

Article

# Evaluation of the Operational Environment Factors of Nature Conservation Policy Implementation: Cases of Selected EU and Non-EU Countries

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**Abstract:** The complex policy decision-making situation around nature conservation requires examination of the operational environment. This study develops and tests a three-phase analytical framework for the evaluation of operational environment factors influencing nature conservation policy implementation. The four important operational environment factors (legal, policy, economic, and social) have been identified, to build up a framework. The framework was tested in selected countries and includes experts' opinions. Experts (n = 44) from five EU countries (Bulgaria, Croatia, Italy, Slovakia, and Slovenia) and four non-EU countries (Bosnia and Herzegovina, North Macedonia, Montenegro, and Serbia) defined and evaluated the factors and sub-factors that affect the operational environment related to nature conservation policy implementation. The results show policy changes arising from the new governance requirements introduced by changed political regime and Europeanization are key driving factors for changes in the nature conservation operational environment. For nature conservation, these wide-reaching changes have led to new political and legal frameworks, new institutional set-ups and multilevel governance frameworks, new establishment of protected areas and Natura 2000 network, and the re-allocation of financial resources and inclusion of non-state actors in policy decision-making. However, there are also some challenges and unsolved problems that need further attention from policy decision-makers and institutions, especially related to the institutional gap, sustainable financing of nature conservation, transposition of the EU Directives into legal systems, designation of sites or improving their implementation, implementation of innovative funding schemes, and a transparent participatory process. This

analytical framework can be applied to various problems related to any environmental issues or other policy implementation or management, and other sectors where public decision-making is combined with stakeholders' engagement.

**Keywords:** biodiversity conservation; nature conservation policy; operational environment; legal; policy; economic and social factors; evaluation framework; protected areas; Natura 2000 network

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## 1. Introduction

Environmental and nature conservation awareness in today's sense began to grow in the second half of the 20th century, when the consequences of human activity in nature became more apparent [1]. Therefore, nature conservation has become a political issue at the global level [2,3].

In order to achieve nature conservation objectives of European wildlife and natural habitats, laws on nature protection have been adopted and PAs were established. Later on the Emerald Network at the national level has been set up in each contracting party of the Bern Convention, which involves also all the EU states [4]. In order to fulfil its obligations arising from the Bern Convention, the EU implemented the "Habitats" Directive [5] in 1992, which together with "Birds" Directive [6] set up the EU's network of PAs called Natura 2000. Natura 2000 is at the moment the largest network of PAs in the world and the core pillar of the EU's nature conservation policy [3,7,8]. Therefore, it is considered an important legal policy framework in achieving a favourable conservation status of nature in the EU Biodiversity Strategy by 2020 [9].

In a broader context, the Natura 2000 network is just one in a wide range of EU policies and legislation related to nature conservation to which the EU member countries must adhere. In the case of legally binding legislation specifically, it is required that the individual EU member countries translate them into national legislation (transposition) while leaving the details of implementation to the national authorities (enforcement) [8].

In the case of EU acceding countries, membership in the EU requires the adoption, implementation and enforcement of the 'acquis communautaire'—the body of the EU law and regulation [10]. The 'acquis' consists of different thematic chapters, where environmental law and regulation constitute one of them. Transposing the environmental chapter does not require a simple transformation of 'acquis communautaire', but also the development and adoption of institutions and structures by which legally binding legislation can be effectively implemented [10,11]. This process is commonly known as Europeanization of domestic environmental governance, which has led to changed policies, values, and norms while empowering new stakeholders in policy decision-making, leading to effective environmental governance [10,12]. On the other hand, in these countries, traditional command-and-control policy decision-making by state actors still dominates quite often as a consequence of post-socialistic governance type [11,13].

The implementation of EU nature conservation policy—de facto, not necessarily de jure—did not harmonize with traditional domestic nature conservation policies in the most of the EU member countries [14]. It introduced several new (in)formal rules such as the required participation of a broad range of stakeholders, and cooperation between government actors from various sectors and across several jurisdictional levels [13,15,16]. Moreover, the implementation and success of nature conservation policies depends on a range of various factors from the operational environment "... political, economic and socio-psychological factors related to the design of the instrument as well as to the historical, local and sectoral contexts have an influence on the success of any conservation programme" [8].

The analysis of operational environments of the nature conservation policies and adjusting to changes in the environments are crucial parts of effective policy implementation [17–19]. Several factors can be expected to influence the behaviour of nature conservation policy implementation

actors and outputs. These factors correspond to the different dimensions of the conservation—e.g., social, cultural, economic, policy, environmental, but also institutional and individual-level ones [20]. According to Blicharska, et al. [21] to achieve a good functionality of the nature conservation, there is a need for knowledge not only on the ecological conservation and management issues, but also on key social, economic, political, and managerial realities potentially influencing policy implementation. Many previous studies have shown that national implementation of nature conservation policies differs across the EU [7–9,22–25]. Differences in implementation pathways are related to differences in policy culture in each country and consequently policy integration [14,26–29], financing of conservation measures and compensation payments [29–33], management practices [34,35], institutional factors [3,13,23,29,36–38], social factors [3,15,39–45], and environmental factors [46,47]. In a recent review of studies related to nature conservation, Popescu, et al. [48], and Blicharska, Orlikowska, Roberge and Grodzinska-Jurczak [21], concluded that research related to ecological factors prevail, while social, economic, and policy ones are underrepresented.

Studies focusing on national and sub-national operational environment factors related to nature conservation policies implementation are available in central-eastern European countries and south-eastern European countries, but most studies fail to systematically evaluate the whole operational environment factors related to nature conservation policies implementation [7,12,14,39,40,49–53]. To fill the above-mentioned gaps, this research aims to develop a framework to analyse the operational environment factors that affected nature conservation policies implementation in selected EU and non-EU member countries. Selected EU members' countries were Italy (IT), Slovakia (SK), Slovenia (SI), Bulgaria (BG), and Croatia (CRO), and non-EU members' countries were Serbia (SRB), Montenegro (MNE), North Macedonia (NM), and Bosnia and Herzegovina (BiH). These countries were selected as they were involved in COST Targeted Network TN1401 "Capacity Building in Forest Policy and Governance in Western Balkan Region (CAPABAL)". In addition, these countries represent good cases as in these countries political, legal, economic and social operational environment changed considerably in a relatively short period, making a substantial impact on nature conservation. These differences influence nature conservation policy implementation in selected countries and make a cross-country comparison interesting. The results of this study are useful for understanding the influences that operational environmental factors have on nature conservation policy implementation in selected countries and are likely to be relevant for policy decision-makers, institutions responsible for management and planning of PAs, and other stakeholders to increase the quality of future nature conservation policy implementation processes.

