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Criminal law counteraction to land pollution in the EU countries: searching for the optimal model

Кримінально-правова протидія забрудненню земельних ресурсів в країнах ЄС: пошук оптимальної моделі

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Abstract

The main goal of the article is to study both advantages and disadvantages of the approaches of the European Union (EU) states to criminal law prevention of land pollution. As a result of this an optimal legislative model should be developed to protect this element of the environment from criminal encroachment, which can be further used by the EU states in improving existing or creating new rules aimed at criminal law protection of land resources from pollution or the creation of new rules aimed at criminal law protection of land resources from pollution. The following research methods have been used to study criminal law provisions of the selected countries, to prove the stated hypotheses and to formulate conclusions: comparative law, system analysis, formal-logical, dialectical and

Анотація

Метою статті є вивчення переваг та недоліків підходів окремих країн Європейського Союзу щодо кримінально-правової протидії забрудненню земель, за результатом якого має бути розроблена оптимальна законодавча модель охорони цього елемента природного середовища від злочинних посягань, яка надалі може бути використана державами Європейського Союзу при удосконаленні вже існуючих або ж створенні нових норм, що направлені на кримінально-правову охорону земельних ресурсів від забруднення. Для дослідження кримінального законодавства обраних країн, доведення висловлених гіпотез, формулювання висновків використано такі наукові методи: порівняльно-правовий, системного аналізу, формально-логічний, діалектичний та метод

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modeling method. As a result of the study of various models of criminal law protection of land resources embodied in the legislation of nineteen European Union states, it has been proved that: 1) such protection should be carried out by a single universal rule on criminal liability for pollution not only of land but also of other components of the environment (water, air, forest); 2) only such land pollution shall be considered criminal, which has led to real (non-potential) damage to the environment, human health or property damage; 3) liability for land pollution should be differentiated depending on: a) weather guilty person's act was intentional or negligent; b) what the consequences of land pollution have been.

Key words: environment, pollution, land resources, crime, criminal liability.

Introduction

Today, the ever-growing scale of environmental pollution is one of the greatest global challenges for the sustainable development of humankind. This fully applies to European countries, given that the member states of the European Union (hereinafter – the EU) have in recent years significantly intensified their activities aimed at combating relevant socially dangerous acts, including those related to land resources. The particular urgency of the problem of land protection is explained by the fact that, on the one hand, the soil is a non-renewable resource and a very dynamic system, which performs many functions and provides services vital to human activity and ecosystem survival (Proposal, 2004), and on the other, as recognized by both European and Ukrainian experts, is the fact that most of Europe's lands remain in critical state, which, among other determinants (degradation, erosion, etc.), is explained by the pollution of the latter (Savchenko, Babikov & Oliinyk, 2017; Swartjes, Carlon, & DeWit, 2008), which is increasingly viewed as a serious obstacle to sustainable development of the European countries (Gilmore, 2001).

Given the transboundary nature of the soil pollution issue, it is necessary to agree with those experts, who emphasize that there is a clear urgent need for a concerted action aimed at combatting this negative phenomenon within the EU (Rodrigues et al., 2009; Glæsner, Helming &

модельовання. У результаті дослідження притаманних законодавству дев'ятнадцяти країн Європейського Союзу різних моделей кримінально-правової охорони земельних ресурсів доведено, що: 1) така охорона має здійснюватися за допомогою єдиної універсальної норми, присвяченій регламентації кримінальної відповідальності за забруднення не лише земельних ресурсів, а й інших компонентів довкілля (вода, атмосферне повітря, ліс); 2) злочинним має визнається лише таке забруднення земель, яке призвело до реальної (не потенційної) шкоди навколишньому природному середовищу, здоров'ю людини чи майнової шкоди; 3) відповідальність за забруднення земель має бути диференційована залежно від того: а) умисним чи необережним було діяння винної особи; б) які наслідки спричинило забруднення земель.

Ключові слова: довкілля, забруднення, земельні ресурси, злочин, кримінальна відповідальність.

