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# NATURE CONSERVATION IN BOSNIA AND HERCEGOVINA – PROBLEMS AND PERSPECTIVE

**Abstract:** The paper deals with the current situation within the sector of nature conservation in Bosnia and Hercegovina. Historical review is given, as well as review of legislative and institutional frameworks. Current challenges regarding the approaching of the B&H towards the international standards in area of nature protection were discussed. Causes for such a poor situation in sector were indicated and possible ways for overcoming the present situation were given.

**Keywords:** nature protection, Bosnia and Hercegovina, protected areas.

# ЗАШТИТА ПРИРОДЕ У БОСНИ И ХЕРЦЕГОВИНИ – ПРОБЛЕМИ И ПЕРСПЕКТИВА

**Апстракт:** Рад се бави тренутном ситуацијом у сектору заштите природе у Босни и Херцеговини. Дат је историјски преглед заштите природе у БиХ, као и преглед и оцјена тренутног законодавног и институционалног оквира. Дискутовано је о тренутним изазовима са којима се БиХ суочава у процесу приближавања међународним стандардима у области заштите природе. Указано је на разлоге за лоше стање у сектору и дате су смјернице за превазилажење ове ситуације.

**Кључне ријечи:** заштита природе, Босна и Херцеговина, заштићена подручја.

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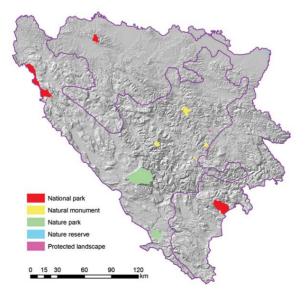
#### 1. INTRODUCTION

Bosnia and Hercegovina is the land of the extreme richness of living world which exists there as the result of its ecological heterogeneity, its geomorphological and hydrological diversity, specific geological past and its ecoclimate diversity. Flora, fauna and fungia of Bosnia and Herzegovina are considered to be among the most diverse in Europe, being especially important in terms of global biodiversity due to its high level of endemism and relictness.

Fragmentation and destruction of habitats, with overexploitation of natural resources, led to a dramatic increase in environmental degradation, reduction in natural habitat areas and number of species but also of the services provided by the same natural resources throughout the world. B&H was not left out of this process. As a matter of fact, events which took place in B&H for last 20 years just added to the difficulty of the situation.

Ecological movement that immerged in 1960s as an attempt to stop the loss of biodiversity advocated the need of protection of valuable and rare natural phenomena. Actually, activities on nature protection date back to 1872, when Yellowstone, USA, was designated as the first national park in the world. According to IUCN and UNEP-WCMC (2011), there is 12.7 % of the world's terrestrial area protected at present.

Unfortunately, B&H doesn't follow this global trend, as only 1.8 % of its territory protected puts the country at the very end of the list of European countries and wider (**Figure 1**).



**Figure 1**: Map of protected areas in B&H

#### 2. HISTORICAL OVERVIEW

The first actions of nature protection in Bosnia and Hercegovina can be traced back in the second half of XIX century when certain game species were protected. The first mention of protected area in B&H can be found in 1913, when Klekovača Mt. was mentioned as possible fourth National park of the Austro-Hungarian Empire (Guttenberg, 1913). Once again in 1935 there was a proposal for National park designation in virgin forests of beech, fir and spruce in Klekovača Mt area (Tregubov, 1941). It was never accomplished.

The first protected area in B&H was designated in 1954. It was special nature reserve "Virgin forest Perućica". First National Park "Sutjeska" was designated in 1962 having Perućica as its nucleus. The second National Park "Kozara" was designated in 1967. On the basis of the Law on nature protection from 1965 (Official gazette of SR BiH 4/65), numerous valuable objects (253) were designated as protected. However this protection was not active and it was mainly based on simple administrative decisions, that some objects are designated as protected but without spatial reference to the object, any goals or measures to achieve the goals of protection. Physical plan of the B&H for the period of 1981 to 2000 has foreseen 15 % of territory to be protected. But at the beginning of the war only 0.55 % of B&H was protected (NEAP Direktorat, 2003). After the war only two National parks remained formally and practically protected. After the war one National park (Una), two Nature reserves (Gromiželj and Lisina), two Nature parks (Blidinje and Hutovo blato), six Natural monuments (pećina Ljubačevo, pećina Orlovača, Vrelo Bosne, Skakavac, Tajan and Prohoško jezero) and one Protected landscape (Bijambare) were designated (Figure 1).