## 2. Materials and Methods

To identify operational environment factors, while explicitly addressing different political and socio-economic context in case countries, this study developed a three-phase analytical framework for analyzing the operational environment factors related to nature conservation policies implementation. The literature review in the introduction showed that institutional theories and governance theory are frequently used to explain nature conservation policy implementation. Our analytical framework draws on these findings, and the factors are therefore based on neo-institutional theory [54]. They are complemented by governance elements (participation) because the implementation of nature conservation policies is highly dependent on stakeholder engagement. As a tool, framework identifies the elements and general relationships among them that one needs to consider for institutional analysis. They provide a general set of variables that can be used to analyze all types of institutional arrangements [55]. The institutional environment is dynamic and constantly changing, so neo-institutionalism tries to find a balance between actors and structure. It seeks to answer the question of whether historical, social, and political outcomes are the result of the intentions, motivations, and behavior of actors; or whether these are shaped by political institutions, power hierarchies, and cultural conventions [54]. The proposed framework is based on the basic elements of these theories namely rules (legal and political), institutions (political, economic) and governance

elements (participation), and it is applicable for different regions and conditions both across Europe and worldwide as it uses general factors to analyze the institutional setting. Simultaneously, it allows a better understanding of the country/region specific situation by using sub-factors. It was developed in a series of steps involving nature conservation experts and applied in selected countries as described in more detail below.

### *2.1. Phase 1—Identification of Operational Environment Factors and Sub-Factors*

To be able to analyze the main operational environment factors that affected nature conservation policies implementation in selected countries four groups of operational environment factors were identified: (1) Legal—including sub-criteria such as international conventions and agreements, national legal framework, PA legal status, Emerald network, Transposition of the EU “Birds” and “Habitats” Directives, Natura 2000 management plans; (2) Policy—including sub-criteria such as policy framework and institutional set-up; (3) Economic—including sub-criteria such as financing mechanisms of PAs and Natura 2000 and compensatory measures for Natura 2000; and (4) Social—including sub-criteria such as stakeholders’ involvement in establishment and management of PAs and stakeholders’ involvement in the implementation of Natura 2000 network. As legal and policy factors often overlap they were merged into one category in our study, which is commonly done also in other studies [56]. As these general factors do not enable detailed analysis of the operational environment of each country a preliminary list of sub-factors under each factor was prepared. The general factors and sub-factors were selected based on the theoretical background and literature review [9,21,48], where it was found that mainly legal issues, governance settings, policy integration, conservation priority setting, management, and participation evaluation have influence on nature conservation policy implementation.

The identified list of factors and sub-factors was discussed afterwards among researchers, university professors, and nature conservation experts. After that, it was modified in order to clarify the defined factors and sub-factors. Based on these factors and sub-factors, a template was developed as a semi-structured, problem-centred interview. The template included basic information about the aim of the study and a brief explanation of factors to ensure a common understanding among the experts.

### *2.2. Phase 2—Expert Selection and Data Collection*

The prepared template was sent by e-mail to nature conservation experts in each country to get the information about the influence of operational environmental factors on nature conservation policy implementation. When selecting the experts, a priority was given to participants who were experienced with respect to nature conservation in their country or have an institutional influence on nature conservation policy formulation or implementation (Table 1). The experts ( $n = 44$ ) have filled the template based on their expertise and the information gaps have been filled with information of other experts who had a good overview of nature conservation policies implementation in the country or other literature sources. The data were collected between March and May 2019.

### *2.3. Phase 3—Qualitative Content Analysis*

A qualitative content analysis was applied on collected information about operational environment factors that influence nature conservation policies implementation. The qualitative content analysis includes contextual information, latent content, as well as formal aspects of the analysis information [57]. For analysis, we first identified and coded the parts of the documents that include general codes (factors) and then codes related to the sub-factors. Coded elements were extracted into a standardized Excel table, which enables a simplified overview of relevant operational environment factors and sub-factors and their interpretation and cross-country comparison in terms of influence on nature conservation policy implementation.

**Table 1.** Experts involved in the data collection.

Country	Name of Institution/Organization/Association	Total No. of Experts
IT	Council for agricultural research and economics (CREA) (1), Forestry officials of the Regions and Autonomous Provinces (2), Forest consultants involved in the drafting of Natura 2000 site management plans (2)	5
SK	Faculty of Forestry (2), National Forestry Centre (1), State Nature Conservancy (6), Ministry of Agriculture and Rural Development (1)	10
SI	Faculty of Forestry (1), Ministry of Environment and Spatial Planning (3)	4
BG	University of Forestry (1), Ministry of Environment and Water (1), Executive Forest Agency (2)	4
CRO	Faculty of Forestry University of Zagreb (2), State forest company Hrvatske šume Ltd. (1), Ministry of Agriculture (1)	4
SRB	Public enterprise “Srbijašume” (1), Public enterprise “Vojvodinašume” (1), Institute of Forestry (1), Ministry of Agriculture and Environmental Protection (1)	4
MNE	Institute of Forestry of Montenegro-Natura 2000 expert for forest habitats (1), Ministry of Sustainable Development and Tourism (1), Ministry of Agriculture and Rural Development (1), Public Enterprise National Parks of Montenegro (1)	4
NM	Public Forest Enterprise (1), Faculty of Forestry (1), National Association of Private Forest Owners (1), NGO Connecting Natural Values and People - CNVP Macedonia (1), Ministry of Agriculture, Forestry and Water Management (1)	5
BiH	Public Forest Enterprise (1), Faculty of Forestry (1), National Park Una (1), Ministry of Agriculture, Water Management and Forestry of the Federation of Bosnia and Herzegovina (1)	4

### 3. Results

#### 3.1. Legal and Policy Factors

##### 3.1.1. International Conventions and Agreements

In the analyzed countries, the main drivers for nature conservation came from the international environment as all countries are signatories of the most important international conventions and agreements related to nature conservation such as Ramsar Convention, Convention on International Trade in Endangered Species of Wild Flora and Fauna, Bonn Convention, Bern Convention, Convention on biological diversity, United Nation Framework Convention on climate change and European Landscape Convention. All these conventions and agreements have been ratified by specific laws or decrees (Italy, Slovenia, Croatia, Bulgaria, Serbia, North Macedonia, and Bosnia and Herzegovina) and/or were implemented in Nature Conservation Act (Slovakia, Bulgaria, and Montenegro).

##### 3.1.2. National Legal Framework of Nature Conservation

All analyzed countries have a legal framework in place to ensure and support nature conservation (Table A1). Strategies that influence nature conservation exist in all countries. They are mainly related to sustainable development (Italy, Slovakia, Slovenia, Croatia, Serbia, Montenegro, and North Macedonia), environmental protection (Slovakia, Bulgaria, Croatia, Republic of Srpska, Federation of Bosnia and Herzegovina), environmental and climate changes (Bulgaria and North Macedonia), nature protection (Croatia, Bulgaria, North Macedonia, Republic of Srpska), biodiversity (Italy, Slovakia, Slovenia, Bulgaria, Serbia, Montenegro, North Macedonia, Republic of Srpska, Federation of Bosnia and Herzegovina), and forestry (Italy, Slovakia, Croatia, Bulgaria, Serbia, Montenegro, North

Macedonia, Republic of Srpska). Moreover, from the aspect of nature conservation, national programs related to this area are also very significant in some analyzed countries. They are mainly related to environmental protection—National environmental protection programs (Slovenia, Serbia, Republic of Srpska, Federation of Bosnia and Herzegovina); and forestry—National forest programs (Italy, Slovenia, Bulgaria, Montenegro, and Federation of Bosnia and Herzegovina).

The main laws that regulate nature conservation in the countries analyzed are nature protection, nature conservation law, environmental protection law, or biological diversity law. Apart from specific nature conservation-related laws all countries also have a number of ordinances, decrees, rulebooks, that further regulate specific nature conservation issues. Additionally, all analyzed countries have also adopted specific legislation governing the proclamation of PAs, mainly national parks (see Section 3.1.4).