De Vries, 2014). At the same time, despite the scale of such issue, academics state that EU countries still lack a common legislative instrument for their criminal law protection (Valentín, Nousiainen, & Mikkonen, 2013). This is despite the fact that the EU Directive 2008/99/EU on the application of criminal law to the protection of the environment, adopted in 2008, stated that, on the one hand, effective environmental protection can only be achieved, if there is an effective mechanism for its criminal law protection, and on the other hand – directly pointed to the low effectiveness of such mechanism, which was explained in part by the lack of a coherent policy in this regard (Directive 2008/99/EC). All these circumstances underline the relevance of the topic chosen for research. The structure of the study and its division into relevant sections are based on objective and subjective features of criminal offenses, which provide for liability for criminal pollution of land resources – subject, consequences, guilt, aggravating circumstances. We deliberately did not analyze the elements of the act, since in fact they have been described by a single term “pollution” in all countries studied.

Literature Review

Some issues of criminal law protection of land resources have been covered in the works of such researchers as L. Bukalerova & A. Shveiger, A. (2013); V. Ladychenko, O. Yara, L.

Golovko & V. Serediuk (2019); T. Overkovskaya (2021); I. Popov (2012); A. Savchenko, O. Babikov & O. Oliinyk (2017); Yu. Turlova (2016); F. Comte, L. Kramer, & O. Dubovik (2010); O. Yara and others (2018). While recognizing the great theoretical and practical significance of research by these scientists, it should be noted that their attention had been mainly focused on studying legislation of specific countries (Eshmurodov, 2020), or on a comprehensive study of criminal liability for crimes against the environment in general (Comte, 2003; Turlova, 2016; Waling, 1994), or only on environmental aspects of the relevant issues (Ladychenko, Yara, Uliutina & Golovko, 2019; Hollins, & Percy, 1998; Lisova & Sharapova, 2020; Meiyappan, Dalton, O'Neill, & Jain, 2014; Yara, Uliutina, Golovko, & Andrushchenko, 2018). At the same time no special studies have been made in the legal literature, within which comprehensive analysis of the EU legislation on the introduction of criminal liability for pollution of land resources, though this is a necessary prerequisite for developing optimal legislative model of criminal law response to relevant socially dangerous manifestations.

Methodology

This research is based on the use of the comparative law method, which has been employed to compare provisions of the criminal law of nineteen EU countries, as well as the EU Council Framework Decision 2003/80/JHA on criminal law protection of the environment of January 23, 2003 (Council Framework Decision) and the EU Directive 2008/99/EC on the application of criminal law to the protection of the environment. Based on the method of systemic analysis, a study of the experience of EU member states in the construction of standards which provide for criminal liability for pollution of land resources has been conducted. The authors used formal-logical method in interpreting the studied norms on liability for

crimes in the field of land relations. Furthermore, dialectical method allowed to comprehend the problems of research, its methodological bases, to structure research, to carry out step-by-step knowledge of the object of research. Using the modeling method, the optimal legislative model of criminal law protection of land resources has been elaborated, which can be used when looking for ways to improve EU members' national legislation.

For our study, we have selected EU countries where criminal liability is provided for land pollution. Among them are Austria, Bulgaria, Denmark, Estonia, Spain, Italy, Latvia, Lithuania, Liechtenstein, the Netherlands, Germany, Poland, Portugal, Slovakia, Slovenia, Hungary, Croatia, the Czech Republic, and Sweden. The choice of such a wide range of countries is explained by the proven fact that the study of foreign experience of as many countries as possible contributes to the transposition of relevant provisions of different foreign countries criminal law, their adaptation, convergence, harmonization, unification and so on (Vozniuk, Dudorov, Tytko, & Movchan, 2020).

Results and discussion

Elements of the environment subject to criminal protection against pollution (subject). First of all, it should be noted that criminal law of most EU countries contains a single universal prohibition on criminal law protection against pollution of not only land resources but also of environmental components such as water, air and, less frequently, forest (Czech Republic), animals and plants (Estonia), biota – flora and fauna (Hungary). In Lithuania and Slovakia, the list of environmental components protected from pollution is not specified, and the term “natural resources” is used instead. Only laws of Liechtenstein and Germany contains separate norms, which deal exclusively with the pollution of lands and, more precisely, soils.

