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The Need to Standardize the Criteria for Classifying Protected Areas within the EU

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Abstract: The European Union has paid increasing attention to the conservation of biodiversity in its member countries and to the protection of the environment. In this context, protected areas, regardless of their rank, surface area, geographical location, play an essential role in saving ecosystems and species in danger of extinction or simply threatened. However, despite their importance, a fundamental aspect of their management remains the non-uniformity in their classification and assessment in the Member States of the European Union and in other non-member European countries. The need to standardize the criteria for classifying protected areas has thus become a key theme in the debates on conservation. The implications are not limited to the effectiveness of environmental policies or the harmonization of standards between the different EU countries. The efficiency of national or EU funding for protected area officials could be greatly improved if there were a common denominator in classifying and comparing these protected areas. Each Member State adopts different rules and methodologies for identifying and designating protected areas, and this can lead to significant differences in the protection status of ecologically similar areas. For example, an area may be considered of major ecological

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importance in one country but not protected in another. A standardization of criteria would help to eliminate these discrepancies and provide a coherent and integrated approach to conservation. Bringing criteria to a common denominator could also facilitate the exchange of good practice between Member States, but also with EU neighbors and others aspiring to join. The different approaches adopted by each country, based on local or national conditions, can provide valuable lessons about what works and what does not work in nature conservation. However, without a common assessment basis, it is difficult to compare and apply these lessons on a large scale. By creating a common European framework, Member States could work together more effectively, pooling resources and experiences to protect areas of high ecological value. Another major argument for standardization is also the need to better comply with and implement European environmental legislation, in particular the Habitats Directive (92/43/EEC/21 May 1992) and the Birds Directive (2009/147/EC), which set the standard for ecological networks of protected areas, in particular the Habitats Directive (92/43/EEC/21 May 1992) and the Birds Directive (2009/147/EC) of the kind in the world. These directives require Member States to designate areas to protect habitats and to specify protected areas at European level. Different interpretations of these regulations can lead to discrepancies in their implementation, which undermines the effectiveness of these laws and compromises the objectives of nature protection. Another essential factor is the coordination and effective management of protected areas. If each country applies a different set of criteria and rules for the management of these areas, cross-border collaboration becomes complicated. Many of the protected areas in the European Union are located in the area that crosses national borders, and their inconsistent management can create confusion and delays in the implementation of protection measures. In conclusion, there are some unitary criteria for the classification of protected areas in the European Union is essential to ensure coherent, effective and integrated protection of biodiversity and to streamline management activities in this area, a more robust legislative framework could be achieved to protect biodiversity in the long term and ensure the sustainability of EU ecosystems.

Keywords: protected areas; classification; standardization; UE

1. Introduction

The standardization of criteria for classifying protected areas in the EU is becoming increasingly urgent for policy coherence, efficient allocation of funds, and integrated monitoring. This paper analyzes various national classifications, examines the economic impact and the connection with financing instruments (LIFE, the EU funding instrument for the environment and climate action created in 1992, and other EU funds) and proposes recommendations for implementing a harmonized classification framework based on IUCN (International Union for Conservation of Nature) and EUNIS (European Nature Information System). Protected natural areas constitute the central pillar of the EU's biodiversity conservation strategy, particularly in the context of the European Green Deal[1] and the EU Biodiversity

[1] www.consilium.europa.eu.

Strategy for 2030. However, in the absence of a unified classification of these areas at the EU level, difficulties arise in monitoring, financing, and cooperation between states. In Romania, this problem is accentuated by frequent overlaps between the national network and Natura 2000 sites. Unifying classification criteria would not only allow better coordination between authorities and member states but also the creation of an efficient system for evaluating the effectiveness of conservation measures, integrating ecological objectives into regional development policies, and the unified management of ecosystem services.

2. Conceptual and Policy Framework in the EU

The European Union recognizes the importance of protected areas for biodiversity and ecosystem services. According to the European Environment Agency, by the end of 2022, protected areas covered 26.1% of the terrestrial territory of the EU-27 (18.6% under Natura 2000 and 7.5% under national designations) and 11.1% of the marine realm. At the same time, the EU's target expressed in the EU Biodiversity Strategy for 2030 aims to increase the protected area coverage to 30% and ensure effective management, although achieving this goal is considered uncertain[1]. EU methodologies often recommend the use of IUCN categories and EUNIS habitat classification, but member state implementation is fragmented. The revision of the EUNIS habitat classification provides context for harmonizing assessments at the European level. Compared to the rest of the world, the EU stands out for having a large number of small protected areas, which can be explained by its high population density and the relatively small size of its countries, in contrast with larger countries that can establish protected areas exceeding one million hectares (Bleahu, 2004).

