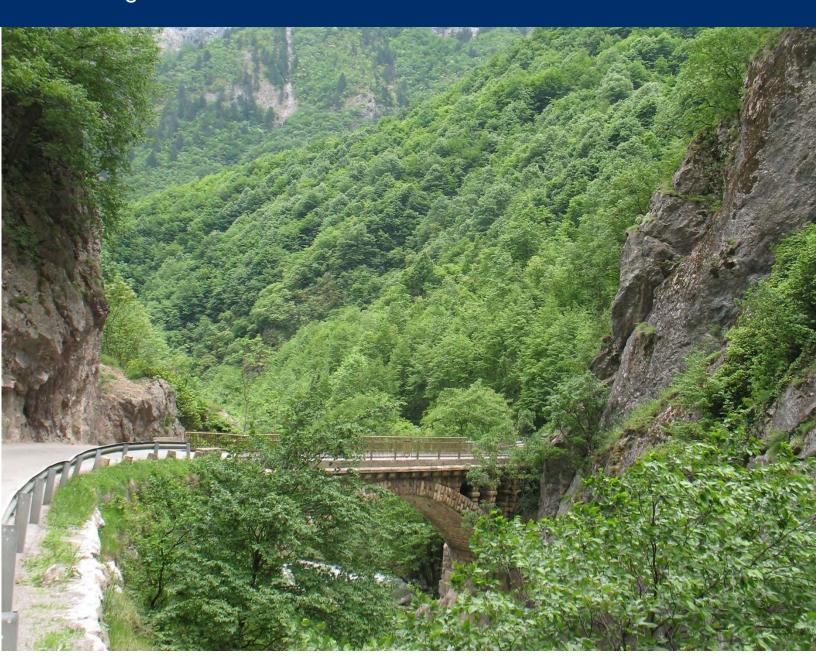


KOSOVO BIODIVERSITY ANALYSIS

Foreign Assistance Act 119



JULY 13, 2018

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KOSOVO BIODIVERSITY ANALYSIS

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ACRONYMS

ADS Automated Data System
BAP Biodiversity Action Plan

BIMR Biodiversity Information Management and Reporting

BRIDGE Biodiversity Results and Integrated Development Gains Enhanced

CDCS Country Development Cooperation Strategy

DO Development Objective
CSO Civil Society Organization

COSiRA Promoting the Competitiveness of the Private Sector in Rural Areas

EIA Environmental Impact Assessment

ERA Environmentally Responsible Action Group
ESAV Ecosystem Services Assessment and Valuation

ETOA Environmental Threats and Opportunities Assessment

EU European Union

FAA Foreign Assistance Act

FAO Food and Agriculture Organization FSC Forest Stewardship Certification

GIZ Gesellschaftfür Internationale Zusammenarbeit

IBA Important Bird Area

ICMM Independent Commission on Mine and Minerals
ICT Information and communication technologies
INPK Institute for Nature Protection of Kosovo

IPA Important Plant Area

IPA Instrument for Pre-Accession

IUCN International Union for the Conservation of Nature

KAE Kosovo Association of Ecologists

KEPA Kosovo Environmental Protection Agency

KEP Kosovo Environment Program
KEK Kosovo Energy Corporation
KFA Kosovo Forestry Agency

LAB Laboratory for Business Activities
LEAP Local Environmental Action Plan
MAP Medicinal and aromatic plants
MCC Millennium Challenge Corporation

MAFRD Ministry of Agriculture, Forestry and Rural Development

MESP Ministry of Environment and Spatial Planning

NFI National Forest Inventory

NGO Non-governmental organization

NMSI Nature Monument of Special Importance

NWFP Non-wood forest product

PA Protected area

PBA Primary Butterfly Area

PES Payment for Ecosystem Services
RBMP River Basin Management Plan
REC Regional Environmental Center

SAPB Strategy and Action Plan for Biodiversity
SEA Strategic Environmental Assessment

SIDA Swedish International Development Agency

TA Technical assistance

TEM Transboundary Ecosystem Management
UNDP United Nations Development Programme

USAID United States Agency for International Development

EXECUTIVE SUMMARY

The purpose of this USAID/Kosovo FAA 119 Biodiversity Analysis is to determine the actions necessary to conserve biodiversity in Kosovo and the extent to which the actions proposed for support by USAID/Kosovo meet the needs identified. The analysis will inform USAID/Kosovo as it develops its 2018-2023 Country Development Cooperation Strategy (CDCS).

USAID's approach to development requires that the Agency examine cross-sectoral linkages and opportunities to ensure a robust development hypothesis. Biodiversity conservation is critical for achieving sustainable development and should be considered in a Mission's strategic approaches to improve development outcomes. The Biodiversity Analysis (also known as an FAA 119 Analysis) is an opportunity for a Mission to better understand the strategic linkages between the conservation of a country's biodiversity and development, so that it can structure a sound results framework to support future programming.

Kosovo's protected area (PA) system consists of 172 designated sites. From 46,397 hectares in 2003, the PA territory increased to 118,913 hectares in 2013, and to 137,332 hectares in 2016, or 11.7 % of the country's territory. Kosovo's total forest area under protection is 59,600 hectares or 12% of the total forest area of the country.

More than 90% of Kosovo's PA territory lies within the country's two national parks, Malet e Sharrit/Šar Planine and Bjeshkët e Nemuna/Prokletije. The two national parks also contain Kosovo's most important biodiversity and biodiverse ecosystems. Broadleaf and conifer forests, pastures, meadows, and fresh water ecosystems dominate the national parks. Both national parks are located on the country's borders: Malet e Sharrit/Šar Planine on the border with Macedonia and Albania and Bjeshkët e Nemuna/Prokletije on the border with Montenegro and Albania. Thus, although very little has been done, opportunities exist for cross-border cooperation.

Kosovo's regulatory framework for biodiversity conservation is largely in place; most of the guiding laws and bylaws, strategies, and action plans have been adopted. However, the legal framework is not well-enforced. Lack of funding for biodiversity conservation is a significant constraint to implementing the legal framework, as is the numbers and types of staff in Government of Kosovo institutions charged with management of the country's biodiversity. The FAA 119 team calculated that within the public sector, a total of 65 full-time staff members work in the field of biodiversity and PA conservation. At the municipality level, there are no biodiversity professionals, and the sector is usually covered by municipal environmental officers or inspectors.

Key Threats

The FAA 119 team identified the key direct threats to Kosovo's biodiversity, in order of priority, as:

- I. Uncontrolled and illegal harvesting of the forest, mainly for firewood, inside and outside of PAs, has created highly degraded forest ecosystems.
- 2. Gravel quarries and the extraction of gravel and sand from rivers without restoration is destroying habitat.
- 3. Road construction, especially highways, is fragmenting wildlife habitat.
- 4. Hydropower plant construction and operation, and ancillary activities are destroying aquatic ecosystems.
- 5. Illegal construction in PAs is fragmenting, degrading, and destroying habitat.
- 6. Illegal and overexploitation of plant and wildlife species threatens some of Kosovo's most

- sensitive and endangered plants and wildlife.
- 7. Pollution is a threat, especially to Kosovo's aquatic biodiversity.
- 8. Climate change is affecting Kosovo's biodiversity.

The main factors driving the direct threats are:

- I. Inadequate enforcement of legislation due to inadequate budget and numbers and training of staff (ultimately due to lack of government will to conserve biodiversity).
- 2. Weak PA management that fails to control illegal activities, balance conservation and development, and manage resources sustainably.
- 3. The demand for firewood far exceeds the legal supply of firewood.
- 4. A shortage of legal and affordable alternatives to wood fuel for heating and cooking.
- 5. Households that lack the infrastructure (stoves, insulation) to minimize their use of wood fuel and/or to transition to alternative energy sources.
- 6. A judicial system that is ineffective and inefficient in dealing with natural resources cases.
- 7. Special interests are able to benefit over the good of the population and of Kosovo's biodiversity.
- 8. Forest Stewardship Certification (FSC) certification standards have been developed for Kosovo, yet the most productive forest is now in the Bjeshkët e Nemuna/Prokletije National Park, resulting in pressure to degazette.
- 9. A pro real estate development attitude among government, media, and the general population.
- 10. Weak civil society and lack of public awareness of the importance of biodiversity.
- 11. Data deficiencies and lack of transparency and sharing of data.
- 12. EU 20:20:20 goal to obtain at least 20% of energy from renewable energy sources.

Actions Necessary to Conserve Biodiversity

The FAA 119 team identified actions necessary to address the drivers of the threats to biodiversity in Kosovo, among them (the full list of "Actions Necessary" is in Table 8):

- Establish an Environmental Fund (Ekofondi).
- Hire biodiversity, tourism, and community natural resource professionals, and/or strengthen capacities of existing staff.
- Place guard shacks to control movement of goods and collect fees to enter national parks.
- Develop forest vocational training programs wildlife management and hunting vocational training programs.
- Create a country-level independent inspectorate agency.
- Develop a Payment for Ecosystem Services system to contribute to the PA budget and to raise awareness of the importance of biodiversity conservation.
- Provide incentives for households to purchase efficient stoves and insulation and to use clean energy alternatives.
- Strengthen the "environmental crime sector" by training members of the judiciary, prosecutors, and the police officers in the environmental crimes unit.
- Increase the penalties for environmental crimes.
- Strengthen the Environmental Impact Assessment (EIA) and permitting processes.
- Train environmental journalists in investigative environment and biodiversity-specific journalism.
- Train biodiversity-related civil society organizations (CSOs) in advocacy, fundraising, and other measures to ensure their sustainability.
- Conduct biodiversity baseline surveys.

Extent to Which USAID/Kosovo Contributes to the Actions Necessary

Based on the "Actions Necessary," the FAA 119 team determined the extent to which USAID/Kosovo is currently contributing to biodiversity conservation in Kosovo. USAID/Kosovo's contributions to biodiversity conservation are mainly in the energy (supporting "clean energy") and the economic growth sector (supporting outdoor tourism and the wood product sector). Then, based on the assumption that the next CDCS will be similar to the current, the FAA 119 team identified many opportunities for the Mission to contribute to Kosovo's biodiversity needs.

Recommendations

The FAA 119 team formulated and prioritized recommendations to integrate biodiversity conservation into the next CDCS under the presumed USAID/Kosovo Development Objectives (DO). The team prioritized recommendations based on 1) the importance of the direct threats and drivers that the recommendation addresses, and therefore, the importance of the recommendation for biodiversity conservation, 2) relevance of the recommendation to the anticipated DO, 3) what others (the Government of Kosovo (GoK), donors, NGOs, and private sector) are doing in support of the recommendation, 4) USAID's comparative advantage, and 5) potential for success. While the FAA 119 team developed the recommendations to assist USAID/Kosovo to integrate biodiversity into their new strategy, the recommendations would need the full support of the GoK, and other donors may apply them as well. In Section 8, each of the below recommendations are described in detail.

DO I: Rule of Law and Governance

- 1. Strengthen the Environmental Crimes Sector
- 2. Support the Development of an Environmental Fund
- 3. Strengthen the Environmental Impact Assessment Process
- 4. Strengthen the Biodiversity Advocacy Community
- 5. Improve Governance and Rule of Law in the Wildlife Sector
- 6. Use Payment for Ecosystem Services to Strengthen Governance in the Natural Resources Sector

DO 2: Economic Growth and the Private Sector

- 1. Support the Eco-Tourism Sector to Better Contribute to Economic Growth
- 2. Support Medicinal and Aromatic Plants Enterprises
- 3. Provide Assistance to Develop Country-Wide Studies to Support Evidence-Based Decision Making
- 4. Improve Forestry's Contribution to Economic Growth through Private Sector Support
- 5. Increase Options for Clean, Sustainable Household-Level Energy
- 6. Increase the Productivity of Kosovo's Public Forests to Support More Livelihoods
- 7. Increase the Income Generation Potential of Kosovo's Wildlife

DO 3: Human Capital (Professional Skills)

- 1. Support the Development of a Professional Biodiversity Sector
- 2. Support the Development of a Professional Environmental Crimes Sector
- 3. Support the Development of Forestry and Wildlife Conservation Vocational Training Programs.
- 4. Support a Stronger Natural Resources-Based Enterprise Sector
- 5. Support the Development of a More Professional EIA Sector
- 6. Support the Development of Stronger, More Professional Environmental CSOs
- 7. Support the Development of a More Professional Environmental Journalism Sector
- 8. Support Environmental Education of Teachers

I. INTRODUCTION

I.I PURPOSE

This USAID/Kosovo Biodiversity Analysis was conducted in compliance with Section 119 of the Foreign Assistance Act (FAA) of 1961, as amended, and Automated Directives System (ADS) Section 201. As part of a USAID Mission's Country Development Cooperation Strategy (CDCS), FAA Section 119, as amended, requires the CDCS to include an analysis of:

- 1) The actions necessary in that country to conserve biological diversity, and
- 2) The extent to which the actions proposed for support by the Agency meet the needs thus identified.

This analysis meets the two requirements of Section 119 of the FAA and is intended to inform USAID/Kosovo in the development of the Mission's 2018-2023 CDCS.

USAID's approach to development requires that the Agency examine cross-sectoral linkages and opportunities to ensure a robust development hypothesis. Biodiversity conservation is critical for achieving sustainable development and should be considered in a Mission's strategic approaches to improve development outcomes.

The Biodiversity Analysis (also known as an FAA 119 Analysis) is an opportunity for a Mission to better understand the strategic linkages between the conservation of a country's biodiversity and development, so that it can structure a sound results framework to support future programming. Notably, the analysis should identify strategic linkages at the results framework level, highlighting opportunities to integrate biodiversity conservation into priority development sectors identified in the CDCS.

The following USAID/Kosovo biodiversity-related analyses have been undertaken previously:

- Environmental Threats and Opportunities Assessment (ETOA), October 2009; updated November 2012
- A partial FAA 119 Biodiversity Analysis: Part II: Meeting Biodiversity Conservation Needs in 2013-2018 (October 2012)
- FAA 119 Kosovo Biodiversity Assessment (2003)

This FAA 119 Biodiversity Analysis references and updates previous analyses. The Scope of Work for the analysis is in Annex A.

1.2 BRIEF DESCRIPTION OF THE USAID PROGRAM

At the time this USAID/Kosovo Biodiversity Analysis was prepared (April through July 2018), the 2018-2023 CDCS was at a very early stage of development; in May 2018, the Mission began preliminary stakeholder consultations, one of the first steps in developing a new CDCS. Therefore, little information was available to the USAID/Kosovo FAA 119 team about the upcoming strategy. Mission expectations were that the new strategy would be updated based on lessons learned, but would be similar to the previous strategy.

The overall strategic goal of USAID/Kosovo's 2014-2019 CDCS is that: Kosovo Becomes an Increasingly Prosperous Country, Progressively Integrating into the Euro-Atlantic Community, with More Effective and Accountable Governance. To contribute to this goal, USAID/Kosovo has

three development objectives (DOs):

- DOI: Improved Rule of Law and Governance that Meet Citizens' Needs. Activities focus on improving transparency and accountability in the justice sector, strengthening effectiveness and accountability of assemblies, administrations, and election processes, improving integration of ethnic minorities, and strengthening civil society.
- <u>DO2: Increased Investment and Private Sector Employment</u>. Activities focus on improving economic governance and the business environment, increasing competitiveness and market linkages, and increasing energy security and diversification.
- DO3: Enhanced Human Capital. Activities focus on improving the professional skill base.

During a mid-term review of the CDCS, USAID/Kosovo identified six cross-cutting issues that have either newly emerged or are the subject of increased attention since the CDCS was developed in 2013/2014. Among the former are (1) Countering Violent Extremism, (2) Countering Russian Pressure, and (3) the Stabilization and Association Agreement (SAA). Cross-cutting issues that were addressed in the strategy but that have become the center of heightened concern are (4) Anti-Corruption, (5) Youth, and (6) Political Instability. A brief summary of each DO is in Annex J.

1.3 METHODOLOGY

The FAA 119 team was composed of the following individuals:

- Karen Menczer, Team Lead
- Zegir Veselaj, Biodiversity/Natural Resources Specialist
- Ergin Hajredini, Forestry/Natural Resources Specialist and Logistics

Bio-sketches of the team members are in Annex B.

The FAA 119 team undertook the following tasks as part of the biodiversity analysis:

- The analysis was kicked off with a telephone call with the Mission to discuss team composition and the draft Work Plan.
- The team collected, shared, and reviewed relevant documents and websites and created a Dropbox for document sharing among team members.
- Upon arrival of the team lead in-country, team members met to update the work plan and prepare for USAID/Kosovo briefings, stakeholder interviews, and site visits.
- During the subsequent 1½ weeks, the team held approximately 25 meetings with biodiversity stakeholders (see Annex C for the List of Contacts), including government staff, nongovernmental organizations (NGOs), donors, a public company (Kosovo Energy Company (KEK), and a private company, SharrCem).
- The team conducted three site visits: to KEK, Bjeshkët e Nemuna/Prokletije National Park, and Malet e Sharrit/Šar Planine National Park.
- On May 16, the team held a meeting with Kosovo's Minister of the Environment and Spatial Planning, Ms. Albena Reshitaj.
- Also on May 16, the team de-briefed USAID/Kosovo, focusing on stakeholder consultations, site visits, and the team's preliminary findings and conclusions.
- Upon departure of the team lead on May 18, members prepared their assigned report sections and continued to share information and discuss findings, conclusions, and recommendations as they developed the draft USAID/Kosovo Biodiversity Analysis.

II. COUNTRY CONTEXT

2.1 LOCATION AND COUNTRY CONTEXT

The Republic of Kosovo is located in southeast Europe and borders Serbia, Macedonia, Albania, and Montenegro (see Figure 1).



Figure 1. Location of Map of Kosovo (Ref: https://www.infoplease.com/atlas/kosovo)

Since Kosovo declared independence from Serbia in February 2008, 113 United Nation states, including the United States, have recognized the Republic of Kosovo as an independent, sovereign state. Since independence, Kosovo has become a member of several international institutions (e.g., the International Monetary Fund and the World Bank), though not of the United Nations; this has implications for biodiversity conservation in Kosovo (see Section 5.2).

In 2016, Kosovo entered into a Stabilization and Association Agreement with the European Union (EU), the first step toward EU membership. On February 6, 2018, the European Commission published its expansion plan, which covers six Western Balkan countries: Albania, Bosnia & Herzegovina, Kosovo, the Former Yugoslav Republic of Macedonia, Montenegro, and Serbia. The plan envisages that all six applicants could achieve accession as members of the EU after 2025. In May 2018, Bulgaria hosted a summit on the Western Balkans, which aimed to facilitate accession by the six countries. Kosovo's status in the EU also has implications for biodiversity conservation in the country (See Section 5.4).

2.2 BIOPHYSICAL SETTING

Kosovo is surrounded by mountains: the Malet e Sharrit/ Šar Planine are located in the south and southeast, bordering Macedonia; the mountain ranges of Bjeshkët e Nemuna/Prokletije (meaning Accursed Mountains, part of the Albanian Alps) in the west; and the Mali i Kopaonikut/Kopaonik Plannine in the north. With an area of 1,100 square km, the Malet e Sharrit/Šar Planine represent approximately 10% of the total territory of Kosovo. The Albanian Alps in Kosovo are a continuation of

the Albanian Alps from northern Albania and eastern Montenegro. The country's highest peak, and part of the Bjeshkët e Nemuna/Prokletije range, is Gjeravica/Djeravica, at 2,656 meters above sea level (masl) (8,714 ft), located along Kosovo's southwest border near Vermica Lake. The Mali i Kopaonikut/Kopaonik Plannine are characterized by mineral wealth, especially lead and zinc, making this one of the most mineral-rich parts of Europe.

Kosovo has two main plains, Dukagjini/Metohija to the southwest, and the Kosovo plain to the northeast. The Lugina e Drenicës/Doline Drenice is located in the center of the country, between the Dukagjini/Metohija and the Kosovo plain, and is a hilly area surrounded by the Mali i Qiqavices/Čičavica Planine to the northeast and Kozmaq/Kozmač to the southwest.

Kosovo has limited water resources. The country is divided into four river basins: Drini i Bardhe/Beli Drim, Ibri/Ibar, Morava e Binçës, and Lepenci/Lepenac. The main rivers in the country are the Drini i Bardhe/Beli Drim, which flows toward the Adriatic Sea; the South Morava in the Gollak/Goljak area; and the Ibri/Ibar in the north. Sitnica, a tributary of the Ibri/Ibar, is the longest river lying completely within Kosovo. Several small natural glacial lakes are found in the high mountains, but Kosovo's most important lakes are artificial: Liqeni i Gazivodes/Gazivodsko Jezero (380 million m³) in the northwest; Liqeni i Radoniqit/ Radonjić Lake (113 million m³) in the southwest; Liqeni i Batllavës/Batlavsko jezero) (40 million m³) and Liqeni i Badovcit/Badovac Lake (26 million m³) in the northeast. Kosovo also has karst, thermal, and mineral springs, important for their cultural and tourism aspects.

III. STATUS OF KOSOVO'S BIODIVERSITY

3.1 MAJOR ECOSYSTEM TYPES AND STATUS

Kosovo has very little reliable and consistent data on ecosystem types, including the species and population status of the species inhabiting the country's ecosystems. Two national forest inventories (2003 and 2012) have analyzed the status of forest cover and these inventories provide the most reliable data on Kosovo's ecosystem types. Therefore, the FAA 119 team primarily used the National Forest Inventory (NFI) of 2012 as the source of data for this section.

Figure 2 shows the distribution and location of Kosovo's main ecosystem types. The main and most important ecosystems in Kosovo are forests and other wooded land, covering 47.4 % of the country's land surface (See Table I). The most important forest ecosystems are located in Kosovo's high mountains in the national parks, in the Malet e Sharrit/Šar Planine (in the south) and in the Bjeshkët e Nemuna/Prokletije mountain range (in the west). Due to their high diversity of plants, these forests have been designated as Important Plant Areas (IPAs).

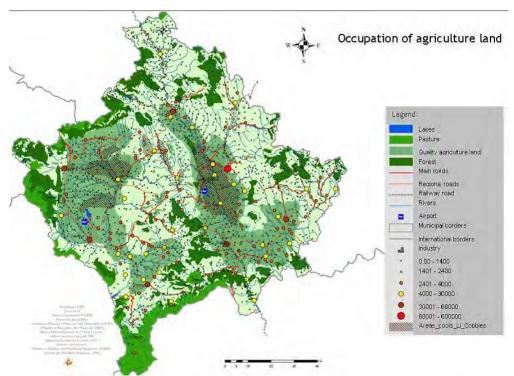


Figure 2. Distribution and Location of Kosovo's Main Ecosystem Types

(MESP, From: MESP http://www.ammk-rks.net/repository/docs/Spatial_Plan_of_Kosova_2010-2020.pdf)

Table I. Land Use Types

Land Use Classes	Area in Hectares	Area in %
Forest	481,000	44.7
Other wooded		
land	29,200	2.7
Cropland	309,000	28.7
Grassland	161,400	15.0
Settlements	48,000	4.5
Water	5,200	0.5
Other wetlands	800	0.1
Total	1,077,000	100

An oak-dominated forest ecosystem is found in the central hilly area of Kosovo. Dominant species there are sessile oak (*Quercus petreae*), turkey oak (*Quercus cerris*), pubescent oak (*Quercus pubescens*), Italian oak (*Quercus frainetto*), and chestnut (*Castanea sativa*). In the southwestern part of Kosovo, in Koritnik and Pashtrik/Paštrik, an area distinguished by a high number of endemics, relict, and endemic-relict plant species, the dominant species in the forest ecosystem is Macedonian oak (*Quercus trojana*). In altitudes above conifer forests, forest ecosystems are dominated by beech (*Fagus moesiacae*).

In Bjeshkët e Nemuna/Prokletije, Koritnik, and in the Malet e Sharrit/Šar Planine, Macedonian [Balkan] pine (*Pinus peuce*) and Bosnian pine (*Pinus cheldreichi*) form forests of scientific significance due to their endemism. The highest forest zones, especially in the Bjeshkët e Nemuna/Prokletije area, are dominated by mountain pine (*Pinus mugho*) forests at altitudes up to 2000 m. Although the wood is of poor quality, mountain pine is important for its medicinal characteristics and as an industrial plant, as well as for protection against erosion on the high, steep slopes. In subalpine and alpine areas, shrub ecosystems are found, dominated by juniper (*Juniperus nana*), bilberry (*Vaccinium myrtillus*, *V. uliginosom*), and perennial herbaceous plants including many medicinal and aromatic plants (MAPs) (Millaku, undated).

Kosovo's grasslands, especially those at high altitude, are important for rare and endangered plant species, and they are very rich in butterfly species. Malet e Sharrit/Šar Planine National Park and Bjeshkët e Nemuna/Prokletije National Park grassland ecosystems are especially noted for their high diversity of butterflies. With 129 species, representing almost 50% of the butterflies found in the Balkans, these grasslands are designated as Primary Butterfly Areas (PBAs). See Annex D for data on butterfly species in Kosovo.

Kosovo's aquatic ecosystems consist of glacial lakes, wet meadows, springs, streams, rivers, artificial water reservoirs, fish ponds, and temporary ponds. Figure 3 shows the distribution of rivers and artificial lakes in Kosovo. Natural lakes are mainly found at high altitudes, in the two national parks, and most are glacial lakes. Only a few studies on Kosovo's aquatic ecosystems have been undertaken, and these focused on the Malet e Sharrit/Šar Planine area streams and lakes. Kosovo is one of the least investigated countries of the Balkan Peninsula as far as fish diversity. Annex D contains information on some of Kosovo's important aquatic species with protection status.

