

## INTERNATIONAL LEGAL ASPECTS OF THE ASSESSMENT OF ENVIRONMENTAL DAMAGE CAUSED BY MILITARY ACTIONS/ Liudmyla Golovko

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**Abstract:** *Military actions not only cause massive human casualties and extensive destruction of homes, infrastructure, and other property, but also a significant environmental damage. It raises the issue of the importance of assessment of environmental damage as a necessary prerequisite for obtaining reparations. The paper analyses international legal documents which relate to the issue of assessment of the amount of environmental damage, as well as relevant decisions of international bodies in this sphere. A conclusion was made about the lack of a uniform approach to the assessment of amount of environmental damage, both in international documents and in international judicial practice. The necessity of the adoption of an international document that would establish the methodology which should be used during environmental damage assessment was proved. This paper should determine components of the environment deterioration of which should be compensated.*

**Key words:** *Environmental Harm; Assessment of Environmental Damage; Environmental Responsibility; Military Actions; International Environmental Law*

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## 1. INTRODUCTION

Military actions always cause significant damage to the environment especially when norms of humanitarian law are violated. Damage is caused to various components of the environment. Leaks of toxic chemicals due to damage to industrial enterprises, destruction of infrastructure related to water supply and drainage, burned oil depots, fuel storage facilities at airfields, agrochemical storage facilities cause pollution of air, soil, and water resources. Active hostilities at sea cause man-made disasters and seriously affect its ecosystem. Soil pollution has long-term consequences for several generations. For holding the states accountable for causing environmental damage and the collection of reparations it is necessary to assess environmental damage correctly and reasonably.

Scientists did not pay much attention to the issue of studying the international legal regulation of environmental damage assessment caused during military conflicts. Considering the unprecedented scale of the damage caused to the environment of Ukraine during the aggression of the Russian Federation, as well as the constant military conflicts that arise in different corners of the globe and, as a result, the need to establish

the extent of environmental damage as a necessary condition for holding states accountable, in our research we aim to explore the international aspects of this issue. Our hypothesis when writing the paper was the existence of gaps in international legal regulation of assessment of environmental damage in general and as a result of military actions in particular, and correspondingly the need of adoption of international legal document which would regulate this issue. When conducting the research, general theoretical methods were mainly used. Analysis and synthesis, systematic interpretation, theoretical generalisation helped to generalise international approaches to the assessment of environmental harm, which exist in international law. The first part of our scholarly work is focused on international legal documents which relate to the right to reparation for deterioration of the environment caused by military actions and issue of determining the amount of environmental damage. In the second part analysis of relevant decisions of international bodies in this sphere was made. The last part of the paper is devoted to the environmental damage assessment methods developed by Ukraine.

## 2. RIGHT TO REPARATION FOR ENVIRONMENTAL DAMAGE AND ITS ASSESSMENT IN INTERNATIONAL LAW

In international law, the principle is applied that violation of norms of international law results in legal responsibility. The international legal regulation of state responsibility was codified in the Draft Articles on Responsibility of States for Internationally Wrongful Acts of 2001. As specified by experts in the field of international law (e.g., Greenwood, 1996, p. 398; Mareček, 2023, p. 30), the principle of responsibility of states for an international illegal act applies also in case of environmental damage caused by one state to another. In compliance with the Article 31 of the Draft Articles, the state due to violation of international law must pay reparations.

Provisions of the Hague Convention (IV) are also devoted to the question of the responsibility of states during the war. According to Article 3 of the Convention, if the state violates its provisions, it must compensate for the damage caused. Moreover, the article constitutes that the state is „responsible for all acts committed by persons forming part of its armed forces”.<sup>1</sup>

The Protocol Additional I to the Geneva Conventions also provides a legal basis for compensation. Article 91 of the Protocol contains a similar provision to the Hague Convention (IV), confirming the rule that the state „which violates the provisions of the Conventions or of this Protocol shall, if the case demands, be liable to pay compensation”.<sup>2</sup>

The PERAC Principles developed by the International Law Commission in 2022 confirmed the obligation of the state to fully pay reparations.<sup>3</sup> In Principle 9 of the Draft Principles, it is separately emphasised that the responsibility of states arises during armed conflict for causing environmental damage and that the state must pay full reparations for deterioration of the environment. As for the reparations, we can find in the

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<sup>1</sup> Hague Convention (IV) Respecting the Laws and Customs of War on Land and Its Annex: Regulations Concerning the Laws and Customs of War on Land, 18 October 1907. Available at: <https://www.refworld.org/docid/4374cae64.html> (accessed on 30.01.2024).