All analyzed countries also have other sectoral laws that are relevant for nature conservation—such as forest law, water law, game management and hunting law—as nature conservation has an indispensable position in the context of other cross-sectoral policies, especially related to forest sector and therefore cannot be seen as an isolated policy sector [58].

### 3.1.3. Institutional Set-Up

Strong institutional set-up is one of the key prerequisites for effective nature conservation policy implementation. Table A2, summarize the institutional set-up in analyzed countries. Evidently, not all of the institutions are presented in all countries, which potentially create a gap for the successful nature conservation policy implementation.

In all analyzed countries, one central authority plays the most important role in nature conservation. In most of the analyzed countries, the Ministry of Environment with jurisdiction over environmental protection is responsible for nature conservation policies, including PAs and Natura 2000 sites. There are exceptions in Montenegro, Bosnia and Herzegovina, and the Republic of Srpska where other ministries are responsible for environmental protection and nature conservation policies (e.g., Ministry of Foreign Trade and Economic Relations in Bosnia and Herzegovina and Ministry of Spatial Planning; Civil Engineering and Ecology of the Republic of Srpska in Republic of Srpska; and Ministry of Sustainable Development and Tourism in Montenegro). Only in Slovakia and Serbia there is an independent Ministry of Environment or Ministry of Environmental Protection, while in other analyzed countries the Ministry of Environment has broader competences, e.g., protection of land and sea, spatial and physical planning, energy, water, tourism.

The presence of Institutes for nature conservation varies from country to country. They exist in Italy, Slovakia, Slovenia, Bulgaria, Croatia, Serbia, and Bosnia and Herzegovina. In countries like Croatia, Montenegro, and North Macedonia, they have experienced changes in relation to formally independent institutes as in most countries' government adopted a decree merging institutes to some other institution. All countries, except Bosnia and Herzegovina and North Macedonia, have Environmental agencies in place at the national level and also regional level as in case of Italy, with similar duties being the collection, integration and processing of environmental data and submission of reports to the European Environmental Agency as European Environmental Agency member countries. In the case of Bosnia and Herzegovina and North Macedonia they are a part of European Environmental Agency partnership network as cooperating countries.

One of the institutional mechanisms that could substantially contribute to the funding of nature conservation, particularly its tasks, is an environmental fund. This funds usually receives finances from different sources (e.g., environmental or eco-taxes, national or regional budgets, regulation fees). An environmental fund exists in all analyzed countries, except Italy, North Macedonia, and Montenegro.

In all analyzed countries, Ministry responsible for nature conservation plays an important role in monitoring of different types of PA and are responsible for the approval of management plans and programs for PA. Although governance by government is a predominant form of governance in analyzed countries, all analyzed countries have established public institutions (PA authorities) for management of PA at the national, regional or local levels. Unlike in other countries, Montenegro and

Slovakia have one central public institution at the national level for management of all PAs. In Italy, Slovenia, Croatia, Bulgaria, North Macedonia, Serbia, and Bosnia and Herzegovina, separate public institutions are set up with the responsibility to manage a specific PA. Moreover, in some analyzed countries, the government can delegate PAs management responsibility to other actors, both public and private ones. The transfer of management by delegation is possible “de jure” in Slovakia, Slovenia, Bulgaria, Serbia, Montenegro, and North Macedonia. Delegation can be done either on a contract basis (Slovakia) or by a legal act, at the designation of PA (Slovenia, Bulgaria, Croatia, Serbia, North Macedonia, and Montenegro). Delegation to different types of actors (e.g., NGO, local association, local municipalities or counties, public enterprises, private companies, and churches or monasteries) was found in some analyzed countries (Slovenia, Serbia, North Macedonia, Montenegro, and Croatia).

### 3.1.4. Legal Status of Protected Areas

The idea of setting aside areas to safeguard for nature conservation was initiated in most of the analyzed countries in the middle of the 20th century, by designating the first national park (Table 2).

**Table 2.** Legal status of protected areas and their coverage.

Country	Year of the Establishment of First NP	No. of NP	Existence of Other Statutory Designated Categories of PA	% of the Country's Territory Covered by PAs
IT	1922	24	Yes	9.5
SK	1949	9	Yes	23.4
SI	1981	1	Yes	14.0
BG	1992	3	Yes	5.3
CRO	1949	8	Yes	8.5
SRB	1960	5	Yes	7.5
MNE	1952	5	Yes	12.5
NM	1948	3	Yes	8.9
BiH	1962	4	Yes	2.7

Legal protection of national park is in majority of the analyzed countries provided by law on national parks (Italy, Slovenia, Serbia, North Macedonia, Montenegro, and Bosnia and Herzegovina) or Protected areas law (Bulgaria). In countries like Italy, Bulgaria, Serbia, and Republic of Srpska, laws regarding national parks/protected areas exist on a country/entity level. In Italy, Slovenia, Montenegro, North Macedonia, and the Federation of Bosnia and Herzegovina, specific laws on the establishment of individual national park exist. In Slovakia and North Macedonia national park establishment in terms of activities granted and prohibited is regulated by nature conservation/protection law, while the national park itself is created by the government ordinance/law. In Croatia, PAs are established by the government or parliament ordinance.

Other statutory designated categories of PA also exist in these countries, mostly harmonized with the IUCN categorization. According to the national data, PAs cover between 2.7% in Bosnia and Herzegovina and 23.4% in Slovakia of the country's territory.

### 3.1.5. Emerald Network

The Emerald network of the Council of Europe is declaratory complementary to the Natura 2000 network outside EU.

The creation of the Emerald Network was started with a help of different pilot projects in all analyzed countries, except Italy. The main purpose of those projects was to initiate the process, create the expert teams, and set up a database of pilot project sites and proposed Areas of Special Conservation Interests (Table 3).

**Table 3.** Status of the Emerald network.

Country	Emerald Network Status	Approved by Standing Committee of Bern Convention	Approved by the National Authority
IT	Emerald network is not implemented.	-	-
SK, SI, BG, CRO <sup>1</sup>	Participated as pilot countries in the first round of Emerald projects; Emerald network is implemented (Areas of Special Conservation Interests)	Yes	No
SRB, MNE, NM, BiH	Proposed Areas of Special Conservation Interests, officially nominated	No	No

<sup>1</sup> Areas of Special Conservation Interests were approved by the national authority.

In Slovakia, Slovenia, Croatia, and Bulgaria, the pilot project of Emerald network creation started in 1999, but stopped, due to the countries' orientation to the EU process and implementation of the Natura 2000 network. All relevant data and results gained within the Emerald pilot project were used for the implementation of Natura 2000 that later became the formal contribution to the Emerald network.

In case of Croatia, Serbia, Montenegro, North Macedonia, and Bosnia and Herzegovina, EU CARDS Regional Project "Development of Emerald Network in South-Eastern Europe" was implemented with the financial contribution of the European Environmental Agency to the Council of Europe [59]. Further activities in these countries were performed under the EU IPA projects [60]. As a result of these projects, countries have nominated their candidate sites. All future activities in these countries related to the Emerald network are dependent on the further national allocation of money.