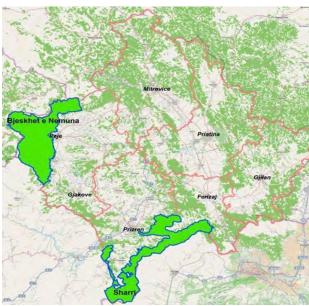


Figure 3. Distribution of Rivers and Artificial Lakes in Kosovo (Ref. KEPA, 2015)

One of Kosovo's most important wetlands is located in the central part of Kosovo, at the wetland site of Henc. With a surface area of 50 hectares, it was created in the late 1960s at the confluence of the Magura and Vrella/Vrela, branches of the Sitnica River. The aim was to create habitat where the common carp (*Cyprinuscaprio*) could be cultivated. A 2010 study (Sherifi et al., 2010) recorded 41 species of birds, four species of fish, three species of reptiles, two amphibians, two mammals, and 28 species of vascular plants at the Henc wetland. The wetland is an important breeding and feeding area for a number of resident, wintering, and migratory water birds and in 2014 was designated a Special Protected Area of Birds.

Since the previous ETOA and FAA 119 Analysis were prepared, very little new information about Kosovo's ecosystems and species diversity has been generated. Three main biodiversity-related documents have been produced since the 2012 analyses: "The State of Nature Report, 2010-2014" (KEPA, 2015), the Malet e Sharrit/Šar Planine National Park Management Plan, 2015-2024 (KEPA, 2015), and the "Red Book of Vascular Plants" (2013), all of which relied on pre-existing data.

3.2 SPECIES DIVERSITY AND STATUS

Kosovo lies at the center of the Balkan Peninsula, where three climatic zones, continental, sub-Mediterranean, and alpine, meet. This, combined with its relief and geomorphologic and hydrologic factors, results in a rich biodiversity. The Herbarium of the Faculty of Natural Species (University of Pristina) has confirmed 1,800 plant species (while a total of 2,500 are predicted to occur), representing 20% of European flora in an area that is less than 2% of the Balkan territory. More than 200 endemic plant species (10% of Balkan endemics) have been recorded in Kosovo and eight steno-endemic species (only found in Kosovo) make the country one of the six centers of European floristic endemism (Stevanovic et al., 1995, Veselaj, 2012). Researchers have also recorded 68 relict plant species (Mustafa B., 1998), 400 species of algae, and 104 species of fungi.

In regions dominated by serpentine rocks (e.g., in the Ibri/Ibar River valley and in a discontinuous chain through Koznica and Golesh/Goleš to the southwest), two plant species endemic to Kosovo and Albania are found: prickly juniper (Juniperus oxycedrus) and forsythia (Forsythia europae). The flora of this serpentine massif area is rich in rare species (Millaku, 2008).

Kosovo's faunal diversity consists of 130 species of insects (significant data gaps exist on insect diversity of Kosovo), 30 fish species, 14 species of amphibians, 14 species of reptiles, 180 bird species, and 45 mammals. In Kosovo's higher mountain, populations of mammals of international importance have been recorded, such as the brown bear (*Ursus arctos*), Balkan lynx (*Lynx lynx balcanicus*), roe deer (*Capreolus capreolus*), and chamois (*Rupicapra rupicapra*), as well as many important species of birds on the International Union for the Conservation of Nature (IUCN) Red List and the World Red List.

In Malet e Sharrit/Šar Planine National Park, 77 plant species of international importance are found; 26 species included on the European Red List (UNECE, 1991); and 32 species on the 1997 IUCN Red List (Veselaj, et al., 2015). Malet e Sharrit/Šar Planine National Park has 314 vegetation units, including 180 plant associations, 16 sub-associations, 59 alliances, 7 sub-alliances, 32 orders, and 20 classes (Mustafa et al., 2013).

Nineteen taxa found in Bjeshkët e Nemuna/Prokletije National Park are listed on the IUCN Red List of Threatened Species; the globally endangered Balkan lynx, (*Lynx lynx balcanicus*), a species of great international importance, is found (Veselaj et al. 2013) in Bjeshkët e Nemuna/Prokletije; and as mentioned above, 129 species of butterflies (*Lepidoptera*), making the territory of the national park one of the richest areas in Europe for butterflies (MESP, 2013).

Because of these high biodiversity values, both national parks have been identified as Important Plant Areas (IPA), regionally Important Bird Areas (IBA), and Primary Butterfly Areas (PBA) (Mustafa et al., 2011, MESP, 2013).

Due to the lack of financial support for an overall country-level biodiversity inventory, species diversity in Kosovo is always presented as an "approximate number." Whereas scientific information about plant diversity is more readily available and accurate than for animal diversity, a full plant inventory is not yet available. Even less information exists on the number of animal species, especially invertebrates. In the past, hunting associations conducted wildlife population studies, but since 1999, no wildlife surveys have been conducted and no reliable data is available on wildlife species and population numbers.

With GIZ support, the "Red Book of Vascular Plants" was prepared and published in 2013 and lists 256 species of local, national, and international importance. After its publication, the Ministry of the Environment and Spatial Planning (MESP) issued regulations on the conservation status of the species included in the "Red Book." The Kosovo Environmental Protection Agency (KEPA) is in the process of preparing the Red Book of Fauna. Kosovo's Law on Nature Protection protects species according to the following categorization: strictly wild protected species, wild protected species, and domesticated protected species.

3.3 GENETIC DIVERSITY

The "Rare Breeds and Varieties of the Balkans Atlas 2009" lists the following in the chapter on Kosovo (the Atlas can be found at http://http://www.agrobiodiversity.net/balkan/).

http://www.ammk-rks.net/repository/docs/Biodiversiteti_i_Kosoves.pdf

Table 2. Rare Breeds and Varieties of Livestock in Kosovo

Name	Local names	Population Status	Risk Status
Mediterranea n water buffalo (Bubalus bubalis)	Buallica	<500 mature females; < 20 mature males No buffalo conservation program From 2000-2009 the number of buffalo has rapidly decreased.	Critical
Dukagjini (Metohija) Busha (Bos taurus)	Busa, Illyrian cattle, Brachyceros, Rhodopi, Rodopy Shorthorn	<100 No conservation program	Endangered
Sharri Busha (Bos taurus)	Busha, Illyrian cattle, Brachyceros, Rhodopi,Rodopy Shorthorn	< 100 Conservation program in Prizren	Endangered
Balusha (Ovus aries)	Baljusha, Baljusa (sheep variety)	<2000 No conservation program Risk of genotype disequilibrium and deviation from the breed standard because of mating in the same or neighboring flock	Vulnerable
Bardoka (Ovus aries)	Bardhoka, Barloka (sheep variety)	>18,000 Risk of genotype disequilibriumand deviation from the breed standard because of mating in the same or neighboring flock	Vulnerable
Kosova (Ovus aries)	Kosovska, Kosovo (sheep variety)	<1000	Endangered
Sharri (Ovus aries)	Sharplaninianpramenk a (sheep variety)	The pure Sharri sheep is now a rare breed; about 20,000 sheep are crosses between Sharri and Wurttemberg.	Endangered
Landrace Goat(Capra aegagrus hircus)	Balkangoat	<5000 No conservation program	Vulnerable

According to https://en.wikipedia.org/wiki/Kosovo_Longcrower, the Kosovo Longcrower or Kosovo Long Crowing Rooster (*Gallus gallus domesticus*) is a breed of chicken originating in Kosovo that was developed as a landrace in the Drenicës/Drenice area. Before 2011, it was rarely kept, however it is now widely found throughout Europe.

According to the Strategy and Action Plan for Biodiversity (SAPB), 2011-2020, no botanic gardens, arboreta, and no zoo breeding programs exist in Kosovo. In the Kosovo Museum, there is a section on natural history and outside of Pristina, a Nature Museum is being planned. The Faculty of Agriculture at the University of Pristina is creating a plant gene bank which will identify and preserve the genetic diversity of some of Kosovo's plants.

Populations of wild species of economic or ecological importance

Prior to independence, Kosovo was one of the largest suppliers of MAPs and non-wood forest products (NWFP) from ex-Yugoslavia (USAID and RECURA, undated). Eighty-four NWFP species of commercial importance have been identified but only 65 are collected commercially with the potential of almost 32,000 tons of dried product (GIZ-COSiRA Project, 2016). The sector is very important for Kosovo's economy and for employment of local people. Official statistics show that approximately 25,000 people are engaged in the collection of NWFPs, but more recent data indicate that as many as 100,000 people rely on MAP collection for income (the more recent data are based on the quantity collected per day).

The richest regions of Kosovo for MAPs are Malet e Sharrit/Šar Planine and Bjeshkët e Nemuna/Prokletije National Parks. In these regions, especially in the subalpine zone, bilberry (*Vaccinium myrtillus*, *V. uliginosom*), juniper (*Juniperus nana*), and cowslip (*Primula veris*) dominate. According to the SAPB, 2011-2020, medicinal plants that are most commonly collected are common sage (*Salvia officinalis*), common juniper (*Juniperus communis L.*), curry plant (*Helichrysum italicum L.*), cowslip (*Primula veris L.*), elder (*Sambucus negra*), bearberry (*Arctostaphylos uva ursi L.*), linden tree (*Tilia cordata Mill.*), and dog-rose (*Rosa canina L.*). The most commonly collected wild fruits are European blueberry (*Vaccinium myrtillus*) and strawberry (*Fragaria vesca*). Edible mushroom species such as penny bun (*Boletus edulis*) and chanterelle (*Cantharellus cibarius*) are also commonly collected.

Neither national park monitors collection of MAPs to ensure harvesting is sustainable, that no protected species are harvested, and that collection does not take place in Zone I. Collectors of MAPs pay no fees to the national park administrations. Lack of monitoring is attributed to the lack of trained staff at the national parks and because MAP collection occurs throughout the national park territories, and therefore is difficult to regulate. No monitoring or fee collection takes place for MAPs collected outside PAs either. Additional information on MAPs, including the policy and legislation framework and collection areas, is in Annex E.

3.4 STATUS AND MANAGEMENT OF PROTECTED AREAS

According to the Law on Nature Protection, Kosovo categorizes PAs as follows:

- I. Strict nature reserve
- 2. National park
- 3. Special area of protection
- 4. Park of nature
- 5. Nature monument
- 6. Protected landscape
- 7. Monument of park architecture

The first Law on Nature Protection (2005/02-L18) used IUCN categories. Now, a combination of IUCN and country-specific PA categories are used (see Table 3).

Table 3. PAs in Kosovo According to IUCN Categories 2016

IUCN Category	Type of PA	Number	Area/ha
Strict Nature Reserve (Cat. I)	Strict Nature Reserve	19	10,885
National Park (Cat. II)	National Park	2	111,957
Natural Monument (Cat. III)	Natural Monument	145	6,010
	Protected Landscape	4	2,437
Protected Landscape (Cat. V)	Natural Park	I	5,934
	Special Area for Birds	I	109
	Total:		137,332

As shown in Table 3, Kosovo's PA system consists of 172 designated sites. From 46,397 ha in 2003, the PA territory increased to 118,913 ha in 2013, and to 137,332 ha in 2016, or 11.7 % of the country's territory. This percentage is close to the Aichi Biodiversity Targets 2020 (17% of a country's land is to be conserved²). Ten PAs in Kosovo are in the process of being designated, mainly as natural monuments (Director of the INPK, personal communication, May 7, 2018). The year of designation, size, protection purpose, a brief history of PA status, and other information about Kosovo's PA system are in Annex F.

More than 90% of Kosovo's PA territory lies within the two national parks, meaning that the country's most important biodiversity and biodiverse ecosystems lie within the national parks. Broadleaf and conifer forests, pastures, meadows, and fresh water ecosystems dominate the national parks.

Both of Kosovo's national parks are located on the country's borders: Malet e Sharrit/Šar Planine on the border with Macedonia and Albania and Bjeshkët e Nemuna/Prokletije on the border with Montenegro and Albania (see the map in Annex F). Thus, although very little has been done, opportunities exist for cross-border cooperation.

Kosovo's total forest area under protection is 59,600 hectares or 12% of the total forest area of the country. According to the KFA, the most productive forest ecosystems are in the national parks, resulting in conflicts between Kosovo Forest Agency (KFA) and KEPA (see Section 5.3). Other protected forest areas, important for their biodiversity, are Gërmia (Regional natural park), Shkugeza/Škoza in Gjakovë/Djakovica (Protected landscape), and Pishat e Deçanit/ Dečanske borovi in Deçan/Dečane. Annex F contains additional information about Kosovo's protected forests.

The 109 hectare Henc Special Protected Area of Birds falls under Category 3 of the Law on Nature Protection, the category used for areas that fall under the provisions of the EU Birds Directive.

Two wildlife special hunting areas have been designated in accordance with the Law on Hunting and Wildlife Management, Blinaja/Lipovica and Duboqak/Duboćak, where the main objective is conservation of wildlife. The wildlife special hunting areas are managed by KFA, based on the National Sustainable Wildlife and Hunting Management Strategy 2010-2023.

Up until 1980, the GoK had made significant investments in Blinaja/Lipovica, where about 30 km of roads were restored and two buildings were renovated (one will serve as a training center for individuals who work in the forestry sector). In the last three years, about 800,000 Euros have been invested in Blinaja/Lipovica and for 2018, 100,000 Euros is available for use in Blinaja/Lipovica. On the other hand, Duboqak/Duboćak has seen very little investment. Annex F contains more details about Kosovo's special hunting areas.

²https://www.cbd.int/sp/targets

Management of joint hunting areas is devolved to municipalities. However, only 18 municipalities out of 39 have designated joint hunting areas, only seven of which have management bodies.

In 2017, the Inspection Section within KFA brought 32 cases of illegal hunting to the courts, mainly dealing with hunting associations that are supposed to protect wildlife, not illegally hunt animals. But most of those cases have been closed without punitive action taken (Head of Directorate for Pasture and Wildlife Management, KFA, personal communication, May 8, 2018).

Institutions Responsible for Kosovo's PA System

The MESP is responsible for nature conservation administration and regulatory work. Within the MESP, under KEPA, the Institute for Nature Protection in Kosovo (INPK), is in charge of monitoring biodiversity and PAs. Established in 1988, it has the mandate to monitor Kosovo's environment with a concentration on nature conservation. The INPK prepared the feasibility studies for designation of both national parks and for other PAs in Kosovo. The limited number of staff, four full-time staff (a director and three officers, one each for protected areas, flora, and fauna diversity³) constrains effectiveness.

Only a few PAs have management bodies. Both national parks have Directorates under the authority of the Directorate of National Parks (within KEPA): the Directorate of Sharrit/Šar is in Prizren and the Directorate of Bjeshkët e Nemuna/Prokletije is in Pejë/Peć. See Annex F for information on other management bodies.

For joint hunting areas, municipalities contract management out, and the contracted entity is responsible for management and protection of the areas' wildlife, while the municipality and Forestry Inspectorate is responsible for oversight of management plan implementation.

Status of PA Management Plans

In 2014, the Assembly of Kosovo adopted the Spatial Plan and Management Plan for Malet e Sharrit/Šar Planine National Park. The plan follows IUCN and national law criteria on the zoning of national parks. However, zoning is not fully respected, as indicated by the Prevala/Prevallac tourist village (see Section VI).

The Malet e Sharrit/Šar Planine National Park Management Plan 2015-24⁴ provides an overall strategic plan for management and a more detailed five year operation plan. However, no technical or financial support has been provided to implement the plan (Director of Malet e Sharrit/Šar Planine National Park, personal communication, May 11, 2018). Malet e Sharrit/Šar Planine National Park has only 18 staff members although the management plan calls for 52 staff.

Following a zoning exercise, the Spatial Plan for Bjeshkët e Nemuna/Prokletije National Park was prepared during 2013 to 2014. However, the Assembly of Kosovo has yet to adopt it. With SIDA (Swedish development agency) support through the Kosovo Environment Program (KEP), MESP and the National Park Directorate are developing the Bjeshkët e Nemuna/Prokletije Management Plan.

The Spatial Plan for the Mirusha Waterfalls/Miruša Vodopadi Nature Monument of Special Importance (NMSI) was adopted in early 2014. No management plan has been prepared, yet buildings and roads are

³http://www.ammk-rks.net/?page=1,118

⁴http://www.ammk-rks.net/repository/docs/Plani i menaxhimit i PK Sharri 2015-2024.pdf

being constructed within the NMSI's borders.

For joint hunting areas, after a contract is signed, a 10-year management plan for hunting is required to be prepared, but no joint hunting area management plans have yet been prepared. No other PAs have management plans. The limited in-country-expertise for preparing management plans is a constraint.

Economic Potential of Kosovo's PA System

Kosovo's PA network has great economic potential, including diverse winter and summer tourism opportunities. Brezovica, the main ski resort in Kosovo is in Malet e Sharrit/Šar Planine National Park. In Bjeshkët e Nemuna/Prokletije National Park, Boge ski resort is becoming popular for winter tourism. Although both ski resorts require infrastructure investments, they have the potential to generate significant income. However, currently income generated by the ski resorts and other PA activities does not get attributed to PA management, but goes into the central budget.

In Bjeshkët e Nemuna/Prokletije and in Malet e Sharrit/Šar Planine National Parks, hiking trails are popular, and combined with neighboring countries' trails, they have the potential to attract local, regional, and international tourists (Peaks of the Balkans trail through Montenegro, Albania, and Kosovo, see http://peaksofthebalkans.info/index.html and the Via Dinarica through Macedonia, Kosovo, and Albania, see https://www.via-dinarica.org/tour/kosovo-macedonia/).Bjeshkët e Nemuna/Prokletije also has beautiful aesthetic sites, which attract traditional tourists, as well as international tourists, especially to Mirusha Waterfalls/Miruša Vodopadi NMSI and the surrounding landscape. The tourism and recreation potential of both parks has been only minimally tapped.

Both Malet e Sharrit/Šar Planine and Bjeshkët e Nemuna/Prokletije National Parks are rich in freshwater resources. Springs of Kosovo's major rivers, such as Lepenci/Lepenac, Drini i Bardhe/Beli Drim, Lumbardhi i Pejes/Pečka Bistrica, and Lumbardhi i Decanit/Dečanska Bistrica, are located in the national parks. These springs and rivers provide environmental services, yet the concept of "payment for ecosystem services" (PES) has yet to be taken up. PES could help finance Kosovo's PA system and raise awareness of the importance of conserving the national parks.

In both national parks, as in other PAs in Kosovo, private enterprises exist (and flourish), yet pay no fee to the PA for the prime locations they occupy. When visiting Kosovo's two national parks, the FAA 119 team observed that the private enterprises are well-marked and advertised, yet the national parks have minimal signage (see Photo 1).



Photo 1. The only sign for Malet e Sharrit/Šar Planine National Park

With entry gates/checkpoints in only three PA locations (Malet e Sharrit/Šar Planine National Park's Brezovica resort, Gërmia Park, and Marble Cave Monument), where entry fees are collected, and with no visitor centers, Kosovo has little information about the number of tourists who visit the PAs. In many ways, this is a missed opportunity:

- Without data on the number and types of visitors, biodiversity conservation may appear to have fewer advocates than is actually the case.
- It is difficult for a manager to advocate for additional resources if no information about visitors is available.
- Without data on the number and types of visitors to Kosovo's PAs, donors fail to see the PA system as a means for supporting economic development of the country.

3.5 STATUS AND MANAGEMENT OF KEY NATURAL RESOURCES OUTSIDE PROTECTED AREAS

The following are the key natural resources outside of Kosovo's PAs, compiled from a variety of sources referenced in Table 4.

Table 4. Key Natural Resources Outside Protected Areas

Land cover/land use type*	Description	Management Authority and Conservation Status	Economic Potential
Private forest land	185,920 hectares scattered throughout the country	Management: individual property owners Conservation Status: Private forests are usually under good management and are protected, while public forests are subject to unsustainable, illegal extraction.	In private forests, total standing capacity is estimated at approximately 19.5 million m³ from which 14.5 million m³ are diameter >7 cm.
Wetlands and other aquatic ecosystems	Scattered wetlands, glacier lakes (most in national parks) and wet meadows, springs, streams, rivers, artificial water reservoirs, fish ponds, and temporary ponds. (The only protected wetland is the wetland site of Henc, described above.)	Individual property owners (unless in a PA) Conservation Status: none (unless in a PA)	A full inventory of wetlands has not yet been conducted in Kosovo. No estimate of economic potential available. According to the ETOA (2009, FAA 119 update in 2012), information on the freshwater ecosystems of Kosovo is extremely limited, and this is still the case as of 2018.
Major catchment areas	Kosovo has four main river basins, the largest of which is the Drini i Bardhe/Beli Drim River Basin. The four river basins flow into three catchment areas (Black,	River Basin Management Plans (RBMP) dictate development and management of the river basins	No economic information Hydrogeological studies are also lacking (see Section IX)

Agricultural ecosystems (crops)	Aegean, and Adriatic seas). The only water flowing into Kosovo is from the source of the Ibri/Ibar, which is 30 km upstream from the country's border: see UN Report, 1983 in Xhambazi, 2012: https://wiki.rit.edu/display/0508484012121/Final+Report, +River+Pollution+In+Kosova 54.23% (342,400 hectares) of the territory of Kosovo (SAPB, 2011-2020) is considered agricultural land, including pasture/meadow), mainly in the center of the country. Alternative estimate	Individual property owners	Agriculture contributed 25% of GDP (2004) and 19% in 2005, supporting over 60% of the population (SAPB, 2011-2020).
	41.8% including pasture (Sharku et. al., 2016)		
Agricultural ecosystems (pasture and meadow)	17.5% of land area (2007) and 33.3% of agricultural land	Individual property owners	
Thermal and mineral springs	The spa in Kllokot/Klokot in the District of Gjilan/Gnjilane in southeastern Kosovo has several thermal springs valued for their medicinal qualities.	Individual property owners or the municipality where the resource occurs	The economy of the municipality of Kllokot/Klokot is mainly based on natural resources (mostly mineral water), tourism (two private spas), agriculture and small trade businesses.

^{*}No reliable land use map for Kosovo exists due to the lack of data for land use at the country level in accordance with international standards (Sharku et al., 2016).

IV. VALUE AND ECONOMIC POTENTIAL

4.1 VALUE OF BIODIVERSITY

No analysis has been undertaken to determine the economic value of Kosovo's natural resources and biodiversity. Kosovo's forests are an economically important renewable natural resource with the potential to supply wood and non-wood products and environmental services, such as watershed protection and carbon sequestration. Their contribution to the country's GDP is 3%; in rural areas the contribution can reach 10% of GDP.

In the past, more than 3,000 people were directly engaged in forest-related jobs (management, harvesting, and road maintenance). Today, with most high quality forest located in national parks, no commercial harvesting of high value wood is taking place, and the number of [legal] forest-related jobs is nominal.

The forest provides non-wood products, such as wild fruits and MAPs (see Section 3.3 and Annex E). The sector has greater potential than is currently realized. The majority of MAPs are exported as unprocessed material. Approximately 250 hectares of MAPs are cultivated, which helps reduce the pressure on wild plants and increases income generated from MAPs.

4.2 ECOSYSTEM GOODS AND SERVICES

According to the National Forest Inventory (2012), the amount of firewood legally harvested in Kosovo (both in public and private forests) is approximately 250,000 m³, which is approximately 16% of demand. Approximately 1.5 million m³ of firewood are needed to satisfy the demand in Kosovo. The annual increment of the forest is 1.7 million m³ (Tomter et al., 2013). This indicates that Kosovo's forests can provide, on a sustainable basis, the firewood needs of the population. However, Kosovo's forests are not categorized and utilized by function (e.g., protection, sustainable use, recreation, and landscape), and firewood harvesting is illegal in areas where it could be sustainably harvested, leading to illegal harvesting and the use of harvesting practices that are highly damaging (FAO, 2015).

Every year for the last 15 years, KFA has planted approximately 400 hectares with non-indigenous tree species, mostly black pine (*Pinus nigra*) and to a lesser extent, fir (*Abies alba*) and spruce (*Picea abies*). Most of the afforested area failed for several reasons: the poor quality of seedlings used; species planted that were not well-adapted to the site conditions; and/or poor planting techniques (FAO, 2015). Introduction of new, especially non-indigenouse species, can lead to changes in the ecosystems to which they are introduced; these include out-competing native biodiversity, creating a monoculture, which may be of little to no value for native wildlife, and increasing the possibility of insect infestations and diseases. However, no studies have been done in Kosovo to determine the potential impacts of plantation forests on native ecosystems. The plantations are expected to be more susceptible to climate change (FAO, 2015).

In addition to firewood, Kosovo's forests also provide erosion control. Much of the country's terrain is very steep and is prone to erosion, landslides, rock falls, and avalanches. However, historically poor management and conservation of forests, especially on steep slopes, caused an avalanche in Dragash/Dragaš (Sharr), in the village of Restelicës/Restelicska, and a landslide on the national road from Kaqanik- Kačanik to Skopje was the result of a quarry located on a steep and previously forested mountainside. Other similar incidents can be traced to destruction of forests, especially on steep slopes.

Both National Parks contain large areas of high mountain pastures, the only available summer pasture for sheep herding. In Malet e Sharrit/Šar Planine National Park, grazing areas have been mapped and sheep herders pay a fee for use of summer pasture. No fee collection for pasture use occurs or is being planned in Bjeshkët e Nemuna/Prokletije National Park.

Kosovo's forest ecosystems are also important for filtering air pollutants and maintaining air quality, wind protection, microclimate regulation, mitigating the effects of climate change, potentially as carbon sinks, and aesthetic landscapes, important for tourism. According to the National Forest Inventory (2012), Kosovo's forests store 88 million tonnes of CO₂.

Aquatic ecosystems in Kosovo are important for drinking water, irrigation, and tourism. However, no studies have been conducted on the economic and biodiversity values of Kosovo's aquatic ecosystems. This lack of information contributes to the unsustainable use of aquatic resources, especially for hydropower (see Section VI). With no data about the aquatic ecosystem's contribution to Kosovo's budding tourism industry and its importance to other sectors, such as irrigated agriculture, industry, and drinking water, information is insufficient to determine how water withdrawals for hydropower will affect other needs, and short-term demands (for "clean energy") are filled without regard for the potential long-term effects on other economic sectors and the aquatic ecoystem. Aquatic ecosystems and their potential to contribute to environmental services are also threatened by waste and wastewater disposal and industrial pollution.