<sup>2</sup> Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I), 8 June 1977, 1125 UNTS 609. Available at: <https://www.ohchr.org/en/instruments-mechanisms/instruments/protocol-additional-geneva-conventions-12-august-1949-and> (accessed on 30.01.2024).

<sup>3</sup> Draft Principles on the Protection of the Environment in Relation to Armed Conflict. Available at: [https://legal.un.org/ilc/texts/instruments/english/draft\\_articles/8\\_7\\_2022.pdf](https://legal.un.org/ilc/texts/instruments/english/draft_articles/8_7_2022.pdf) (accessed on 30.01.2024).

PERAC principles only general provisions. The document does not contain any recommendations that would establish an algorithm for establishing of their amount. The explanation may be that the PERAC principles belong to the principles of general application.

Thus, as we can see, the principle of full reparation for damage caused by military activities, including deterioration of environment is enshrined in provisions of different international legal documents. However, unfortunately, the international documents regulating this issue do not contain a definition of what should be understood by damage to the environment. The issue of assessing the extent of environmental damage is particularly difficult because the consequences of this damage can last for a long time, or even appear in the future. In addition, it is often impossible to return the environment to its previous state. Therefore, an urgent question arises as to how to correctly assess the amount of environmental damage, on which the amount of reparations depends.

Although international humanitarian law contains norms that are indirectly aimed at preventing environmental damage (articles 36, 54 and 56 of the Additional Protocol I), it does not define the term environment as an object of protection. The Rome Statute also does not contain this definition.

There is no international document that would determine which indicators should be taken into consideration when assessing the amount of environmental damage caused during military actions. That is why it is necessary to analyse the definition of environment and environmental damage which are contained in international documents in order to determine whether international law regulates the issue of determining the extent of environmental damage at all.

Definitions of environment and environmental damage we can find in a number of multilateral environmental agreements. Draft Articles on the Effects of Armed Conflicts on Treaties of 2011 indicate, that international treaties, the purpose of which is to prevent damage and protect the environment, continue to be in force even during military operations in part or in whole (article 7 and annex to the Draft Articles).<sup>4</sup> After the adoption of the Draft Articles scholars refer extensively to them to support the ongoing applicability of multilateral environmental treaties during military actions (e.g. Dam-de Jong and Sjøstedt, 2021; van Steenberghe, 2023, pp.1568-1599). Therefore, it is potentially possible to use the definitions of the amount of environmental damage given in these agreements to calculate the amount of reparations. Let's turn to these definitions.

According to Article 2(2)(c) of the Protocol on Liability and Compensation for Damage Resulting from Transboundary Movements of Hazardous Wastes and Their Disposal to the Basel Convention of 1999, when assessing the amount of damage to the environment the following factors should be taken into account: death of people and bodily injury; property damage; loss of income caused by the deterioration of the environment; costs of actual measures aimed at restoring the environment; costs of preventive measures that have arisen due to the hazardous properties of the waste.<sup>5</sup> In the Draft principles on the allocation of loss in the case of transboundary harm arising out of hazardous activities of 2006, damage caused to cultural heritage is singled out as

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<sup>4</sup> Draft Articles on the Effects of Armed Conflicts on Treaties. Available at: [https://legal.un.org/ilc/texts/instruments/english/commentaries/1\\_10\\_2011.pdf](https://legal.un.org/ilc/texts/instruments/english/commentaries/1_10_2011.pdf) (accessed on 30.01.2024).

<sup>5</sup> Basel Protocol on Liability and Compensation for Damage Resulting from Transboundary Movements of Hazardous Wastes and Their Disposal. Available at: <https://www.ecolex.org/details/treaty/basel-protocol-on-liability-and-compensation-for-damage-resulting-from-transboundary-movements-of-hazardous-wastes-and-their-disposal-tre-001341/> (accessed on 30.01.2024).

a separate element of compensation for environmental damage (article 2(a)).<sup>6</sup> Lugano Convention of 1993 includes similar definition of environment.<sup>7</sup>

UNEP Guidelines Decision IG 17/4 defines "environmental damage" as measurable adverse change in a natural or biological resource service which may occur directly or indirectly.<sup>8</sup> According to the document, among the basic elements of environmental damage are expenses incurred in connection with its assessment. The document also recognises the possibility of cases where the state of the environment will deteriorate to such an extent that restoration to the original state will be impossible. In this case, "compensation by equivalent" is provided. Unfortunately, the normative legal act does not disclose in more detail the method of determining the amount of compensation according to this method.