### 3.1.6. Transposition of the EU Birds and Habitats Directives

The countries involved in this study are at different stages of transposition of the "Birds" and "Habitats" Directives into national legislation (Table 4), considering the country's status regarding the EU accession. EU Member States countries have transposed the Directives and implemented Natura 2000 network. This network has been implemented gradually, starting in 1997 in Italy, followed by other countries joining the EU afterwards (Slovenia and Slovakia in 2004, Bulgaria in 2007 and Croatia in 2013).

The EU candidate and potential candidate countries have, in compliance with the *acquis* obligations, to implement and enforce environmental policies in their legal framework, but enforcement and implementation of the nature conservation policy are still at the early stage because there are still significant gaps in transposition and site designation. For example, these countries have designated Emerald network sites (future Natura 2000 sites), but more effort should be put into the selection of Special Protection Areas (SPAs) and Sites of Community Importance (SCI) under the Directives. In countries like Montenegro, North Macedonia, and Bosnia and Herzegovina, potential SPAs and SCI sites are proposed, while in SRB only potential SPAs are proposed. These proposed sites will in the future act as potential sites for inclusion in the Natura 2000 network.

In most of the analyzed countries, the "Habitats" Directive is mainly transposed through the Law on nature protection/conservation (Slovakia, Slovenia, Serbia, Montenegro, North Macedonia, and Bosnia and Herzegovina) and its decrees (as in case of Serbia, Italy, Slovenia, Croatia, and the Federation of Bosnia and Herzegovina). The "Birds" Directive is also transposed by the Law on nature protection/conservation (Italy, Slovenia, Croatia, Serbia, and North Macedonia) and Law on Game and Hunting (Italy, Serbia, and Bosnia and Herzegovina) and Forest Law (Croatia). In Bulgaria, Natura 2000 sites are not considered as PAs, they are called protected sites and therefore designated under the biological diversity law, not the protected areas law. Therefore, also the Directives are transposed through the biological diversity law.

According to EEA [61], the Natura 2000 network now covers 18.0% of EU's land territory in EU-28. Currently, the Natura 2000 network covers 37.2% of land territory in Slovenia, followed by Croatia (36.7% of the land territory), Bulgaria (34.4% of the land territory), and Slovakia (30.0% of the land territory). These countries are also ranked as countries with the highest share of Natura 2000 area within EU-28. In Italy, the Natura 2000 network covers about 19.0% of country's land territory. In analyzed 'new' member states in Eastern and Southeastern Europe, the share of national land territory under Natura 2000 is well above the EU average. In the rest of the study area, larger Natura 2000 sites were designated as a consequence of overlapping with (but sometimes also exceeding) existing nature PA, but in the old member states, like Italy, smaller sites were established [8].

**Table 4.** Status of the Natura 2000 network [61].

Country	No. SPA	No. SCI	% of the Country's Territory under Natura 2000	% of the Forests inside Natura 2000
IT	631	2.335	19.0	35.0
SK	41	642	30.0	48.8
SI	31	324	37.2	71.0
BG	119	233	34.4	56.5
CRO	38	741	36.7	36.0
	No. pSPA	No. pSCI		
SRB <sup>1</sup>	43	-	-	-
MNE <sup>2</sup>	X	X	16.0	9.0
NM <sup>1</sup>	3	6	-	-
BiH <sup>1</sup>	1	72	18.7	-

<sup>1</sup> Data about Natura 2000 coverage of country territory and % of forest inside Natura 2000 are not available. <sup>2</sup> Some SPA and SCI sides are proposed but the process is not finished.

Forests are of crucial importance for Natura 2000. According to the European Commission [62] it has been estimated that the Natura 2000 network includes approximately 375,000 km<sup>2</sup> of forests, which is about 50% of the total Natura 2000 network and about 21% of total forest resource in EU. In Slovakia, Slovenia, and Bulgaria, forest is included in more than half of all proposed Natura 2000 sites (48.8%, 71.0%, and 56.5% respectively) [63,64]. The high percentage of forests in Natura 2000 reflects not only the wide distribution of forests in these countries but also their overall importance for biodiversity. In Croatia, forests cover approximately 36.0% of Natura 2000 network and in Italy 35.0% of the Natura 2000 network [65].

### 3.1.7. Management Plans for Natura 2000 Network

After the designation of the Natura 2000 sites, policy enforcement and practical management becomes the primary task for national authorities [8]. According to the "Birds" and "Habitats" Directives, the preparation of management plans for the Natura 2000 sites is not obligatory, but the "Habitats Directive" recommends their use as a means to secure the beneficial conservation status of the sites. In spite of the soft regulation, the preparation of site-level management plans is promoted in all selected EU countries as the main tool to identify conservation measures at the site level (Table 5). Some of the analyzed EU countries consider the development of a management plan for sites as a legal obligation (Slovenia, Slovakia), or/and make a possibility to include specific management measures in other sectoral plans related to management and use of natural resources (forests, water) or include them in contractual obligations, as recommended by Article 6 of the "Habitats Directive" (Slovenia, Bulgaria, Croatia). In Italy, according to the Decree no. 224 (2002), there is a legal obligation to define the conservation measures for the Natura 2000 sites, while management plan is an additional instrument aimed to protect threatened species and habitats.

Natura 2000 management plans are prepared under the responsibility of the ministry responsible for nature conservation in almost all analyzed EU members' countries, except Croatia, assisted by

facilitators (experts), with the provision of EU financial sources and the national budget. In Croatia, directives are implemented in forest management plans under the responsibility of the Ministry of Agriculture. These management plans are developed at the national (Slovakia, Slovenia, Bulgaria) or regional/local level (Italy).

**Table 5.** Synthetic overview of legal requirements in Natura 2000 management planning.

Country	Legal Obligation for Management Plans	Management Plans are Developed
IT	No	Yes (R)
SK, SI	Yes	Yes (N)
BG	No	Yes but not for all sites (N)
CRO	No	No

N: national level, R: regional level.

### 3.2. Economic Factors

There are numerous economic factors that must be considered in the analyses of nature conservation policies. The most noticeable is funding as this was identified in many studies as “the biggest issue”, and that it is the key factor of further development of nature conservation [8,32,66].

#### 3.2.1. Financing Mechanisms of Protected Areas

Well-developed legal frameworks are in place in the analyzed countries (see Section 3.1), which underline the need for and importance of funding of PAs. All analyzed countries have ratified international conventions, which call in some way for contracting parties to allocate funds for nature conservation. Therefore, in analyzed countries laws (mainly nature protection/conservation law) and decrees related to PAs prescribe different financing mechanisms.

Financial resources for PAs may be generated by different sources (Table A3); most commonly these are external sources and market-based fees for goods and services.

In all analyzed countries, financing of PAs is ensured from the state budget funds, through the ministries responsible for nature conservation. To a much lesser extent, financing comes from municipal budget (Slovenia, Croatia, Serbia, Montenegro, North Macedonia, and Bosnia and Herzegovina) or province/regional budget (Italy, Croatia, Serbia, and Bosnia and Herzegovina) in the case where the PAs are established by the municipality or province/regions. In addition, Slovenian law on nature conservation permits a possibility of public/private partnership on the management of PAs. Moreover, in countries like Slovakia, Serbia, Montenegro, North Macedonia, and Bosnia and Herzegovina, international assistance and funding or private voluntary donations (Slovakia, North Macedonia, and Bosnia and Herzegovina) of PA is provided. In Slovakia, Croatia, and Serbia, the Environmental Protection Fund is established to provide financial support for environmental protection and sustainable development to applicants in the form of grants or loans in support of projects and activities aimed at achieving environmental policy goals at national, regional, or local levels.