## 3. LEGISLATIVE AND INSTITUTIONAL FRAMEWORK

Although BiH possesses remarkable natural assets, many factors including war and complicated post-war economical and political situation resulted in unenviable situation in sector of nature conservation. National policies and plans regarding nature protection are divided between two entities and cantonal governments. According to Bosnia and Hercegovina Progress report (2010), B&H's administrative capacity in the environment sector remains overall weak. The Federation's environment fund was established, and its director and management board were nominated. Republika Srpska's environment fund is fully operational. However, sources for the Entity funds are limited to vehicle registration and water fees. A State-level environmental law providing for harmonised environmental protection and an adequate legal and institutional framework were not adopted. A State-level Environmental Protection Agency, which is a European Partnership priority, needs to

be established. Environmental institutions do not have the capacity to implement and enforce legislation at Entity, Canton and local levels. Integration of environmental concerns in other sectors remains weak. It can be stated that cooperation inside this sector is poor and that the sector has low capacities for endorsement of international legislative and standards in the management of protected areas.

The legal framework for the protection of biological and landscape's diversity at national level is made of the Constitution of B&H, the Constitution of FB&H, the Constitution of RS, Statut of Brčko District, and sets of environmental laws at level of entities and Brčko District.

The main legal acts in this area are entity laws on nature protection. They were adopted in 2003, while one in the Republic of Srpska was amended in 2008. The main changes consider the categorization of protected areas according the IUCN categories. Federation of B&H is still using the old four categories classification. Secondary legislation i.e. bylaws, regulations, rulebooks in both entities are still waiting to be adopted, or if they were adopted they are not implemented in practice.

Strategy for the nature protection in Republic of Srpska was endorsed in 2011.

#### 4. GLOBAL STANDARDS IN NATURE PROTECTION AND B&H

As a signatory of The Convention on Biological Diversity (CBD), B&H is obliged to enact strategies, plans and programs which would relate to CBD principles, prepare reports about current state of biodiversity and to integrate those principles into the relevant multisectoral plans, strategies and programs. The preparation of National strategy for biodiversity conservation and national report is underway. The focal point for the biodiversity in B&H is Federal Ministry of Ecology and Tourism.

According to the provisions of Ramsar convention, three Ramsar sites were designated by now: Bardača (2007), Livanjsko polje (2009) and Hutovo blato (2001) (The List of Wetlands of International importance, 2011). Those sites lack the practical protection, as Ramsar convention is not obligatory. Two of those sites (Hutovo blato and Livanjsko polje) suffered massive fires this summer.

Following the provisions of the Bern convention B&H pursued the project called "Establishment of Emerald Network in Bosnia and Herzegovina". This project identified 28 sites which fulfilled criteria to be designated as ASCIs (Areas of Special Community Importance) in B&H with coverage of 204.587 ha which made 4.04 % of country's total (Smaragd network in B&H). This reference list of sites was evaluated as "insufficient major" at the last Bio-geographical seminar for Southeastern Europe held by European Environmental Agency (EIONET). Bern convention also doesn't have obligatory character, so every action regarding the

## Emerald network is voluntary.

According to Strategy for nature protection of Republic of Srpska (2008), nature conservation policy in RS is moving towards the two key strategic goals: adaptation of the sustainable development concept and EU accession.

In 2009, the Public Forest Enterprise "Forests of the Republic of Srpska" got FSC certified for forest management. By definition, "FSC certification of forest management means that forest and forest land are managed in compliance with strict environmental, social and economic standards." Through this certification process Public Enterprise "Sume Republike Srpske" was obliged to designate Forests of High Conservation Value following six general "high protective values". Forest areas protected by HCVF criteria encompass about 5% of total forested area in RS. These areas should be included into amendments of management plans for certain Forestry Management Unit and should be excluded from regular utilization.

FSC certification was not conducted in Federation of B&H.

B&H doesn't possess National ecological network, National habitat classification or Red lists for any of the groups of species according to the international criteria of IUCN (IUCN 2001, 2003). Assessments of the conservation status of plant species was done either provisionally – IUCN criteria were not used per se (Šilić, 1996) or it was done following the IUCN criteria but locally (Stupar et al., 2010).