V. LEGAL FRAMEWORK AFFECTING CONSERVATION

5.1 NATIONAL LAWS, POLICIES, AND STRATEGIES

Article 52 of Kosovo's constitution stipulates that citizens are responsible for the protection of nature. The key laws that directly regulate nature and biodiversity conservation are listed and briefly described in Table 5 (The complete list of laws, by-laws, plans, and guidelines is in Annex G).

Table 5. Laws with Direct Influence on Nature Conservation in Kosovo

Law	Brief Description
Law on Nature	Regulates overall conservation of nature (biodiversity and landscapes) and
Protection 03/L-233 ⁵	its sustainable use in the Republic of Kosovo. The Law on Nature
	Protection sets legal obligations for many policy documents on biodiversity
	and nature conservation.
Law on National Park	Established the national park, covering an area of 62,488 ha in the
"Bjeshkët e Nemuna ⁶	municipalities of Pejë/Peć, Deçan/Dečane, Junik, Istog/Istok (Burim), and
/Prokletije"	Gjakovë/Djakovica.
Law on National Park	Established the national park, covering an area of 53,469 ha in the
"Malet e Sharrit/Šar	municipalities of Prizren, Štrpce/Shtërpcë, Suharekë/Suva Reka (Therandë),
Planine" ⁷	Kaçanik/Kačanik, and Dragash/Dragaš (Sharr).
Law on Environmental	Promotes the establishment of a healthy environment for the population
Protection (04/L-25)	by gradually meeting the EU's environmental standards. Regulates the
	system of environmental protection and risk reduction for life and human
	health according to the concept of sustainable development.
Law on Spatial Planning	Ensures sustainable development of spatial planning in the territory of
(04/L-174) ⁸	Kosovo as a national value, through good governance, wise use of land,
	protection of the environment, and cultural and national heritage.
Law on Forestry	Regulates the roles and responsibilities for forest management, both for
(2003/3 and 2004/29)9	public and private forest land. In 2012, the law was amended, where
	responsibility for forest protection and tendering was delegated to
	municipalities as part of the decentralization process.
Law on Hunting (02/L-	Regulates the roles and responsibilities of hunting and wildlife management
53)10	and allows for three types of hunting areas: hunting areas of special
	importance (managed by KFA); joint hunting areas (managed by
	municipalities); and private hunting areas. The law describes the hunting
	season, species which should be protected, the objectives of hunting areas,
L Control	and protection and sustainable management of wildlife.
Law on Strategic	Establishes rules and administrative procedures on assessment of
Environmental	environmental impacts of plans and programs to provide high level
Assessment (03/L-230) ¹¹	protection of the environment and human health.

⁵ http://kuvendikosoves.org/common/docs/ligjet/2010-233-alb.pdf

⁶http://kuvendikosoves.org/?cid=1,191,986

⁷http://kuvendikosoves.org/?cid=1,191,988

⁸http://kuvendikosoves.org/?cid=1,191,1047

⁹http://www.kuvendikosoves.org/common/docs/ligjet/2003_3_al.pdf

¹⁰http://kuvendikosoves.org/common/docs/ligjet/2005 02-L53 al.pdf

¹¹http://kuvendikosoves.org/common/docs/ligjet/2010-230-alb.pdf

Law on Environmental Impact Assessment (03/L-214)	Establishes rules and administrative procedures on identification and assessment of environmental impacts of specific investment projects for issuing of environmental consent by MESP. All interventions in PAs, as well as other infrastructure projects, must be approved through an EIA process and include a report prior to issuing environmental consent.
Law on Fishery and Aquaculture (02/L-85) ¹²	Regulates management of fish resources, fishing activity, and aquaculture.
Criminal Code of Republic of Kosovo (04/L-082)13	Chapter 28 regulates criminal cases against the environment, animals, plants, and cultural objects (Art. 348-364)
Law on Water 04/L-147	Addresses sustainable use of water resources and their protection from pollution, overuse, and misuse.
Regulation 21/2013 ¹⁴	The MESP adopted this regulation on Rules of Conduct within national parks that prescribes the protection, preservation, promotion, and use of national parks and defines measures for non-compliance.

Significant legal developments in the nature protection sector occurred after the 2009 ETOA with the adoption of the new Law on Nature Protection (2010) and two laws on national parks (2012), including by-laws and other policy documents stipulated by these laws. Required by the Law on Nature Protection, the Strategy and Action Plan for Biodiversity, 2011-2020¹⁵ was prepared and approved in 2010.

The Law on Nature Protection also requires that each municipality must prepare a Local Biodiversity Action Plan (LBAP). To date, only two LBAPs have been adopted, for Prizren and Dragash/Dragaš (Sharr), both documents donor supported. Some municipalities included biodiversity status and actions as a separate chapter in their Local Environmental Action Plans (LEAPs) (Director of the REC-Kosovo, personal communication, May 7, 2018).

From the FAA 119 Team's review of the laws and policy documents and from interviews with officials and other stakeholders, the team concludes that most of the regulatory framework is in place; the guiding laws and bylaws, strategies, and action plans have been adopted. However, the legal framework is neither well-enforced nor supported by fines commensurate with the crimes. As an example, the FAA 119 team was told about an individual who had been charged more than 130 times of illegally harvesting wood, yet each time, after the individual was fined, he went back to illegally harvesting wood.

As stakeholders confirmed, the GoK has not provided the financial support to implement the regulatory framework. Projects from the SAPB, 2011-2020 have not received GoK funding (very few projects are supported by donors). This has resulted in a significant gap in the implementation of legislation and explains the 2018 EU evaluation of "no progress" in nature protection and alignment with the *Acquis Communitaire*.

5.2 INTERNATIONAL AGREEMENTS

Since Kosovo is not a member of the UN, it is not a full party to international environmental agreements, including biodiversity conservation agreements. However, the Law on Nature Protection

¹²http://kuvendikosoves.org/common/docs/ligjet/2006_02-L85_al.pdf

¹³http://kuvendikosoves.org/common/docs/ligjet/Kodi%20penal.pdf

¹⁴http://www.mmph-rks.org/repository/docs/MINISTRI-UA_NR_21-3685-13_728450.pdf

¹⁵ Strategy and Action Plan of Biodiversity 2011-20 available in Albanian: http://www.mmph-rks.org/repository/docs/SPVB_2011-20_Shqip_899103.pdf

emphasizes the connection with "international conventions," such as in the case of "capture, trade and hunting of species of international importance" (referring to the Convention on International Trade in Endangered Species, CITES) and in the many articles of the Law on Nature Protection that refer to Natura 2000 and the Habitat and Birds Directives, guiding policies of the EU. Since the 2012 ETOA, there have been no changes as far as Kosovo's status on international agreements.

5.3 GOVERNMENT AGENCIES

Table 6. Key Institutions Involved in Nature and Biodiversity Protection

Institution	Key Responsibilities
Assembly of Kosovo	Adopting laws related to nature conservation, spatial plans for national
	parks, and other important conservation areas.
Ministry of Environment	Coordinating activities in the field of environmental protection to promote
and Spatial Planning	coherent environmental protection policies. EIA permitting in protected
	areas.
Department of	Administrative, regulatory, and professional work in biodiversity
Environment-Division	conservation, natural heritage values, and sustainable use of natural values.
for Nature	
Conservation	
Kosovo Environmental	Data collection and processing for biodiversity and nature, monitoring of
Protection Agency-	biodiversity, professional reports for the state of PAs and biodiversity, and
Institute for Nature	designation of new areas and species under protection.
Protection	•
Directorate for	As a part of KEPA, overall administration of Malet e Sharrit/Šar Planine and
National Parks	Bjeshkët e Nemuna/Prokletije National Parks, based on the specific laws,
	spatial plans, and management plans.
Institute for Spatial	Develops spatial plan at state level and plans for special PA, such as
Planning	national parks and nature monuments of special importance.
Ministry of Agriculture,	Through its Department of Forestry, drafting and developing forestry
Forestry and Rural	policies and legislation on forest and wildlife management.
Development	
Kosovo Forestry	Regulation of forest and forest lands, implementation of forest and wildlife
Agency	laws and by-laws, and permitting for wood, NWFPs, and hunting.
Forestry Institute of	Technical and scientific support for KFA and Forestry Department within
Kosovo	MAFRD
Ministry of Industry-	Permitting of mining activities including quarries (most are located in forest
Council for Mines and Minerals	areas) and gravel extraction from rivers
	In accordance with the Levy on Network Directors CARD 2011 20 and
Municipalities	In accordance with the Law on Nature Protection, SAPB, 2011-20, and
	spatial planning documents, municipalities undertake biodiversity conservation measures in accordance with their LBAPs. According to the
	Forestry Law, forest protection is the responsibility of municipalities.
	Based on the Hunting Law, municipalities are responsible for hunting within their territories.
	within their territories.

Since the ETOA 2009, two new national park directorates were established with the responsibility of managing the national parks; this has, in part, increased overall management of the national parks (with the caveat stated above, lack of adequate funding).

FAA 119 interviews and site visits indicated that the following is common in biodiversity-related institutions: inadequate numbers of staff; lack of coordination within and between institutions; expertise that fails to match an agency's mandate; and overlapping responsibilities within governmental agencies. As an example of expertise failing to match an agency's mandate, originally, the Law on Forestry gave the mandate to KFA for management of all forest and forest lands, including those in national parks. The Law on National Parks transferred this responsibility to KEPA's Directorates of National Parks. With this transfer of responsibilities, staff was also transferred and the majority of the national parks' ranger corps now consists of staff previously hired as forest guards, yet they have been provided with no additional training for their new responsibilities in national park management, and they are still predominately working as guards.

Lack of coordination within and between government agencies is illustrated by an example described by the Director of the INPK to the FAA 119 Team: In the EIA permitting process in PAs, the INPK is not involved in the decision-making process. Even large infrastructure projects (e.g., the new road that the FAA 119 team visited, Deçan/Dečane-Plave/Plava) including those financed with government funds, are being implemented in sensitive PAs, without the required environmental consent of PA management (Director of Bjeshkët e Nemuna/Prokletije National Park, personal communication, May 9, 2018; Director of Road Inftarstructure-MED, May 10, 2018).

Lack of staff, especially individuals with university degrees in biodiversity fields, is a constraint in the field of conservation. The Nature Conservation Division in MESP has only four staff members with university degrees; INPK also has four staff: a director and one specialist for each-flora, fauna, and PAs. The National Parks administration consists of 56 staff members. Bjeshkët e Nemuna/Prokletije National Park, covering an area of 62,488 hectares, has 38 staff, of which only two have university degrees (the director and an economist), while the rest are forest guards (Director of Bjeshkët e Nemuna/Prokletije National Park, personal communication, May 9, 2018). Malet e Sharrit/Šar Planine National Park, covering an area of 53,469 hectares, has only 18 full time staff, a director, a biologist, and the rest are park rangers (Director of Malet e Sharrit/Šar Planine National Park, personal communication, May 11, 2018). Both parks have a dearth of biodiversity professionals, including foresters, and inspectors and there are no tourism officials. MESP lacks professionals with EIA knowledge. Only one MESP inspector is assigned to deal with biodiversity cases. Only one forester is stationed at Malet e Sharrit/Šar Planine National Park, and at Bjeshkët e Nemuna/Prokletije, there are no professional foresters.

At the municipality level, there are no biodiversity professionals, and the sector is usually covered by municipal environmental officers or inspectors. The effectiveness of the environmental inspectorates, both at central and local levels, is very low.

The FAA 119 team calculated that in the public sector, a total of 65 full-time staff members work in the field of biodiversity and PA conservation, with the responsibility for more than 11.7% of the most valuable territory of Kosovo in terms of biodiversity and natural resources.

5.4 CONSERVATION INITIATIVES: GAP ANALYSIS

Annex H contains the main conservation initiatives currently implemented and being planned in Kosovo, including some key activities that may indirectly contribute to biodiversity conservation. A brief evaluation of effectiveness is included, which is based on the FAA 119 Team's stakeholder consultations and site visits. No formal performance evaluations for these projects were made available to the FAA 119 Team.

Gaps in Support for Biodiversity Conservation

The main gaps in support for biodiversity conservation, including financial, technical, and managerial capacity, are the following:

- 1) The main gap in support for biodiversity conservation is financial and is attributed to:
 - Biodiversity conservation is not a GoK priority (as almost 100% of interviewees stated to the FAA 119 Team), and therefore, fails to receive adequate government support.
 - Since biodiversity conservation is not a GoK priority, it is also a very low priority for donor support. All donors except SIDA and GIZ have ended their direct support for biodiversity conservation.
 - Kosovo is not a UN member, and therefore, is unable to access UN funds.
 - The EU's Instrument for Pre-Accession (IPA) has had no funding for biodiversity; the 2018 IPA is in progress.
 - The environmental NGO sector is constrained by limited budgets; and because of this, they direct their attention to activities where funds are available, not biodiversity.
- 2) Technical capacity gaps in biodiversity conservation:
 - A limited number of professionals in the forestry and biodiversity conservation fields at all levels.
 - No capacity at municipality level in the biodiversity conservation field.
 - Very few and technically weak environmental NGOs.
- 3) Stakeholder consultations indicated that the following gaps in managerial capacity may exist:
 - Failure to advocate for adequate budgets in the biodiversity sector. The minimal fees collected by the few PAs that collect fees (see Section 3.4) are submitted to the central budget and from there, the funds go from the GoK budget to the MESP line budget to KEPA, and then to the PA.
 - Failure to motivate staff of biodiversity-related agencies.
 - Failure to emphasize enforcement of legislation (EIA, permitting processes, inspection activities, complying with PA zone guidelines, illegal harvest).
 - Failure to emphasize conservation partnerships and other innovative management approaches to strengthen community support for conservation initiatives.
 - Failure to promote PAs as areas of great potential for development activities, such as nature tourism, traditional tourism, recreation, NWFP collection, and education.

The main lessons learned from past and ongoing support for biodiversity conservation are:

- Direct financial support for biodiversity conservation is critical if Kosovo is to achieve sustainable biodiversity conservation results (versus indirectly supporting biodiversity conservation).
- Support for biodiversity conservation should be long-term. Results often require more than five years.
- SIDA's ongoing support is a model donor program for biodiversity conservation: Their support directly strengthens biodiversity conservation, they have the experience from investing long-term in the biodiversity conservation sector, and they build on results.
- Kosovo has a strong policy and regulatory framework for biodiversity, and now, technical, managerial, and financial support is needed for implementation of the framework rather than for updating and revising it.

VI. THREATS TO BIODIVERSITY

The FAA 119 team identified the direct threats to biodiversity in order of priority, drivers of the threats, and actions necessary to address the threats (one of the two requirements of FAA Section 119) based on stakeholder consultations, review of documents, and site visits, followed by team analysis.

6.1 DIRECT THREATS TO BIODIVERSITY

The 2012 update to the ETOA identified habitat loss (forest degradation from wood extraction and wild fires), water pollution, overexploitation of certain species, and climate change as the most important types of threats to biodiversity. The 2012 threats are also among the key direct threats that this analysis found, which, along with their key drivers, are described below in order of priority.

Key Direct Threats to Kosovo's Biodiversity

I) Uncontrolled and illegal harvesting of the forest, manly for firewood, inside and outside of PAs has created highly degraded forest ecosystems.

Forest ecosystems are the most endangered of Kosovo's ecosystems (Veselaj, 2012); this is largely due to the uncontrolled and illegal harvesting of wood for firewood. According to the 2012 National Forest Inventory (Tomter et al., 2013), only 7% of the wood harvested in Kosovo is in accordance with forest legislation; 93% is informally or illegally harvested. The majority of the illegally harvested wood is used for firewood, as this is the main source of heating, even in some urban areas (Kosovo Country Environmental Analysis, World Bank, undated).

The National Forest Inventory states that 59% of public forests and 34% of private forests have been subject to uncontrolled or illegal harvesting activities. Informal estimates suggest that approximately 780,000 m³ per year are cut illegally; this is at least 80% of the total annual increment.

Illegal harvesting is concentrated in the most valuable forest areas with the oldest, most productive trees. The situation is most critical in coniferous forest, "where the entire existence of large forest areas is put at risk if no strong and immediate actions are taken" (FSC, 2010). In addition, because improper harvesting technology is used when illegally harvesting, large areas of forest are damaged indirectly, and large volumes of wood are left on the ground, increasing the risk of fire and insect attacks. In steep terrain, overharvested areas are subject to erosion (also see below, threat 8, climate change).

Kosovo needs approximately 1.5 million m³ a year of fuelwood to meet heating needs (Tomter et al., 2013). The potential sustainable wood production from Kosovo's forests can satisfy the demand, but much less wood is being legally harvested (According to the National Forest Inventory (2012), the amount of firewood legally harvested in Kosovo (both in public and private forests) is approximately 250,000 m³). The difference in the demand and supply is a key factor driving illegal logging. Because of the limited legal supply of firewood on the market, the market price is high, and this is an incentive for illegal harvesting-it is a profitable business.

The most ecologically valuable forest is in the national parks. However, traditional areas for firewood collection were also placed under the National Park when Bjeshkët e Nemuna/Prokletije was created without considering local communities' need for firewood. The ecologically valuable forest could be protected from illegal harvesting if legal harvesting for firewood was allowed in designated areas in national parks outside of Zone I, and in designated areas outside of the national parks. Sustainable, legal harvesting could satisfy the demand for firewood, while curtailing illegal firewood harvesting in Zone I of the national parks, and preventing land degradation and other negative impacts on biodiversity and

wildlife habitat. Fuelwood harvesting could also generate funds (legally) that could be invested back into forest management.

In 2008, the EU project "Sustainable Forest Management" implemented forest thinning in three municipalities in Kosovo (Dragash/Dragaš (Sharr), Sllatina/Slatina, and Novo Brdo/Novobërdë (Artanë). With support from the project team, KFA staff marked the trees that were to be retained, monitored the thinning operation, and issued transport permits for the wood removed. Villagers performed the thinning and for compensation, they received the wood for free. Thinning took place in degraded forest that had previously been impacted by illegal cutting and where the diameter of trees was small. The project resulted in thinning of 35 hectares of forest, 82 families received firewood legally instead of harvesting illegally in unsuitable locations using damaging methods, and the forest was thinned to allow for regeneration. For the first time, villagers felt ownership of the forest; when others tried to enter and harvest, the villagers protected the forest from illegal harvesting. Prior to the thinning operation, the KFA doubted that this joint community-KFA activity could be successful, but when on the third day, 40 famililes showed up to perform thinning, the KFA was convinced of its utility.

2) Gravel quarries and gravel and sand extraction from rivers with no restoration is destroying habitat (see Photo 2).



(Photo 2. Gravel quarries dot the landscape in Kosovo, some legal, many illegal.)

Most stakeholders agreed that gravel extraction, legal and illegal, is a significant threat to Kosovo's biodiversity. According to the SAPB, 2011-2020, 463 gravel quarries exist (2010), 265 are illegal; only 198 have environmental consent and are legal. According to the mining law, ICMM can only issue an exploitation and operational license (conferring legality) once an operator provides the environmental consent and submits a recovery plan. Smaller quarries, in particular, are difficult to

control and many more than identified may be operating illegally. When EIAs are prepared and environmental consent is obtained, environmental impacts and recovery plans may be insufficiently evaluated, mitigated, and monitored. After gravel extraction is completed, the company is required to reclaim the land, including reforest the site. But instead, quarries are often abandoned, without reclamation, including containment of pollution from the sites. Although regulations are in place to prevent this, often they are not enforced, and most stakeholders commented that this is because individuals with influence are involved in many quarry operations.

Stakeholders told the FAA 119 team that even legal extraction from rivers has resulted in changes to riverbeds, causing flooding and affecting biodiversity. Gashi et al. (2015) reported that gravel and sand extraction from rivers is a serious problem, especially in the southern part of Kosovo, where the use of heavy equipment to mine these materials has destroyed fish habitat. Mustafa (2004 in Veselaj, 2012) states that Balkan lynx (*Lynx lynx balcanicus*) habitat was damaged when a quarry was allowed to be constructed on the border of the protected strict nature reserve of Rusenica (in Suharekë/Suva Reka (Therandë) municipality), and this led to lynx abandoning the area and never seen again.

3) Road construction, especially highways, is fragmenting wildlife habitat (see Photo 3).



Photo 3. Highway construction without erosion control (and dissecting the country north-south and east-west)

The SAPB, 2011-2020 states that construction of new roads, especially highways, will have a negative impact on natural habitats by fragmenting and otherwise decreasing habitat quality because of increased noise and light. A considerable number of wild animals have been killed on Kosovo's roads (SAPB, 2011-2020), also leading to a loss of biodiversity. Although highway and road infrastructure receives significant investment and has major impacts on the environment, no Strategic Environmental Assessment

(SEA), in accordance with the Law on SEA, has been prepared to evaluate and mitigate impacts at the sectoral level.

Construction of the Route 6 highway from Pristina to Skopje (approximately 60 kms of newly constructed road), which traverses Kosovo in a north-south direction, splitting Kosovo into two parts, is currently underway. Where the highway passes, Kosovo's terrain is relatively flat and therefore, the highway will have very few overpasses and underpasses, creating a barrier to movement, especially of large mammals, such as brown bear (*Ursus arctos L.*) and wolf (*Canis lupus L.*), populations of which are already threatened (Veselaj, 2012). A part of the highway runs close to the Kaçanik/Kačanik Gorge, along very steep terrain, sensitive to erosion and landslides. The signs of erosion are already present, yet no measures have been taken to prevent erosion. According to the Hani i Elezit/Elez Han Municipal Director for Agriculture and Environment, "construction of the highway is the biggest negative impact on the environment" in this part of Kosovo today.

Construction began on the 123 km Route 7 from Pristina to Albania in 2010 and was completed in 2018. Route 7 runs in an east-west direction, through the middle of the country, again splitting Kosovo in half. Construction of highways and other roads have cumulative impacts on wildlife habitat with each construction project further fragmenting habitat.

The EC Progress Report (2018) emphasizes "the need for these [highway construction] plans to ensure fulfillment of nature conservations [sic] during these interventions." However, the ElAs for both Routes 6 and 7 are completed and contain no plans to retain habitat connectivity (Ministry of Infrastructure-Director of Department for Road Infrastructure, personal communication, May 10, 2018). This is mainly due to lack of ElA capacity; the need for habitat connectivity was not considered a significant concern that required mitigation.

4) Hydropower plant construction and operation and ancillary activities are destroying aquatic ecosystems (see Photos 4 and 5).





(Photo 4, left). Road construction at the Decani Plave/Plava road in Bjeshkëte Nemuna/Prokletije National Park, in part upgraded to serve the Lumbardhi hydropower plants)

(Photo 5, right. Hydropower construction in Firaje ville, outside Malet e Sharrit/Šar PlanineNational Park)

In accordance with the EU goal 20:20:20 and national renewable energy planning, Kosovo is obligated to obtain 20% of its energy from renewable energy sources. Hydropower is the dominant renewable energy source being exploited to reach this level. Vejnović et al. (2018) identified 103 "greenfield" hydropower projects in Kosovo, planned or having started operation since 2005 (see Figure 4) ("greenfield" means that the plants are located on a site that had not previously been developed for hydropower).

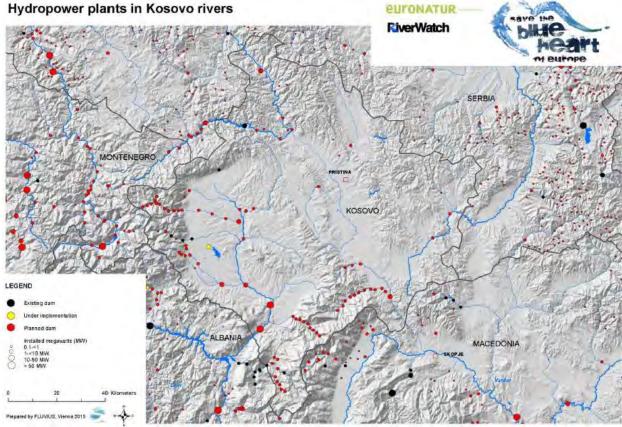


Figure 4. Map of Hydropower Plants (Ref. Schwarz, U., 2015)

Some of the hydropower projects currently under construction and planned are: two new medium-sized hydropower plants along the two large rivers, Ibri/Ibar and Drini i Bardhe/Beli Drim (Schwarz, 2015); a

hydropower plant, Brodi 2, with a section along the Lumi i Restelicës/Restelicska Reka next to Zone I of Malet e Sharrit/Šar Planine National Park, and a section in the village of Mlikë/Mlike in the Municipality of Dragash/Dragaš (Sharr), which is being renovated and upgraded; Restelicës/Restelicska cascade, currently under construction in Malet e Sharrit/Šar Planine National Park; a new hydropower plant was being constructed in Bjeshkat e Nemuna/Prokletije National Park in the Deçan/DečaneValley at the Lumbardhi i Lloqanit/Loćanska Bistrica, however, after public and NGO objections, the MESP withdrew the permit for the plant. The MESP decision stated that the ongoing renovations to existing hydropower plants (Radavc, Lumbardhi, and Kelkos in Bjeshkat e Nemuna/Prokletije National Park) can continue, however, no new hydropower plants may be constructed in national parks. (This decision may only be temporary).

The existing hydropower plants in Bjeshkat e Nemuna/Prokletije National Park have ElAs and permits, (with the justification that the projects began before the national park was designated) however, other than in the national park, there seems to be confusion about which hydropower projects have ElAs and permits.

According to Vejnović et al. (2018), 51 of the 103 "greenfield" hydropower plants are located in PAs. In a previous report from 2015, only two new plants had started operating since 2005 and two more have been commissioned since then. However, the pace of construction seems to be speeding up with as many as 18 plants under construction and 34 plants being planned, 18 of these in PAs (Vejnović et al., 2018); these may be affected by the recent MESP decision regarding construction of hydropower plants in national parks.

