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Assessment of lost benefits for nature conservation areas and objects due to war in the post-war recovery system of the country

**L. Horoshkova (National university of "Kyiv-Mohyla academy"), O. Vasyl'yeva (National University «Zaporizhzhia Polytechnic»), D. Antoniuk (Zaporizhzhya Chamber of Commerce and Industry), K. Antoniuk (National University «Zaporizhzhia Polytechnic»), S. Horoshkov (National university of "Kyiv-Mohyla academy"), O. Tarasenko (National university of "Kyiv-Mohyla academy")*

SUMMARY

The study involves an analysis of the existing "Methodology for Determining Damage and the Extent of Losses Incurred by Enterprises, Institutions, and Organizations of All Forms of Ownership Due to the Destruction and Damage to Their Property as a Result of Armed Aggression by Russian Federation, as well as Lost Benefits from the Inability or Obstruction of Economic Activity Implementation" for its application in assessing the lost benefits of the Azov-Syvash National Natural Park. Considering the non-profit nature of the institution's activities, proposals are developed to improve the Methodology by creating an algorithm for assessing lost benefits for non-profit organizations engaged in economic activities and of significant societal/state importance. Determining the extent of lost benefits was carried out using the following estimation procedures: analysis and determination of the compounding period within which the lost benefit from the asset (property) is considered; calculation of the annual amount of cash flows and conversion into a monthly amount for the entire compounding period; justification of the components of the compounding rate and its determination; determination of the future value of cash flows at the end of the compounding period through compounding these cash flows.



Introduction

Nowadays, 900 nature conservation areas, constituting 44% of the total area of reserves and national parks in Ukraine, are located in temporarily occupied territories or conflict zones. With the onset of the war, the Azov-Black Sea coastline within Donetsk, Zaporizhzhia, and Kherson regions also fell under temporary occupation. As a result, significant damage has already been inflicted on these territories and their biodiversity. Furthermore, conducting conservation activities here is practically impossible for both government authorities and civil organizations. A comprehensive analysis of the consequences of military invasion on Ukraine's protected natural areas will only be possible after the end of the war and the completion of demining efforts. However, there is already a need for conducting research on the state of these territories using available sources of information. Special attention is deserved in assessing the lost benefits for such nature conservation areas, reserves, and national natural parks due to the impossibility of conducting economic activities.

Method

In the analysis, general-scientific methods (analysis and synthesis, induction and deduction) and special methods of phenomena and processes analysis (abstraction, econometric and econometric-mathematical modelling) have been used.

Results

As the subject of this study, the Azov-Syvash National Natural Park (NNP) is chosen. It was established in accordance with the Presidential Decree of Ukraine dated February 25, 1993. The park was organized based on the existing Azov-Syvash hunting and game management area and its protective zone, including the waters of the Central Sivash and the Azov Sea. Administratively, the Azov-Syvash NNP is under the jurisdiction of the State Administration of the President of Ukraine. As of today, the total area of the park is 52,154 hectares, of which nearly 49,000 hectares are occupied by the waters of the Central Sivash and the one-kilometer coastal strip around the Biryuchy Island. Land areas assigned to the park have a total area of 8,469 hectares, including 7,528 hectares in the Henichesk district (Biryuchy Island and part of Kuyuk-Tuk Island) and 941 hectares in the Novotroitsky district (part of Churyuk Island with adjacent small islands - Martyniachyi and Kitai). The environmental value of the Azov-Syvash NNP is immense - the diversity of landscapes, rich biodiversity, nesting, wintering, and stopover locations for migratory birds, as well as an intact natural area, all transform its territories and waters into a true treasure of nature and a highlight of Ukraine. The sandy steppes of the Biryuchy Peninsula can be considered one of the primary centers of biotic diversity in riverine sands in Europe (Figure 1, 2).