Table 1.
Elements of the natural environment protected by law (developed by the authors)

Country	Object of criminal violation
Austria	land, water, air
Bulgaria	land, water, air
Denmark	land, water, air, soil
Estonia	soil, water, air, animals, plants
Spain	earth, subsoil, air, water
Italy	soil, subsoil, water
Latvia	land, subsoil, water, forest
Lithuania	natural resources
Liechtenstein	Soil
Netherlands	land, water, air
Germany	Soil
Poland	soil, water, air
Portugal	land, water, air
Slovakia	natural resources
Slovenia	land, water, air
Hungary	land, air, water, biota (flora and fauna)
Croatia	land, soil, water, sea, air
Czech Republic	soil, water, air, forest and other components of the environment
Sweden	land, water, air

In our opinion, given the organic relationship of all these types of natural resources, there is no need to differentiate criminal liability for pollution of each of them. This view is supported by L. Bukalerova and O. Schweiger, who point out that the essence of pollution should be reduced to the consequences of a one-dimensional nature and the delimitation of norms on environmental objects is impractical, since it does not take into account all possible consequences for a particular object (Bukalerova & Shvejger, 2013).

Consequences. Depending on the peculiarities of constructing the consequences element of the discussed provisions, the approaches of the parliamentarians of the EU countries to the

presentation of the studied norms can be divided into three groups:

- 1) In the so-called first group of countries, any pollution, which has created a danger to human life or health or the environment (torts of danger) is considered criminally illegal;
- 2) In the second group – only pollution which led to the occurrence of real socially dangerous consequences, which are provided for in the dispositions of the relevant criminal law provisions;
- 3) Legislators of the third group of countries apply a comprehensive approach, when the condition of recognizing pollution as criminal are both real consequences and the threat of their occurrence.

Table 2.
Division of provisions depending on the consequences related to criminal liability for pollution of land resources (developed by the authors)

Country	Consequences of pollution
Austria	- endangering life or health of a large number of people or; - creating a significant danger to the state of fauna or flora or; - long-term deterioration of water, soil or air quality or; - cases when the cost of eliminating pollution exceeds 50 thousand euros
Bulgaria	- creating danger to humans, animals and plants, or; - making natural resources unsuitable for use in cultural and domestic, health, agricultural and other economic purposes
Denmark	- causing significant damage or; - creating a real danger of causing significant damage to the environment
Estonia	- creating a danger to human life or health or; - creating a risk of significant damage to the quality of water, soil or air, animals or plants or parts thereof
Spain	- causing or threatening to cause significant damage to the quality of air, soil or water, as well as to animals or plants

Italy	- pollution
Latvia	- causing significant damage to the environment, human health, property or economic interests
Lithuania	- creating a threat of significant damage to air, land, water, animals or plants or other serious consequences for the environment
Netherlands	- creating a threat to public health or life of another person, death of a person
Germany	- causing harm to the health of another person, animals, plants or other objects of value, or water bodies, or; - significant pollution or other negative impact on the environment Contamination in such quantity or in such a form that it can:
Poland	- endanger human life or health, or; - cause a significant decrease in the quality of water, air or land surface, or; - cause damage to flora or fauna on a large scale causing significant damage, which should be understood as such losses that: - significantly or permanently impair the physical integrity and well-being of people, or; - make it impossible to use the environmental component for a long time, or;
Portugal	- have led to the spread of microorganisms or substances harmful to the body or health of people, or; - had a significant impact on the conservation of species or their habitats, or; - significantly worsened the quality or condition of the environmental component
Slovakia	- creating a threat of damage to the environment
Slovenia	- creating a threat to the life of one or more persons, or; - causing serious harm to the quality of air, soil or water, as well as to animals or plants, or; - creating a danger of significant deterioration of the habitat in the protected area
Hungary	- endangering natural resources - creation for a long period of time or to a large extent of a threat to the quality of natural resources, or;
Croatia	- creating a threat to natural resources over a vast territory, in which animals, plants, or human life or health are endangered - significant damage to soil or a threat to it, of water, air, forest or other component of the environment, or;
Czech Republic	- pollution of natural resources that could cause serious harm to health or death, or; - if it requires significant costs to eliminate the consequences of such behavior, or; - a person intentionally increases such damage or threat to an environmental component or aggravates its rejection or mitigation
Sweden	- pollution which is insignificantly harmful to human health, animals or plants, or; - any other significant violation of the environmental rules

In our opinion, construction of the analyzed provision as a tort of creating a danger is not justified. In particular, I. Popov suggests that responsibility for creating a threat of pollution and the lack of precise criteria for the crime of acts leads to the fact that, for example, tens of thousands of crimes against the environment are registered in Germany each year (Popov, 2012) (among the latter the average share of soil pollution is about 10%) (Comte, Kramer, & Dubovik, 2010). We believe that, given the prevalence of environmental pollution (including land resources), only those, which have led to real socially dangerous consequences should be recognized as criminally unlawful.