[1] https://op.europa.eu.

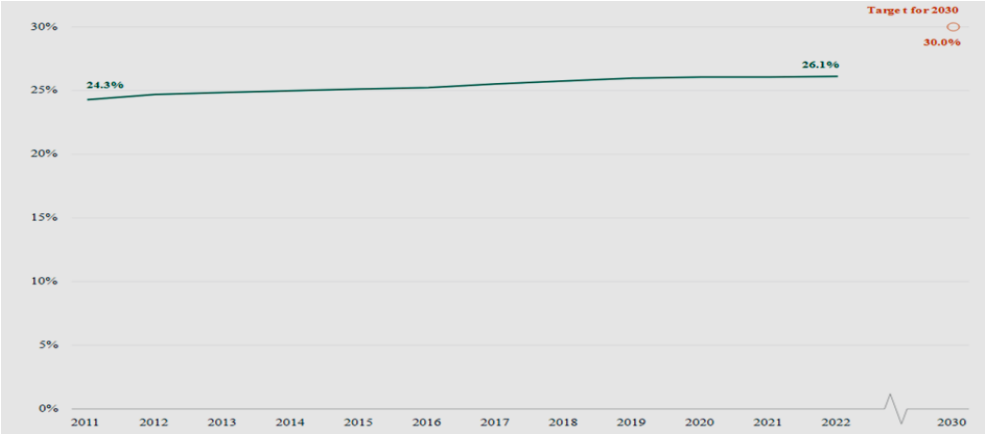

Figure 1. Coverage of protected areas in the EU-27 land area in 2011-2022[1]

3. The Classification System in Romania

Romania adopted the EU directives through Government Emergency Ordinance 57/2007 and Law 49/2011, along with subsequent regulations, but the implementation process of SCI and SAC was initially slowed by multiple necessary approvals (SCI is the acronym for Site of Community Importance, introduced by the EU Habitats Directive 92/43/EEC; SAC refers to Special Area of Conservation, essentially the same site but officially designated by the member state with concrete conservation measures within six years from its approval as an SCI). Later, this process was simplified through the 2011 law (Martin-Russu, 2022). Currently, just over 6% of Romania's territory is covered by protected sites[2]. Although the legal framework allows for the delegation of area management to public or private entities, the complexity of overlapping competencies persists. Studies highlight the uncertain efficiency of Romania's protected area network, particularly regarding land use change and forest management, with consequences for biodiversity integrity (Iojă et al., 2010)[3].

There are also issues with classifying natural reserves and their placement within IUCN categories; Bleahu (2019) points out that the classification under Law 462/2001 and OG 57/2007, although more complete, is not used consistently by Romanian authorities. Assigning areas to IUCN Category I should only be done for

[1] www.eea.europa.eu.
[2] https://data.gov.ro/dataset/arii_protejate.
[3] https://www.mmediu.ro/Ghid_SOER.

reserves with the necessary isolation and intactness characteristics, which many Romanian reserves lack, except for the Danube Delta. Similarly, IUCN Category II requires that areas be uninhabited, free from economic exploitation, and mostly state-owned; without strictly adhering to these criteria, the classification is not standardized.