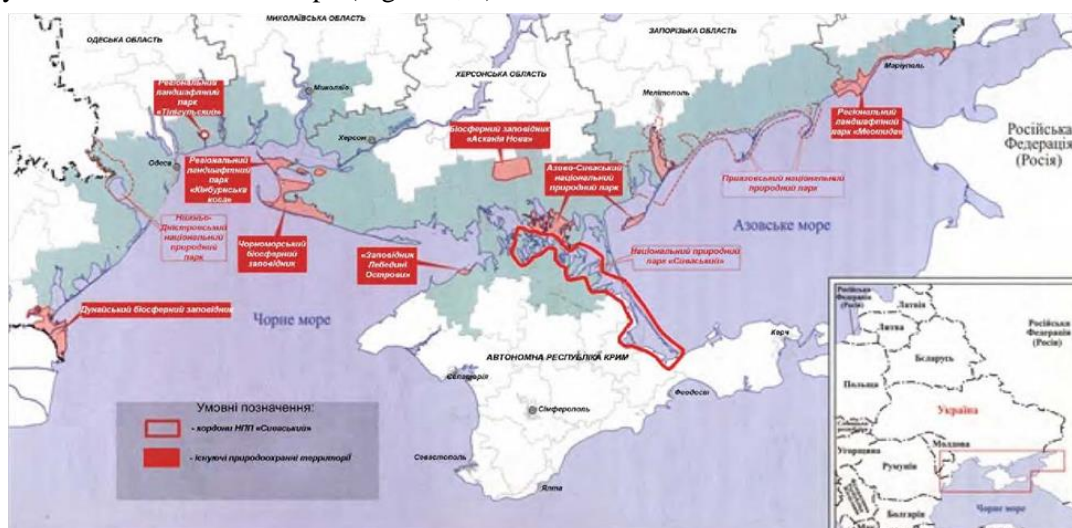


Figure 1 Location diagram of the Azov- Syvash NPP



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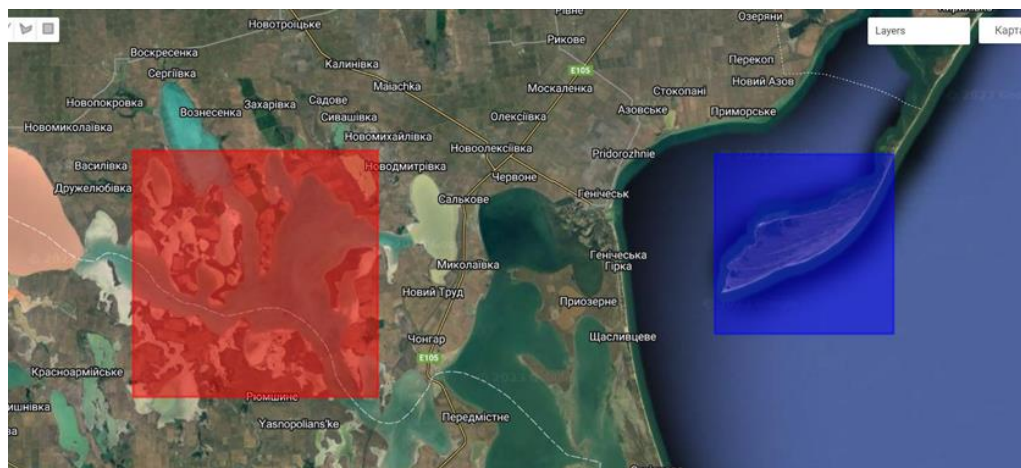


Figure 2 Satellite Image of the Azov-Syvash National Natural Park (NNP)

The Azov-Syvash NNP is a non-profit organization, and its funding is provided by the State Budget of Ukraine (general fund). In addition, the NNP conducted (prior to the start of the war) various economic activities, including the following main types: accommodation for tourists, honey sales, hay sales, meat sales (culled during population control), sale of skins and antlers of wild animals, sale of wild animals, photography and videography services, transportation of tourists by motor vehicles, rental fees for the use of official residential premises on Biryuchy Island by employees to support the institution's activities, brochure sales, automotive services, and other revenues. Engaging in these activities allows the formation of a special fund, the funds from which were used for the development of the NNP, staff incentives, and more, without generating a profit.

Since the beginning of the war and the occupation of the NNP's territory up to the present day, the Azov-Syvash NNP has been unable to conduct economic activities, resulting in lost benefits.