PA management bodies are offered the possibility to supplement their budget financing through income-generating activities—market-based fees for goods and services (e.g., entrance fees in PAs, entrance fees in visitor or information centres, informational materials, tourism activities, etc.), such revenues represent in most cases a fairly small share from their total annual budget (Italy, Slovakia, Slovenia, Croatia, Serbia, North Macedonia, and Bosnia and Herzegovina), except when income is generated from management of lands and resources inside the PAs (Italy, Slovakia, Slovenia, Bulgaria, Serbia, Montenegro, North Macedonia, and Bosnia and Herzegovina) or concessions of management or resource use rights (Bulgaria, Croatia, Serbia). Another financing opportunity of PAs is represented by the existence of grants that can be accessed through projects, which becomes a quite common and important source of funds in all analyzed countries.

In countries like Slovakia, Bulgaria, Croatia, North Macedonia, Montenegro, and Bosnia and Herzegovina, a general characteristic of financing nature conservation and PAs is their large dependency

on external funding sources, which finance various nature conservation projects. The European Fund for Southeast Europe has also played an important role in financing different activities in Slovakia. In addition, external funding also comes from EU funds (Italy, Slovakia, Slovenia, and Bulgaria), or EU-accession funds (Croatia, North Macedonia, and Bosnia and Herzegovina). Moreover, in Italy, Croatia, Montenegro, and North Macedonia, innovative instruments—such as payments for ecosystem services (hereafter PES)—have been developed and represent a financing source of PAs.

### 3.2.2. Financing Mechanisms of the Natura 2000 Network

The EU's integrated approach to financing Natura 2000 has resulted in a complex funding structure [30]. In accordance with the Treaty on the Functioning of the EU [67], the responsibility for implementing and financing environmental policy, including the Natura 2000 network, lies with the Member States. Article 8 of the "Habitats" Directive states that in a case in which the respective Member States face exceptionally high costs, these costs can be co-financed by any relevant EU co-financing instrument and foresees the need to develop a prioritized action framework [5]. According to the aforementioned article, implementing institutions have two options for funding the necessary measures in the Natura 2000 network: to use either their existing state nature conservation budgets or the EU co-financed instruments.

National public funding is the most frequently mentioned source of financing Natura 2000 objectives and measures in all analyzed EU member countries (Table 6), because funding of nature conservation measures is prescribed by nature protection/conservation law. In Slovakia and Croatia, national environmental protection funds have been mentioned as an important additional source of financing Natura 2000 objectives and measures.

**Table 6.** Overview of funding instruments for Natura 2000 objectives and measures for 2014–2020 in analyzed EU member countries.

Funding Instruments	Country				
	IT	SK	SI	BG	CRO
National public funds	X	X	X	X	X
National environmental protection fund	-	X	-	-	X
European Agricultural Fund for Rural Development	X	X	X	X	X
European Agricultural Guarantee Fund	X	-	-	-	-
European Regional Development Fund	X	X	X	X	X
European Social Fund	X	-	-	X	-
European Maritime and Fisheries Fund	X	X	X	X	X
Cohesion Fund	X	X	-	X	-
Financial Instrument for the Environment (LIFE/LIFE+)	X	X	X	X	X
Framework Programme for Research and Innovation (FP7, Horizon 2020)	X	X	X	X	X
Public/Private Partnership financing schemes	X	-	X	-	-

Moreover, the objectives and measures of Natura 2000 in analyzed EU member countries are supported through the European structural and investment funds, with the majority of their investment being handed out through national governmental institutions (Table 6).

In analyzed countries objectives and measures of Natura 2000 were co-funded through several EU instruments. These available EU-level funding instruments can cover only a small amount of the estimated costs of the implementation of Natura 2000 and its measures. Therefore, in countries like Slovakia and Croatia National environmental protection funds promote advances in environmental protection through the award of credits or other financings.

Additionally, in Slovenia the legislation on nature conservation allows public/private partnership on the management of Natura 2000 sites. Such is the case in the management of Sečoveljske soline

Landscape Park. In Italy, 76 Natura 2000 sites located in the WWF Oasis are managed by WWF in accordance with the national and regional/provincial guidelines.

In the EU candidate and potential candidate countries, initial work on the establishment of Natura 2000 network started in the frame of the different project, mostly financed by EU IPA program (Serbia, North Macedonia, Montenegro, and Bosnia and Herzegovina), foreign governments (Bosnia and Herzegovina), bilateral aid agencies (North Macedonia and Bosnia and Herzegovina), and NGOs (WWF in Montenegro).

The transposition of the “Habitats” Directive requires compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected (Article 6). Therefore, different compensation measures are assured in current EU funding programs (2014–2020), such as European Structural and Investment Funds, the Rural Development Fund, the Cohesion Policy Funds, and the European Maritime and Fisheries Fund.

As regards the compensatory measures included in the Rural Development Programme 2014–2020, that are relevant for Natura 2000 three measures have been identified in analyzed EU member countries. The most widely used measures for the conservation or recovery of natural habitats and species are the agri-environment and climate payment measures (M10) which exists in all of the analyzed countries. In Italy and Slovakia, payments for Natura 2000 areas in combination with the Water Framework Directive (M12), which is aimed at activities on agricultural land (M12.1) and forest land (M12.2), also exists. In particular, the measure M12.2 (Payments Natura 2000 for forest areas) has been implemented in five regions (Basilicata, Liguria, Marche, Piemonte, Umbria) in Italy. Forest-environmental and climate commitment payment measures (M15) are included in Bulgaria, Slovakia, and certain regions of Italy. In addition, in Slovenia a budgetary forest fund was established in 2016 based on the changes in the organizational structure of the state forest management body and the adoption of the Management of State Forest Act (Article 33). The forest fund intended to cover compensation measures in private forests within Natura 2000 areas, in accordance with the Natura 2000 management program and program of investments in forests, based on the national forest program prepared by the public forestry service in accordance with the forest act.

### 3.3. Social Factors

Stakeholder participation, cooperation, and their ability to influence the policy decision-making process are, as identified in numerous studies (e.g., [8,40–42,52]), the key factors for policy implementation success.

#### 3.3.1. Stakeholders’ Involvement in the Establishment and Management of Protected Areas

Views about PAs and stakeholders’ participation (mainly local population and public) in decision making concerning the establishment and management of PAs have changed considerably over the last decades in all analyzed countries.

