the Mine Action Centre and the Centre for Humanitarian Demining remains on the agenda. In particular, it is necessary to eliminate duplication of their powers. The Cabinet of Ministers of Ukraine established the budgetary institution "Centre for Humanitarian Demining" in April 2023 at the suggestion of the State Emergency Service of Ukraine. In order to substantiate the ways of solving this issue, it is advisable to allow for the Guide of the Geneva International Centre for Humanitarian Demining "Developing Mine Action Legislation", which contains the principle provisions on the creation of the National Mine Action Authority and the Mine Action Centre, (GICHD, 2006).

Both theoretically and practically it is important to resolve the issues of legal liability of mine action operators and demining specialists for violation of legal requirements or provisions of national standards, as well as the problem of determining damage caused to Ukraine as a result

of Russian armed aggression in terms of costs associated with demining. According to the current legislation, the costs of engineering and technical, construction and other works necessary to bring the damaged area for further use (demining, etc.) are included in the costs associated with the limit of liability. Such costs are not taken into account in all cases of assessment of needs for restoration of real estate, movable property and property rights. They are the subject of a separate study prior to the assessment of needs for the restoration of the property (the Resolution of the Cabinet of Ministers of Ukraine of March, 20 2022 No. 326 "On Approval of the Procedure for Determining Damage and Losses Caused to Ukraine as a Result of the Armed Aggression of the Russian Federation") (Resolution No. 326, 2022). This approach requires a deeper scientific analysis to ensure a fair assessment of damage caused by humanitarian demining.

The presented arguments determine the need for research on the economic and legal dimension of humanitarian demining. This research will be based on data from previous studies on the Ukrainian territories' restoration, economic development of European countries in the post-war period, sustainable development and management of local territories in conditions of armed conflict, environmental restoration of cities in post-conflict territories, improvement of waste legislation in the context of the restoration and development of Donbas, as well as other issues. Despite the importance of the highlighted issues, they have been studied in Ukraine only in fragments. Therefore, it is advisable to focus on the development of conceptual principles for humanitarian demining to ensure the comprehensive restoration of the territories of Ukraine based on a combination of economic and legal tools.

As part of future research, it is important to solve a complex of theoretical and applied problems, namely: to specify the content of "humanitarian demining" and its significance in the economic and legal context; to analyse the national and foreign experience of economic and legal support of humanitarian demining for the restoration of de-occupied territories; to monitor humanitarian demining in the regions of Ukraine; to explore the features of humanitarian demining through the spatial development of Ukrainian local territories; to identify the key challenges of humanitarian demining and to develop economic and legal ways of responding to them within the comprehensive restoration of the territories of Ukraine.

Solving the specified tasks will create economic and legal prerequisites for improving important indicators and increasing the efficiency of the humanitarian demining process with a focus on the comprehensive restoration of the affected regions of Ukraine. It is expected that conceptual approaches and scientific and practical proposals in the above areas will contribute to the acceleration of humanitarian demining and the active revival of Ukraine, in particular:

- solving these tasks will allow local territories to form programs for their comprehensive restoration, taking into account the action plan for demining agricultural land. This will have a positive effect on the ability of territories to resist security challenges and threats, plan the restoration of territories on the basis of modern approaches (human-centrism, rational spatial planning, etc.);
- developing a set of interrelated economic and legal provisions to improve humanitarian demining within the comprehensive restoration of the territories of Ukraine will allow researchers to reassess the national experience in this area, take into account the best foreign practices of humanitarian demining for the restoration of de-occupied territories, focus on the regional dimension of this process based on the concept of spatial development of local territories and, finally, propose directions for modernizing national legislation in the field of humanitarian demining.

Conclusions

The Russian armed aggression against Ukraine, which began in 2014 and turned into a full-scale war in February 2022, led to the contamination of almost a third of the Ukrainian territory with mines and other explosive objects. This became an obstacle to the functioning of agriculture and various branches of the national economy, made it difficult to restore the affected territories, destabilized the lives of a large part of the population, and resulted in the cessation of investments. In these circumstances, there is an urgent need to carry out humanitarian demining, which is a primary step in the process of comprehensive restoration of de-occupied regions. High-quality humanitarian demining involves a series of sequential measures, namely surveying the entire territory where hostilities took place, identifying suspicious areas and places with mines, remnants of other explosive objects, and clearing them. Humanitarian demining is also aimed at protecting the

population from danger, helping affected persons and providing opportunities for further planning for the restoration of territories and their sustainable development. Handing over the cleared territories to the authorities and the population makes it possible to start the reconstruction of the housing stock and critical infrastructure with the subsequent restoration of economic and other peaceful use of these territories.

It is important to note that the emphasis in humanitarian demining has changed over time. In the past, the focus was on reducing the number of victims, but today the focus is on the consequences of this process in the context of socio-economic recovery of the affected areas. In many countries, mine action measures have been included in the strategic planning of territories at the national and local levels for several decades. This is of great importance for Ukraine, as there is a direct correlation between demining and restoration of the affected territories in the long term.

Within the studied issues, special attention should be paid to the problems, the identification of which is necessary for justifying the directions for improving the legal framework for humanitarian demining and proposing concrete ways to eliminate the shortcomings of the legislation. The legal and organizational foundations for humanitarian demining were created with the adoption of the Law of Ukraine "On Mine Action in Ukraine" in December 2018. However, a number of legal issues in this sphere require both a deeper theoretical understanding and a proper response from public authorities endowed with law-making powers. When conducting the research, it is important to rely on data that make it possible to evaluate the effectiveness of adopted legal acts. This will contribute to the substantiation of theoretically and practically significant conclusions and the fulfillment of the scientific tasks.

The presented conclusions confirm the necessity and prospects of scientific research based on combination of economic and legal instruments. This will allow researchers to develop conceptual approaches, as well as scientific and practical proposals for ensuring humanitarian demining within the comprehensive restoration of the territories of Ukraine.

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