Ancillary activities, such as road construction and upgrade, are also a threat to biodiversity. The road upgrade to access the Rugova plant, alongside the Pejë/Peć cascade, is being undertaken without the necessary erosion control, especially on steep slopes, affecting aquatic biodiversity. Standard best practices could easily address the impacts to aquatic biodiversity. The Deçan/Dečane-Plave/Plava road, being constructed to access villages in Montenegro and also serving the Lumbardhi hydropower plants are also causing degradation of habitats in the Bjeshkët e Nemuna/ Prokletije National Park, as the FAA I 19 team witnessed during a site visit.

Most of these hydropower plants are poorly planned, due to inadequate and unreliable data on hydrology. Likely to withdraw more water than is sustainable, without regard to aquatic ecosystems (as the analaysis team was told, some of the rivers will be completely piped), these developments are not only a threat in Kosovo, but also to biodiversity conservation throughout the Balkans and southern Europe. 16 "Save the Blue Heart of Europe" 17 is a multi-country campaign to protect Balkan rivers from unsustainable hydropower plant development as these rivers are key freshwater ecosystems with biodiversity importance and critical resources for humans, as well, but only if used sustainably, in accordance with sound environmental principles and standards.

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 $^{{}^{16}}https://balkan rivers.net/sites/default/files/Protected\%20 areas\%20 and\%20 hydropower\%20 dams\%20 in\%20 the\%20 Balkan 1905 15. pdf$

¹⁷ https://www.balkanrivers.net/

5) Illegal construction in PAs is fragmenting, degrading, and destroying habitat (see Photo



(Photo 6. Construction of the tourist village at Prevala/Prevallac in Malet e Sharrit/Šar Planine National Park adjacent to Zone I (the structures and ancillary features are illegal).)

According to Veselaj (2012), large construction projects, such as subdivisions, hotels, restaurants, and factories, especially in PAs, are among the main causes of habitat degradation. Most of these facilities are constructed without an EIA permit, required for any intervention in a PA, and therefore, are illegal. For example, in Bjeshkët e Nemuna/ Prokletije National Park, of 2,400 buildings, only

eight have permits; 2,392 structures are illegal. The Bjeshkët e Nemuna/ Prokletije National Park Spatial Plan and Management Plan have not yet been approved and this drives illegal construction.

Construction has taken place in strict nature reserves (Zone I), where no human activities are allowed and in Zone 2, which restricts certain activities, such as construction. The Prevala/Prevallac tourist village near Prizren, is located at the boundary of protected strict reserves of relict Bosnian pine (*Pinus heildreichii*), which is designated Zone I in the Malet e Sharrit/Šar Planine National Park Spatial Plan and Malet e Sharrit/Šar Planine National Park Management Plan. The Prizren municipal authorities granted the permits for this construction, and because permission never should have been granted in this sensitive habitat, permitting authority was transferred from the municipality to the MESP. Even now though, with MESP oversight, the situation has not improved. No provisions have been made for solid waste and wastewater management. The village includes a road network, which is unpermitted and therefore, illegal.

The MESP website (March 5, http://www.mmph-rks.org/en-us/Search) states that the MESP inspectorate distributed 45 decision acts ordering the owners of illegal construction within Malet e Sharrit/Šar Planine National Park to demolish, within 15 days, the facilities that have no construction permit and are in conflict with the Regulatory Plan for the Prevala/Prevallac resort. The FAA 119 team visited the site on May 11, and no facilities had been demolished yet. The MESP decision also ordered the owners of such facilities to remove demolition waste and reclaim the degraded landscape.

Whether legal or illegal, construction projects, including the Prevala/Prevallac resort, often fail to use best practice standards that would avoid or reduce impacts to biodiversity and the environment in general. The many construction projects within PAs without regard to biodiversity value are fragmenting and otherwise degrading Kosovo's key habitat for wildlife.

6) Illegal and overexploitation of plant and wildlife species threatens some of Kosovo's most sensitive and endangered plants and wildlife.

Collection of MAPs, wild mountain fruit, and mushrooms is often undertaken illegally and unsustainably. Illegal and overexploitation of MAPs is affecting rare and endangered plant species (SAPB, 2011-2020); however, due to lack of monitoring, the extent of the threat and its impact on rare and endangered species is largely unknown. MESP is not monitoring collection of MAPs in PAs due to lack of staff and KFA is failing in their responsibility to monitor the collection of MAPs outside PAs.

The yellow gentian (*Gentiana lutea*) in Bjeshkët e Nemuna/Prokletije National Park, in the Deçan/Dečane Valley area is under the most direct threat because of its medicinal values and very high market price.

The FAA 119 team was told about an area along the border of Kosovo and Albania, where Albanians typically cross the border to illegally collect MAPs, especially, yellow gentian. Because of lack of control of this cross-border exploitation, yellow gentian is threatened and could become locally extinct from areas where it typically occurs.

Illegal hunting is also a threat to biodiversity. According to the SAPB, 2011-2020, even though hunting licenses are regulated and members of hunting associations are trained about sustainable hunting and specific "game" species, hunting takes place outside of regulated hunting seasons and areas and endangered species have been shot. One week after the FAA 119 team completed their field work, national media reported that a Balkan lynx (*Lynx lynx balcanicus*) in the Podujeva/Podujevo area was trapped and shot. With a worldwide population of only 30 Balkan lynx (it is on Annex II of the Bern Convention), the illegal killing or capture of even one animal is a significant impact to the population, as well as being against the Criminal Code of the Republic Kosovo, subject to three years in prison.

No monitoring of the cross border wildlife trade is conducted and the FAA 119 team found no reliable data on the topic, including whether illegal wildlife trafficking is occurring.

7) Pollution is a threat, especially to Kosovo's aquatic biodiversity.

The SAPB, 2011-2020, states that due to water pollution, the biodiversity of aquatic ecosystems has been dramatically impacted, including the fisheries. The SAPB identifies polluted urban river channels (solid and liquid waste), past industrial pollution, and pollution from the use of mineral fertilizers and pesticides in agriculture as the main pollutants of concern.

The lack of sewage treatment plants was a key threat noted by several of those interviewed for the analyis. In https://wiki.rit.edu/display/0508484012121/Final+Report,+River+Pollution+In+Kosova, Xhambazi (2012) states that the biggest threat to the aquatic ecosystem is Kosovo's sewage system. In Kosovo only about 48% of all homes are connected to a sewage system and where no sewage treatment exists, it is disposed directly into rivers. Only the municipality of Skënderaj/Srbica has a wastewater treatment plant, which, due to high maintenance costs, is difficult to keep in good operating condition. The SharrCem factory has a wastewater treatment plant, to which 26 households of Hani i Elezit/Elez Han municipality are connected.

Swiss Cooperation and GIZ are investing in wastewater treatment plants in Gjakovë/Djakovica and Pejë/Peć, both in the Drini i Bardhe/Beli Drim basin. KFW is financing the Prizren wastewater treatment plant, and when complete, these will cover the entire Drini i Bardhe/Beli Drim basin.

In Kosovo, landfills operate with minimal standards and pose a risk to biodiversity. Landfills are unlined, no separation of hazardous, household, medical, and other wastes occurs and therefore, all waste is treated the same and without the stringent standards needed to safeguard people and the environment. No groundwater monitoring is in place, and therefore, the extent of contamination, if any, of the aquatic environment is unknown.

Industrial waste has yet to be cleaned up at several sites, such as in Trepça/Trepća and KEK areas of operation. In 2010, REC and MESP developed the first Water Polluters Cadastre, where a list of 56 collective discharge polluters (sewage pipes) and 22 individual (industry discharge points) have been registered.¹⁹

¹⁸http://gazetametro.net/vritet-ne-llap-kafsha-me-e-rralle-ne-bote-autori-mund-te-shkoje-3-vite-ne-burg/

¹⁹https://www.ammk-rks.net/repository/docs/Water Polluters Cadastre eng.pdf

8) Climate change is affecting Kosovo's biodiversity.

The USAID Climate Change Risk Profile for Kosovo (January 2017) states that for the Western Balkans, climate change projections are:

- Regional warming higher than the world average, especially for mountain areas.
- Decrease in overall annual precipitation, with the greatest decreases in summer.
- Increases in winter precipitation, particularly in mountains, resulting in more frequent spring flooding.
- A decline of 50 days per year of snow cover by 2050.

As discussed above, quality and productivity of Kosovo's forests are declining and they will be further compromised by climate change. Particularly for forests on steep, mountainous terrain, desertification due to soil erosion is already noticeable and climate change will exacerbate desertification. Forest fires in 2011 and 2012 were correlated with drought years and high temperatures, and based on climate change projections of decreased annual precipitation, especially in summer, and warmer temperatures, destructive forest fires will likely increase.

Climate data in Kosovo are insufficient to determine the extent of the climate change threat. The first meteorological station in Kosovo was constructed in 1925. Until World War II, Kosovo had 28 stations. By 1989, the country had 126 stations. From 1989 until 2000, no climate monitoring took place. After 2000, stations were re-installed at the same locations as they previously stood. However, data are missing from 1925 to 1999 as they are with the Hydro-meteorological Institution of Serbia (Sharku et al., 2016) and not shared with colleagues in Kosovo.

Biodiversity experts interviewed by the FAA 119 team did not mention climate change impacts on Kosovo's biodiversity as a significant threat. This could be due to the lack of data on the topic.

6.2 DRIVERS OF THREATS

Table 7. Drivers of Biodiversity Threats

Drivers of the Direct Threats (constraints, opportunities, or other	Direct Threats
important variables that positively or negatively influence direct	to Kosovo's
threats)	Biodiversity
 Inadequate enforcement by national park staff of legislation controlling wood harvesting in parks (harvesting wood in a national park without a permit is illegal) due to weak PA management (ultimately due to lack of government will to protect biodiversity). Inadequate enforcement by KFA and municipalities of legislation controlling wood harvesting in forests outside national parks (harvesting wood in public forests requires a permit) (Ultimately due to lack of government will to protect biodiversity). The demand for firewood far exceeds the legal supply of firewood. Weak civil society: Lack of public awareness about the importance of biodiversity to development of the country and weak CSOs that are unable to effectively advocate for biodiversity conservation and sustainable development. A shortage of legal and/or affordable alternatives to wood fuel for heating and cooking. Households that lack the infrastructure (stoves, insulation) to minimize their use of wood fuel and/or to transition to alternative energy sources (wood pellet stoves). 	I) Uncontrolled and illegal harvesting of forest for firewood and inside and outside of PAs has created highly degraded forest ecosystems.

- A judicial system that is ineffective and inefficient at dealing with natural resources-related criminal cases as regulated in the Criminal Code. Cases take a long time to be brought to court; fines are inadequate and fail to discourage illegal activities; the judiciary often sides with people versus the natural resources.
- Special interests are able to benefit over the good of the population and of Kosovo's biodiversity.
- FSC certification standard has been developed for Kosovo, yet the most productive forest is now in the national park, Bjeshkët e Nemuna/Prokletije creating pressure to de-gazette to allow commercial harvesting (Since FSC certification takes significant technical effort and is expensive to maintain, the process remains at a standstill since the most productive and potentially profitable forest is now in the national park, where commercial timber harvesting is prohibited).
- Inadequate budget, training, and numbers of MESP and municipality staff
 results in EIA and permitting that is not conducted in thorough, transparent,
 and professional manners; this allows many quarries to operate illegally,
 without permits (Ultimately due to lack of government will to protect
 biodiversity).
- Inadequate number and training of inspectorate staff to conduct inspections
 to ensure that permit requirements are followed and that restoration takes
 place (Ultimately due to lack of government will to protect biodiversity).
- A judicial system that fails to fine companies commensurate with the offense of not restoring quarries and riverbeds as foreseen in EIA permits.
- Weak civil society: Lack of public awareness about the importance of biodiversity to development of the country and weak CSOs that are unable to effectively advocate for biodiversity conservation and sustainable development.
- A pro-development attitude among government, media, and the general population, with a lack of understanding about the importance of protecting biodiversity, the foundation of development.
- Special interests are able to benefit over the good of the population and of Kosovo's biodiversity.
- Inadequate budget, training, and numbers of MESP and municipality staff
 results in EIA and permitting that is not conducted in a thorough,
 transparent, and professional manner (Ultimately due to lack of government
 will to protect biodiversity).
- A pro-development attitude among government, media, and the general population, with a lack of understanding about protecting biodiversity, the foundation of development.
- Deficient data on wildlife habitat, populations, and movement results in the inability to plan and advocate for measures to protect wildlife.
- Inadequate budget, training, and numbers of MESP and municipality staff
 results in EIA and permitting that is not conducted in thorough, transparent,
 and professional manners; this allows hydropower projects to operate
 illegally, without permits. (Ultimately due to lack of government will to
 protect biodiversity).
- Inadequate number and training of staff to conduct inspections to ensure that permit requirements are followed. (Ultimately due to lack of government will to protect biodiversity).

2) Gravel quarries and gravel and sand extraction from rivers with no restoration is destroying habitat.

- 3) Road construction, especially highways, is fragmenting wildlife habitat.
- 4) Hydropower plant construction and operation and ancillary activities are destroying aquatic ecosystems.

- Weak PA management that fails to balance development with conservation in PAs.
- Deficient data on the hydrology of Kosovo's rivers to evaluate hydropower feasibility and on which to base decisions.
- Weak civil society: Lack of public awareness about the importance of biodiversity to development of the country and weak CSOs that are unable to effectively advocate for biodiversity conservation and sustainable development.
- A judicial system that fails to fine companies commensurate with the offense of not fulfilling permit requirements.
- A pro-development attitude among government, media, and the general population, with a lack of understanding about protecting biodiversity, the foundation of development.
- The EU 20:20:20 goal to obtain at least 20% of energy from renewable energy sources is being applied in Kosovo only in support of hydropower development rather than for the full range of possible renewable energy sources.
- Special interests are able to benefit over the good of the population and of Kosovo's biodiversity.
- Inadequate budget, training, and numbers of MESP and municipality staff
 results in EIA, Regulatory Plans, and permitting not conducted in thorough,
 transparent, and professional manners, allowing facilities to be constructed
 without permits. (Ultimately due to lack of government will to protect
 biodiversity).
- Weak PA management that fails to balance development with conservation in PAs
- Inadequate number and training of staff to conduct inspections to ensure that
 permit requirements are followed and that restoration takes place.
 (Ultimately due to lack of government will to protect biodiversity).
- Weak civil society: Lack of public awareness about the importance of biodiversity to development of the country and weak CSOs that are unable to effectively advocate for biodiversity conservation and sustainable development.
- Deficient data and transparency on the number and locations of illegal v. legal facilities inside (and outside) of PAs.
- A pro-development attitude among government, media, and the general population, with a lack of understanding about protecting biodiversity, the foundation of development.
- Special interests are able to benefit over the good of the population and of Kosovo's biodiversity.
- Deficient data on wildlife and MAPs results in the inability to develop sustainable use plans; and without adequate, reliable data, no management plans have been developed for large mammals (Balkan lynx, wolf, and bear) and other wildlife species. In part, data deficiencies are attributed to lack of data sharing and transparency (data on MAP distribution, numbers, and sustainable use have been developed, but have not been shared among agencies).
- Weak PA management that fails to sustainably manage PA resources.
- Inadequate numbers of professionally trained staff to manage hunting areas. (Ultimately due to lack of government will to protect biodiversity).

5) Illegal construction in PAs is fragmenting, degrading, and destroying habitat.

6) Illegal and overexploitation of plant and wildlife species threatens some of Kosovo's most sensitive and endangered plants and wildlife.

 Poor cooperation with courts, police, and relevant natural resource institutions on controlling the use of protected wildlife and plant species. Lack of data on the cross-border wildlife trade results in the inability to manage the trade and advocate for greater control. 	
 Deficient data to evaluate possible effects of climate change on biodiversity and upon which to base decisions about biodiversity conservation in line with projected climate change. Lack of government will and capacity to integrate climate change effects on biodiversity into development plans. 	7) Climate change is affecting Kosovo's biodiversity.
 Inadequate enforcement of legislation to control and monitor pollution and to reclaim land and water impacted by pollution. Weak civil society: Lack of public awareness about the importance of biodiversity to development of the country and weak CSOs that are unable to effectively advocate for clean-up of polluted sites. 	8) Pollution is a threat, especially to Kosovo's aquatic biodiversity.

Affecting all aspects of biodiversity conservation and the capacity to address threats is Kosovo's unresolved political status. Since the country is not a member of the UN or the EU, Kosovo is unable to access EU and multilateral funds and to fully participate in UN conferences and other related activities. For example, while other countries in the region can benefit from the United Nations Global Environment Facility and Green Climate Fund, Kosovo is unable to apply for these funds.

As Table 7 indicates, drivers of the majority of direct threats are:

- The legal framework that supports biodiversity conservation is largely not enforced (directly related to lack of political will);
- Data for all areas of biodiversity are seriously limited and the lack of transparency and sharing of data exacerbates the problem;
- Agencies are constrained because they do not have the needed capacities and numbers and staff
 are unmotivated due to limited budgets (directly related to lack of political will); and
- In the biodiversity sector, CSOs, media, and the judicial sector are weak.

VII.ACTIONS NECESSARY TO CONSERVE BIODIVERSITY

The FAA 119 team identified "Actions Necessary" to address these drivers of the direct threats. Table 8 fulfills the first requirement of FAA 119, the actions necessary to conserve biological diversity in the country. As relevant, Table 8 includes actions from the 2012 FAA 119 Analysis. The current status of the "actions necessary" from the 2009 ETOA and 2012 FAA 119 Update is in Annex I. Unless stated otherwise, the GoK would lead the "actions necessary," most of which would need external financial and technical support.

Table 8. Actions Necessary to Conserve Biodiversity

Drivers	Links to Direct	Actions Necessary
Inadequate enforcement of legislation due to inadequate budget and numbers and training of staff (ultimately due to lack of government will to conserve biodiversity).	- Uncontrolled and illegal harvesting of wood - Gravel quarries and gravel and sand extraction from rivers with no restoration - Hydropower plant construction and operation - Illegal construction - Illegal and overexploitation of plant and wildlife species - Climate change -Pollution	- Establish an Environmental Fund (Ekofondi) as a tool to channel ecological taxes for environment and biodiversity related activities, as required by SAPB, 2011-20. - Hire biodiversity, tourism, and community natural resource professionals, and/or strengthen capacities of KFA and national park directorate staff in biodiversity conservation and monitoring, promotion and development of tourism, and community-based natural resource management in accordance with approved management plans). - Approve the Bjeshkët e Nemuna/Prokletije National Park Spatial Plan and when finalized, the Management Plan. - Develop and approve Regulatory Plans, required to ensure development is environmentally sound, for additional Zone 3 areas in the two national parks (A Regulatory Plan exists only for Prevala/Prevallac; Regulatory Plans are planned for four Zone 3 areas in the two national parks). - Demarcate, on the ground, outer boundaries and inner conservation zones of the national parks. - Place guard shacks to control movement of goods (especially of MAPs/NVFPs, wood, and construction material) and collect fees to enter national parks. - Train all levels of KFA and KEPA staff and other affected persons in the legal framework for forestry and nature protection so that they become more "meaningful," are not seen as "obstructive," and to enhance standards of professionalism and commitment to their tasks (adapted from the Forest Strategy). - Develop forest vocational training programs (Forest Strategy) and develop wildlife management and hunting vocational training programs to quickly add trained staff to relevant agencies (lead: academic institutions).

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The demand for firewood far exceeds the legal supply of firewood.	- Uncontrolled and illegal harvesting of wood	- Create a country-level independent inspectorate agency (Minister of the Environment and Spatial Planning) Develop a Payment for Ecosystem Services (PES) system to contribute to the PA budget and to raise awareness of the importance of biodiversity conservation Amend the Hunting and Wildlife Management Law (2006) to strengthen governance and rule of law in the wildlife sector by expanding the mandate of forest guards from only forest protection to wildlife conservation and hunting and harmonize the law with EU directives (Birds and Habitat Directives) and other international conventions (Bern, Ramsar, etc.) Harmonize Kosovo's secondary legislation for wildlife management with Red List fauna species to avoid overlap Apply silvicultural treatments to young coppice (low quality deciduous) forests to increase the official harvesting target to sustainably meet the demand in Kosovo for firewood (Forest Strategy). (lead: private forest owners, as well as the KFA) -Hire/train more foresters, who could advocate for and implement sustainable forest management. Maximize the potential multiple use benefits of forests through land consolidation processes that would promote rational use of public and private forests and through the introduction of systems and tools allowing the private sector to take responsibility for management of certain delineated areas of state owned forests (Forest Strategy) Conduct national forest inventories on a regular basis, and process and store data for easy access to use for planning purposes (adapted from Forest
Weak PA	- Uncontrolled and	Strategy).
management that fails to control illegal activities, balance conservation and development, manage resources sustainably.	illegal harvesting of wood - Hydropower plant construction and operation - Illegal construction - Illegal and overexploitation of plant and wildlife species	See Actions Necessary above for "Inadequate enforcement of legislation due to inadequate budget and numbers and training of staff."
A shortage of legal and affordable alternatives to wood fuel for heating and	- Uncontrolled and illegal harvesting of wood	See below, "Households that lack the infrastructure."

cooking		
Households that lack the infrastructure (stoves, insulation) to minimize their use of wood fuel and/or to transition to alternative energy sources.	- Uncontrolled and illegal harvesting of wood	- Provide incentives for households to purchase efficient stoves and insulation and to use clean energy alternatives, where available, such as wind, solar, and "clean" fuels.
A judicial system that is ineffective and inefficient in dealing with natural resources cases.	- Uncontrolled and illegal harvesting of wood - Gravel quarries and gravel and sand extraction from rivers with no restoration is resulting in habitat destruction - Hydropower plant construction and operation - Illegal and overexploitation of plant and wildlife species	- Strengthen cooperation among government agencies, focusing on police, prosecutors, and courts, to improve enforcement, follow up on reports of criminal transgressions, and judicial outcomes (Forest Strategy and SAPB, 2011-2020) Strengthen the "environmental crime sector" by training members of the judiciary, prosecutors, and the police officers (currently four) in the environmental crimes unit Increase the penalties for environmental crimes Create an independent country-level inspectorate agency (Minister of the Environment and Spatial Planning)
Special interests are able to benefit over the good of the population and of Kosovo's biodiversity.	- Uncontrolled and illegal harvesting of wood - Gravel quarries and gravel and sand extraction from rivers with no restoration - Hydropower plant construction and operation - Illegal construction	- Strengthen the EIA and permitting processes by training staff in the EIA process, especially those whose responsibility is to review EIAs; increasing the number of staff assigned to review and monitor EIAs, e.g., inspectorate staff; involving national park administration in the EIA decision making process when actions are planned in PAs; and ensuring transparent review, decision making, and follow up actions (e.g., compliance with requirements, fines and other legal actions taken). - Also see "actions necessary" under civil society and public awareness.
FSC certification standards have been developed for Kosovo, yet the most productive forest is now in the Bjeshkët e Nemuna/Prokletije National Park, creating pressure to de-gazette.	- Uncontrolled and illegal harvesting of wood	-Support joint national park-community-based enterprises for fuelwood collection to challenge the pressure to de-gazette the national park. - Train biodiversity-related CSOs in advocacy, fundraising, and other measures to ensure their sustainability (lead: CSOs)
A pro-development attitude among government, media,	- Gravel quarries and gravel and sand extraction from rivers	- Build a community of support for environmentally sound development by strengthening the eco-tourism sector through training of Ministry of Trade and

- Highway construction	Industry Tourism Department, MESP park
- Hydropower plant construction and operation - Illegal construction	directorate staff, private sector tour operators, and eco-tour guides; developing tourism products, such as bird guides, plant guides, trail guides, and guides to national parks and other areas of eco-tourism interest; strengthening transboundary eco-tourism, by coordinating on marketing transboundary eco-tourism products; and strengthening the MAP sector by training entrepreneurs in processing, marketing, branding, and by providing incentives, such as grants as loans. (lead: in addition to the Minsitry of Trade and Industry, private sector tour operators) - Provide opportunities for communities adjacent to national parks and other PAs to benefit from natural resources, such as through wood and MAP collection and participation in eco-tourism opportunities. -Also see "actions necessary" under civil society and public awareness.
Uncontrolled and illegal harvesting of wood Gravel quarries and gravel and sand extraction from rivers Highway construction Hydropower plant construction and operation Illegal construction Pollution (aquatic biodiversity)	- Encourage coordination and cooperation among "environmental journalists" and biodiversity-related academics, CSOs, and media companies (national TV station, etc.) to strengthen the demand for investigative environmental journalism products. (lead: private sector) - Train environmental journalists in investigative environment and biodiversity-specific journalism. (lead: private sector) - Train biodiversity-related CSOs in advocacy, fundraising, and other measures to ensure their sustainability (lead: CSOs) - Improve public awareness and understanding of biodiversity as a resource for sustainable development, so that citizens can participate actively in environmental decisions and take responsibility for conservation, leading to greater participation of civil society in biodiversity conservation (FAA 119, 2012). (lead: private sector, in addition to the GoK). - Increase cooperation between biodiversity-related institutions, including NGOs, and teacher associations/schools (adapted from the SAPB, 2011-2020). (lead: GoK and private sector, including NGOs and teacher assocations). - Train teachers at all levels on measures to increase the environmental and biodiversity conservation curricular portfolio (SAPB, 2011-2020).
Illegal construction Hydropower plant construction and operation	- Develop a full inventory of plant and animal species in Kosovo followed by a computerized information system (SAPB, 2011-2020). (lead: NGOs, academia, in addition to the GoK) - Provide incentives and forums for cooperation and
	Uncontrolled and illegal harvesting of wood Gravel quarries and gravel and sand extraction from rivers Highway construction Hydropower plant construction and operation Illegal construction Pollution (aquatic biodiversity)

	overexploitation of plant and wildlife species Climate change	data sharing within and among ministries, such as data on MAP populations and sustainable use. - Develop a database, available to the public, with information on the EIA and construction permitting processes, including status of EIAs and permits with capability for public input/comment. - Conduct biodiversity baseline surveys (updated from FAA 119 (2012)), such as: population and habitat studies for species in Kosovo, especially those listed in the Directive for Wild Birds and Directive for Habitats; for flora and fauna in national parks; inventory of birds in Malet e Sharrit/Šar Planine National Park; inventory of invasive species (SAPB, 2011-2020); and study of potential impacts of climate change on Kosovo's biodiversity and the potential impacts from climate change on forest fire incidence, insects, and diseases. - Prepare Management Plans for threatened/endangered, keystone wildlife (e.g., Rupicapra rupicapra, Lynx lynx balcanicus, Canis lupus, Ursus arctos) - Conduct a country-wide hydrological study to determine water flow requirements in Kosovo's river basins, including flow needed to maintain aquatic ecosystems.
EU 20:20:20 goal to obtain at least 20% of energy from renewable energy sources	Hydropower	- Conduct economic analyses for use of renewable energy options that include natural resource valuation and accounting and use these as a basis for decision making prior to approving additional hydropower projects. (lead: academia in addition to the GoK)

VIII. EXTENT TO WHICH THE MISSION MEETS THE IDENTIFIED ACTIONS NEEDED

Table 9 describes the extent to which the current CDCS meets the biodiversity conservation needs identified and satisfies the second requirement of the FAA of 1961, as amended, the extent to which the actions proposed for support by the Agency meet the [biodiversity conservation] needs thus identified. Annex J contains a brief description of the current CDCS. Annex K contains a preliminary "extent to which" table for the upcoming CDCS.