As former socialist states with communist experiences, each of the analyzed countries, (with the exception of Italy), has its own peculiarities in the development of participatory decision-making related to nature conservation matters [68]. In these countries, a self-management system was based on decentralized powers of local authorities, but the true decision-making power was never given to the local people in the areas of nature conservation and PAs. After becoming independent in the early 1990s, countries started to implement international agreements related to nature conservation and EU nature conservation policies. Consequently, the concept of participation changed, and PAs started being treated differently. Moreover, in these countries, the legal framework has changed, which requires increased stakeholder involvement in PAs management. Therefore, in these countries, a shift from the ‘traditional paradigm’ in which PAs were established by the central government, to the ‘new paradigm’, where the cooperation among different stakeholders (i.e., local stakeholders, NGOs, private companies, regional, and local authorities) in the governance of PAs has taken place. As a result, local stakeholders are no longer passive recipients of the top-down approach; rather, they are active partners. In Italy, the

participatory process is related to the administrative decentralization established by Decree no. 616 (1977). The legal competences in agriculture, forestry, and land management have been transferred to the regions and autonomous provinces. Regarding nature conservation, Law no. 394 of 1991 states the statute of each public authority delegated to the management of the parks establishes the criteria of public participation in the decision-making process. Generally, the local public administrations—e.g., provinces and municipalities—are involved in the environmental governance, while the involvement of other stakeholder changes from case to case (from information to collaboration).

In the case of Italy, Croatia, Montenegro, and North Macedonia, establishment and management of PAs has been mostly characterized as a top-down approach, although PAs' establishment and management followed participatory procedures in these countries. In Slovakia, Slovenia, Bulgaria, Serbia, and Bosnia and Herzegovina, also a top-down approach in establishment and management of PAs prevails, but in some cases a bottom-up approach has been applied. In countries like Serbia, North Macedonia, Montenegro, and Bosnia and Herzegovina, the participatory approach is a relatively new concept for PAs as most of the PAs were established with very low participation of other stakeholders; especially on the local level. This practice has been changing mostly in the case of management of PAs in these countries, but the value of involving different stakeholders has yet to be fully recognized. Certain changes are evident in these countries as well as Slovakia and Slovenia because the legal framework has changed, which necessitates increased stakeholder involvement in the management of PAs (Table 7).

Local stakeholder involvement is a known important factor in the establishment and management of PAs, and their participation in the decision-making process is ensured in almost every analyzed country (Table 7).

**Table 7.** Overview of the participatory process in the case of protected areas.

Country	Approach	Participatory Process Organized	Local Stakeholders Involved
IT	Top-down	Variable from case to case	Variable from case to case
SK, SI, BG, SRB <sup>1</sup> , BiH	Different from case to case (from top-down to bottom-up)	Variable from case to case	Yes
CRO, MNE, NM	Top-down	Yes	Yes

<sup>1</sup> Local stakeholders were involved in the case of national park; but in the case of other PAs, local stakeholders' involvement depends on activities of PA managers.

### 3.3.2. Stakeholders' Involvement in the Implementation of the Natura 2000 Network

The habitats directive as the legal basis for the Natura 2000 network does not pay attention to the issue of public participation. This leaves countries with considerable leeway as to how they deal with the new possibility of participatory approaches to the implementation of the Natura 2000 network [41,69]. In all analyzed countries, the participatory process has been applied (Table 8); however, performance is still low in terms of engaging key stakeholders and sharing decision-making power with them.

In all analyzed EU countries public actors have ultimate decision-making power. Therefore, the process of implementing the Natura 2000 network was a controversial top-down process in a majority of EU analyzed countries. An exception is Italy, where most of the implementation responsibilities and tasks were, according to the Decree no. 357 of 1997, delegated to the regions and autonomous provinces. Consequently, the approach differed from one region to another.

**Table 8.** Overview of the participatory process in the case of the Natura 2000 network.

Country	Approach	Degrees of Involvement <sup>1</sup>
IT	From top-down to bottom-up	Consultation Information
SK, SI, BG, CRO	Top-down	Co-decision Collaboration Information

<sup>1</sup> A four-level system was adopted by Herwig (2008) [69] which distinguishes between four degrees of involvement: information, consultation, collaboration, co-decision.

The analyzed countries varied in their implementation styles regarding the degree of stakeholders' involvement. For example, in countries like Slovakia, Slovenia, Bulgaria, and Croatia, almost all degrees of involvement, except consultation, were adopted during Natura 2000 network implementation. In Italy, consultation and information were the primary degrees of stakeholder involvement adopted during Natura 2000 network implementation.

#### 4. Discussion

The cross-country analysis of national nature conservation systems and policy implementation reveals several similarities and only a few differences among the analyzed countries. What makes these systems similar is first that they are a part of strong EU nature conservation efforts and second, that the EU *acquis* has provided opportunities and financial (material) benefits to environmental state authorities and non-state actors through funding and capacity building projects supported by the European Commission and other old EU Member States. However, analyzed countries differ in socio-economic and political contexts backgrounds. The differences exist mostly in the institutional set-up and the method with which the countries transposed international obligations (non-EU countries) together with EU legislation (EU members' countries) into their respective national legislation, primarily regarding management plans for PAs.

##### 4.1. Socio-Economic and Political Context as the Main Driver of Nature Conservation Changes

All analyzed countries, except Italy, share a similar history in terms of regime changes. They have transitioned from socialism to democratization with a more recent period of Europeanization. Changes after the political and economic transition in the 1990s shifted public focus to both nature conservation and the use of natural resources in these countries. Moreover, the changes made nature conservation a higher priority within the state, which resulted in the expansion of PAs. The transition to democracy led to new political and legal frameworks while also bringing change to institutional settings. Accession to the EU became an additional layer in the transition process that brought new policy elements, such as the Natura 2000 network.

The legal issues of nature conservation are dealt with in a comprehensive political and legislative process that spans from the international and European level down to the national legal framework. Despite the fact that a legal framework of nature conservation was in place in all analyzed countries even before the negotiation process with the EU started, the gap between national nature conservation systems and the EU's requirement was quite wide. It required the adoption of a whole set of new legal rules. The Environmental Protection or Nature Conservation Act established new environmental principles and the legal basis for nature protection. Based on the new legal framework in each of the analyzed countries, all important nature conservation-related international conventions and agreements have successfully been transposed and several types of PAs have been established in harmony with the IUCN. Therefore, PAs are one of the most important nature and forest conservation measures in all of the analyzed countries. Moreover, countries have successfully transposed the "Habitats" and "Birds" Directives into national legal order that fulfills the requirements under the *acquis* but the implementation process needs to be improved. Also, the comprehensive evaluation of the Directives

(known as the “Fitness Check”) undertaken by the European Commission highlighted that the full potential of Directives can only be accomplished by substantially improving their implementation [70].

After the changes in the political system and following the EU requirements, each of the analyzed countries began to adapt their respective institutional context of nature conservation gradually. According to our study, which is in line with observations of Kluvánková-Oravská et al. (2009) [13] and Falkner et al. (2008) [28], an institutional misfit was inevitable because there was a need to change crucial domestic institutions. The primary approach of eliminating this misfit has been through the incremental-transformation type since some institutions already existed, albeit most were rearranged, merged, and given more resources. In Italy, nature conservation policy has changed from a centralized first phase—where the main actor was the Ministry of Environment—to a second decentralized phase where the main actors are regions and autonomous provinces. In almost all analyzed countries, a well-rounded institutional set-up exists, which include a central authority for the environment, a ministry related to environment or nature conservation/protection, institutes for nature conservation, and management authorities for PAs (public institutions) at the national, regional, or local levels. Additionally, in some countries these institutional set-ups are complemented by a specialized environmental agency and an environmental fund.

