



## NATURE CONSERVATION IN KOSOVO THROUGH LEGISLATIVE AND POLICY MEASURES IN THE PERIOD 2003-2013

Zeqir Veselaj<sup>1</sup> & Behxhet Mustafa<sup>2</sup>

<sup>1</sup>University of Prishtina “Hasan Prishtina” Str. Mother Theresa n.n. 10000, Prishtina, Republic of Kosovo.

<sup>2</sup>University of Prishtina “Hasan Prishtina” Str. Mother Theresa n.n. 10000, Prishtina, Republic of Kosovo.

### Abstract

This paper presents a survey of main steps in the legislative developments in nature conservation in the last decade in Kosovo. Two very important laws were approved in 2012 about two national parks: the Bjeshket e Nemuna and Sharr National park. With these developments, the protected area network that in 2003 was about 4.36 % of the territory has been increased to 11.02%, reaching a satisfactory degree of protected areas and increasing number of protected areas in a total of 98.

While in terms of conservation of protected areas a significant progress has been realized, stagnation is seen in the conservation of rare and threatened species of flora and fauna. Although envisaged by legislation, the Red List of Kosovo of rare and threatened species has not been adopted yet. Also, there is a small progress in the implementation of practical measures contained in this legislation.

**Key words:** biodiversity, conservation, protected areas, environment, sustainability.

### 1. Introduction

Kosovo within its small territory is characterized by high natural value. Conservation of the natural areas in Kosovo through network of protected areas was initially regulated in the late 1950s with the designation of several nature reserves such are: Kozhnjeri (1955), Rusenica (1955), Gubavci (1959) etc. (Veselaj et al. 2003). More developments in this respect were made in the second half of 1980s, respectively, in 1986, when the Law on the national park Sharr Mountains was adopted, and later in 1988 with the approval of the Law for the preservation of natural and manmade environment in Kosovo. However, major developments have occurred in the postwar period, and particularly after 2003 when the first institutions of self-government were established and Law on environmental protection and other laws were approved (Mustafa et al. 2009).

### 2. Objectives

This study aimed to document progress of qualitative and quantitative extension of protected areas network in the Republic of Kosovo in the decade 2003-2013.

### 3. Methods

During this research, a field research method through the network of protected areas in their zoning has been applied. Also the authors analyzed laws and sub-legal acts approved in the last decade in the field of nature conservation and biodiversity.

### 4. Results

First provisions about the nature conservation are set in the first in the Law on Environmental Protection (Law Nr. 09/2003), which dedicates a special chapter to the nature protection issues (Chapter IV) and special nature conservation areas are treated as separate (article 33) and protection of biological diversity (Article 34). However, this law opened the way for regulation of "nature conservation, sustainable use of natural values, classification of areas with special international categories, laying procedures of conservation, protection of rare and endangered species of flora and fauna, protection regimes according to the categories, protected areas management, public participation in decision-making on the nature and professional supervision of areas with specific natural values" by a special law. Also, in this law, the Institute for Nature Protection within the Kosovo Environmental Protection Agency is designated as a key nature conservation professional institution in Kosovo.

The first Law of nature protection (Law Nr. 02/L-18) was approved in 2005 aiming to regulate "the system of the nature conservation in the territory of Kosovo" and "special protection of the natural values determined by this law that are of interest for Kosovo". This law has 13 chapters and 47 articles. Chapter 3 sets out the main principles of environmental protection such as: principle of sustainability, principle of cooperation, user pays principle, principle of integration etc. Chapter 4 of the law provides documentation for nature conservation: Strategy and Action Plan for the Nature Conservation to be approved by the Assembly of Kosovo (Article 7) and programs of nature conservation adopted by municipalities (Article 8).

In Chapter 5 it is determined that administrative duties in the nature conservation are carried out by Ministry of Environment and Spatial Planning and municipalities, while the professional work in this sector is a responsibility of the Kosovo Institute of Nature Protection. General measures for the conservation of nature are drawn in chapter 6 and will be

achieved through landscape protection (Article 11) and conservation of flora and fauna species (Article 12). Chapter 7 regulates measures for the protection of nature-protected areas respectively determining the nature protection categories primarily based on the IUCN categories (sections 21-28). And Chapter 8 provides procedures for the designation of protected areas and their management (Articles 29 - 39).