Table 9. Extent to Which USAID Actions Meet Biodiversity Needs

Actions necessary to achieve conservation of biodiversity (consolidated from Table 8, column 2)	Extent to which USAID actions currently meet biodiversity needs
Establish an Environmental Fund (Ekofondi) as a tool to	No USAID/Kosovo actions address this.
channel ecological taxes for environment and biodiversity-	
related activities as required by SAPB, 2011-20.	
Hire biodiversity, tourism, and community natural resource	No USAID/Kosovo actions address this.
professionals, and/or strengthen capacities of KFA and	
national park directorate staff in biodiversity conservation	
and monitoring, promotion and development of tourism,	
sustainable forest management, and community-based	
natural resource management.	
Approve the Bjeshkët e Nemuna/Prokletije National Park	No USAID/Kosovo actions address this.
Spatial Plan and when completed, the Management Plan.	
Develop and approve Regulatory Plans, required to ensure	No USAID/Kosovo actions address this.
development is environmentally sound, for additional Zone	
3 areas in the two national parks.	
Demarcate, on the ground, outer boundaries and inner	No USAID/Kosovo actions address this.
conservation zones of the national parks.	
Support MESP efforts to place guard shacks to control	No USAID/Kosovo actions address this.
movement of goods (especially MAPs/NWFPs, wood, and	
construction material), to collect fees to enter national	
parks and track visitation data, and raise awareness of the	
public about the reasons and importance for implementing	
these measures.	
Train all levels of KFA and KEPA staff and other affected	No USAID/Kosovo actions address this.
persons in the legal framework for forestry and nature	
protection so that they become more "meaningful," are not	
seen as "obstructive," and to enhance standards of	
professionalism and commitment to their tasks (adapted	
from the Forest Strategy).	N. 110415 (1)
Develop forest vocational training programs (Forest	No USAID/Kosovo actions address this.
Strategy). Develop wildlife conservation and hunting	
vocational training programs.	AL LICAID III
Create an independent, country-level inspectorate (Minister	No USAID/Kosovo actions address this.
of the Environment and Spatial Planning).	N. LICAID/IV
Develop a PES system to contribute to the PA budget and	No USAID/Kosovo actions address this.
to raise awareness of the importance of biodiversity	

conservation.	
Amend the Hunting and Wildlife Management Law (2006)	No USAID/Kosovo actions address this.
to strengthen governance and rule of law in the wildlife	NO OSAID/ROSOVO actions address tins.
sector by expanding the mandate of forest guards from only	
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forest protection to wildlife conservation and hunting and	
harmonize the law with EU directives (Birds and Habitat	
Directives) and other international conventions (Bern,	
Ramsar, etc.).	N. LIGAID //
Harmonize Kosovo's secondary legislation for wildlife management with Red List fauna species to avoid overlap	No USAID/Kosovo actions address this.
Apply silvicultural treatments to young coppice forests to	No USAID/Kosovo actions address this.
increase the official harvesting target to sustainably meet	
the demand in Kosovo for firewood (Forest Strategy).	
Support KFA to maximize the potential multiple use	DO I's Property Rights Program
benefits of forests through land consolidation processes	improves the legal framework and
that would promote rational use of public and private	institutional practices and procedures
forests and through the introduction of systems and tools	governing property rights to acquire,
allowing the private sector to take responsibility for	register, use, and transfer property. The
management of certain delineated areas of state owned	Property Rights Program lays the
forests (Forest Strategy).	foundation for this "action."
Conduct national forest inventories on a regular basis, and	No USAID/Kosovo actions address this.
process and store data for easy access to use for planning	140 OSAID/ROSOVO actions address tins.
purposes (adapted from Forest Strategy).	
Provide incentives for households to purchase efficient	DO 2's EMPOWER Private Sector
•	
stoves and insulation and to use clean energy alternatives,	project stimulates large-scale job
where available, such as wind, solar, and "clean" fuels.	creation by elevating the
	competitiveness of firms in the
	renewable energy sector. From July
	2014-2017, the EMPOWER project
	created 257 jobs in the renewable
	energy sector, some of which were
	geared to providing cleaner energy
	options to households. For example,
	DO 2 worked with manufacturers of
	pellet stoves to increase availability. DO 2's REPOWER - KOSOVO project
	supports new clean energy projects that
	will improve Kosovo's ability to provide
	a cleaner, more consistent, more
	reliable, and affordable energy supply.
Strengthen cooperation among government agencies,	No USAID/Kosovo actions address this.
focusing on police, prosecutors, and court systems, to	
improve enforcement, follow up on reports of criminal	
transgressions, and judicial outcomes (Forest Strategy and	
SAPB, 2011-2020)	
Strengthen the environmental crime sector by training	DO I works with the GoK to
select members of the judiciary and the police officers	strengthen judicial independence and
(currently four) in the environmental crimes unit.	rule of law, and although environmental
	crimes are not specifically addressed,
	strengthening judicial independence
	2 91

	could indirectly contribute to this
	biodiversity conservation need.
Increase the penalties for environmental crimes.	No USAID/Kosovo actions address this.
Strengthen the EIA and permitting processes by: training	No USAID/Kosovo actions address this.
staff in the EIA process (especially those responsible for	
reviewing EIAs); increasing the number of staff assigned to	
review and monitor EIAs, in particular, inspectorate staff;	
involving national park administration in the EIA decision	
making process when actions are planned in PAs; ensuring	
transparent review, decision making, and follow up actions	
(e.g., compliance with requirements, fines and other legal actions taken).	
Build a community of support for environmentally sound	DO 2's EMPOWER Private Sector
development by strengthening the eco-tourism sector	project stimulates large-scale job
through training Ministry of Trade and Industry-Tourism	creation by elevating the
Department, MESP park directorate staff, private sector	competitiveness of firms in the outdoor
tour operators, and eco-tour guides; developing tourism	tourism sector. From July 2014-2017,
products, such as bird guides, plant guides, trail guides, and	the EMPOWER project created 39 jobs
guides to national parks and other areas of eco-tourism	in the outdoor tourism sector and
interest; strengthening transboundary eco-tourism, by	supported tourism products, such as the
coordinating the marketing of transboundary eco-tourism	trail through the Balkans, which builds
products; strengthening the MAP sector by training	support for biodiversity conservation in
entrepreneurs in processing, marketing, branding, and by	the region and generates funds that
providing incentives, such as grants as loans; and by	could be used to this end. DO 2's
supporting joint national park-community-based enterprises	support to the Laboratory for Business
for fuelwood collection.	Opportunities (LAB) trains
	entrepreneurs in processing, marketing,
	and branding agricultural and natural
	resources products. However, no
	information is available to determine the
	extent to which these actions
	contribute to biodiversity conservation.
Provide opportunities for communities adjacent to national	DO 2's EMPOWER Private Sector
parks and other PAs to benefit from natural resources, such	project stimulates large-scale job
as through wood and MAP collection and participation in	creation by elevating the
eco-tourism opportunities.	competitiveness of firms in wood
ceo courism opportumees.	processing and outdoor tourism. As
	mentioned above, 39 jobs were created
	in the outdoor tourism sector; during
	the same time period, 662 jobs were
	created in the wood sector. As above,
	no information is available to determine
	the contribution to biodiversity
	conservation.
Encourage coordination and cooperation among	No USAID/Kosovo actions address this.
environmental journalists and biodiversity-related	1 to 30/ (15/1030) o actions address tills.
academics, CSOs, and media companies (national TV	
station, etc.) to strengthen the demand for investigative	
environmental journalism products.	
Train environmental journalists in environment and	No USAID/Kosovo actions address this.
rrain environmental journalists in environment and	INO OBAID/NOSOVO actions address this.

Lie di conte de contra la contra di	
biodiversity specific investigative journalism.	DO III : I I III II : II I I I
Build capacities of biodiversity-related CSO staff in	DO I has included biodiversity-related
advocacy, fundraising, and other sustainability measures.	CSOs among the CSOs that have
	received capacity strengthening.
Improve public awareness and understanding of biodiversity	No USAID/Kosovo actions address this.
as a source for sustainable development, so that citizens can	
participate actively in environmental decisions and take	
responsibility for conservation, leading to greater	
participation of civil society in biodiversity conservation	
(FAA 119, 2012).	
Increase cooperation among biodiversity-related	No USAID/Kosovo actions address this.
institutions, including NGOs, and teacher	
associations/schools (adapted from the SAPB, 2011-2020).	
Train teachers at all levels on measures to increase the	No USAID/Kosovo actions address this.
environmental and biodiversity conservation curricular	
portfolio (SAPB, 2011-2020).	
Develop a full inventory of plant and animal species in	No USAID/Kosovo actions address this.
Kosovo followed by a computerized biodiversity	
information system (SAPB, 2011-2020).	
Provide incentives and forums for cooperation and data	No USAID/Kosovo actions address this.
sharing within and among ministries, such as data on MAP	
populations and sustainable use.	
Develop a database, available to the public, with information	No USAID/Kosovo actions address this.
on the EIA and construction permitting processes, including	
status of EIAs and permits and with the capability for public	
input/comment.	
Conduct biodiversity baseline surveys (updated from FAA	No USAID/Kosovo actions address this.
119 (2012), such as:	110 00, 112/1100010 acaiono acai cos cino.
population and habitat studies for species in Kosovo,	
especially those listed in the Directive for Wild Birds and	
Directive for Habitats; for flora and fauna in national parks;	
inventory of birds in Malet e Sharrit/Šar Planine National	
Park; inventory of invasive species (SAPB, 2011-2020); and	
study of potential impacts of climate change on Kosovo's	
biodiversity and the potential impacts from climate change	
on forest fire incidence, insects, and diseases.	
	No USAID/Kosovo actions address this.
Prepare Management Plans for threatened/endangered,	INO OSAID/NOSOVO actions address this.
keystone wildlife (e.g., Rupicapra rupicapra, Lynx lynx	
balcanicus, Canis lupus, and Ursus arctos)	NI- LICAID/I/
Conduct a country-wide hydrological study to determine	No USAID/Kosovo actions address this.
water flow requirements in Kosovo's river basins, including	
flow needed to maintain aquatic ecosystems.	N. 110AID/I/
Conduct economic analyses for use of renewable energy	No USAID/Kosovo actions address this.
options that include natural resource valuation and	
accounting and use these as a basis for decision making	
prior to approving additional hydropower projects.	

IX. RECOMMENDATIONS

The FAA 119 team formulated the recommendations to inform the upcoming CDCS. They are expanded from Table 8, "actions necessary" and the "extent to which" table in Annex K. As CDCS preparation progresses, as relevant, the Mission can adapt the recommendations to integrate them into the CDCS, then update the table in the annex (column 2) accordingly, to confirm whether the DOs are actually contributing to the "actions necessary."

Below, under each anticipated DO, the FAA 119 team prioritized recommendations based on 1) the importance of the direct threats and drivers that the recommendation addresses, and therefore, the importance of the recommendation for biodiversity conservation, 2) relevance of the recommendation to the anticipated DO, 3) what others (the GoK, donors, NGOs, and private sector) are doing in support of the recommendation, 4) USAID's comparative advantage, and 5) potential for success. While the FAA 119 team developed these recommendations to assist USAID/Kosovo to integrate biodiversity into their new strategy, they would need the full support of the GoK, and other donors may apply them as well.

DO I: Rule of Law and Governance

According to stakeholders interviewed by the FAA II9 Team, enforcement of the environmental/biodiversity legislative framework is extremely weak, environmental crimes are taken less seriously than other types of crimes and are less likely to be adequately investigated and successfully prosecuted, and therefore, it appears that the rule of law does not apply when it comes to "crimes against the environment." This lack of accountability in the biodiversity sector is highly visible and pervasive, and unless the GoK addresses this, an overall sense will remain that laws in general can be flaunted. To address this, USAID could include the biodiversity sector (e.g., wildlife, forestry, inspectorate, and EIA) in their support for rule of law and governance in Kosovo. The FAA II9 Team provides the following recommendations to integrate biodiversity conservation into DO I:

- I. Strengthen the Environmental Crimes Sector. Environmental crimes (inside and outside PAs, related to: illegal wood harvesting, illegal construction, illegal quarries, and illegal exploitation of plant and wildlife species) often fail to be prosecuted and when prosecuted, penalties are too low to discourage perpetrators from additional illegal acts. To address these problems: DO I could I) support the development of a country-wide independent inspectorate agency (across all sectors), which would work independently from and not be influenced by a parent agency (in conjunction with DO 3 strengthening professional skills); 2) strengthen coordination among institutions in the environmental crimes sector (inspectorates, police, prosecutors, the judiciary) so that crimes are more efficiently and effectively investigated and prosecuted (this could involve developing a database that tracks cases and outcomes, supporting team building, as well as strengthening professional skills (DO 3)); and 3) provide technical assistance to increase (rationalize) penalties so that they discourage future environmental crimes.
- 2. **Support the Development of an Environmental Fund.** DO I could support the development of a Kosovo Environmental Fund, the Ekofondi, as a tool to channel ecological taxes (fees collected from vehicle registration) and fees from hunting, NWFP (including MAPs) collection, timber harvesting, use of pasture, and for infrastructure permitting to environment and biodiversity related activities. The GoK needs support to: I) develop the structure of the Ekofondi, 2) develop governance of the Ekofondi, including bylaws, management, and oversight of the fund, and 3) train Ekofondi management (staff and board). The GoK will need to amend the Law on Public Finance to allow funds to be channeled to the Ekofondi. The Minister of the MESP has clearly expressed support for the establishment of the Ekofondi

and stated to the FAA 119 team that she plans to move ahead with the concept of an Environmental Fund.

- 3. Strengthen the Environmental Impact Assessment Process. DO I could strengthen the EIA process by supporting development of an EIA and permitting database (including status of Regulatory Plans that govern development in PAs) to improve transparency and enforcement of the EIA process and to encourage greater collaboration among affected agencies, CSOs, media, and individuals. This recommendation addresses the current confusion and misinformation about which projects (e.g., quarries, tourism developments, hydropower plants, roads, and subdivisions) are legal (have an approved EIA and permit) and which are illegal; would provide a channel for PA management to be involved in EIA/permitting processes within their jurisdiction; would clarify and facilitate opportunities for civil society input; and would strengthen transparency, in particular of how civil society concerns have been considered in decision making. The current situation--lack of transparency in the EIA sector--contributes to the attitude that the rule of law does not apply to the wealthy/special interests and the environment is available for plunder. This recommendation should be coordinated with DO 3, support for a more professional EIA sector.
- 4. **Strengthen the Biodiversity Advocacy Community.** Kosovo's civil society and environmental CSOs are weak and are ineffective watchdogs and spokespersons for biodiversity conservation. To address this, DO I could work with environmental CSOs to I) strengthen coordination and cooperation among environmental journalists, academics, CSOs, and media to improve the relevancy of information generated so that it supports the needs of environmental CSOs; and 2) strengthen NGO/CBO advocacy to focus on national level needs such as approval of relevant biodiversity-related legislation, provision of adequate funding in the biodiversity sector, and enforcement of EIA, wildlife, PA, and forestry legislation. This should be supported in coordination with DO 3, support the development of stronger, more professional environmental CSOs.
- 5. Improve Governance and Rule of Law in the Wildlife Sector. Pending changes to the Law on Hunting and development of adequate data on wildlife species and populations, and in coordination with DO 3 to create vocational training programs in wildlife conservation, DO I could support the creation of joint hunting areas as a means of improving governance in the wildlife sector. Municipalities need support to develop and implement transparent contracting procedures and contract management arrangements and contractors need support to develop management plans. This should be implemented in coordination with DO 2, to increase the income generation potential of Kosovo's wildlife and related DO 3 interventions in the wildlife field.
- 6. Use Payment for Ecosystem Services to Strengthen Governance in the Natural Resources Sector. Pending changes to the Law on Public Finance, DO I could support a PES system and an accompanying awareness raising campaign. A PES pilot could focus on drinking water provision (the national parks provide the service of filtering and retaining water) or on facilities located in national parks that benefit from their national park location (a fee could be applied to the facilities) and income generated from the PES pilot would be channeled to PA management, which would benefit drinking water enterprises and/or facilities located in the national park, as well as biodiversity conservation. This should be accompanied by an awareness raising campaign about the ecosystem services that a well-managed national park provides.

DO 2: Economic Growth and the Private Sector

Kosovo has the potential to develop a thriving natural resource-based enterprise sector that could significantly contribute to rural peoples' incomes and Kosovo's prosperity, while conserving biodiversity. To address this, DO 2 could include natural resource-based enterprise development in its support for

economic growth and private sector strengthening. The following are the FAA 119 Team's recommendations to integrate biodiversity conservation into DO 2:

- I. Support the Eco-Tourism Sector to Better Contribute to Economic Growth. DO 2 could support interventions in and around Kosovo's PAs to attract more tourists so the PA system can better contribute to economic growth. DO 2 could support I) investments in tourism infrastructure, such as visitor centers, signage, and boundary demarcation; 2) development of visitor guide books, trail maps, and other tourism products, including online information that could be easily accessed by tourists; 3) development of a fee structure for PA visitors and awareness raising about the need for fees; and 4) development of a visitor information database to track the number of tourists and their countries of origin and the fees collected. Information on tourist visitation and fees generated could serve as an advocacy tool for additional support to Kosovo's ecotourism industry and PA conservation. This recommendation should be undertaken in coordination with DO 3, training in the eco-tourism sector.
- 2. **Support Medicinal and Aromatic Plants Enterprises.**While Kosovo's MAP sector is generating incomes for rural families, it has much greater potential than is currently realized. Also, the sector could strengthen biodiversity conservation, but currently, this opportunity is being squandered. DO 2 could strengthen MAP enterprises by I) identifying demand for products, 2) evaluating Kosovo's competitiveness and potential to build economies of scale, taking into account sustainable harvesting guidelines, 3) providing support for processing (loans or grants for equipment and training), 4) providing assistance for branding (e.g., sustainably harvested, community-based enterprises that support biodiversity conservation), 5) assisting enterprises to market their products, and 6) commercializing additional products in accordance with sustainable collection criteria. In parallel, the MESP and MAFRD should implement the monitoring system based on existing guidance and should implement a fee collection system.
- 3. Provide Assistance to Develop Country-Wide Studies to Support Evidence-Based Decision Making. Biodiversity conservation and sound natural resources management underpin economic growth. Yet Kosovo has considerable information gaps in biodiversity and natural resources knowledge that should be filled prior to making decisions that involve Kosovo's natural resource base. DO 2 could provide technical assistance to conduct two studies that would assist Kosovo to make environmentally and economically sound decisions: I) a country-wide hydrological study to contribute to environmentally sound and evidence-based decision making in the hydropower sector, and 2) natural resource valuation and economic analyses to contribute to environmentally sound and sustainable economic growth and support evidence-based decision making in the power sector as well as biodiversity conservation.
- 4. Improve Forestry's Contribution to Economic Growth through Private Sector Support. DO 2 could strengthen private forestry enterprises by supporting forest owners to form groups/associations, joining their parcels to manage their forest as one entity, sharing benefits based on parcel size and productivity. This would decrease management costs while improving management, which would increase productivity and incomes. Well-managed, larger parcels will benefit biodiversity and other income generating activities could be incorporated, such as NWFP collection and hunting, and possibly, ecotourism. The increased incomes generated from forest resources will in turn provide incentives to conserve forest and wildlife. Currently, private forests are scattered and small, they are managed mainly for firewood, generating little profit, and owners are unable to afford professional forest management services; thus, private forests become degraded and owners have little incentive to retain them.
- 5. Increase Options for Clean, Sustainable Household-Level Energy. DO 2 could support

private sector enterprises to produce and market household-level clean energy options, such as pellet stoves, sustainable wood collection enterprises, and improved household insulation, and provide incentives to purchase and use them.

- 6. Increase the Productivity of Kosovo's Public Forests to Support More Livelihoods. In conjunction with the MESP, KEPA, and national park administrations, DO 2 could support income generation/creation of rural livelihoods in forest management for communities adjacent to the national parks. To implement this, the MESP first must designate areas in the national parks, in accordance with Spatial Plans and Management Plans, where skilled community members, CBOs, and local private enterprises could thin and clean the forest in accordance with sustainable forest management guidelines. The wood would be supplied to local communities as compensation (see Text Box) and could generate income for CBOs and enterprises. DO 2's role could be to strengthen the organizational and business development skills of CBOs and local enterprises so they could gain the needed skills, bid on the forest management work, and account for funds. This effort would benefit biodiversity by closing the gap in supply and demand of legal fuelwood, thereby, decreasing the amount of fuelwood obtained illegally, usually from valuable forest, using damaging practices. By strengthening the bonds between national parks and communities, indirectly, this could help address the pressure to de-gazette part of Bieshkët e Nemuna/Prokletije National Park to provide commercial timber under the FSC standards. Most forests in the national parks are even-aged forests, sensitive to winds, severe weather, and insect infestation; the density of trees is high; tree diameter is small and crowns areasymmetric, leading to trees that are unstable in wind and unable to withstand heavy snows. Forests need to be thinned to create openings for regeneration of trees and undergrowth, to create healthier forests with resources for wildlife.
- 7. Increase the Income Generation Potential of Kosovo's Wildlife. Pending successful updating of the Law on Hunting, establishing baseline information on wildlife populations, and developing joint hunting areas and a professional cadre of wildlife managers, DO 2 could help establish Kosovo as a destination for wildlife viewing and hunting. This would involve developing marketing tools for the wildlife sector, in particular, the national parks and hunting areas, to attract national and international tourists, resulting in increased income generation attributed to wildlife resources, which would help to justify support for wildlife conservation.

DO 3: Human Capital (Professional Skills)

As the majority of stakeholders mentioned, the biodiversity sector is constrained due to a shortage of biodiversity professionals and because of a mismatch of agency mandates with staff skills. Without a professional, skilled, and dedicated workforce, the biodiversity field, as well as Kosovo's biodiversity, will continue to suffer and opportunities for biodiversity to contribute to Kosovo's prosperity will be lost. DO 3 support to strengthen human capital, in particular, key professional skills, could integrate biodiversity-related skills as follows:

- I. Support the Development of a Professional Biodiversity Sector. DO 3 could support professional capacity strengthening in the biodiversity sector, especially for field-based staff (e.g., forest guards) in topics such as biodiversity monitoring, wildlife conservation and hunting, community-based natural resource management, and in the legal framework for forestry and nature protection. As mentioned in Section 5.4, a key constraint to effective biodiversity conservation in Kosovo is the limited number of professional staff in the biodiversity field. This professional capacity strengthening could be in coordination with DO I (to strengthen the environmental crimes sector and to improve governance and rule of law in the wildlife sector).
- 2. **Support the Development of a Professional Environmental Crimes Sector**. DO 3 could strengthen capacity of key staff involved in the environmental crimes sector (e.g., inspectorate staff,

police officers, prosecutors, and the judiciary) in investigative skills, coordination and communication skills, and in the importance of prosecuting environmental crimes as a means of protecting Kosovo's natural heritage and its future. This training could be supported in coordination with DO I, strengthening the environmental crimes sector.