In countries like Croatia, Montenegro, North Macedonia, and Bosnia and Herzegovina not all of the institutions are represented, which potentially creates a gap for the successful implementation of nature conservation policy. These findings are in line with observations of other studies [14,60] where it was found that strengthening institutional structures and administrative capacities are necessary to ensure continued and long-term efficiency.

#### *4.2. Economic Factors as the Major Obstacle of Nature Conservation Development*

By establishing a network of PAs, analyzed countries governments become responsible for funding the conservation and maintenance of these areas. Many of these pledges to fund PAs are enforced by national policies. In all analyzed countries, financing of PAs is ensured from the state budget funds and it is expected that these funds will remain at the core of long-term funding. Although the PA management institutions have the possibility to supplement their budget through income generated activities, such revenues represent a fairly small share of their total annual budget in analyzed countries. For that reason, current sources of PA funding in analyzed countries are not sufficient to maintain and expand PA networks; therefore, financial constraints act as a major obstacle for effective nature conservation development in PAs both now and in the future. In order to overcome this, it is important that countries develop and expand the innovative PA financing mechanisms that have emerged in some of the analyzed countries. Noted innovative financing mechanisms with high potential in the analyzed countries include grants or loan schemes, public/private partnership and PES. In other studies (e.g., [71–73]) PES specifically has shown high potential as a mechanism to generate funding for PAs and nature conservation in general and therefore could be applied also in our analyzed countries; especially as those kinds of innovative mechanism already exist. Such mechanisms definitely offer the greatest chance of substantially increasing PA funding in the future. Additionally, they can help stimulate broader improvements in PA management and sustainability. Moreover, in the analyzed countries other opportunities to improve the financial sustainability of PAs also exist; particularly, in some analyzed countries a delegation of PAs management to other actors is possible de jure. In many cases, these actors seek to mobilize different financial resources mainly through commercial and market-based activities. While there are many opportunities in analyzed countries to improve PAs financial sustainability, there are also some challenges that need to be overcome. Notable among these challenges is the common dependence of PAs on international funding assistance and funding from projects. This opportunity is important not only for EU countries, but also countries which are in the process of EU integration as they have opportunities to be involved in the EU project. However, this possibility is often held back by the limited capacity of the PA staff and the possibility of the state institutions to ensure co-financing of projects. The same limitations were reported in other studies (see

e.g., [66,74]). Based on that it can be said that diversification of funding is a solution to ensuring the long-term financial sustainability of PAs.

The responsibility of implementing and financing the Natura 2000 lays with the EU member states. Therefore, national public funding is the most frequently mentioned source of financing Natura 2000 objectives and measures in all analyzed EU member countries as well as the scientific literature [9,23,30,32,75]. Additionally, the EU offers funding opportunities for Natura 2000 through a so-called 'integrated approach'. Currently, the financing of Natura 2000 is delivered through several EU instruments in all analyzed EU countries. The availability of funding to cover the costs of Natura 2000 implementation is frequently insufficient in analyzed countries. This lack of funding is viewed as a major obstacle for the effective implementation of Natura 2000 not only in analyzed countries but also in other EU countries (see e.g., [20,23,24,30]). Since the use of EU funds seems to be hardly guided by the aim of compensating for the disadvantages of the Natura 2000 designation for forest owners, their effectiveness and efficiency is questionable. A better understanding of the reasons behind this use of EU funds requires an in-depth analysis.

In addition, in some analyzed countries additional innovative funding instruments have been developed. For example, in Slovakia and Croatia National environmental protection funds help finance management costs, and public/private partnerships in Slovenia and Italy offset the price of maintaining PAs. These innovative financing instruments are also suggested by the European Commission, although such instruments are covering a rather small portion of the total financing requirements. This claim for innovative financing mechanisms is also supported by the scientific literature [16,75]. In analyzed EU candidate and potential candidate countries, with the EU Accession, huge financial resources have become available for different nature conservation-related projects. The incoming EU funds started to play an important role in financing nature conservation activities. In addition, foreign governments, bilateral aid agencies, and NGOs were noted as funding sources, but they play minor roles.

#### *4.3. Stakeholders' Engagement and Participation—Main Failure of Effective Nature Conservation Implementation*

On the European level, there are no legally binding obligations to organize a participatory process in establishing either PAs or Natura 2000 network. This in turn leaves the countries unlimited freedom to introduce elements of participation on their own. In analyzed countries, the participatory process was dependent on the national political context and the historical development of participatory approaches in public policy, which was also reported in other studies [15,37].

The analysis of participatory processes shows that they are in an initial phase in the case of PAs. To a certain extent it can be said that, a shift from the 'traditional paradigm' in which PAs were established by the central government, to the 'new paradigm', where the cooperation among different actors (i.e., local stakeholders, NGOs, private companies, regional, and local authorities) in the governance of PAs has happened in analyzed countries. This shows a positive trend from a command-and-control approach in establishing the PAs towards a participatory approach, not only in analyzed countries, but also in other EU countries [14,76–78]. This paradigm shift is the result of a growing social demand for a direct involvement of citizens in environmental governance. Concerning the management planning of PAs, a wide variety of actors from different levels are most of the times, at least de jure, involved in the process. However, not all of the requisite conditions for successful participation were created (i.e., equally engagement of stakeholders, communication with some of key stakeholders) in analyzed countries, as quite often still a top-down approach was applied in final decision-making. Other studies [51,79–81] also show the same conditions for successful participation (i.e., stakeholders' engagement, planning, and implementing the communication) were not achieved. Therefore, both managers of PAs and actors need to develop their capacities for successful stakeholder participation.

The situation is slightly better in case of Natura 2000 network implementation. In the implementation of the Natura 2000 network, analyzed EU Member countries differ in their

implementation style with regard to stakeholder involvement through both the level of involvement and the approach that was adopted. However, the overall impression is that, the level of participation is strictly linked to the stakeholders' power to influence the final decision in the participatory process. According to the results, the ultimate decision-making power was held by public actors (ministries related to nature conservation) and they were the ones deciding who may participate in what form by aiming to fulfil legal requirements rather than empowering the stakeholders. In all analyzed countries, the initial process was a controversial top-down conservation science-based approach. Only later and mainly in response to the need to manage the substantial conflicts, the implementation approach shift to a more socially inclusive and participatory bottom-up approach came about [8]. Sotirov et al. (2015) [14] called such effect "symbolic transformation", where informal institution and practical behavior did not change in line with formal domestic policy and institution. Many studies have shown similar problems regarding the influence and the power of stakeholders that emerged as a consequence of the adopted top-down approach [13,29,37,38,40,41].

The degree of stakeholder participation varied among analyzed countries and even from one Natura 2000 site to another (Italy). The results point out that public actors have been involved through the co-decision during the participatory process with the supervision of the ministry responsible for nature conservation. Non-state actors have been involved through consultation or collaboration. The general public and local stakeholders have been involved mainly through information. Other transition countries (the Czech Republic, Poland, Romania, and Hungary) have shown similar problems with regards to stakeholders' participation [13,27,38,39,42].