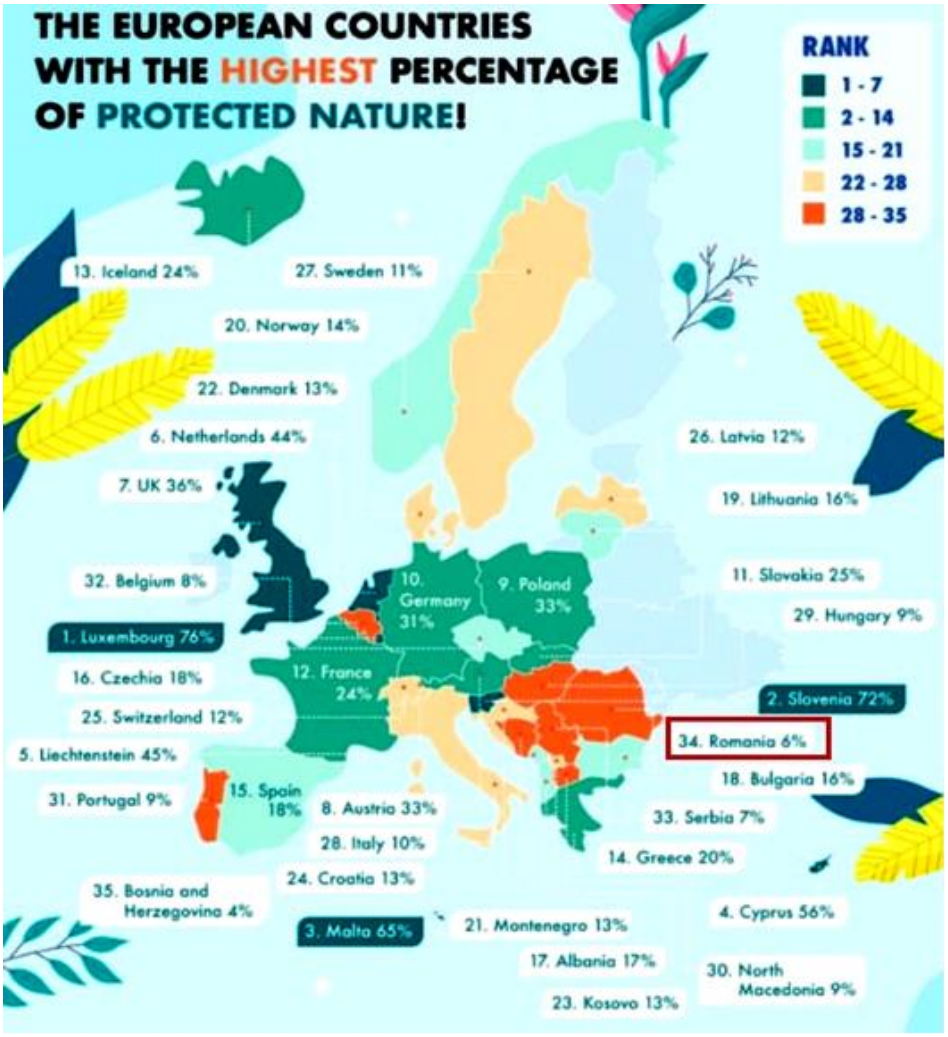

Figure 2. Surfaces of protected areas in European countries compared to the entire territory[1]

[1] https://cursdeguvernare.ro.

In fact, by comparing the situation (Fig. 3), it is found that some countries are more or less close to the 30% target, while others have already exceeded it. The problem is that what is understood by a protected area category in one country may not mean the same thing for another, hence the need to arrive at a standardized assessment of the criteria used to evaluate a protected area.

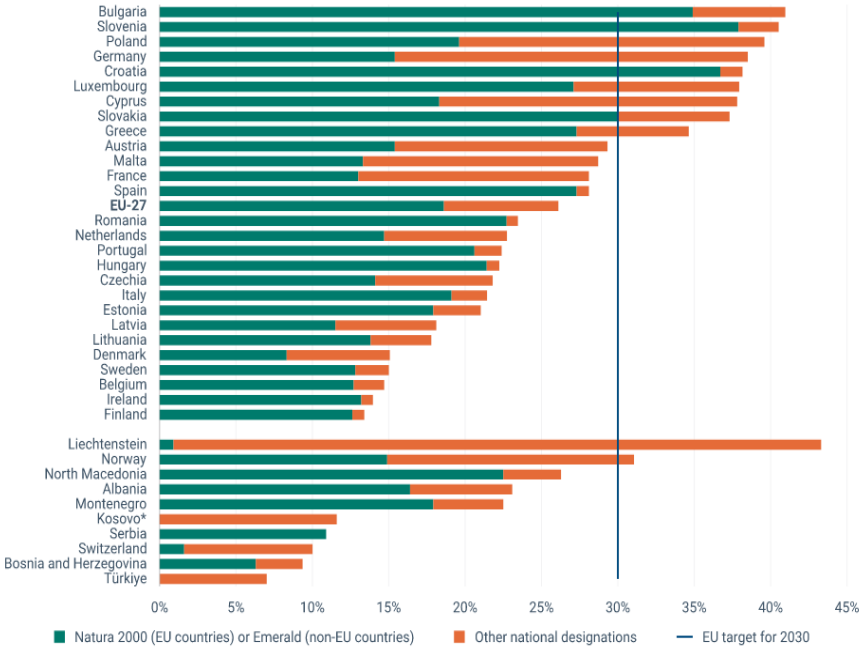

Figure 3. Terrestrial protected area coverage by country and in the EU-27 by end of 2022[1]