#### 5. CURRENT SITUATION

Current situation regarding nature protection in B&H is not too optimistic. Although Physical plan for Republic of Srpska (1996 to 2015) stated that 15 to 20 % of Entity's area should be protected by designation of the new 11 National parks and 11 Natural parks (Institute for Urbanism of Republic of Srpska, 2008; Kadić i Marković, 2006), only few protected areas of small scale were designated. Situation is pretty much the same in the Federation of B&H (Federal Ministry for Spatial planning, 2009). There are several proposals and evaluation studies waiting on the shelves of relevant ministries, but nothing is happening. Not only that nothing is happening regarding the new protected areas, but the old ones are deteriorating as well.

In this rather unenviable situation B&H is trying to move towards the international standards in nature conservation. On that journey, several reasons are responsible for holding it back:

- Lack of capacities (experts, institutions, administrative capacities etc.)
- Lack of National habitats classification. This is very big problem since it was very difficult to recognize whether some habitat type from the Annex I is present in B&H or not.

- There is no national ecological network established.
- B&H does not possess databases and modern inventories of flora, fauna, habitat types and ecosystems.
- Very complex institutional structure and complex division of competences between entities and sectors in the field of environment protection.
- Public awareness on environmental issues is at very low level. There is a lack of environmental issues treatment in education process, media, politics etc.
- Historical factor and traditionally bad attitude to environmental issues are big negative factor.
- Very high influence of different socio-economic factors on the state environmental policies (e.g. energetics, forestry, tourism), in front of low priority level of environmental protection.
- The present environmental legislation in B&H is not harmonized between different sectors.
- The present environmental legislation is not fully harmonized with EU regulations and standards
- There is a lack of legal regulations and guidance documents that would support practical implementation of the legal provisions.
- At present there is no environmental institution on the state level so there is a lack of formal coordination between the entities.
- There are no legal provisions regarding the environmental issues at the state level (just entities).
- Public awareness and participation in decision-making is at very low level.

## 6. CONCLUSION

Bosnia and Hercegovina is a country with a very high level of biological and landscape diversity thanks to wide range of ecological, historical, economical and social factors. However those natural assets are facing strong anthropogenous pressures leading to inevitable deterioration of natural heritage. This is highly sustained by complex situation in legal and institutional framework of the sector, not to mention poor overall economic situation the country is in.

In order to overcome those problems some important measures need to be conducted at the national as well as at the local level. First of all there is a need for straightening

of capacities and raising the public awareness. Along with this, job on the wild life inventory and habitat classification is of the highest priority. Only with this job done and supported by sound and applicable environmental legislation can we expect to have the good basis for meeting the international standards in nature conservation.

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#### Резиме

## Владимир Ступар

# ЗАШТИТА ПРИРОДЕ У БОСНИ И ХЕРЦЕГОВИНИ – ПРОБЛЕМИ И ПЕРСПЕКТИВА

У раду је приказана тренутна проблематика у сектору заштите природе у Босни и Херцеговини. Дат је историјски преглед заштите природе у БиХ, као и преглед и оцјена тренутног законодавног и институционалног оквира. Чињеница да је у БиХ заштићено само 1,8% територије, говори колико је далеко постизање међународних стандарда. Дискутовани су тренутни изазови са којима се БиХ суочава у процесу приближавања међународним стандардима у области заштите природе. Указано је на разлоге за лоше стање у сектору, од којих су најважнији: слаби капацитети (експертски, институционални, административни итд.), комплексна институционална структура, јавна свијест на ниском нивоу, неповољан историјско-културолошки фактор, велики утицај различитих социо-економских фактора на државну политику у заштити природе, слаба интерсекторска хармонизација закона у области заштите животне средине итд.

У циљу превазилажења ових проблема потребно је провести мјере како на националном, тако и на локалном нивоу. Најприје је потребно радити на јачању капацитета и подизању свијести јавности. Упоредо са овим, потребно је радити на инвенторизацији живог свијета, као и на класификацији станишта. Тек када овај посао буде урађен, и при том потпомогнут бољим и примјенљивијим законодавством, можемо рећи да имамо добру основу за постизање међународних стандарда у области заштите природе.