According to article 2 (1) of the 1992 Helsinki Transboundary Watercourses Convention, when determining the transboundary impact, the socio-economic impact of environmental damage is also taken into account.<sup>9</sup> Having analysed the above-mentioned definitions, one can agree with Marie-Louise Larsson that broad general formulations were used in their development (Larsson, 1999, p. 172). They do not have specific, clearer recommendations, and significant attention was not paid to the reduction of environmental services. At the same time, as Khalatbari and Poorhasehemi claim, the concept of harm to the environment is too general (Khalatbari and Poorhasehemi, 2019, pp. 21-28).

As we can see definitions of environmental damage given in individual conventions are diverse and vary in different areas. There is no universal definition of environmental damage in international law. In the next part of the paper, we will refer to the decisions of international bodies in order to identify the approaches used in practice in assessing of the amount of environmental damage.

### 3. INTERNATIONAL CASE LAW

In the practice of the ICJ there are two cases where environmental reparations were considered in the context of military operations. The first case in which the ICJ dealt with the issue of compensation for damage caused to the environment is the case of the San Juan River. The case arose out of a territorial dispute between Costa Rica and Nicaragua concerning three-kilometre zone, on the territory of which wetlands of international importance were located next to the North Branch of the San Juan River. In 2010, Costa Rica commenced a trial at the ICJ against Nicaragua for the illegal entry, occupation, and use of its territory. Costa Rica also demanded compensation for the damage caused to wetlands and rainforests due to the dredging of the canal for the purpose of navigation, the construction of which was carried out with the removal of trees and destruction of vegetation "in violation of several international obligations and with grave environmental consequences".<sup>10</sup> Nicaragua responded by initiating the trial against Costa Rica in 2011 for alleged infringement of sovereignty and significant environmental

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<sup>6</sup> Draft principles on the allocation of loss in the case of transboundary harm arising out of hazardous activities of 2006. Available at: [https://legal.un.org/ilc/texts/instruments/english/commentaries/9\\_10\\_2006.pdf](https://legal.un.org/ilc/texts/instruments/english/commentaries/9_10_2006.pdf) (accessed on 30.01.2024).

<sup>7</sup> Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment of 1993.

<sup>8</sup> Decision IG 17/4: Guidelines for the Determination of Liability and Compensation for Damage resulting from Pollution of the Marine Environment in the Mediterranean Sea Area. UNEP(DEPI)/MED IG.17/10 Annex V.

<sup>9</sup> Convention on the Protection and Use of Transboundary Watercourses and International Lakes of 1992. Available at: <https://unece.org/fileadmin/DAM/env/water/pdf/watercon.pdf> (accessed on 30.01.2024).

<sup>10</sup> ICJ, *Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)*, Compensation, Judgment, I.C.J. Reports 2018, par. 9.

damage caused by Costa Rica's construction work on a road along the border area. In 2013, the ICJ combined both proceedings into one. The court found that Nicaragua had an obligation to pay compensation to Costa Rica for the material damages caused by Nicaragua's illegal activities on the territory of Costa Rica and gave the parties the opportunity to agree on the amount of compensation. The parties could not come to an agreement and in January 2017 Costa Rica turned to the ICJ with a request to determine the amount of damages.

The parties' position differed significantly on the methodology which should be used in assessing the environmental damage caused by Nicaragua's illegal actions. Nicaragua argued that Costa Rica had the right to reparation for pecuniary damages, the amount of which was limited to property damage or other interests of Costa Rica that were financially significant. Costa Rica identified 22 categories of ecosystem products and services that may have been degraded or lost due to violation of international law and sought reparation for only six of them: timber stands; other raw materials (fibre and energy); gas regulation and air quality; mitigation of natural threats; soil formation and erosion control and biodiversity.<sup>11</sup>

The ICJ noted that environmental harm and the subsequent deterioration or loss of the environment's ability to render environmental services and products must be compensated according to international law. This compensation includes compensation for the deterioration or loss of environmental products and services in the pre-remedial period and compensation for the restoration of the environment to its original state. Importantly, the ICJ admitted ecosystem services as basic element of compensable environmental damages. The court also stated that the absence of adequate evidence of the amount of material damage generally does not prevent the award of compensation.<sup>12</sup> When determining compensation for environmental damage, the ICJ assessed the amount of costs necessary to restore the state of the environment and the loss of environmental products and services in the period before remediation.