In 2010, the Assembly of Kosovo approved the new Law on Nature Protection (Nr. 03/L-233), which was more detailed than the first one. This law has 15 chapters and 177 articles. Guiding principles of the law remain more or less those of the 2005 law, as well as regulatory documents and institutions responsible for nature conservation in Kosovo. Chapter 2 defines the nature conservation values protection under this scheme:

*Tab. 1 Categories of protected areas.*

Categories of PA-s (Law 2005)	Categories of PA-s (Law 2010)
1. Strict nature reserve; 2. National Park; 3. Natural monument; 4. Management areas of habitat or species; 5. Protected landscapes; 6. The protected area of natural resources.	1. Strict nature reserve; 2. National park; 3. Particular area; 4. Natural park; 5. Natural monument; 6. Monument of nature of particular importance 7. Protected landscape; 8. monument of park architecture

From the Table above we can see the difference from the 2005 law, where the protected areas were strictly complied with the IUCN categories, while the classification of protected areas in the 2010 Law has categories outside the IUCN ones such as: natural parks, the particular areas, the monument of park architecture. These values according to their degree of importance are classified into: international, national and local values. This classification should be done based on an administrative directive which has not been approved yet. Chapter 3 provides the procedures and institutions responsible for the designation of protected nature in Kosovo under the following scheme:

Institution	Assembly:	Government:	Municipality:
Category	1. National park	1. Strict nature reserve; 2. Particular areas; 3. Natural park; 4. Monument of nature of particular importance.	1. Natural monument, 2. Protected landscape; 3. Monument of park architecture,

According to the law, the relevant directorates govern with the natural protected areas. Directorates for management of national parks, natural parks, nature monuments of special importance are established by the Ministry with a special decision, while for all other categories of protected areas these directorates are established by municipalities (Art. 77). Conditions for issuing construction permits, implementation of works and interventions in the territory of national parks, special protected areas, nature parks, and monuments of nature are issued only if the construction of buildings is within the spatial plan of the protected area and if the EIA procedures are implemented. Municipalities are responsible for issuing construction location permits for construction and interventions in the territory of protected landscape and architecture Monument Parks.

A number of sub-legal acts (administrative instructions and decisions) have derived from the Law on nature protection to ensure proper implementation of it. From 21 administrative instructions to be issued by the Law on nature protection, up to now only 13 of them are issued (more than half of them). In the European Commission progress reports, prepared yearly for Kosovo since 2008, a limited progress in the field of nature protection is reported, especially in relation to its compliance with the Birds and Habitat Directives (Veselaj et al. 2006). In December 2012, after more than four decades of intensive work, the National Park law "Bjeshket e Nemuna" (Law Nr. 04/L-086) was approved with the justification "territory with high natural values and natural rarities, with a large number of important forest ecosystems and other conserved ecosystems, with high number of endemic and relict species, rich with geomorphological, hydrological and landscape features, that have importance scientific, education, cultural-historical and tourist-recreational activities that will contribute to economic development following ecological criteria" (Veselaj, Mustafa and Krasniqi 2013).

Declared national park area is about 62.488 hectares and lies on the western and north-western territory of Kosovo respectively in the territory of five municipalities: Gjakova, Junik, Decan, Peja and Istog (Veselaj 201). Regarding biodiversity values "Bjeshket e Nemuna" is characterized by high floristic values: there are 1,611 taxa (species and sub-species), 435 genera, 105 families, 50 orders and 6 classes (Veselaj, Mustafa, Krasniqi 2013). According to the researches, in the highest peaks of "Bjeshket e Nemuna" such as Gjeravica, Lumbardhi Mountains, Guri i Kuq, Koprivnik, Liqenat are found 255 Balkan endemic species and subspecies. From the plant species of "Bjeshket e Nemuna", 19 taxa's are entered in the IUCN Red List of Threatened Plants of 1997.