In this respect, the experience of Latvia deserves the most attention, in which only land pollution, which has led to significant damage to the environment, human health, property or economic interests (Part 2 of Article 102 of the Criminal Code of Latvia (1998)) is considered criminal. As one can see, despite the fact that the relevant act was considered a crime against the environment, in addition to damage to the

environment, Latvian parliamentarians also found the pollution that led to real damage to human health and property to be criminal. At the same time, we note that for the reason of a unified interpretation of the relevant provisions of criminal law in Art. 102 of the Criminal Code of Latvia (1998) should have fixed a specific indicator of “significant damage to property or economic interests.” In particular, this is the path taken by the Austrian legislator, which clearly states in Articles 180–181 of the Criminal Code of Austria (1974) that only such pollution should be punished by criminal law, the cost of eliminating which exceeded 50 thousand euros.

Guilt. Two approaches are used in presenting the characteristics of the subjective side of the discussed criminal offenses in the EU member states: 1) differentiated and 2) unified.

A differentiated approach involves delineating liability for land pollution depending on whether it was done intentionally or negligently. For example, in comparison the Austrian Criminal Code (Criminal Code of Austria, 1974) provides

for imprisonment for up to three years for intentional contamination of natural resources (§ 180) and only up to one year for negligent contamination (§ 181). Under the German Criminal Code, the penalty for intentional soil contamination is imprisonment for up to five years or a fine (Part 1, § 324-a), and for negligence – up to 3 years or a fine (Part 3, § 324-a) (Criminal Code of Germany, 1998).

It should be also noted that such differentiated approach, in turn, also has two options: in some

countries, differentiation occurs within certain parts of one article, while in others – in different articles of criminal law.

Instead, legislators in countries, which use a unified approach, have not considered it appropriate to delineate liability based on whether the pollution was intentional or negligent.

Table 3.

Division of EU countries based on whether their criminal law differentiates liability for land pollution depending on the form of guilt (developed by the authors)

Liability is differentiated			Liability is unified
	Willfulness	Negligence	
Austria	Art. 180	Art. 181	Denmark
Bulgaria	Part 1 and 3 of Art. 352	Part 4 of Art. 352	Spain
Estonia	Art. 364	Art. 365	Italy
Liechtenstein	Part 1 of Art. 89	Part 2 of Art. 89	Latvia
Netherlands	Art. 173-a	Art. 173-b	Lithuania
Germany	Part 1 of Art. 324-a	Part 3 of Art. 324-a	Sweden
Poland	Part 1 of Art. 182	Part 2 of Art. 182	
Portugal	Part 1 and 2 of Art. 279	Part 4 and 5 of Art. 279	
Slovakia	Art. 300	Art. 301	
Slovenia	Part 1 of Art. 332	Part 4 of Art. 332	
Hungary	Part 1 of Art. 241	Part 2 of Art. 241	
Croatia	Part 1 of Art. 193	Part 3 of Art. 193	
Czech Republic	Chapter 293	Chapter 294	

When assessing the benefits of these approaches, it is important to keep in mind justice as a feature of criminal law. The principle of justice is key to criminal law, the law must be based on it, and not the other way around: what is just is lawful. One of the components of justice is that intentional crime should be punished more severely than a negligent crime.

If we take into account the above-mentioned to return to the issue of criminal law protection of land from pollution, it should be noted that, for example, actions of a dump truck driver who, while being clearly aware of the public danger of his actions, throws waste in order to save time and money, on the one hand, and actions of a person who, due to negligence in his responsibilities, caused pollution or damage to land, on the other hand, cannot be viewed as equally socially dangerous (Dudorov & Movchan, 2020).

Qualifying features. As it turned out, the question of the expediency of allocating qualified crime sets within the framework of the considered criminal law norms is resolved differently among the EU countries: in some countries liability for any means of land pollution is unified, while in others it is differentiated depending on the consequences. At the same time, the increase in liability for land pollution is most often associated with the occurrence of two such socially dangerous consequences as human death or other serious damage to health and significant (significant, large, long-term recovery) damage to the environment as a whole or its individual components. Less often, differentiation is associated with such features as contamination with hazardous substances (Italy), its commission for selfish motives or for the purpose of making a large profit (Germany, Czech Republic), the recurrence of the relevant offense (Czech Republic).