The court also stated that when determining environmental damage, it is necessary to proceed from "overall valuation" of damage to the entire ecosystem as a whole unit before its state is restored, rather than evaluating individual categories of environmental products and services and estimating the period of their recovery for each of them.<sup>13</sup> Such reasoning was presented without a clear explanation of what this "overall valuation" meant and whether it was based on sound scientific knowledge in assessing short-term and long-term damage to environment.<sup>14</sup>

The amount of compensation determined by the ICJ to Costa Rica was set at \$ 120,000 for the deterioration and loss of environmental goods and services and \$ 2,708.39 for the restoration costs of the internationally protected wetland. The total amount of compensation of \$ 378,890.59 (including default interest) was set at only approximately 5 % of the amount demanded by Costa Rica.<sup>15</sup>

The case is important considering several considerations. It is the first case in which the ICJ dealt with the issue of compensation for environmental damage. The court confirmed that environmental damage includes ecosystem services. Unfortunately, the ICJ did not provide details on how it calculated the amount of compensation.

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<sup>11</sup> *Ibid.*, par. 55.

<sup>12</sup> *Ibid.*, par. 35.

<sup>13</sup> *Ibid.*, par. 78.

<sup>14</sup> *Ibid.*, par. 80-88.

<sup>15</sup> *Ibid.*, par. 157.

In the case *Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v. Uganda)*, the ICJ considered compensation for damage caused to the environment because of exploitation of the DRC's natural resources by Uganda People's Defence Forces (UPDF). The ICJ established that Uganda was responsible for conduct of its military forces as a whole and for activity of all its members. The ICJ awarded \$ 325 million in reparations, of which \$ 60 million for damage caused to natural resources. Experts say that this is a very small amount.<sup>16</sup> For example, according to Dismas Kitenge, Honorary Vice President of the International Federation for Human Rights, if to consider the exploitation of natural resources - gold, diamonds, all the minerals and timber that Uganda sold on the international market - it was no less than \$ 3 billion (Kitenge, 2022). Manuel J. Ventura (2023) has the same point of view. Congo's mistake was that it did not prepare the evidence base in time. After the end of the war in 2003, after gaining access to the occupied territory, no evidence was collected, no documentation of the damage caused was made, and no interviews of witnesses were conducted. The evidence was taken from secondary sources and was not verified by witnesses present at the crime scene or independent experts. As a result, the ICJ concluded, that the DRC failed to provide the necessary evidence to establish the extent of environmental damage. Therefore, the ICJ had no opportunity to even approximately determine its size.<sup>17</sup> Consequently, the ICJ given the special circumstances, awarded reparation in the form of a "global sum", taking into account as far as possible the existing evidence and applying an equity,<sup>18</sup> because otherwise, it would have to admit that the weakness of the evidence does not allow to make a decision on the amount of compensation at all, which would contradict the 2005 ICJ's decision on Uganda's responsibility. This case shows the need for timely documentation of damage done by the aggressor state and environmental damage in particular.

Another example is the compensation for environmental damage by Iraq as a result of its aggression against Kuwait in 1990. According to the Decision of the UN Compensation Commission (UNCC) created by the Resolution 687 of the UN Security Council<sup>19</sup> \$ 5.26 billion were compensated for environmental damage (Sand, 2005, pp. 244-249).

All claims submitted to the UNCC by states, international organizations, legal and natural persons were qualified according to six categories (from A to F). Some categories had subcategories. Sub-category "F4" dealt with environment damage.

According to the Decision 7 "Criteria for additional categories of claims" taken by the Governing Council of the UNCC during its 3rd session on 28 November 1991, the powers of the UNCC included consideration of claims for direct environmental damage, which included expenses for mitigation of environmental damage, restoration of the environment, monitoring and assessment of damage caused and health damage.<sup>20</sup>

Temporary loss of services provided by natural resources was also compensated. The claimants proposed the Habitat Equivalency Analysis (HEA) to determine the amount of the damage caused and it was approved by the UNCC. In order

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<sup>16</sup> *Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v. Uganda)*, Reparations, Judgment, I.C.J. Reports 2022, p. 13.

<sup>17</sup> *Ibid.*, par. 350.

<sup>18</sup> *Ibid.*, par. 365.

<sup>19</sup> Security Council Resolution 687(1991) of 3 April 1991: Iraq-Kuwait Resolution. Available at: <https://peacemaker.un.org/iraqkuwait-resolution687> (accessed on 30.01.2024).