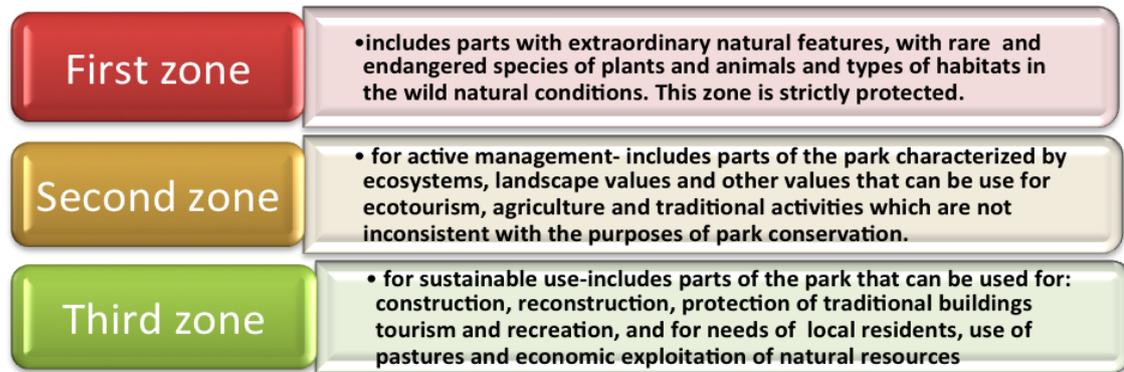


Fig 1. Conservation zones of the national parks in Kosovo according to law.

Fauna of Bjeshket e Nemuna contains: 8 species of fish (Pisces), 13 species of amphibian (Amphibia), 10 species of reptiles (Reptiles), 148 species of birds (Aves), 37 species of mammals (Mammalia) and 129 butterfly species from the order Lepidoptera make the region as one of the richest in Europe, and was identified as MBP (Primary butterfly Area). According to the latest data, it is expected to have over 200 species of birds, and because of this high diversity and migratory routes passing through the area, Bjeshket e Nemuna are identified as IBA (Important Bird Areas IBA) regions (Mustafa, 2009).

A Spatial Plan is currently being developed for the Bjeshket e Nemuna National Park respectively zoning of the conservation zones 1, 2 and 3.

The 1986 Law on National Park "Sharr Mountain" in December 2012 was replaced by a new law on national park "Sharri" (Law Nr. 04/L-087), which extends protected areas from 39,000 ha as it was in the previous law, to 53 469 ha with description "territory with natural values and rarities, preserved forests, the high number of important forest and other ecosystems, with high number of endemic and relics species, with rich geomorphological, hydrological features, and with scientific, cultural, historic, landscapes, sports, tourism and recreation and activities that contribute to economic development with ecological criteria". The territory Sharri National Park lies in southern part Kosovo on the territory of five municipalities: Kacanik, Shtërpce, Suhareka, Prizren and Dragash (Mustafa et al. 2012).

Sharri National Park is characterized by high biodiversity values: about 1500 species of vascular flora. Marking elements of the Sharri National park are: 77 plant species with international significance, 26 species included in the European Red List and 32 species included in the IUCN Plant Red List (Veselaj et. al 2012). Also, the area is rich in vegetation, with 314 vegetation units: 180 associations, 16 sub associations, 59 alliances, 7 sub alliances, 32 orders and 20 classes, have been registered till nowadays (Amidzic & Ostojic 2006). Fauna of the park consists of: 147 species of butterflies, 7 species of fish (Pisces), 9 species of amphibians (Amphibia), 10 species of reptiles (Reptilia), 154 species of birds (Aves) and 30 species of mammals (Mammalia).

Due to these values, both national parks have been identified as Important Plant Area (IPA) and regional Important Bird Area (IBA's) as well as primary butterflies area-PBA (Mustafa et. al 2009).