- 3. Support the Development of Forestry and Wildlife Conservation Vocational Training Programs. DO 3 could support forestry and wildlife conservation vocational training programs, fields with clear shortages of professional staff in both the public and private sectors. For example, in the wildlife field especially, the dearth of trained wildlife conservation professionals means that Kosovo's wildlife is not being monitored, managed, nor adequately conserved. Target staff for vocational training should be forest guards, municipal staff, as well as new entrants to these fields, with the aim of rapidly creating a cadre of forestry and wildlife conservation technicians. This professional capacity strengthening could be implemented in coordination with DO I (environmental crimes and wildlife-related recommendations) and related DO 2 recommendations.
- 4. **Support a Stronger Natural Resources-Based Enterprise Sector**. In coordination with DO 2, DO 3 could strengthen professional capacities in the eco-tourism and MAP/NWFP sectors, as well as in other community-based income generating activities linked to PAs. Capacity strengthening could be provided in topics ranging from business and financial management to application of sustainable harvest criteria for MAPs. Kosovo's natural resource-based enterprise sector needs a greater level of professionalism to become more competitive and sustainable.
- 5. **Support the Development of a More Professional EIA Sector**. In coordination with DO I (strengthening the EIA process), DO 3 could strengthen the capacity of professionals involved in EIA (prioritizing individuals who review EIAs, but also training for those who conduct EIAs), permitting, and inspectorate staff. Topics for capacity strengthening include: impact assessment for specific sectors (road building, quarries, protected area developments, hydropower development), EIA monitoring, participatory aspects of EIA, and transparency in the EIA process. Lack of professionalism in the EIA sector leads to decision making that fails to incorporate sound environmental principles and practices as well as civil society input.
- 6. Support the Development of Stronger, More Professional Environmental CSOs. In coordination with DO I, DO 3 could strengthen capacities of environmental CSOs so they become more professional, more sustainable, and are better able to concentrate their activities and advocate for biodiversity conservation. Professional skills development is needed in topics such as fundraising, management, and advocacy, as well as technical areas of CSO focus and interest.
- 7. Support the Development of a More Professional Environmental Journalism Sector. DO 3 could strengthen capacities of environmental journalists to improve their professional investigative skills level, to help them develop engaging products, and to market their products. By providing useful information and raising awareness, this would help strengthen civil society's environmental advocacy.
- 8. **Support Environmental Education of Teachers**. DO 3 should strengthen capacity in environmental education for teachers, as a means of professional development and to build a cadre of environmental educators with the capacity to teach environmental education from primary through secondary levels.

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ANNEX A. SCOPE OF WORK FOR THE USAID/KOSOVO FAA 119 BIODIVERSITY ANALYSIS (2018)

I. BACKGROUND

As part of the documentation for the 2018-2023 Country Development Cooperation Strategy (CDCS), USAID/Kosovo is required by Section 119 of the Foreign Assistance Act, as amended, to prepare an analysis of biodiversity in Kosovo.

By mandating an FAA 119 analysis (hereafter referred to as the analysis), the U.S. Congress is recognizing the fundamental role that biodiversity plays in sustainable development. Based on this analysis, USAID/Kosovo will define to what extent the CDCS will contribute to biodiversity conservation needs in Kosovo. The analysis will assist in strengthening the Mission's role in biodiversity conservation by integrating biodiversity conservation in the CDCS.

1.1 Summary of relevant parts of FAA Section 119

FAA Section 119, as amended, requires that USAID Missions address the following:

FAA Sec 119 Endangered Species

COUNTRY ANALYSIS REQUIREMENTS. Each country development strategy, statement, or other country plan prepared by USAID shall include an analysis of:

- 4) the actions necessary in that country to conserve biological diversity, and
- 5) the extent to which the actions proposed for support by the Agency meet the needs thus identified. The FAA 119 analysis for USAID/Kosovomust adequately respond to the two questions for country strategies, also known as, "actions necessary" and "extent to which."

I.2 Purpose

The primary purpose of this task is to conduct an analysis of biodiversity in compliance with Section 119 of the FAA of 1961, as amended, and ADS guidelines. The analysis will inform USAID/Kosovo in the development of the Mission's CDCS.USAID's approach to development requires that the Agency examine cross-sectoral linkages and opportunities to ensure a robust development hypothesis. Biodiversity conservation is a critical approach for achieving sustainable development and should be considered in Mission strategic approaches to improve development outcomes. The analysis therefore is an opportunity for the Mission to better understand the strategic linkages between the conservation of a country's biodiversity and development, so that it can structure a sound results framework to support future programming. Notably, the analysis will identify strategic linkages at the results framework level, highlighting opportunities to integrate biodiversity conservation into priority development sectors identified in the CDCS.

The analysis will also evaluate the threat to the country's biodiversity from climate change. In addition to evaluating the climate change threat to biodiversity, the analysis team should consider climate change as a cross-cutting theme and should analyze and incorporate climate change, as appropriate, throughout the report. Climate change vulnerabilities should also be considered when developing the report's recommendations. The analysis team should identify innovative, integrated strategic approaches that link biodiversity conservation to all USAID programming sectors and to climate change adaptation and mitigation.

The analysis team should use the USAD/Kosovo climate risk screening in the analysis.

1.3 Mission program

The overall strategic goal of <u>USAID/Kosovo's 2014-2018 CDCS</u> is that: Kosovo Becomes an Increasingly Prosperous Country, Progressively Integrating into the Euro-Atlantic Community, with More Effective and Accountable Governance. To contribute to this goal, USAID/Kosovo has three development objectives (DOs):

- DOI: Improved Rule of Law and Governance that Meet Citizens' Needs. To contribute to this DO, USAID/Kosovo activities focus on improving transparency and accountability in the justice sector, strengthening effectiveness and accountability of assemblies, administrations, and election processes, improving integration of ethnic minorities, and strengthening civil society.
- DO2: Increased Investment and Private Sector Employment. To contribute to this DO, USAID/Kosovo activities focus on improving economic governance and the business environment, increasing competitiveness and market linkages, and increasing energy security and diversification.
- DO3: Enhanced Human Capital. USAID/Kosovo activities under this DO focus on improving the professional skill base.

More information about USAID/Kosovo activities can be found on the <u>Newsroom page</u> of the USAID/Kosovo website.

II. STATEMENT OF WORK

This analysis will mainly involve synthesis and analysis of existing information, coupled with key stakeholder consultations and site visits to collect and analyze data.

Under the direction of the team leader, the analysis team will evaluate the biodiversity concerns and conservation efforts in Kosovo. The focus of all activities undertaken will be twofold:

- A) Identify actions necessary to conserve biodiversity and the extent to which the Mission meets the actions necessary, and
- B) Develop recommendations that will guide the Mission in updating the "extent to which" in the new country strategy.

To accomplish this task, the analysis team will perform the activities in Sections 2.1 and 2.2:

2.1 Desk Review and Data Collection and Analysis

2.1.1 Prior to in-country fieldwork, the analysis team will²⁰:

- I. Gather and begin to analyze existing information to identify biodiversity status in Kosovo, key biodiversity issues, stakeholders, policy and institutional frameworks, and gaps in the available information. Reports and other documentation to be reviewed include previous 119 analyses; current CDCS and project documents; information available online (websites of government ministries) on biodiversity conservation; project reports and evaluations; the National Biodiversity Strategy and Action Plan (NBSAP); and the National State of the Environment Report (NSOER).
- 2. In coordination with the Mission, begin planning site visits based on the Mission's recommendations and on the team's preliminary review of key topics and information gaps. The assessment team should plan to visit:
 - KEK
 - The Sharri Mountains
 - Municipalities to be identified in consultation with USAID/Kosovo

²⁰Depending on timing of the award, some of these tasks may not begin until the full analysis team arrives in-country.

- Hani Elezit Municipality (and the Sharr Cement Factory there in particular)
- USAID/Kosovo AGRO and EMPOWER beneficiaries, to be identified in consultation with USAID/Kosovo
- USAID/Kosovo-Repower Program
- 3. Approximately one month before beginning the in-country work, develop a draft work plan (Deliverable I). The draft work plan will include a schedule of tasks and milestones, proposed assessment tools, and a discussion of some of the information gaps. In the work plan, identify the type of information to be obtained and the key people to meet with throughout the analysis process, i.e., USAID/Washington; Mission staff, including the Program Office, technical staff, and the Deputy and Mission Director; implementing partners; and biodiversity stakeholders, including host country government, international, national, local nongovernmental organizations, and private sector. To maximize Mission participation, the workplan will include a proposed schedule for in-country meetings and site visits .The final work plan will be based on Mission comments/suggestions and submitted after the in-briefing of the analysis team.
- 4. Begin preparation of interview guides and a draft report outline based on the outline attached to the SOW (refer to Annex B: Analysis Report Annotated Outline).
- 5. Hold phone meetings with the relevant Washington stakeholders such as, USAID Europe & Eurasia (E&E) Bureau Environmental Officer (BEO), Bureau for Economic Growth, Education and Environment (E3), U.S Forest Service and any other Washington, DC- based entities (such as conservation non governmental organizations, multilateral development banks, and others with active programs in the country or region) to gather relevant information on agency environmental regulations and status of biodiversity.
- 6. Assess opportunities to apply environment and/or other sector programmatic geospatial data to the analysis. Consult the Mission about available geospatial data available from the mission, implementing partners, local organizations, or the host country government. Coordinate with the USAID Washington technical experts to assess opportunities for collaboration with the Land and Urban Office (Ioana Bouvier and Silvia Petrova) to highlight gaps in the data or interpret existing data.

2.1.2 FIELD WORK AND DATA COLLECTION: After arrival in country, in coordination with the activity manager, the analysis team will:

- 7. Meet with the Program Office at USAID and Mission Environmental officer to get Mission perspectives on the assignment, discuss the Mission's current CDCS and activities, and gain an understanding of the status of the CDCS and future CDCS goals and objectives.
- 8. Meet with personnel from all three DOs, i.e.,Office of Economic Growth and the Office of Democracy and Governance, to gain an understanding of the current activities and the future activities.
- 9. Get an understanding of specific Mission interests, organizations to be contacted and site visits, including advice and protocol on approaching USAID partners and host country organizations with respect to the assignment. The Mission will brief the analysis team on any sensitivity related to the exercise (i.e., the potential for raising expectations, and the need to be clear about the purpose of the analysis) and relevant Mission guidance. Discussions should include the approach the analysis team will take to conduct the analysis and recommendations for potential biodiversity linkages with other sectors.
- 10. Meet with donor organizations, government bodies, the civil society sector, the private sector,

and individuals who are knowledgeable about and/or implementing projects on environment, biodiversity, and other sectors relevant to biodiversity conservation, such as agriculture, economic growth, health, and governance. The assessment team should plan to meet with:

- UNDP
- EU
- Swiss Government (Swiss Development Contact-SDC)
- German Government (GTZ)
- Ministry of Environment and Spatial Planning
- Ministry of Economic Development
- Ministry of Local Administration
- Ministry of Agriculture
- KEK
- NGOs
- 11. Continue to obtain, review and analyze existing reports, online information, and other data.
- 12. Conduct site visits to supplement information gathered from consultations, literature review, and other second-hand sources. Site visit locations will be finalized in consultation with the Mission.
- 13. Prior to departure, prepare a MS Power Point presentation of FAA 119 Analysis methodology, tasks, key findings, as well as preliminary conclusions and recommendations; and present it to the Mission staff at the exit-briefing (Deliverable 3).

2.2 Preparation of the FAA 119 Analysis

- 1. The analysis team will analyze the information gathered and will prepare the analysis in accordance with the outline attached to the SOW. The analysis team should also refer to the FAA 118/119 Best Practices Guide for useful information on producing the analysis, and Annex B: the Analysis Report Annotated Outline which provides details on the information required in each section of the report.
- 2. The analysis team shall prepare a draft report, of between <u>20-35 pages</u> (excluding annexes), for review by USAID (Deliverable 4).
- 3. The analysis report will respond to the legislative requirements listed above and include recommendations on the extent to which the Mission can contribute to the actions necessary to conserve biodiversity.
- 4. The Mission review period for draft reports will be 10 working days. Following receipt of Mission comments on the draft report, the analysis team will prepare and submit a final analysis (Deliverable 5) that incorporates Mission comments, in accordance with the schedule of deliverables below. The analysis report should be sent to the relevant Bureau in Washington for review and concurrence at the same time that it is sent to the mission. The Mission may review and provide comments on Deliverable 5 until the analysis is considered final and sufficient.
- 5. The FAA 119 analysis draft and final reports will follow the outline in Annex A of the SOW, and should include the following maps and tables:
 - a) Map of main ecosystems in the country
 - b) Map of the forested areas and land uses
 - c) Map of protected areas, including forest reserves
 - d) Map of aquatic and marine resources
 - e) Protected area (PA) status table with:

- A list of all declared and proposed PAs (national parks, wildlife reserves and refuges, forest reserves, sanctuaries, hunting preserves, etc.).
- Institution(s) responsible for the protection and management of each PA.
- Area of coverage.
- Ecosystems contained in each PA.
- PA management plan status.
- f) Table of the status of natural resources outside protected areas with:
 - Land cover and land-use type (e.g., wetlands/freshwater sources, major catchment areas, agricultural ecosystems, etc.).
 - Institution(s) responsible for management.
 - An overview of the major threats and challenges to conserving biodiversity outside PAs.
 - Economic potential.
- g) Table of conservation initiatives including:
 - A list of the main conservation initiatives implemented by government, donors, nongovernmental organizations, private sector, and universities.
 - Brief evaluation of effectiveness.
 - Implementation dates.
 - Funding levels.

III. SCHEDULE AND LOGISTICS

It is anticipated that the FAA 119 Analysis will require up to 15 weeks including two weeks of work in Kosovo. The Contractor is expected to deliver the first draft of the FAA 119 Analysis Report o/a May 4, 2018.

The Contractor will be responsible for all logistical support of the FAA 119 Analysis activities, including translation/interpretation, transportation, accommodation, meeting/visit arrangements, office space, equipment, supplies, insurance and other contingency planning. USAID/Kosovo will participate in, and support the organizing and scheduling of meetings internal to USAID.

IV. DELIVERABLES

The following are the deliverables for this task:

Deliverable 1. Work plan and schedule submitted one month before the in-country work.. The work plan should include all tasks and a timetable, milestones, and deliverables and explain the following information:

- Plan for coordination and consultations with the Mission.
- The analysis team's expectations of the Mission (activity manager and others).
- A brief agenda for DO and Program Office meetings and for the in-briefing and exit briefing.
- Proposed coordination with implementing partners and donors.
- Coordination with the Mission to ensure the analysis team can respond to "extent to which."
- Plan for communicating the recommendations to all DO teams.

Deliverable 2. Weekly check-ins with the activity manager.

Deliverable 3. Exit briefing presentation prior to the analysis team's departure from the country.

Deliverable 4. Draft FAA 119 submitted 20 working days after the conclusion of in-country work.

Deliverable 5. Following 10 working days for USAID/Kosovo and E&E BEO review and comments, a revised final report, incorporating all comments, formatted and branded in accordance with USAID requirements, will be submitted within 10 working days of the receipt of comments on the draft.

V. ROLE OF THE USAID MISSION

The USAID Mission will provide the analysis team with:

A list of key documents to review.

A list of key stakeholders to be contacted and will assist the team in making initial contact to arrange interviews.

Criteria to identify potential site visits.

A list of donor projects.

Logistics support for site visits.

Review and feedback on the draft analysis report.

VI. QUALIFICATIONS OF THE CONSULTANTS

<u>The Team Lead</u> must have strong team management skills and extensive and diverse experience in designing and/or conducting biodiversity analysis and cross cutting programming. The Team Lead must have sound knowledge of FAA 117-119, and USAID development policies and practices. Excellent communication skills (both verbal and written) and experience in conducting biodiversity analysis in Kosovo are desirable. Knowledge of about the region and country context is desirable.

The Senior Natural Resource Management Advisor will lead the analysis and should be have the following qualifications:

- Post-graduate qualifications (master's level degree or higher) in biology, ecology, zoology, forestry, ecosystem conservation, or a closely related field.
- Knowledge of USAID's strategic planning process related to biodiversity.
- Expertise in assessing environmental threats.
- Experience in the geographical region and the specific country.
- Experience coordinating analyses and leading teams.
- Exceptional organizational, analytical, writing, and presentation skills.
- Fluent in English.

At least one Local Natural Resources and/or Environmental Policy and Management Specialist with the following qualifications:

- Expertise in the country's environmental policy and institutional framework.
- Expertise in the country's biodiversity (including forests) and natural resources management status.
- Good contacts within the country's government agencies, nongovernmental organizations, international donors, and private sector.
- Fluent in English.

Logistics /Administrative Assistant with the following qualifications:

- Good organizational skills
- Good contacts with actors working in environment and development to help identity and schedule sector meetings
- Expertise in travel/logistic arrangements
- Expertise in interpretation and translation
- Excellent verbal and written communication skills

ANNEX B. BIO-SKETCHES OF USAID/KOSOVO FAA 119 ANALYSISTEAM MEMBERS

Team Lead/Senior Natural Resources Management Advisor. Ms. Karen Menczer is an international natural resources management and biodiversity conservation specialist with more than 30 years of experience in Latin America and the Caribbean, Africa, Eastern Europe, Asia, and the US, covering the following fields: protected areas management, wetland and watershed management, wildlife management, community-based natural resources management, eco/nature tourism, environmental impact assessment, and climate change mitigation and adaptation. She has worked with USAID and other donors, NGOs, governments, and communities to design, implement, monitor, and evaluate strategies, projects, and activities. Ms. Menczer served for nearly 10 years as a Natural Resources Advisor to USAID/Washington and USAID/Uganda and has conducted more than 25 evaluations of USAID biodiversity, agriculture, and democracy and governance projects around the world. She served as Team Leader and/or Biodiversity Specialist on approximately 20 Tropical Forest/Biodiversity (FAA 118/119) Analyses and as part of the BRIDGE project, helped develop the new USAID guidance on FAA 118/119 Analyses in 2016.

Local Natural Resources and/or Environmental Policy and Management Specialist. Dr. Zeqir Veselaj has a background in natural and environmental sciences and currently serves as professor of environmental courses: Biodiversity, Ecology and Environmental Education. Dr. Veselaj has more than fifteen years of direct involvement and working experience in the main environmental institutions in Kosovo: in nature conservation as Director of Kosovo Institute for Nature Protection, environmental advisory services for the first Minister of Environment and Director of the international environmental organization, REC. He has been involved in the preparation of the main environmental policy documents: Kosovo Environmental Strategy, Kosovo Environmental Action Plan, Kosovo Strategy and Action Plan of Biodiversity 2011-20, as well as the majority of environmental laws in Kosovo, e.g., environment, nature conservation, national parks, waste, water, and EIA. Dr. Veselaj served as the local expert in the first Kosovo Biodiversity Assessment (2003), for the ETOA (2009), and other international environmental projects in Kosovo.

Forestry and Logistics Specialist. Mr. Ergin Hajredini is a national forestry, GIS, and protected areas management specialist with more than 18 years of experience in Kosovo and on international projects. Some of the key projects that Mr. Hajredini has worked on are: forest management plans for over 40 management units; the first national forest inventory in Kosovo; the GIS Sustainable Development Atlas for Malet e Sharrit/Šar Planine National Park; the GIS Sustainable Development Atlas for Dragash/Dragaš (Sharr) Municipality; mapping of NWFP resources in Kosovo and definition of quotas for 65 plants; establishment of two hunting areas in Klinë/Klina Municipality; and preparation of the management plan for Sharr National Park. Mr. Hajredini typically works on international donor projects in Kosovo (World Bank, GIZ, SIDA, UNDP, FAO) as well as for Kosovo Forest Agency and the MESP as a forestry, environment, and GIS specialist.

ANNEX C. LIST OF INDIVIDUALS CONSULTED

Table I. List of Individuals Consulted for the USAID/Kosovo FAA 119

Name	Organization/Title	Phone	Email Address
Edmond Shyti	USAID/Kosovo Project Management Specialist & Acting MEO	049 958 853	eshyti@usaid.gov
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Martina Perino	USAID/Kosovo D & G Strategic Planning Specialist		mperino@usaid.gov
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Lisa Magno	USAID/Kosovo Deputy Mission Director		
Jim Hope	Mission Director		
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Edmond Nulleshi	Kosovo Energy Corporation-	+383/038 501 401	edmond.nulleshi@kek-
Editiona Mullestii	Services Director	1136	energy.com
Fatmir Morina	MEsP-Director of Bjeshkët e Nemuna/Prokletije National Park	+383/044 222 718	fatmir.morina@rks-gov.net
Hysen Shabanaj	Head of NGO LAB Hani i Elezit/Elez Han	+383/049 757411	hysen.shabanaj@lab-ks.org
Halil Berisha	SharrCem-Environmental Manager	+383/049 757 312	halil.berisha@sharrcem.co m
Zaim Bela	Municipality of Han i Elezit/Elez Han-Director of Directorate for Agriculture and Environment	+383/049 757 428	zaim.bela@rks-gov.net
Bajram Kafexholli	MESP-Director of Malet e Sharrit/Šar Planine National Park	+383/044 263 188	bajram.kafexholli@rks- ks.net
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ANNEX D.ADDITIONAL INFORMATION ABOUT KOSOVO'S ECOSYSTEMS AND SPECIES

This annex contains information about Kosovo's butterflies and Kosovo's important aquatic ecosystems and species.

Butterflies (Lepidoptera)

Based on information generated by donor projects, such as the UNDP's work in the Malet e Sharrit/ Šar Planine, and on other research studies, some of the important butterflies of Kosovo and their protection status are presented in Table I.

Table I. Protected Butterflies of Kosovo

Group	Genius	Species	EU Habitat Directiv e	Bern Conventio n	Status by IUCN	Location in Kosovo	Source
Nymphalidae	Euphydryas	Euphydryasaurinia	Annex II	Annex II, Revised Annex I	LC - Least Concern	Malet e Sharrit/ Šar Planine, Mitrovicë/Mitrovi ca South	UNDP Dragashrapor t - 2013
Lycaenidaae	Lycaena	Lycaenadispar	Annex II,	Annex II, Revised Annex I	LC - Least Concern	Malet e Sharrit/ Šar Planine	UNDP Dragashrapor t - 2013
Lycaenidaae	Maculinea	Maculineaarion	Annex IV	Annex II	EN - Endangered	Malet e Sharrit/ Šar Planine	UNDP Dragashrapor t - 2013
Papilionidae	Parnassius	Parnassiusapollo	Annex IV	Annex II	NT - Near Threatened	Malet e Sharrit/ Šar Planine, Bjeshkët e Nemuna/Prokletije	UNDP Dragashrapor t - 2013
Lycaenidaae	Polyommatus	Polyommatuseroides	Annex II,	Annex II, Revised Annex I	NE - Not Evaluated	Malet e Sharrit/ Šar Planine	UNDP Dragashrapor t - 2013
Lycaenidaae	Pseudophilote s	Pseudophilotesbaviu s	Annex II,	Revised Annex I	LC - Least Concern	Malet e Sharrit/ Šar Planine, Bjeshkët e Nemuna/Prokletije	UNDP Dragashrapor t - 2013

					1	Pristina	
Decilioni de c	7	7	Annex	A II	LC - Least	Malet e Sharrit/ Šar Planine, Pristina, Mitrovicë/Mitrovi ca South	UNDP Dragashrapor
Papilionidae	Zerynthia	Zerynthiapolyxena	IV	Annex II	Concern	Ca 30uui	t - 2013
				Annex II,			UNDP
Cerambycida			Annex II,	Revised	LC - Least	Malet e Sharrit/	Dragashrapor
e	Rosalia	Rosaliaalpina	IV	Annex I	Concern	Šar Planine	t - 2013

Aquatic Species of Kosovo

In the Drinii Bardhe/Beli Drim, 18 species of fish from six families have been recorded (Grapci et al., 2010). In Badovci Lake and the Llap River, 16 species belonging to six families have been recorded. Eleven of those species belong to the family Cyprinidae, while all other families are represented by a single species. According to the IUCN criteria, two species are in Category VU- Vulnerable species: *Cyprinuscaprio* and *Alburnoidesbipunctatus* (not included in the table). Some of Kosovo's important aquatic species with protection status (based on national and international criteria) are presented in Table 2.

Table 2. Kosovo's Aquatic Species with Protection Status

Group	Genius	Species	EU Habitat Directive	Bern Convention	Status by IUCN	Location	Source
Amphibian			Annex II,	Annex II,	LC-Least	Malet e Sharrit/ Šar	
s	Bombina	Bombinavariegata	IV	Revised Annex I	concern	Planine; Liqenat	UNDP Dragashraport - 2013;
Amphibian					LC-Least	Malet e Sharrit/ Šar	
s	Bufo	Bufobufo		Annex III	concern	Planine	UNDP Dragashraport - 2013
Amphibian					LC-Least	Malet e Sharrit/ Šar	
s	Hyla	Hylaarborea	Annex IV	Annex II	concern	Planine	UNDP Dragashraport - 2013
Amphibian					LC-Least	Malet e Sharrit/ Šar	
s	Rana	Rana dalmatina	Annex IV	Annex II	concern	Planine	UNDP Dragashraport - 2013
Amphibian					LC-Least	Malet e Sharrit/ Šar	
s	Rana	Rana graeca	Annex IV	Annex III	concern	Planine	UNDP Dragashraport - 2013
Amphibian					LC-Least	Malet e Sharrit/ Šar	
s	Rana	Rana temporaria	Annex V	Annex III	concern	Planine	UNDP Dragashraport - 2013
Amphibian					LC-Least	Malet e Sharrit/ Šar	
s	Salamander	Salamandraatra	Annex IV	Annex II	concern	Planine	UNDP Dragashraport - 2013

Amphibian		Salamandrasalamandr			LC-Least	Malet e Sharrit/ Šar	
s	Salamander	а		Annex III	concern	Planine	UNDP Dragashraport - 2013
Amphibian					LC-Least	Malet e Sharrit/ Šar	
s	Triturus	Triturus vulgaris		Annex III	concern	Planine	UNDP Dragashraport - 2013
					Critically	Malet e Sharrit/ Šar	
Fish	Anguilla	Anguilla anguilla			Endangered	Planine	UNDP Dragashraport - 2013
					LC-Least	Malet e Sharrit/ Šar	
Fish	Barbus	Barbusbarbus	Annex V		concern	Planine	UNDP Dragashraport - 2013
	Chondrostom				LC-Least	Malet e Sharrit/ Šar	
Fish	а	Chondrostomanasus		Annex III	concern	Planine	UNDP Dragashraport - 2013

ANNEX E.ADDITIONAL INFORMATION ABOUT THE NWFP SECTOR IN KOSOVO

The legal basis for NWFP (including MAPs) collection is the Policy and Strategy for NWFP (2014). The NWFP Strategy, the Law on Forestry, and the Law on Nature Protection require the mapping of NWFP resources and the definition of quotas for species that are commercially collected.