<sup>20</sup> Decision 7. Criteria for additional categories of claims. Decision taken by the Governing Council of the United Nations Compensation Commission during its third session, at the 18<sup>th</sup> meeting, held on 28 November 1991, as revised at the 24<sup>th</sup> meeting held on 16 March 1992 S/AC.26/1991/7/Rev.1; 17 March 1992).

to compensate for the loss of ecosystem services that could not be evaluated in a financial equivalent, Saudi Arabia proposed to create 10 marine and coastal reserves, but the UNCC recognised that the creation of two reserves would be sufficient to compensate for irreparable damage in addition to financial compensation.<sup>21</sup> The use of this analysis was approved by the UNCC due to the lack of international legal regulation in this sphere.

#### 4. ENVIRONMENTAL DAMAGE ASSESSMENT METHODS DEVELOPED BY UKRAINE

Russian aggression against Ukraine led to significant environmental damage. According to the data of the Ministry of Environmental Protection and Natural Resources of Ukraine (Ministry) since the beginning of the large-scale aggression against Ukraine, Russian Federation has committed more than 2,500 environmental crimes and 265 war crimes against the environment. About a third of Ukraine's territory (174,000 square kilometres of Ukrainian land) is mined and contaminated with explosives.<sup>22</sup> The pollution of these lands will have long-term consequences; they cannot be cultivated for a long time and will need to be returned to their natural state. Unfortunately, these numbers will continue to increase as long as the war continues. By blowing up the Kakhovskaya HPP, Russia caused the biggest environmental disaster since Chernobyl. The entire European continent will feel the irreversible consequences of these actions. And many such examples can be given.

In order to hold the Russian Federation accountable and determine the amount of reparations for the damage caused to the environment, it is necessary to carry out an assessment of its damage. The damage done to the environment is unprecedented. Therefore, the experience of Ukraine in determining the extent of environmental damage that occurred due to the aggression of the Russian Federation will be unique and deserves attention.

To calculate the amount of damage caused, experts of the State Environmental Inspection of Ukraine have developed new special methodologies, which have been approved by the Ministry. Let's consider the main indicators that are taken into account when assessing environmental damage.

The amount of damage to soil is calculated according to the exact formulas given in the methodology specially developed for this purpose.<sup>23</sup> Different formulas are used for the calculation. For example, damage from soil pollution is calculated on the basis of the regulatory monetary assessment of the land plot, the soil of which was contaminated. Normative monetary assessment data are taken from any sources. If the monetary valuation of the plots has not been carried out before, the average monetary valuation of agricultural land in this region is used.<sup>24</sup>

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<sup>21</sup> The UN Compensation Commission – a prospect of financing the environmental remediation in Ukraine after the war against the rf. NGO "Ecology-Law-Human" (May 2022). Available at: <https://epl.org.ua/en/eco-analytics/kompensatsijna-komisiya-oon-perspektyva-finansuvannya-vidnovlennya-dovkillya-v-ukrayini-pislya-vijny-iz-rf-oglyad-diyalnosti-kompensatsijnoyi-komisiyi-oon/#> (accessed on 30.01.2024).

<sup>22</sup> See: Ministry of the Environment (2024). More than 2,500 crimes against the environment committed by Russian Federation were recorded in Ukraine. Available at: <https://www.ukrinform.ua/rubric-economy/3776555-v-ukraini-zafiksuvali-ponad-25-tisaci-zlociniv-proti-dovkilla-aki-vcinila-rosia.html> (accessed on 27.01.2024).

<sup>23</sup> Order of the Ministry of Environmental Protection and Natural Resources of Ukraine of 04.04.2022 No. 167 "On the approval of the Methodology for determining the amount of damage caused to land and soil as a result of emergency situations and/or armed aggression and hostilities during martial law". Available at: <https://zakon.rada.gov.ua/laws/show/z0406-22#Text> (accessed on 27.01.2024).

<sup>24</sup> *Ibid.*

Soil pollution is recognised when negative quality changes were determined in its composition, which consist in the appearance of pollutants that were not there before. Soil pollution is recognised as well when there is an increase in the content of hazardous substances that exceeds the maximum permissible concentration. Littering of land is defined as the entry of polluters due to emergency or military actions without appropriate permits. The amount of damage is determined by authorised officials of the State Environmental Inspection. For this purpose, any sources can be taken into account including evidence collected by experts, witness statements, reports, etc.