With a government's decision, in 2012, one of the most beautiful and attractive natural areas of Kosovo changes the category of protection for the purpose of advancing its conservation and management. For the Natural Regional Park "Mirusha Waterfalls" as declared in 1983, the Government adopted the decision to declare as Monument of nature of particular importance with the justification "spatial entirely unique and representative values with 16 lakes and 12 waterfalls, with specific geological, geomorphological, speleological features, with important forest ecosystems, the endemic and relict species and scientific values, landscape, tourism, culture and recreation ". Protected area is 598 hectares, and lies in the territory of three municipalities: Kline, Malisheve and Rahovec. With this development, this monument goes to be managed by central government and is expected very soon to establish a management body for the area.

With these developments, a significant increase in the number of protected areas in Kosovo occurred. The overall protected area at a country level is provided in Table 2.

Tab. 2. Progres of protected areas network 2003-2013.

Type	IUCN category	Nr. of PAs 2003	Nr. of PAs 2013	Area /ha 2003	Area/ha 2013
Nature reserves	I	11	11	847	847
National parks	II	1	2	39,000	115,957
Natural monuments	III	38	83	4,867	1,507
Protected landscapes	V	2	2	1683	1,683
Total		52	98	46,397	119,994

Tab. 2 shows the increase of protected area surface of Kosovo from 4.26 % (2003) to 11.02% of country's territory in 2013.

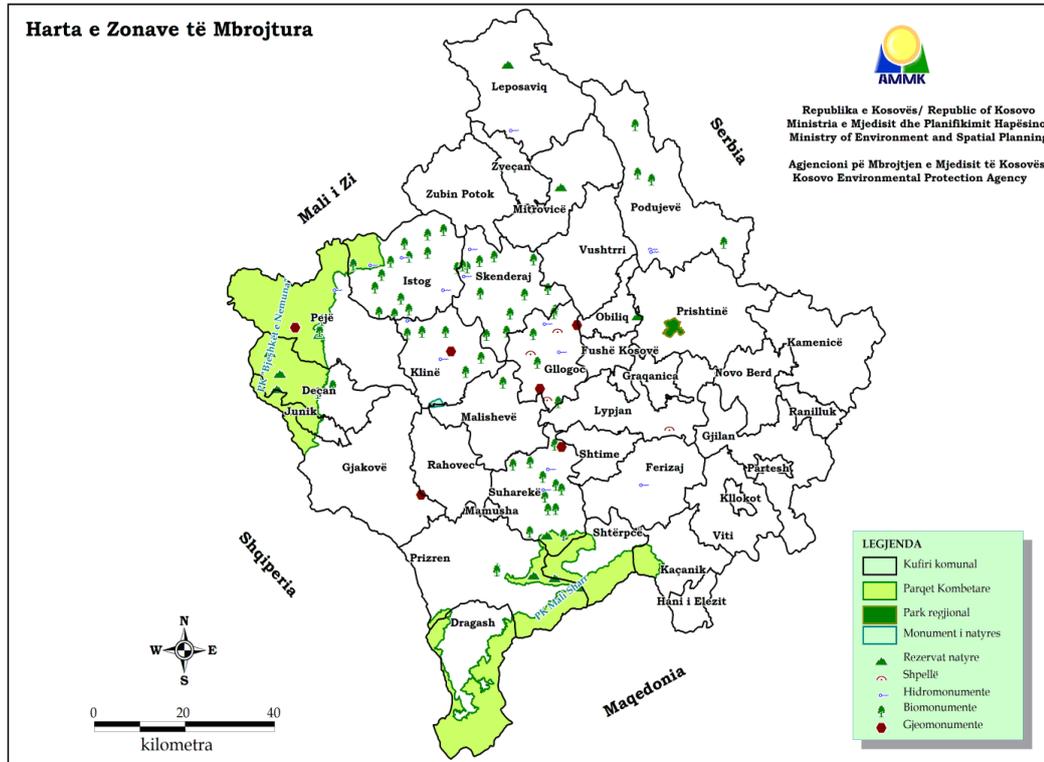
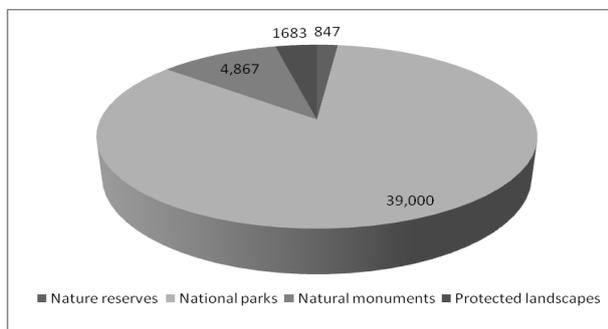