From 2007-2009, the Swiss Agency for Development and Cooperation (SDC) supported an inventory of MAPs, which was conducted in coordination with MAFRD, MESP, GIZ- COSiRA, and the Association of NWFP, an association of NWFP collectors.

A 2016 mapping exercise (GIZ-COSiRA project) designated NWFP collection areas, which exclude PA Zone I sites. The 2016 mapping exercise identified a total potential area for NWFP collection of 148,172 hectares (see map). However, currently less than 25% of this area is used for collection and mainly higher priced products are collected. Only 6% of the available potential is utilized, mainly blueberries, juniper berries, mushrooms, and some medicinal plants.

The GIZ-COSiRA project also developed quotas for 65 commercially collected species. Quotas exclude NWFPs that are Kosovo Red Book species or endemic species.

The criteria used to calculate the quotas—the amount of a resource that should be conserved and the amount that may be collected--vary based on the part of the resource harvested (see Table I).

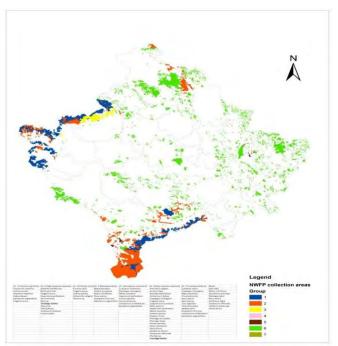
Euotas for Rosovo s Fina s								
Part of plant collected	% for conservation	% sustainable use						
Flower	30	70						
Herba	60	40						
Root	80	20						
Fruit	20	80						
Bark	80	20						
Leaves	70	30						

The GIZ project also trained staff of relevant institutions to monitor MAP collection, best practice guidelines were developed, and species identification information was produced. However, the FAA 119 Team found that much of this valuable information had not been shared beyond those who received the training and the data were not in the hands of those who needed the information.

Kosovo has a well-established network of collectors organized into an association of private companies that collect NWFPs and semi-processors who have relationships with rural communities (Medicinal and Aromatic Plans Informational Booklet, USAID, GIZ, and RECURA Financials).

Approximately 250 ha of MAPs are cultivated, of which 85 ha are certified organic. Based on official data 25,000 people are engaged in collection of MAPs on a seasonal basis, but more recent data based on exports and average norms indicate that the number is closer to 100,000 people. The export of MAPs generates 39 million Euros. However, currently Kosovo mainly serves as a primary supplier with most of the processing occurring in other countries.

The following map (along with the table, the legend) shows the distribution of collection areas in Kosovo categorized by the species harvested. As can be seen, a good deal of the collection areas lie in and around Kosovo's two national parks. Collection of MAPs (and other NWFPs) is not monitored-inside or outside of PAs-to ensure no overharvesting occurs and that collection is not occurring in excluded areas and of excluded species. The national parks do not collect fees for harvesting.



Group 1 (Vaccinum myr filus)	Group 2 (High mountain pasture)	Group 3 (Primula veris)	Group 4 (Betula pendula)	Group 5 (Jun iperus communis)	Group 6 (Low mountain pasture)	Group 7 (Castanea Sativa)
Vaccinium myrtillus	Ach i le a mil le folium	Primula veris	Bet ul a pe n dula	Juni perus communis	∆rtemisia vulgaris	Castanea sativa
Carlina acaulis	Bellisperennis	Fragaria vesca	Sorbus aucupante	Crata egus m onogyna	Arctium lapa	Crataegus monogyna
Aconitum napellus	Fragaria ve sca	Carlina a caulis	Rubus ulmiflorus	Malus sylvestris	Achillea millefolium	Malus sylvestris
Rubuside aus Epilobium	Hypericum perforatum	Alchemillavulgaris	Rosa canina	Hypericum perforatum	Ochorium intybus Crataegus	Pyrus communis
an gustif di a	Primula veris	Thymus sp.	Dry op terisfilix mas	Prunus spinosa	mon ogyna	Rosa canina
Fragaria v esca	Rosa sp.		Epilobium angustif dia	Pyrus communis Centaurium	Fragaria vesca Capsella bursa	Rosa sp.
	Tussilago farfara			umbellatum Epilobium	pastoris	Tilia cordata
	Tymus sp.			angust ifoli a	Bellis perenis	Tilia tom ento sa
	Urticadioica				Hypericum perforatum	Hedera helix
	Verbascum thapsus				Malus sylves tris	Dryopt eris filix ma:
	Violatrico br				Ononis spinosa	Centaurium umbellatum
					Papaver rhoas	Epilobium angustifolium
					Plantago lanceolata	
					Plantago major	
					Prunus spino sa	
					Pyrus communis	
					Rosa canina	
					Sambucus ebulus Taraxacum officinale	
					Thym us sp.	
					Tussilaga farfara	

ANNEX F. ADDITIONAL INFORMATION ABOUT KOSOVO'S PROTECTED AREA SYSTEM

This annex includes a map of Kosovo's PAs, including protected forests (Figure 5, the best and only version available), a list of Kosovo's PAs, including the year of protection, the size, the IUCN category, and a short description of each PA's values (Table I), and additional information about Kosovo's PA system.

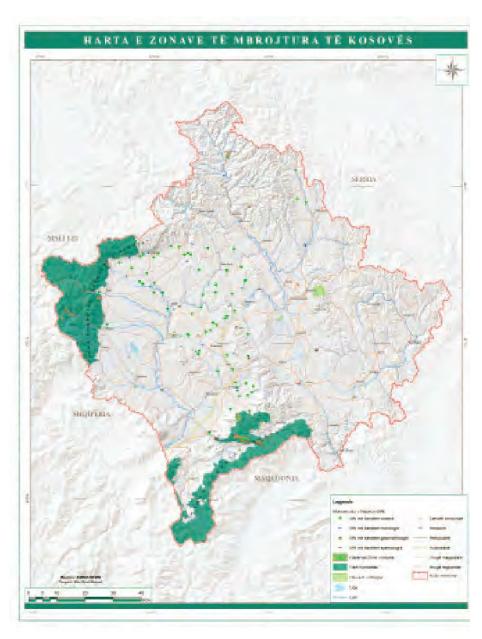


Figure 5. Map of Kosovo's Protected Areas (Source: KEPA, State of Nature Report, 2010-2014)

PROTECTED AREAS OF KOSOVO (KEPA, 2016)

(For information about the seven categories of protection listed below, see the State of Nature Report, http://www.ammk-rks.net/?page=2,7,321)

Code	Name of the Area/Object	Municipality/ Zone	Territor y(ha)	IUCN Categor y	Year of Protectio n	Short Description of Values			
	STRICT NATURE RESERVES (10885.82 ha)								
RN_001	Kamilja	Leposavič/ Leposaviq	228	lb	1988	Special nature reserve with paleontological features			

	ĺ	PK. Malet e	1		1	Plant reserve of steno-
		Sharrit/Šar				endemic species Bornmullra
RN_002	Lëndina e Shenjtë	Planine	18		2016	dieckii
		PK. Malet e				
		Sharrit/Šar				
RN 003	Shutman	Planine	5,057		2016	
		PK. Malet e	-,			Nature reserve of Macedonian
		Sharrit/Šar				fir (Abies borisi regis) and
RN_004	Bredhik	Planine	123. 16		2016	brown bear (Ursus arctos)
						Plant reserve of forest
						ecosystems of: Pinus heldreichii,
		PK. Malet e				Pinues peuce, Abis alba, Picea
		Sharrit/Šar				abies, Pinus mugo and Fagus
RN_005	Pashallare	Planine	400		2016	moesiecae
		PK. Malet e				Plant reserve of forest of the
		Sharrit/Šar				endemo-relict species of
RN_006	Koretnik	Planine	818		2016	Pinetum heldreichii
		NID M. I				Plant reserve of plant
		NP. Malet e				association Fageto -taxetum
DNI 007	Conde	Sharrit/Šar Planine	104		2016	baccat, the relict species <i>Taxus</i>
RN_007	Gryka	NP. Malet e	104		2016	baccata with Fagus mosaicae.
		Sharrit/Šar				
N 008	Lumbardhi	Planine	304		2016	
11_000	Lumbarum	NP. Malet e	304		2010	
		Sharrit/Šar				
RN 009	Lubeteni	Planine	202.16		2016	
		NP. Malet e				
		Sharrit/Šar				
RN 010	Koblica	Planine	199		2016	
		NP. Malet e				
		Sharrit/Šar				
RN_011	Dupnica	Planine	484		2016	
		PK. Malet e				
		Sharrit/Šar				
RN_012	Bistra	Planine	642.12		2016	
	.					Plant reserve of pines, firs and
	Bjeshka e	NP. Bjeshkët				beech with presence of rare
DNI OLO	Kuzhnjerit /Maja	e	1 110 57		2017	secies chamois Rupicapra
RN_013	e Ropsit	Nemuna/Pro	1,110.57		2016	rupicapra L.
		kletije NP. Bjeshkët				Plant reserve with uniqe
		e				composition of mountainous
		Nemuna/Pro				maple Acer heildreichii and Pinus
RN 014	Malet e Prilepit	kletije	106		2016	peuc
	. iaiot e i i nepit	NP. Bjeshkët				Strict plant reserve of
		e Nemuna/				endemic and relict species
RN 015	Gubavci	Prokletije	77		2016	Forsythia europea
		NP. Malet e				Fauna reserve of Balkan lynx
RN_016	Rusenica	Sharrit/Šar	270		2016	(Lynx lynx balcanicus)
		i	1	İ	1	

	l [Planine	Ì	ĺ	l	
RN_017	Oshlaku	NP. Malet e Sharrit/Šar Planine	550.47		2016	Nature reserve of Pinus heldreichii and a few other endemic species
RN_018	Maja e Arnenit	NP. Malet e Sharrit/Šar Planine	145.48		2016	Nature reserve of Pinus heldreichii
RN 019	Pisha e Madhe (pjesa e Koxha Ballkanit)	NP. Malet e Sharrit/Šar Planine	44		2016	Nature reserve of Pinus heldreichii
_	NATIONAL PAR	KS (115.957)	ha)		'	
PK_001	National Park Malet e Sharrit/Šar Planine	Prizren Suharekë/ Suva Reka (Therandë)K açanik/ KačanikŠtrpc e/ ShtërpcëDra gash/ Dragaš (Sharr)	53.469	II	2013	Recognized for a high number of endemics and relicts of flora and fauna and for high value geomorphology, geology, hydrology, speleology, culture, education, and tourism.
PK_002	National Park Bjeshkët e Nemuna/ Prokletije	Pejë/PećDeça n/ Dečanelstog/ Istok (Burim) Junik, Gjakovë/ Djakovica	62.488	II	2013	Characterized by a high number of plant endemics and relict species, and high geomorphological, geological, hydrological, speleological, cultural, educational, and touristic values.
	NATURAL MON	UMENTS (60)59.79 ha)			
MN_00 I	Mani Sham (Morus sp.)	Pejë/Peć	0.03	III	1957	Natural monument with botanical character
MN_00 2	Rrapi (<i>Platanus</i> orientalis) në Marash	Prizren	0.05	III	1959	Natural monument with botanical character
MN_00 3	Plepi (<i>Populus</i> tremula) në Bajçinë	Podujevë/P odujevo (Besianë)	5	III	1959	Natural monument with botanical character
MN_00 4	Bliri (<i>Tilia argentea</i>) në Isniq	Deçan/ Dečane	2	III	1968	Natural monument with botanical character

	Trungjet e Blirit				1	Natural monument with
MN_00	(Tilia argentea) në	Deçan/				botanical character
5	Isniq	Dečane	5	III	1968	
		Lipjan/				Natural monument with
MN_00		Lipljan				geomorphologic and
6	Shpella e Gadimes	(Lypian)	39	III	1969	speleological character
		Mitrovica/				Natural monument with
MN_00	Mineralet –	Mitrovicë				geomorphologic and
7	Kristalet	North	5	III	1970	speleological character
	Rrjedha e lumit					
MN_00	Mirusha/Miruša	Suharekë/S				Natural monument with
8	Vodopadi	uva Reka	12	III	1983	hydrological character
		(Therandë)				
		Klinë/				
		KlinaMalish				
		evë/Mališev				
		o (Malas)				Natural monument with
						geomorphologic, hydrological,
MN 00	Gryka e lumit					speleological, and botanical
9	Bistrica	Prizren	200	III	1976	character
,	Districa	11121 611	200	1111	1770	Natural monument with
	Burimi i Drinit të					geomorphologic, hydrological,
MN 01	Bardhë dhe Shpella					speleological, and botanical
0	e Radavcit	Pejë/Peć	90	III	1983	character
		. 5,5,1 55				Natural monument with
						geomorphologic, hydrological,
MN 01						speleological, and botanical
-	Gryka e Rugovës	Pejë/Peć	4301	III	1985	character
MN 0I	Burimi i ujit	Klinë/				Natural monument with
2	mineral në Dresnik	Klina	0.07	III	1985	hydrological character
						Natural monument with
						geomorphologic, hydrological,
MN_01		Klinë/				speleological, and botanical
3	Gryka e lumit Klina	Klina	205	III	1985	character
	Trungjet e bungut					Natural monument with
MN_01	(Quercus sp.) në	Malishevë/				botanical character
4	Lozice	Mališevo	5	III	1985	
	Trungu i qarrit					Natural monument with
MN_01	(Quercus cerris) në	Klinë/				botanical character
5	Zllakuçan	Klina	5	III	1985	
		Gjakovë/Dj				
	Kanioni i Drinit të	akovicaRah				Natural monument with
MN_01	Bardhë te Ura e	ovec/Orah	100		1004	geomorphologic and hydrological
6	Fshajtë	ovac	198	III	1986	character
MAL OF		D /C!				Natural monument with
MN_01	Charalle a D : "	Drenas/GI			1007	geomorphologic and
7	Shpella e Baicës	ogovac	11	III	1987	speleological character
MN_01	Shpella e	Drenas/GI	0.05		1007	Natural monument with
8	Gllanasellës	ogovac	0.05	III	1987	geomorphologic and

						speleological character
	Burimi					
MN_01	termomineral në	Leposavič/L				Natural monument with
9	Vuqë	eposaviq	16.6	Ш	1988	hydrological character
	Burimi i ujit	Podujevë/P				Natural monument with
MN_02	mineral në	odujevo				hydrological character
0	Sallabajë	(Besianë)	31	III	1988	
		Podujevë/P				Natural monument with
MN_02	Burimi i ujit në	odujevo	١.	l		hydrological character
<u> </u>	Shajkovc	(Besianë)	I	III	1988	
	Trungu i qarrit	Podujevë/P				Natural monument with
MN_02	(Quercus cerris) në	odujevo		l		botanical character
2	Pollatë	(Besianë)	44	III	1988	
	Trungu i qarrit	Podujevë/P				Natural monument with
MN_02	(Quercus cerris) në	odujevo		l		botanical character
3	Dobratin	(Besianë)	0.07	III	1988	
	Trungjet e rrënjës					Natural monument with
MN_02	(Quercus robër) në	Drenas/GI		l		botanical character
4	Nekovc	ogovac	0.05	III	2006	
	Kompleksi i		0.05			Natural monument with
	trungjeve të					botanical character
MN_02	rrënjës (Quercus	Drenas/GI				
5	robur) në Negroc	ogovac		III	2006	
	Trungjet e		0.05			Natural monument with
MN_02	shpardhit në	Drenas/GI		l	2004	botanical character
6	Negroc	ogovac		III	2006	
MN_02	Shpella e	Drenas/GI				Natural monument with
7	Kishnarekës	ogovac	0.02	III	2006	botanical character
	Trungu i qarrit					Natural monument with
MN_02	(Quercus cerris) në	Drenas/GI				botanical character
8	Krajkovë	ogovac	0.05	III	2006	
MN_02	Guri i Gradinës në	Drenas/GI				Natural monument with
9	Llapushnik	ogovac	0.02	III	2006	botanical character
MN_03	Burimi i ujit	Drenas/GI	0.05			Natural monument with
0	mineral, në Poklek	ogovac		III	2006	botanical character
	Trungjet e dushkut		0.05			Natural monument with
	- Gjashtë lisat					botanical character
MN_03	(Quercus sp.) në	Drenas/GI				
<u> </u>	Likoshan	ogovac		Ш	2006	
	Trungjet e dushkut		0.05			Natural monument with
MN_03	(Quercus sp.) në	Drenas/GI				botanical character
2	Tërstenik	ogovac		Ш	2006	
_	Trungu i dushkut		0.05			Natural monument with
MN_03	(Quercus sp.) në	Drenas/GI				botanical character
3	Likoshan	ogovac		III	2006	
MN_03	Guri i plakës në	Drenas/GI	0.05			Natural monument with
4	Dobroshec	ogovac		III	2006	botanical character

	Trungu i bungëbutës		0.05			Natural monument with botanical character
MN_03 5	(Quercus pubercensWilld.) në Aqarevë	Skënderaj/S rbica		III	2007	
MN_03 6	Trungjet e dushkut (Quercus sp.) në Polac	Skënderaj/S rbica	0.05	III	2007	Natural monument with botanical character
MN_03 7	Trungu i dushkut (Quercus sp.) në Likoc	Skënderaj/S rbica	0.05	III	2007	Natural monument with botanical character
MN_03 8	Burimi i ujit termal në Banjë	Skënderaj/S rbica	0.01	III	2007	Natural monument with hydrological character
MN_03	Trungu i dushkut (Quercus sp.) në Prellovc	Skënderaj/S rbica	0.05	III	2007	Natural monument with botanical character
MN_04 0	Kompleksi i trungjeve të dushkut (Quercus sp.) në Rrezallë	Skënderaj/S rbica	0.02		2007	Natural monument with botanical character
MN_04	Kompleksi i trungjeve të bungbutës (Quercus pubescensWilld.) në Klladernicë	Skënderaj/S rbica	0.01	III	2007	Natural monument with botanical character
MN_04 2	Trungu i qarrit (Quercus cerris L.) në Kotorr	Skënderaj/S rbica	0.05	III	2007	Natural monument with botanical character
MN_04 3	Trungu i qarrit (Quercus cerris L.) në Padalishtë	Skënderaj/S rbica	0.05	III	2007	Natural monument with botanical character
MN_04 4	Trungu i bungëbutës (Quercus pubescensWilld.) në Çitak	Skënderaj/S rbica	0.05	III	2007	Natural monument with botanical character
MN_04	Trungu i qarrit (Quercus cerris L.) në Runik	Skënderaj/S rbica	0.05	III	2007	Natural monument with botanical character
MN_04 6	Burimi i ujit të njelmët, në Leqinë	Skënderaj/S rbica	0.05	III	2007	Natural monument with botanical character
MN_04 7	Trungu i bungut (Quercus sp.), në Lubovec	Skënderaj/S rbica	0.05	III	2007	Natural monument with botanical character
MN_04 8	Trungu i rrënjës (Quercus robur), në Deiq	Klinë/ Klina	0.05	III	2007	Natural monument with botanical character
MN_04 9	Kompleksi i trungjeve të	Klinë/ Klina	0.05	III	2007	Natural monument with botanical character

	rrënjës (Quercus robur), në Gllarevë					
	Trungu i qarrit		0.05			Natural monument with
MN 05	(Quercus cerris) në	Klinë/	0.03			botanical character
0	Nagllavkë	Klina		III	2007	
MN 05	Burimi i ujit	Klinë/	0.05			Natural monument with
1	mineral, në Rudicë	Klina	0.00	III	2007	hydrological character
-	Trungu i bungut		0.05			Natural monument with
MN 05	(Quercus pubescens)	Klinë/	0.00			botanical character
2	në Ujëmir	Klina		III	2008	
	Trungjet e dushkut	Suharekë/	0.05			Natural monument with
MN 05	(Quercus sp.) në	Suva Reka				botanical character
3	Breshanc	(Therandë)		III	2007	
	Kompleksi i	,				Natural monument with
	trungjeve të	Suharekë/				botanical character
MN 05	dushkut (Quercus	Suva Reka				
4	sp). në Savrovë	(Therandë)	0.15	III	2007	
	Trungu i pishes	Suharekë/				Natural monument with
MN_05	(Pinus sp.) në	Suva Reka				botanical character
5	Delloc	(Therandë)	0.05	III	2007	
	Trungjet e dushkut	Suharekë/				Natural monument with
MN_05	(Quercus sp.) në	Suva Reka				botanical character
6	Grejkoc	(Therandë)	0.15	III	2007	
	Trungu i plepit	Suharekë/				Natural monument with
MN_05	(Populus sp.) në	Suva Reka				botanical character
7	Reçan	(Therandë)	0.05	III	2007	
		Suharekë/				Natural monument with
MN_05	Burimi i ujit	Suva Reka				hydrological character
8	mineral në Reçan	(Therandë)	0.01	III	2007	
	Kompleksi i					Natural monument with
	trungjeve të	Suharekë/S				botanical character
MN_05	dushkut (Quercus	uva Reka				
9	sp.) në Muhlan	(Therandë)	0.15	III	2007	
	Trungu i Vodhës	Suharekë/				Natural monument with
MN_06	(Sorbus domestica	Suva Reka		l		botanical character
0	L.) në Budakovë	(Therandë)	0.05	III	2007	
	Kompleksi i					Natural monument with
	trungjeve të	Suharekë/				botanical character
MN_06	dushkut (Quercus	Suva Reka	0.15		2007	
I	sp.) në Papaz	(Therandë)	0.15	III	2007	N
MNI OC	Dy trungjet e	Suharekë/				Natural monument with
MN_06	bungut (Quercus	Suva Reka	001		2007	botanical character
2	sp.) në Bllacë	(Therandë)	0.01	III	2007	Natural magning and with
MNI OZ	Trungu i qarrit	Suharekë/				Natural monument with
MN_06	(Quercus sp.)	Suva Reka	0.05	III	2007	botanical character
3	Vraniq	(Therandë)	0.05	III	2007	Natural manufactorists
MNI OC	Lokaliteti i bujgerit	Suharekë/ Suva Reka				Natural monument with
MN_06	(Quercus trojana) në		0.01	l	2007	botanical character
4	Biraqë	(Therandë)	0.01	III	2007	

	Kompleksi i					Natural monument with
	trungjeve të bungut	Suharekë/				botanical character
MN_06	(Quercus sp.) në	Suva Reka	0.15		2007	
5	Luzhnicë	(Therandë)	0.15	III	2007	
		Suharekë/				
MN_06	Guri i Xhamisë në	Suva Reka	0.15		2007	Natural monument with
6	Luzhnicë	(Therandë)	0.15	III	2007	geomorphologic character
MAL OC	Dy trungjet e	1-6/1-6-1-				Natural monument with
MN_06 7	manit të zi (Morus	lstog/lstok (Burim)	011	III	2008	botanical character
/	nigra L.) në Cerrcë Trungu i blirit të	(buriffi)	0.11	III	2006	Natural monument with
	argjendtë (<i>Tilia</i>					botanical character
MN 06	tomentosa Moench)	lstog/lstok				Dotanical character
8	në Lubozhdë	(Burim)	0.1	III	2008	
	Trungu i blirit të	(Burnin)	0.1	111	2000	Natural monument with
MN 06	kuq (Tilia sp.) në	lstog/lstok				botanical character (damaged)
9	Istog të Poshtëm	(Burim)	0.05	III	2008	botamear character (damaged)
-	Trungjet e	(20)	0.00	···	2000	Natural monument with
	bungbutës (Quercus					botanical character
MN 07	pubescens Willd) në	lstog/lstok				
0	Sinaj	(Burim)	0.17	III	2008	
	Trungu i blirit të	,				Natural monument with
	argjendtë (Tilia					botanical character
	tomentosa Moench.)					
MN_07	në Shushicë të	lstog/lstok				
1	Epërme	(Burim)	0.05	III	2008	
MN_07	Burimi i ujit natyral	lstog/lstok				Natural monument with
2	në Istog	(Burim)	3.88	III	2008	hydrological character
	Trugu i vodhës					Natural monument with
MN_07	(Sorbus domestica	lstog/lstok				botanical character
3	L.) në Uçë	(Burim)	0.07	III	2008	
	Trungu i blirit të					
	argjendtë (Tilia					
MN_07	tomentosa Moench)	Istog/Istok	0.05		2000	Natural monument with
4	në Kaliqan	(Burim)	0.05	III	2008	botanical character (damaged)
MN_07	Burimi i ujit termal	Istog/Istok	0.05		2000	Natural monument with
5	në Banjë	(Burim)	0.85	III	2008	hydrological character
MN 07	Trungu i blirit të	letog/letol:				Natural monument with
6 6	kuq (<i>Tilia sp.)</i> në Lubovë	lstog/lstok (Burim)	0.07	III	2008	botanical character
U	Trungu rrënjës	(Burilli)	0.07	1111	2000	Natural monument with
MN 07	(Quercus robur L.)	lstog/lstok				botanical character
7	në Zallq - Zabllaq	(Burim)	0.11	III	2008	Docarrical Crial acter
•	Trungu rrënjës	(Bariiii)	V.11	'''	2000	Natural monument with
MN 07	(Quercus robur L.)	lstog/lstok				botanical character
8	në Trubuhovc	(Burim)	0.75	III	2008	Joannen Character
-	Trungu rrënjës	(/		ļ		Natural monument with
MN 07		lata allatali				botanical character
I'IIN U/	(Quercus robur L.)	Istog/Istok				Dotanicai character