Table 4.

Nations, which criminal law provides for qualifying elements of land (or other natural resources) contamination (developed by the authors)

Country	Qualifying elements
Bulgaria	- death or serious bodily injury to one or more persons or; - significant damage to the environment
Estonia	- causing significant damage to the quality of water, soil or atmospheric air, individuals of species of animals or plants, or their parts or; - causing major damage to the quality of water, soil or air, to species of animals or plants or to parts thereof
Spain	- threat of serious damage to the balance of natural systems
Italy	- pollution by dangerous substances
Lithuania	- causing significant damage to air, land, water, animals or plants or; - other serious consequences for the environment causing such soil damage that: - cannot be eliminated, or the elimination of which requires a long time or large costs;
Germany	- harms public water supply; - causes significant damage to endangered species of animals or plants for a long period of time; - committed for selfish motives - creating a risk of serious injury or death to another person or;
Slovakia	- causing significant damage to the environment or; - causing serious injury or death or; - causing large-scale damage - causing serious bodily injury or;
Slovenia	- causing actual damage to the quality of air, soil, water, animals or plants; - causing death to one or more persons damage to a natural resource to such an extent that:
Hungary	- its natural or previous state can be restored only by intervention or; - its natural or previous state cannot be restored
Croatia	endangering human life and health - recurrence or; - commission of pollution as a result of a breach of an important duty arising from his work, occupation, position or function, or law, or;
Czech Republic	- causing permanent or long-term damage to environmental component; - when elimination of the consequences of pollution requires significant costs, or; - the person commits pollution with the intention to receive substantial or significant profit for himself or for another person committing a serious crime, which can be considered a pollution that:
Sweden	- caused or could cause irreversible damage to a significant extent or; - was particularly dangerous or; - involved intentional taking of a serious risk or; - is a consequence of serious negligence

Reflecting on the abovementioned approaches, we would like to recall again that in criminal law it is recognized fair and therefore legitimate to apply a more severe punishment: for encroachment on a more valuable object; for an intentional crime compared to a negligent one; an act which caused significant damage compared to an act which caused less dangerous consequences; acts committed in complicity, compared to crimes committed alone, etc. According to European commentators, penalties for environmental pollution must be effective, proportionate and convincing (Proposal). Taking into account these general theoretical provisions, we came to the conclusion that the approach of the legislators of those countries, in which differentiated liability depends on the consequences of land pollution, deserves support. After all, it cannot be considered fair to

impose the same punishment, for example, for land pollution, which has not led to any socially dangerous consequences and similar manifestations that have led to the death of one or more people, or for land pollution, which environmental consequences are minimal, and actions that have led to the pollution of a large area of land, disappearance or significant reduction of the population of animals or plants, pollution of water sources, etc.

Conclusion

Legal liability is a significant element of the legal regulation of public relations aimed at influencing the behavior of individuals through legal measures; its goal is to protect and defend public relations from any illegal violations

through coercive measures (Minchenko et al., 2021).

Based on the results of a comparative study of the criminal law of nineteen European Union member states, it can be concluded that the optimal legislative model of criminal law protection of land resources provides for the creation of a single universal rule:

- 1) which will be devoted to the regulation of criminal liability for pollution not only of land resources but also of other components of the environment (water, air, forest);
- 2) in which only such land pollution which has led to real (non-potential) damage to the environment, human health or property damage is considered criminal. In such case, these consequences should be as formalized as possible, which, in particular, can be ensured by indicating the specific amount of property damage, in the event of which pollution is considered criminally illegal;
- 3) within which liability for land pollution will be differentiated depending on:
 - a) whether an act by guilty person was intentional or negligent;
 - b) what the consequences of land pollution have been.

At the same time, we agree with scholars who emphasize that mere criminalization of land pollution and improvement of relevant substantive criminal law cannot significantly improve situation in the field of land protection, because even in the presence of relevant norms a state (represented by law enforcement agencies) may do little or nothing to apply these rules in practice (Faure, 2017), in particular, refusing to investigate the identified facts of land pollution. Therefore, solving the problem of land protection from pollution requires the application of a comprehensive approach aimed at improving the rules of not only criminal but also environmental, administrative, criminal procedure law and so on.

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