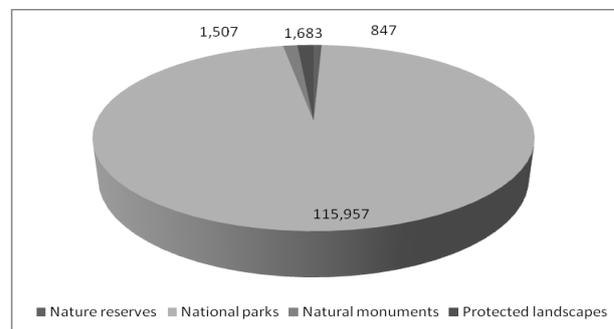
Fig.2 Map of the protected areas network in Kosovo (Source: Kosovo Environmental Protection Agency).

Although the number and the surface of protected areas has been increased by legislative developments (Graf. 1, 2, 3 and 4), progress in establishment of management bodies for the main protected areas is moving very slowly, and this is reflected in their poor management and protection. National parks are run by the respective Directorates, under the competencies of the Ministry of Environment and Spatial Planning. Directory of Sharri national park has a more consolidated structure, while Directory of Sharri national park Bjeshtet e Nemuna is at its initial stage of operations. With protected landscape (Regional Park) Germia is managing the municipal enterprise "Horticulture" which main responsibility is maintaining green spaces in Prishtina capital city.

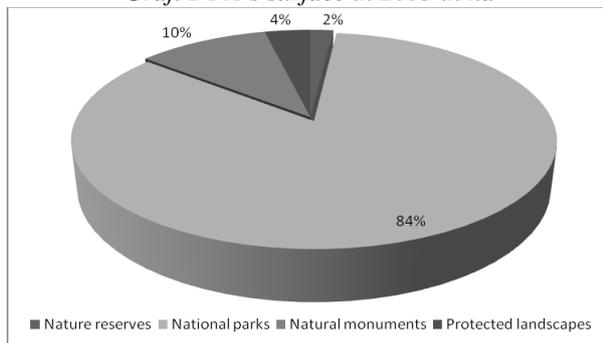
Marble Cave of Gadime so far has had a “private” management, but without legal basis of privatisation. In 2011 a governmental decision was adopted to protect the cave as Natural Monument of Particular Importance in order to provide better management. This happened after many degradations caused as a result of in-proper management: changes of microclimate, damages of crystals, changes in flora species that are characteristics for the caves etc. In September 2012, the cave is closed by environmental inspectorate in order to finish the process of establishing an effective management body of the Ministry of Environment and Spatial Planning.



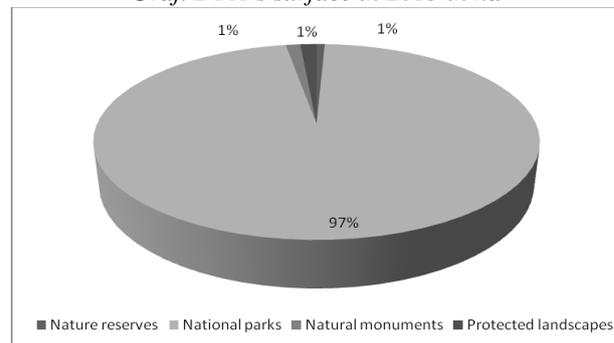
Graf. 1 PA-s surface in 2003 in ha



Graf. 2 PA-s surface in 2013 in ha



Graf. 3 PA-s surface in 2003 in %



Graf. 3 PA-s surface in 2013 in %

Even the progress of expansion of protected areas is significant, positive changes on the ground are still very small. So far, Bifurcation of River Nerodime, being the second such case in the world, as a result of degradation by human factor, has lost the vital function for which has been protected as a special natural reserves.