#### 4.4. Methodological Viewpoints

When interpreting the results of this study, it should be noted that the analytical framework for evaluation of operational environment factors related to nature conservation policy implementation included a relatively small number of experts mainly from state-level institutions and included only a few local experts. The results may thus not be considered as statistically representative for the case countries. However, the number of experts (4–10 experts in each country) was big enough to show that the developed framework is functional and provides aspired results. In comparison to other studies—e.g., [82–85]—the total number of experts was satisfactory. In addition, the background and expertise profiles of experts varied between countries, which may have affected the results. However, the experts were selected based on their experiences in the field of nature conservation and consulted to objectively evaluate the operational environment factors. Moreover, the present study does not reveal the opinion of the local stakeholders or the general public. A strength point of the study concerns the large number of different countries involved in the analysis ( $n = 9$ ), addressing different political and socio-economic context. Besides, the analyzed countries differentiate regarding EU membership status. These differences among countries allowed a wider comparison of the nature conservation policy at national level in a context of increasing Europeanization.

The developed analytical framework for evaluation of operational environment factors influencing nature conservation policy implementation showed to be functional as the methodological approach followed rather similar procedures in different countries. The use of the common framework and factors enabled comparisons between countries. Therefore, presented framework may be used and replicated in other countries. In the future, the developed framework needs to be tested in different socio-economic and political contexts by including additional case studies countries to allow for a more comprehensive applicability. The weakest point of the developed framework is that the framework allows including only the most important general factors and sub-factors in the analysis (based on a literature review, but including expert opinion), but did not allow countries to modify them; therefore, inclusion of country-specific sub-factors was limited. Diverging factors such as environmental factors, ownership structures and resource rights, resource management, as well as perceptions, attitudes and values of various stakeholders can be additional factors that potentially might influence nature

conservation policy implementation. Therefore, these factors might be included in the future in an analytical framework, for a broader applicability and robustness of the proposed framework.

## 5. Conclusions

This study developed and tested a new analytical framework for the evaluation of four separate operational environmental factors (legal, policy, economic, and social) that influence the implementation of nature conservation policy in several EU and non-EU countries.

Our analysis has shown that the legal framework is well established in all countries taking into account international, national, sub-regional, and regional obligations in nature conservation. Therefore, in all analyzed countries, legislative framework related to nature conservation is very complex as numerous new strategies and laws related to nature conservation have been adopted and integrated into different sectors. In all analyzed countries, a well-rounded institutional framework exists in analyzed countries—but still not all of the required institutions—are represented, which potentially creates a gap for the successful implementation of nature conservation policy.

Economic factors were seen as the major obstacle for nature conservation development. In all analyzed countries, diversification of funding of PAs exists and may be seen as a prerequisite for ensuring the long-term financial sustainability of PAs, even if financing of PAs is nowadays ensured mainly from state budget. This is evidence that there are many opportunities in the analyzed countries to improve PAs' financial sustainability (from state budget funding to market-based funding), but there are also some challenges that need to be overcome. Establishment of PAs is often dependent on international funding assistance and funding from projects, and PAs staff has a limited capacity for implementing these projects. With regard to Natura 2000, even though the EU offers funding opportunities for Natura 2000 through a so-called 'integrated approach', the availability of funding to cover the costs of Natura 2000 implementation and further management is frequently insufficient in analyzed countries. This lack of funding is viewed as a major obstacle for the effective implementation of the Natura 2000. Thus, in some analyzed countries, additional innovative funding instruments have been developed as for example national environmental protection funds and public/private partnership.

Stakeholders' engagement and participation has shown as the main failure of effective nature conservation implementation since not all the requisite conditions for successful participation were created in analyzed countries. Commonly, a top-down approach was applied in final decision-making and not all stakeholder groups were engaged. It can be concluded that there is a possibility for improvement in terms of continuity and transparency of participatory processes, especially by involving the general public and non-state actors from the beginning and throughout the whole policy decision-making process.

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## Appendix A

Table A1. National legal framework relevant for nature conservation.

Regulation Area	National Legislation	Country									
		IT	SK	SI	BG	CRO	SRB	MNE	NM	BiH RS <sup>2</sup>	BiH FBiH
Sustainable development	National sustainable development strategy	X	X	X	-	X	X	X	X	-	-
Environmental protection	Environmental protection strategy	-	X	-	-	X	-	-	-	X	X
	Environmental and climate change strategy	-	-	-	X	-	-	-	X	-	-
	National environmental protection program	-	-	X	-	-	X	-	-	X	X
	Environmental protection law	X	X	X	X	X	X	X	X	X	X
Nature protection	National strategy for nature protection	-	-	-	X	X	-	-	X	X	-
	Nature protection/conservation law	X	X	X	-	X	X	X	X	X	X
Biodiversity conservation	Biodiversity conservation strategy	X	X	X	X	-	X	X	X	X	X
	Biodiversity law/biological diversity law	-	-	-	X	-	X	X	-	-	-
Protected areas	Protected areas act or decree	X	-	X	X	X	X	X	X	-	X
	Law on national parks	X	-	X	X	-	X	X	-	X	X
Forestry	Forestry development strategy	-	X	-	X	X	X	X	X	X	-
	National forest program	X	-	X	X	-	-	X	-	-	X
	Forest law	X	X	X	X	X	X	X	X	X	-
Water resources	Law on water	X	X	X	X	X	X	X	X	X	X
Game management	Law on game and hunting	X	X	X	X	X	X	X	X	X	X

<sup>1 2</sup> The complex BiH political set-up has led to an absence of the nature conservation legislation at the national level. Hence, nature conservation is regulated through the laws adopted and implemented at the entity level (Republic of Srpska—BiH RS, the Federation of BiH —FBiH and Brčko District as separate district).

**Table A2.** Main institutions responsible for nature conservation.

Institutions	Country								
	IT	SK	SI	BG	CRO	SRB	MNE	NM	BiH
Ministry	X	X	X	X	X	X	X	X	X
Institutes for nature conservation	X	X	X	X	-	X	-	-	X
Environmental funds	-	X	X	X	X	X	-	-	X
Environmental agency	X	X	X	X	X	X	X	-	-
Public institution (protected area authority)	X	X	X	X	X	X	X	X	X

**Table A3.** Overview of financing mechanisms according to the source of funds in protected areas.

Source of Funds	Country								
	IT	SK	SI	BG	CRO	SRB	MNE	NM	BiH
<b>External sources</b>									
State budget	X	X	X	X	X	X	X	X	X
Province/regional budget	X	-	-	-	X	X	-	-	X
Municipal budget	-	-	X	-	X	X	X	X	X
Environmental protection funds	-	X	-	X	X	X	-	-	X
International assistance/funding (agencies, foreign governments)	-	X	-	-	-	X	X	X	X
Private voluntary donations/private foundations	-	X	-	-	-	-	-	X	X
Public/private partnership	-	-	X	-	-	-	-	-	-
<b>Market-based fees for goods and services</b>									
Tourism charges (entrance fees, parking)	X	X <sup>1</sup>	X	-	X	X	-	X	X
Management of land and resources inside PAs	X	X	X	X	-	X	X	X	X
PES	X	-	-	-	X	-	X	X	-
Revenues generated in performing activities (providing lodging, food and beverage, guiding tourists)	X	X	X	-	X	X	-	X	X
Concession of management or resource use rights	-	-	-	X	X	X	-	-	-
Funds provided for implementation of projects	X	X	X	X	X	X	-	X	X

<sup>1</sup> Fee is collected only for parking. According to the legislation entrance fees into national park and PA cannot be charged.

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