As of today, “Methodology for Determining Damage and the Extent of Losses Incurred by Enterprises, Institutions, and Organizations of All Forms of Ownership Due to the Destruction and Damage to Their Property as a Result of Armed Aggression by Russian Federation, as well as Lost Benefits from the Inability or Obstruction of Economic Activity Implementation” (hereinafter referred to as the “Methodology”) (*Methodology*, 2022). Attempting to determine the extent of lost benefits using the aforementioned Methodology is proven impossible under the following circumstances.

According to Section IV, “Methodological Principles of Estimating (Determining the Amount of) Missed Benefits (Unearned Income)” the determination of the amount of missed benefits is carried out for property intended for commercial activities with the aim of generating profit or income in other forms. This includes agricultural, fishing, and forestry real estate, investment real estate, real estate with commercial potential, integrated property complexes of enterprises, institutions, and organizations of all ownership forms, corporate shares, assets in material and non-material forms, the value of which is determined by the value of the integrated property complex created on their basis (business-related objects), and so on. In this definition, not only the category of “unearned income” is taken into account, but also “missed benefit”. However, further in the document, it only refers to “unearned income”.

Additionally, the methodology mentions the category of “income in another form” but this category is also absent when detailing the calculation procedure.

Furthermore, it is mentioned that “missed benefit» refers to the amount of profit that the owner (balance holder, user) of the damaged, lost, and/or destroyed property could have accumulated during a specified period of time, assuming that the property was not damaged, destroyed, or lost due to armed aggression.

As for the “missed benefit”, the calculation methodology is not provided. Missed benefits are not calculated for enterprises that incurred losses during the years 2020-2021. The document takes into



account specific cases that can be considered exceptions to the «general rule». For example, “state or municipal enterprises, or enterprises in which there is a government share that demonstrated a loss-making activity according to the results of 2020 and 2021, have significant societal/government significance” and, therefore, the assessment of missed benefits is still carried out for them. It is specified that the “assessment of missed benefits is carried out in compliance with the requirements of the Law of Ukraine “On Property Valuation, Property Rights, and Professional Appraisal Activity in Ukraine» international and national appraisal standards, norms of international appraisal practice that have developed through the analysis of the reasons for increased enterprise losses due to armed aggression”.

In such a case, the appraisal report (expert conclusion) should contain justification for deviations from the provisions of this Methodology and the argument that the enterprise's loss is primarily due to its societal/government functions rather than being related, for instance, to transfer pricing, functioning within a group of enterprises with specific internal calculations, incompetent management, and so on.

Other cases (types of enterprises) are also taken into account, namely: 1) If the enterprise prepares financial statements in accordance with P(S)BO 25 “Simplified Financial Reporting” in Form № 2-m. 2) If the enterprise prepares financial statements using forms specific to certain types of activities (e.g., banking activities). 3) If the integrated property complex operates on the organizational basis of an individual entrepreneur and does not entail the preparation of extensive financial statements.

In the latter case, “taxable income is calculated based on the tax return data of the single tax payer - an individual entrepreneur for the respective year, and the indicator used is the level of profitability of small enterprises' operating activities based on data from the State Statistics Service of Ukraine (www.ukrstat.gov.ua) for profitability of enterprises' operating activities for 2019 - 9 months of 2021”

However, as the analysis conducted has shown, the methodology does not address non-profit organizations at all. In the context of war, they also suffer not only material losses that can be quantified but also incur lost benefits due to the impossibility of conducting non-profit economic activities. Such a scenario is not described in the methodology.

At the same time, the methodology stipulates that if there are grounds to associate the occurrence of missed benefits with factors other than the enterprise not generating profit, or if the presence of missed benefits is not a result of the enterprise's loss-making activities, the analysis of unrealized cash flows and the assessment (determination of the amount) of missed benefits shall be conducted in accordance with the requirements of this Methodology or other regulatory legal acts on property valuation developed in accordance with the Law of Ukraine “On Property Valuation, Property Rights, and Professional Appraisal Activity in Ukraine” and in accordance with international and national appraisal standards and international appraisal practice that has developed».

Therefore, this allows for the assessment of missed benefits for non-profit organizations. As stated in the Methodology, in this case, the “appraisal report (expert conclusion) must provide justification for deviations from the provisions of this Methodology”.