The main indicators that are considered when assessing damage caused to land resources are as follows:

- area of the contamination/clogged area;
- expenses for elimination of the consequences of damage/clogging;
- regulatory monetary assessment of the land plot;
- hazard ratio of the pollutant;
- environmental value of the land plot;
- cost of land reclamation;
- volume of waste;
- environmental and economic significance of lands.<sup>25</sup>

On September 2, 2022, the Methodology for determining damages caused to water resources was adopted by the Order of the Ministry of 21.07.2022.<sup>26</sup> The methodology establishes the procedure for determining water pollution as a result of the armed aggression of the Russian Federation. Indicators taken into account to determine the extent of damage caused to water resources are as follows: coefficient that takes into account the increase in damage to the aquatic ecosystem during martial law; coefficient that takes into account the category of the water body; regional coefficient of scarcity of water resources of surface waters; the amount of released harmful substances.<sup>27</sup>

Indicators taken into account to determine the extent of damage caused to atmospheric air are as follows: the amount of released harmful substances and their mixtures, as well as their specifics; the coefficient taking into account the average density of pollutants; coefficient taking into account the danger class of polluting substances or a mixture of such substances; coefficient taking into account the area of contamination, for example the area of fire; coefficient that depends on the origin of the harmful substances.<sup>28</sup>

The adoption of a national methodology for the assessment of environmental damage was a necessary step, caused by the need to quickly document the infliction of environmental damage and to carry out its assessment, since uniform international standards do not exist. At the same time, it should be noted that no methodology was developed for determining the amount of damage caused to ecosystems (disruption of ecosystem connections, loss of biodiversity). There are no international standards for calculating these types of damages. All this indicates the need of their development.

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<sup>25</sup> *Ibid.*

<sup>26</sup> Order of the Ministry of Environment Protection and Natural Resources of Ukraine of 21.07.2022 No. 252 "On the approval of the Methodology for determining damages caused by pollution and/or clogging of waters, arbitrary use of water resources". Available at: [252https://zakon.rada.gov.ua/laws/show/z0900-22#n14](https://zakon.rada.gov.ua/laws/show/z0900-22#n14) (accessed on 27.01.2024).

<sup>27</sup> *Ibid.*

<sup>28</sup> *Ibid.*



The criteria for determining environmental damage already developed by Ukraine can be used in the development of international standards in this field as an example used in practice.

## 5. CONCLUSION

As a result of the conducted research, a conclusion can be drawn that there is a clear basis in international law for the payment of reparations for environmental damage caused by military actions based on violation of *jus in bello*. At the same time, an important issue is the correct and reasonable assessment of the amount of damage caused to the environment. There is no international document that would determine which indicators should be considered when assessing the amount of damage caused during military actions. There is not even a definition of what minimum amount of damage should be caused to the environment for the country to be entitled to compensation.

Also, there is no universal definition of environmental damage in international environmental law. The definitions given in individual multilateral environmental agreements are different. This is undoubtedly a gap in international legal regulation. The practice of the ICJ also does not provide answers as to which methodology should be used when determining the amount of environmental damage. The significance of the ICJ settlement on the San Juan River is that the court found that the overall damage to the entire ecosystem (including ecosystem services) should be compensated. However, the disadvantage is that the ICJ did not give an explanation concerning what methodology it used to determine the amount of damage. The UNCC in its decision approved the lack of international legal regulation of the assessment of the loss of ecosystem services. Therefore, it had to use the Habitat Equivalency Analysis proposed by the claimants. The case *Armed Activities on the Territory of the Congo* is a good proof of importance of timely preparation of the evidence base to establish the extent of environmental damage. Due to the fact that even approximately it was not possible to establish the extent of environmental damage the ICJ awarded reparation in the form of a "global sum" applying an equity. Considering all the above, we came to the conclusion about the necessity of the adoption of an international document that would establish the methodology which should be used during environmental damage assessment. This document should determine components of the environment deterioration of which should be compensated and indicators that should be considered.

A comprehensive methodology for assessing environmental damage began to be developed in Ukraine in 2014 and was approved in 2022. The start of development was caused by the beginning of hostilities and the lack of international standards in this field. A significant number of experts were involved in the development, as the task was to develop a methodology that would be recognised by international community. As a result, a clear approach, and specific formulas for calculating damage caused to basic components of the environment were formed. Due to full-scale aggression and unprecedented damage to the environment, this methodology is actively used in practice. All this experience can be used in the development of international standards for the assessment of damage caused to the environment at least as a sample worth analysing.

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