There are also evident and visible cases of degradation in the territory of national parks such as: illegal and non-planned constructions, legal and illegal forests logging, forest fires, wild animal shootings etc. Constructions in the protected areas and particularly in national parks are not following any of legal rules. One of the worst examples is the degradation of the natural reserve of Bosnian pine (*Pinus heildreichii*) for construction purposes in the Prevala touristic village near Prizren (Veselaj et al. 2012).

Even wild species of flora and fauna are facing tremendous pressure, including those in habitats of national parks. In March 2012, the media reported a "mysterious hunting action" followed by mass shootings of animals in the area Decani region, belonging to Bjeshket e Nemuna, where over 100 bodies of deers, wild goats, and wild pigs were found (Veselaj, Mustafa & Krasniqi 2013).

## 5. Discussion

Based on the presented results, it is seen that there is progress in terms of increasing the surface area and number of protected natural areas in Kosovo in the last decade. The number of protected areas increased from 52 in 2003 at 98 in 2013, while the surface of protected areas from 46.397 ha in 2003 to 119.994 ha in 2013 or expressed in percentage from 4.27 % in 2003 to 11.01 % of the territory in 2013.

There is slow progress in terms of practical regulation implementing the law through secondary legislation. From 23 by-laws that arise from the nature conservation legislation, until July 2013, only 13 regulations or 62 % of secondary legislation is adopted.

Apart from Sharri National Park that has prepared its spatial plan, all other protected areas are without spatial and management plans. For national parks as a special area of interest under the prepared legislation specific spatial plans must be harmonized with the spatial plan of Kosovo. Spatial Plan Sharri national park is approved while, the for the national park Bjeshket e Nemuna is in process of development.

There is a lack of management institutions for protected areas. Only four of the designated protected areas currently have established their management institutions: two national parks, a regional park "Gërmia" and marble cave of Gadime, but all of them with very limited human capacities and financial resources.

A change of the situation on the ground, compared with legislative progress, is very slow. In this respect, there are limited developments especially in the protection of rare and endangered species living in Kosovo, which, in many cases have been brought to the brink of extinction, as is the case with the lynx (*Lynx lynx*), golden eagle (*Aquila chrysaetos*) etc.

## References

- Amidzic L, Ostojic D. (2006): The Sar-planina vegetation, Protection of nature, Issue 56, p. 33-49, Belgrade.
- Dudley N. (2008) Guidelines for applying protected areas management categories, IUCN/WCPA ISBN 978-2-8317-1086-0
- IUCN (1997). IUCN Red List of Threatened Species 1997.
- Mustafa B. et al. (2009): Zonat potenciale për Natura 2000 në Kosovë, PM International, Prishtinë
- Veselaj Z. & al. (2003): Vlerat natyrore të Kosovës, Instituti për Mbrojtjen e Natyrës së Kosovës, Prishtinë
- Veselaj Z. et al. (2006): Species of international significance and their distribution in Kosovo, Proceedings of IV Balkan Botanical Congress, Sofia.
- Veselaj Z. (2010): Bjeshkët e Nemuna- perla natyrore e Kosovës, REC and KFOS, Prishtina.
- Veselaj et al. (2012): Biodiversity conservation in Kosovo with focus on biodiversity centers, Journal of Environmental Biology Vol. 33, p. 307-310.
- Veselaj Z., Mustafa B., Krasniqi Z. (2013): National park "Bjeshket e Nemuna, the biggest development in nature conservation in Kosovo International, Journal of Ecosystems and Ecology Science (IJEES) Vol. 3/4, p. 733-738.