4. Some Comparison with Issues in Other EU Member States

A study evaluating alpine regions in Spain highlighted variations between national designations and the IUCN categories actually met (Muñoz & Hausner, 2013). The conclusion was that IUCN does not always reflect the real management of areas, requiring locally harmonized criteria. An analysis of SPA (Special Protection Areas) effectiveness in Germany using citizen science data showed that only 17% of the species studied had positive trends between 2012–2022, suggesting the need for better-funded and better-directed management (Pflüger et al., 2024). The highest

[1] https://www.eea.europa.eu/en/analysis/indicators/terrestrial-protected-areas-in-europe.

values of functional connectivity between protected areas are found in Spain, Slovakia, Romania, and Bulgaria; however, in countries with much lower population density such as Sweden and Finland, which have large natural areas with low human impact, we do not see high connectivity due to the large distances between sites. The distribution of protected areas relative to roads explains the higher proportion of isolated sub-networks in Portugal compared to Belgium. Romania and Slovakia have higher functional connectivity values than many Western European states, underlining the strategic potential of the Carpathian network for cross-border management (Estreguil et al., 2014).

The highest percentage of protected areas from the total national territory is recorded in Luxembourg (52%), Bulgaria, and Slovenia (41%)[1].

5. Economic Impact and the Importance of EU Funds

Standardizing classification facilitates the transparent and efficient allocation of funds through LIFE and agricultural/cohesion programs; the LIFE program bases project eligibility on clear standards for protected area type and protection level[2]. A proposed mechanism uses conservation auctions with staggered payments to finance strictly protected forest areas, suggesting an economically advantageous model for meeting the EU 2030 targets without immediate financial pressure (Benedek, 2018). Literature acknowledges the value of ecosystem services: water purification, ecological recreation, sustainable tourism, public health, regional commercial products, and local jobs (Jones et al., 2022). In Romania, qualitative and cost–benefit analyses indicate that inefficient management of protected areas undermines local economic potential, especially in biodiversity-rich areas such as Retezat National Park (IUCN II) (Antonescu, 2019).

6. Benefits of Standardization

- Administrative and legal coherence – Harmonizing national classifications with an EU-mandatory scheme (such as adapted IUCN) reduces ambiguities between mandates, attributions, and overlapping national/EU legislation.

[1] www.researchluxembourg.org.
[2] https://mfe.gov.ro/.

- Optimized fund allocation and monitoring – Clear classifications allow the uniform application of SEBI indicators across member states, reducing double counting and facilitating the evaluation of site evolution over time.
- Local economy and tourism – Correctly identifying an area as a National Park (IUCN II), Natural Park, or Protected Landscape (V) has a direct impact on attracting tourism funds, ecotourism, regional grants, and community support.
- Cross-border cooperation – Networks such as those in the Carpathians benefit from a common classification language, facilitating integrative LIFE projects and green infrastructure strategies.

7. Recommendations for Implementation

1) Adoption of an EU-mandatory typology inspired by IUCN and interoperable with the EUNIS habitat database.
2) Mandatory mapping between national and EU categories, with CDDA/EUNIS codes in the EEA central register.
3) A centralized European registry with uniform metadata (purpose, regime, conservation status).
4) Pilot projects in Romania, Hungary, Slovakia, Poland to test the implementation of harmonized criteria and participatory management involving local authorities, NGOs, and communities.
5) Innovative economic mechanisms such as conservation auctions (ex. Kangas et al., 2025) with staggered payments and financial facilities conditioned on standardized classification.

8. Conclusions

Standardizing the classification of protected areas leads to:

- Legal and administrative coherence between national and EU levels.
- Unified monitoring and clear reporting.
- More efficient access to EU and LIFE funds.
- Local economic support through tourism and sustainable conservation.
- Stronger cross-border cooperation.

Without a harmonized framework, countries like Romania remain vulnerable to inefficiencies, administrative redundancy, and the loss of conservation and local development potential. Implementing a unified classification system is a strategic necessity for achieving the EU biodiversity objectives by 2030. Considering that overlaps and confusions regarding the classifications of protected areas would be avoided, funds would be spent much more efficiently and the result of their use could be quantified much more easily.

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