In Ukraine today, there is a considerable number of non-profit organizations that engage in economic activities, the results of which do not include profit generation. Among such organizations are National Nature Reserves, for example. Their activities are funded through the State budget of Ukraine, and these funds are accounted for in a general fund. Simultaneously, virtually all of them engage in economic activities, receive funds from the sale of goods (provision of services), which are accounted for in a special fund. All financial resources of such organizations (general and special funds) facilitate their functioning, meaning they are expended without creating conditions for profit generation. A portion of the special fund's funds may remain unspent throughout the year and are reported as fund balances, but again, this does not constitute profit.

The basis for determining missed benefits for such organizations can be the total amount of financial inflows into the special fund as a result of their economic activities. Considering that such activities are non-profit and therefore not subject to taxation, the full amount can be used as the calculation



base. Similarly to “profit” as the calculation base for missed benefits in situations outlined in the Methodology, non-profit organizations can use the amount of inflows into the special fund for the years 2020 and 2021. Then the calculation can proceed in accordance with the provisions of the Methodology.

In the case of assessing lost benefits for non-profit organizations like National Nature Reserves, which are not part of cultural heritage (thus eliminating the need for a separate assessment procedure), it is entirely possible to apply the assessment procedure provided by the Methodology with the exception of the calculation base. Instead of “the amount accumulated during a specified period of time of profit that the owner (balance holder, user) of the damaged, lost, and/or destroyed property could have obtained assuming that the property was not damaged, destroyed, or lost due to armed aggression”, the following formulation can be used: “the amount accumulated during a specified period of time of income that the owner (balance holder, user) of the damaged, lost, and/or destroyed property could have obtained assuming that the property was not damaged, destroyed, or lost due to armed aggression”.

Special attention should be given to National Nature Reserves (NPP) since the category “state or municipal enterprise, or enterprise in which there is a government share that... has significant societal/government significance” can be applied to them. This is because all NPPs are state non-profit organizations that indeed hold significant societal/government importance.

Therefore, this allowed proposing an improvement of the discussed Methodology (which, by the way, was a prior consideration) for the purpose of its application to a non-profit organization engaged in economic activity, which is a non-standard case. Key provisions of the Methodology were generally used for the assessment conducted.

Taking into account the above considerations, the calculation of lost benefits was performed based on data on the inflow into the special fund of the Azov- Syvash National Natural Park for the years 2020 and 2021. Specifically, the funds accumulated in the special fund represent the benefit that the NNP lost the opportunity to receive due to the war and the impossibility of conducting economic activities.

Determining the extent of lost benefits was carried out using the following estimation procedures: analysis and determination of the compounding period within which the lost benefit from the asset (property) is considered; calculation of the annual amount of cash flows and conversion into a monthly amount for the entire compounding period; justification of the components of the compounding rate and its determination; determination of the future value of cash flows at the end of the compounding period through compounding these cash flows.

The conducted calculation can be regarded as one of the options for calculating lost benefits for non-profit organizations that indeed have significant societal/state importance.

Conclusions

The study involves an analysis of the existing “Methodology for Determining Damage and the Extent of Losses Incurred ... Due to the Destruction and Damage to Their Property as a Result of Armed Aggression by Russian Federation, as well as Lost Benefits from the Inability or Obstruction of Economic Activity Implementation” for its application in assessing the lost benefits of the Azov-Syvash NNP. Considering the non-profit nature of the institution's activities, proposals are developed to improve the Methodology by creating an algorithm for assessing lost benefits for non-profit organizations engaged in economic activities and of significant societal/state importance.

Reference

Methodology for Determining Damage and the Extent of Losses Incurred by Enterprises, Institutions, and Organizations of All Forms of Ownership Due to the Destruction and Damage to Their Property as a Result of Armed Aggression by Russian Federation, as well as Lost Benefits from the Inability or Obstruction of Economic Activity Implementation. (2022). Ministry of Economy of Ukraine and the State Property Fund of Ukraine dated October 18, 2022, No. 3904/1223. <https://zakon.rada.gov.ua/laws/show/z1522-22#Text>