	Trungu i qarrit					Natural monument with
MN_08	(Quercus robur) në	lstog/lstok				botanical character (damaged)
0	Gurrakoc	(Burim)	0.01	III	2008	
MN_08	Burimi i ujit në	lstog/lstok				Natural monument with
l	Vrellë	(Burim)	0.26	III	2008	hydrological character
		Malishevë/				
		Mališevo				
		(Malas)				Natural monument with
		Klinë/Klin				geomorphologic, hydrological,
		a				speleological, botanical and
NN_08	Ujëvarat e	Rahovec/				landscape with scientific and
2	Mirushës	Orahovac	598.4	III	2012	touristic importance
	Trungu i Qarrit	Malishevë/				'
MN 08	(Quercus ceris L.) në	Mališevo				Natural monument with
3	Lladrovc	(Malas)	0.08	III	2014	botanical character
		Malishevë/		<u> </u>		Natural monument with
MN 08	Shpella e	Mališevo				geomorphologic and
4	Temeqinës	(Malas)	0.69		2014	speleological character
<u> </u>	Trungu i Qarrit	Malishevë/	0.07		2017	Natural monument with
MN 08	(Quercus ceris L.) në	Mališevo				botanical character (damaged)
5	Carravranë	(Malas)	0.08	III	2014	(-480-)
	Trungu i	,				Natural monument with
	Bungëbutës	Malishevë/				botanical character
MN_08	(Quercus pubesens	Mališevo				
6	Willd) në LLozicë	(Malas)	0.08	III	2014	
	Trungu i					Natural monument with
	Bungëbutës	Malishevë/				botanical character
MN_08	(Quercus pubesens	Mališevo			2014	
7	Willd) në LLozicë	(Malas)	0.07	III	2014	N
MAN 1 00	CI II D I :	Malishevë/				Natural monument with
MN_08	Shpella e Bozhurit në Damanek	Mališevo	0.02	III	2014	geomorphologic and
8	ne Damanek	(Malas) Malishevë/	0.02	111	2014	speleological character Natural monument with
MN 08	Shpella e	Mališneve/				geomorphologic and
9	Lladroviqit	(Malas)	0.02	III	2014	speleological character
	Trungu i	(1 14143)	0.02		2011	Natural monument with
	Bungëbutës					botanical character
	(Quercus pubesens	Malishevë/				
MN 09	Willd)	Mališevo				
0	Guriq	(Malas)	0.05	Ш	2014	
	Trungu i Qarrit	Malishevë/				Natural monument with
MN_09	(Quercus ceris L.)ne	Mališevo				botanical character (damaged)
l	Drenovc	(Malas)	1.25	III	2014	
	Trungu i Qarrit	Malishevë/				Natural monument with
MN_09	(Quercus ceris L.) në	Mališevo	0.00	l	2011	botanical character
2	Bubël	(Malas)	0.08	III	2014	l n
MAL OO	Trungu i Qarrit	Malishevë/				Natural monument with
MN_09	(Quercus ceris L.) në	Mališevo	0.00	111	2014	botanical character
3	Bubël	(Malas)	0.08	III	2014	

	Trungu i Qarrit	Malishevë/				Natural monument with
MN 09	(Quercus ceris L.) në	Mališevo				botanical character
4	Bellanic	(Malas)	0.08	III	2014	
	Trungu i frashrit	,				Natural monument with
	gjethengushtë					botanical character
	(Fraxinus	Malishevë/				
MN 09	angustifolia Vahl) në	Mališevo				
5	Javiq	(Malas)	0.08	III	2014	
	J	Malishevë/				Natural monument with
MN 09		Mališevo				botanical character
6	Vakëfi i Vermicës	(Malas)	0.70	V	2014	Joeannear Character
	Zabeli dhe	Malishevë/	0.7 0	<u>'</u>	2011	Natural monument with
MN 09	Vrella/Vrela ne	Mališevo				botanical character
7	Javiq	(Malas)	0.51	V	2014	Botamear character
	Javiq	Malishevë/	0.51	'	2011	
MN 09	Burimi i ujit ne	Mališevo				Natural monument with
8	Carravranë	(Malas)	0.08	III	2014	hydrological character
	Carraviane	Malishevë/	0.00	1111	2017	Trydi Ologicai Charactei
MN 09		Mališevo				Natural monument with
9	Chaolla a Donomaia		279	III	2014	
7	Shpella e Ponorcit	(Malas)	2/7		2014	speleological character Natural monument with
MAL IO	Bifurkacioni i lumit	Ferizaj/				
MN_10		Uroševac	1.5	1	2015	morphologic and hydrological
0	Nerodime		15	III	2015	character
NN_10	Shpella e Shullanit	Kaçanik/Ka	0.01	III	2015	Natural monument with
1	në Sllatinë	čanik	0.01	ļ	2015	speleological character
MM_10	Humnera në shpatin	Kaçanik/Ka	0.01	III	2015	Natural monument with
2	e Qenares, në	čanik				speleological character
	Glloboqicë	1.0		<u> </u>		
MN_10	Trungjet e Qarrit,	Kaçanik/Ka	0.05	III	2015	Natural monument with
3	në Kaçanik i Vjetër	čanik		<u> </u>		botanical character
MN_10	Guri i gjate në	Kaçanik/Ka	0.01	III	2015	Natural monument with
4	Stagove ["]	čanik				geomorphologic character
MN_10	Guri i Zi, në	Kaçanik/Ka	0.20	III	2015	Natural monument with
5	Llanishte	čanik				geomorphologic character
MN_I0	Trungjet e Qarrit,	Kaçanik/Ka	0.05	III	2015	Natural monument with
6	në Kaçanik i Vjetër	čanik		<u> </u>		botanical character
MN_I0	Trungu i Qarrit, në	Kaçanik/Ka	0.05	III	2015	Natural monument with
7	Kovaqec	čanik				botanical character
MN_I0	Trungjet e Bungut	Kaçanik/Ka	0.05	III	2015	Natural monument with
8	në Bob	čanik				botanical character
MN_I0	Kompleksi i	Kaçanik/Ka	0.05	III	2015	Natural monument with
9	trungjeve të	čanik				botanical character
	dushkut, në Runjev					
MN II	Trungu i Shelgut në	Kaçanik/Ka	0.05	III	2015	Natural monument with
0	Kaçanik	čanik				botanical character
MN II	Trungjet e dushkut	Kaçanik/Ka	0.05	III	2015	Natural monument with
1	në, Ivajë	čanik				botanical character
MN II	Trungu i Qarrit, në	Kaçanik/Ka	0.05	III	2015	Natural monument with
2	Kotlinë	čanik	5.55			botanical character
-	- Counte	Curini				Joannear Character

MN_11 3	Vrella e Zez, në Petrovë	Shtime/ Štimlje	0.02	III	2015	Natural monument with hydrological character
MN_II 4	Shpella e Imer Devetakut, në Devatak	Shtime/ Štimlje	0.02	III	2015	Natural monument with speleological character
MN_II 5	Trungjet e dushkut, në Mollapolc	Shtime/ Štimlje	0.05	III	2015	Natural monument with botanical character
MN_II 6	Lisi i Sahitit, në Godanc i Epërm	Shtime/ Štimlje	0.05	III	2015	Natural monument with botanical character
MN_II 7	Lisi i Alushit, në Rashincë	Shtime/ Štimlje	0.05	Ш	2015	Natural monument with botanical character
MN_II 8	Shpella e Pjetershticës, në Pjetershticë	Shtime/ Štimlje	0.05	III	2015	Natural monument with speleological character
MN_II 9	Lisat Binjak, në Gadanc i Epërm	Shtime/ Štimlje	0.05	III	2015	Natural monument with botanical character
MN_I2 0	Gështenjat e Shtimës, në Shtime	Shtime/ Štimlje	0.50	III	2015	Natural monument with botanical character
MN_I2 I	Shpella e Devetakut dhe Burimi, në Devetak	Shtime/ Štimlje	0.02	III	2015	Natural monument with speleological and hydrological character
MN_I2 2	Trungu i shpardhit (Quercus frainetto) në Dyz	Podujevë/P odujevo (Besianë)	0.05	III	2015	Natural monument with botanical character
MN_12 3	Trungjet e dushkut (Quercus sp.) në Llapashticë e Epërme	Podujevë/P odujevo (Besianë)	0.10	III	2015	Natural monument with botanical character
MN_I2 4	Trungu i dushkut (Quercus sp.) në Llapashticë e Epërme	Podujevë/P odujevo (Besianë)	0.05	III	2015	Natural monument with botanical character
MN_12 5	Vrella dhe trungu i ahut, në Dobratin	Podujevë/P odujevo (Besianë)	0.10	III	2015	Natural monument with hydrological and botanical character
MN_12 6	Trungu i plepit (Populus tremula) në Murgullë	Podujevë/P odujevo (Besianë)	0.05	III	2015	Natural monument with botanical character
MN_I2 7	Trungu i Plepit (Populus tremula) në Gerdoc	Podujevë/P odujevo (Besianë)	0.05	III	2015	Natural monument with botanical character
MN_I2 8	Trungu i plepit (Populus tremula) në Orllan	Podujevë/P odujevo (Besianë)	0.05	III	2015	Natural monument with botanical character
MN_I2	Trungjet e Shpardhit Dushkut,	Vushtrri/Vu	0.10	III	2016	Natural monument with

9	(Quercues frainetto), në Zhilivodë	čitrn				botanical character
MN_13 0	Trungjet e Dushkut, në Druar	Vushtrri/Vu čitrn	0.10	III	2016	Natural monument with botanical character
MN_13	Kompleksi i Trungjeve (Quercus sp) të Dushkut, në Galicë	Vushtrri/Vu čitrn	0.15	III	2016	Natural monument with botanical character
MN_I3 2	Trungu i Bungut,(Quercus petraea) në Shitaricë	Vushtrri/Vu čitrn	0.05	III	2016	Natural monument with botanical character
MN_13 3	Trungu i Rrënjës, (Quercus robur) në Dumnicë e LLuges	Vushtrri/Vu čitrn	0.05	III	2016	Natural monument with botanical character
MN_13 4	Burimi i ujit termomineral, në Gjelbishtë	Vushtrri/Vu čitrn	0.10	III	2016	Natural monument with hydrological character
MN_13 5	Trungu i Qarrit, (Quercus cerris) në Ceceli	Vushtrri/Vu čitrn	0.05	III	2016	Natural monument with botanical character
MN_13 6	Trungu i frashërit (Fraxinus excelsior) në Kaznik	Rahovec/ Orahovac	0.08	III	2016	Natural monument with botanical character
MN_13 7	Trungu i shpardhit (Quercus frainetto) në Kaznik	Rahovec/ Orahovac	0.35	III	2016	Natural monument with botanical character
MN_13 8	Trungjet e dushkut (Quercus sp.) në Dobidol	Rahovec/ Orahovac	0.13	III	2016	Natural monument with botanical character
MN_13 9	Trungu i shpardhit (Quercus frainetto) në lagjen e Berishajve - Drenoc	Rahovec/ Orahovac	0.04	III	2016	Natural monument with botanical character
MN_14 0	.Trungu i shpardhit (Quercus frainetto) në lagjen e Mehovce - Drenoc	Rahovec/ Orahovac	0.04	III	2016	Natural monument with botanical character
MN_I4 I	Trungu i bungut (Quercus petraea) Nagavc	Rahovec/ Orahovac	0.05	III	2016	Natural monument with botanical character
MN_14 2	Trungu i qarrit (Quercus cerris) dhe Trungu i vidhit (Ulmus minor) Bratotin	Rahovec/ Orahovac	0.07	III	2016	Natural monument with botanical character
MN_I4	Trungu i shpardhit (Quercus frainetto)	Rahovec/ Orahovac	0.04	III	2016	Natural monument with

3	në Bratotin					botanical character
MN_I4 4	Shpella e "Bali Agës" në Zatriq	Rahovec/ Orahovac	I	III	2016	Natural monument with speleological character
MN_14 5	Shpella e Peshterrit, në Zatriq	Rahovec/ Orahovac	0.70	III	2016	Natural monument with speleological character
MN_I4 6	Trungu i Bungut (Quercus petraea), në Cërnillë	Ferizaj/ Uroševac	0.05	III	2017	Natural monument with botanical character
MN_14 7	Trungu i Bungëbutës (Quercus pubescens), në Greme	Ferizaj/ Uroševac	0.05	III	2017	Natural monument with botanical character
MN_14 8	Trungu i Bungut (Quercus petraea), në Greme	•	1	III		Natural monument with botanical character
MN_I4 9	Trungjet e Qarrit (Quercus cerris), në Jezerc	Uroševac	0.09	III	2017	Natural monument with botanical character
MN_15 0	Trungu i Bungut (Quercus petraea) në, Komogllavë	Ferizaj/ Uroševac	0.05	III	2017	Natural monument with botanical character
MN_15 1	Trungu i Bungut (Quercus petraea) në Lloshkobarë	•	0.05	III	2017	Natural monument with botanical character
MN_15 2	Trungu i Qarrit (Quercus cerris) në Pajat	•	0.05	III	2017	Natural monument with botanical character
MN_15 3	Trungu i Qarrit (Quercus cerris) në. Rahovicë	Ferizaj/ Uroševac	0.05	III		Natural monument with botanical character
MN_15 4	Trungu i Qarrit (Quercus cerris) në Rahovicë		0.05	III	2017	Natural monument with botanical character
MN_15 5	Trungu i Qarrit (<i>Quercus cerris</i>) në. Zaskok	Ferizaj/ Uroševac	0.05	III	2017	Natural monument with botanical character
MN_15 6	Trungu i Bungëbutës (Quercus pubescens), në Zaskok	Uroševac	0.05	III	2017	Natural monument with botanical character
			ARK OF N	NATURE ((5.934/ h	•
PN 002	Pashtrik/Paštrik	Prizren and Gjakovë/Djak ovica	5.934	V	2015	Park with biological, geomorphologic, hydrological, cultural and touristic values
				1	1	

	Vërmicës					
		PROT	ECTED L	ANDSCA	APE (2437	ha)
PM_001	Shkugza	Gjakovë/ Djakovica	70	٧	2011	Locality with floristic, education, and touristic values
PM_002	Pishat e Deçanit	Deçan/ Dečane	15	V	1969	Locality with floristic, education, and touristic values
PM_003	Kompleksi i pishave, në Strazhë	Kaçanik/ Kačanik	25 ha	V	2015	Locality with floristic, education, and touristic values
PM 004	Kompleksi i Pishave në Shtime	Shtime/ Štimlje	25	V	2015	Locality with floristic, education, and touristic
PM_005	Gërmia	Pristina	1949	V	2016	Park with scientific, education, cultural, and touristic importance
		SPECIAL ARI	EA FOR B	IRD PRO	TECTION	(109.5 / ha)
ZVM_0 01	Zonë e veçantë e mbrojtur e Zogjve	F. Kosove Gračanica/Gr açanicëLipjan / Lipljan (Lypian)	109	V	2014	Area with special natural characteristics in ornithology, ichthyology, hydrogeology, botany, and landscape.

Brief History of Kosovo's PA System

Kosovo's first PA, a strict nature reserve for the plant, the common peony (*Paeonia decora*), was declared in 1953. The designation of the first national park, the 39,000 hectare Malet e Sharrit/Šar Planine

National Park, in 1986, was the most significant step in nature conservation efforts before the war in Kosovo. After 2000, based on KINP's proposal, many small PAs were protected, but the overall size of the country's PA system remained unchanged. The next significant development occurred in 2012 with the designation of the second national park, Bjeshkët e Nemuna/Prokletije, covering an area of 63,000 ha, comprising the largest PA in Kosovo. That same year, Malet e Sharrit/Šar PlaninePark was redeclared and expanded by another 14,469 ha, for a total area of 53,469 ha. During 2016, many PAs were evaluated, and a change of status was proposed for some. Dozens of new areas are now going through a feasibility study process, possibly to place them under legal protection.

Kosovo's National Parks

Malet e Sharrit/Šar Planine National Park is characterized by high biodiversity with about 1,500 registered species of vascular plants. Fauna of the park consists of 147 species of butterflies, 7 species of fish, 9 species of amphibians, 10 species of reptiles, 154 species of birds, and 30 species of mammals (Mustafa et al., 2013). It contains important forests and other ecosystems of conservation importance; a large number of endemic and relict species; remarkable geomorphological and hydrological features with scientific, cultural, historical, landscape, sport, tourism, and recreational aspects. The park area is characterized by rivers, springs, waterfalls, snow-capped mountains, and dozens of glacial lakes, such are Jazhince and Livadhica.

In Malet e Sharrit/Šar Planine National Park at Oshlak, a strict reserve area (Zone I), is designated that protects Bosnian pine (*Pinus heldreichii*), as well as endemic species, such as velvet plant (*Verbascum*

scardicolum), Bulgarian gentian (Gentianella bulgarica), and dianthus (Dianthus cartusonarumand Dianthus integer). At Rusenica, also a strict reserve area in Malet e Sharrit/Šar Planine, Balkan lynx (Lynx lynx balcanicus), a rare and endangered species, is found. Big Pine, 35 hectares dominated by Balkan pine in association with Bosnian pine (Seslerio-Pinetum heldreichii), is another forest area in Malet e Sharrit/Šar PlanineNational Park with strict reserve status. Endemic plant species, such as sedums (Sedum flexiosum) and white asphodel (Asphodelus albus) are found there. It provides habitat for roe deer (Capreolus capreolus), wild cat (Felix sylvestris), brown bear (Ursus arctos), European badger (Meles meles), beech marten (Martes foina), lanner falcon (Falco biarmicus), and common buzzard (Buteo buteo).

Bjeshkët e Nemuna/Prokletije National Park is characterized by high floristic richness and is considered a Balkan floristic diversity center, with 1,611 taxa (species and sub-species). On the higher peaks (2,000 masl), such as Gjeravica/Djeravica, Guri i Kuq, and Liqenat, 255 endemic and sub-endemic Balkan plant species have been recorded. The fauna of the park is rich as well and includes 8 species of fish, 13 species of amphibians, 10 species of reptiles, 148 species of birds, and 37 species of mammals (Mustafa et al., 2011, MESP, 2013). Bjeshkët e Nemuna/Prokletije National Park contains a large number of important forest ecosystems and other important ecosystems; a high number of endemic and relict species; and it is rich with geomorphologic, hydrologic, and landscape features.

Both of Kosovo's national parks are located on the country's borders: Malet e Sharrit/Šar Planine on the border with Macedonia and Albania and Bjeshkët e Nemuna/Prokletije on the border with Montenegro and Albania. Bjeshkët e Nemuna/Prokletije Planine National Park is the center of the Balkan Peace Park initiative, aiming to bring the border area of the three states, Kosovo, Montenegro, and Albania, into a natural entity for sustainable development. In 2006, mayors of municipalities along the borders of Kosovo, Montenegro, and Albania signed a Letter of Good Intent to work towards the common goal of establishing a transboundary conservation area to protect the unique cultural and natural resources of the region. Howevere, since that time, no further developments have occurred, mainly due to a lack of funding. In Malet e Sharrit/Šar Planine, the Trans-boundary Ecosystem Management project is working in the biodiversity hotspot shared by Macedonia, Kosovo, and Albania (GIZ-ORF).

Special Hunting Areas

Kosovo has two special hunting areas, Blinaja/Lipovica and Duboqak/Duboćak. Blinaja/Lipovica is located in central Kosovo and covers 2,795 ha at altitudes between 600 to 850 masl. Administratively it falls under the Lipljan Municipality. The hunting area is treated as state owned, although 22% of the hunting area is owned by private individuals. The area is characterized by a high and dense forest ecosystem, more than 30 lakes and ponds, and about 60 meadows. The site provides good habitat for grazing and browsing animals.

Blinaja/Lipovica is a closed hunting area with no free movement of wildlife and without a sufficient number of natural predators to control populations. Therefore, hunting is the main population control tool. The hunting area, which employs 11 staff members, is habitat for approximately 500 wild boar (Sus scrofa) and 450 individuals of three species of roe deer. Although illegal hunting has been attempted, only one individual has been caught and the case is currently in court (Head of Directorate for Pasture and Wildlife Management, KFA, personal communications, May 8, 2018).

Duboqak/Duboćak covers 2,470 ha, located in the municipalities of Mitrovca and Skenderaj (about 30%) and Zubin Potok (about 70%). The site is dominated by forest cover (88%) and grassland (12 %). Duboqak/Duboćak is an open hunting area, with free movement of wildlife. Wild boar is the main species present in the area. Other species had been found there, such as roe deer (*Capreolus capreolus*) and fallow deer (*Dama dama*), but due to illegal hunting, they are no longer present. Illegal hunting remains one of the main challenges, as well as illegal forest harvesting. Duboqak/Duboćak also has an

institutional challenge: all staff members (12 individuals) of Duboqak/Duboćak are employed in the municipality of Zubin Potok (Head of Directorate for Pasture and Wildlife Management, KFA, personal communications, May 8, 2018), which is one of the four municipalities that are resistant to Kosovo's national laws.

Management Status (continued from Section 3.4)

The PA, Marble Cave Monument in Gadime, is managed by a management body after a decade of unclear management status between private and state entities. However, the management body is run by an acting director and has a limited number of staff and no management plans to specify management of its tourism resources.

Gërmia Park is the only PA in walking distance from the city. The park is managed by a municipal enterprise, Hortikultura, in charge of city greening. Gërmia Park and Marble Cave Monument are the only PA sites that have check points and charge entry fees.

Considered the most beautiful landscape in Kosovo, Mirusha Waterfalls/Miruša Vodopadi, although redesignated as a Natural Monument of Special Importance (NMSI) by Government, has no management body. As mentioned in the main text, the two national parks have management bodies, however, other than those mentioned here, no other PA has a management body in place.

ANNEX G. NATURE PROTECTION LEGISLATION IN KOSOVO

The following is the complete legal framework for nature conservation in the Republic of Kosovo: Laws:

- I. Law No. 03/L 233 OF NATURE PROTECTION OGRK No. 85/09. 11. 2010.
- Law No. 04/L 086 ON NATIONAL PARK "BJESHKËT E NEMUNA" OGRK No. 2/21. 01. 2013.
- 3. Law No. 04/L 087 ON NATIONAL PARK "SHARRI" OGRK No. 2/21. 01. 2013.

Policy documents:

- 1. Strategy and action plan for biodiversity 2011 2020, approved by Kosovo Assembly 07.10.11.
- 2. Action Plan for Biodiversity 2016 2020, approved by Government on 20.03.18.

Administrative Instructions - Regulations:

- 1. Administrative Instruction for the collection of protected wild plants species with the purpose of processing and tradingNo. 08/2011/13. 07. 2011.
- 2. Administrative Instruction for the sort of natural habitat types, natural habitat map, threatened and rare natural habitat types as well as safeguard measures for conservation of natural habitat typesNo. 12/2011/18. 08. 2011.
- 3. Administrative Instruction for the keeping conditions, the manner of marking and evidencing of the protected animals in captivityNo. 01/2012/28. 02. 2012.
- 4. Administrative Instruction on content and manner of keeping nature protected values Register No. 07/2012/ 18. 06. 2012.
- 5. Administrative Instruction on wildlife crossings No.16/2012/01.08.2012.
- 6. Administrative Instruction for the proclamation of wild species protected and strictly protected No. 18/2012/ 01. 08. 2012.
- 7. Administrative Instruction on the content, form and manner of issuing of identification card and appearance of uniform for the supervisors and nature ranger No. 24/2012/05. 12. 2012.
- 8. Administrative Instruction on cross-border movement and trade in wild protected species No. 26/2012/ 10. 12. 2012.

- 9. Administrative Instruction for the form and manner of providing the official card and sign for nature protection inspector No. 27/2012/ 20. 12. 2012.
- 10. Administrative Instruction on type, appearance, procedure and manner of award of gratitude's and rewards for achievements in the field of nature protection No. 06/2013/ 20. 05. 2013.
- 11. Administrative Instruction on the sign of nature protection No. 07/2013/20. 05. 2013.
- 12. Administrative Instruction on the manner of development and implementation of risk assessment study for the introduction, re-introduction and cultivation of wild species No. 14/2013/ 01. 07.13.
- 13. Administrative Instruction on assessment of acceptability of plan, program or intervention on the ecological network. 19/2013/26. 08. 2013.
- 14. Regulation MESP on internal order of National Parks. OGRK No. 46 /08. 11. 2013.
- 15. Administrative Instruction MESP on the manner and conditions of performing the ranger tasks for nature protection No. 23/2013/12. 11. 2013.
- 16. Administrative Instruction GRK on the proclamation of the ecological network No. 03/156/13. 11. 2013.
- 17. Administrative Instruction MESP for prevention and compensation of damages caused by wild species of animals strict protected No. 15/2014/02. 06. 2014.
- 18. Regulation MESP No. 23/2014 on internal order for the nature Monument of Particular importance "Shpella e Gadimes"/27. 11. 2014.
- 19. Administrative Instruction MESP No. 24/2014 for classification of Nature Protected Values by importance/27. 11. 2014.
- 20. Administrative Instruction MESP No. 02/15 for permission of scientific research in nature/ 03.03.15.
- 21. Administrative Instruction MESP No. 03 on determination of tariffs for issuance of consents, permits, licenses, certificates and verifications prescribed by legislation on nature protection/11.08.2016.
- 22. Administrative Instruction MESP No. 12/2017 for proclamation of strictly protected wild species.

Decisions:

- Decision of Kosovo Assembly No. 04 V 772/ 11. 02. 2014 on approval of Spatial Plan for National Park "Sharri"
- 2. Decision of Kosovo Assembly No. 3023/3 2013/18. 03. 2014 on approval of Spatial Plan for Nature Monument of Special Importance NMSI "Ujëvaratë e Mirushës"
- 3. Decision of Government No. 04/57/13. 03. 2009 for putting under protection of NMSI "Shpella e Gadimes"
- 4. Decision of Government No. 06/75/ 23. 05. 2012 for putting under protection of NMSI "Ujëvarat e Mirushës"
- 5. Government Decision No. 03/156/13. 11. 2013 for approval of Al to declare the ecological network
- 6. Government Decision No. 01/178/18. 03. 2014 for putting under protection of Henc-Radeva wetland as Special Protected Area for Birds
- 7. Decision of GRK No. 01/74 dt. 10.02.2016 on putting under strict protection of the clean forest of red arnen (Pinusheldreichii) in place "Pisha e Madhe" part of the mountains massif Koxha Balkan, NP "Sharri"
- 8. Decision of GRK No. 02/74 dt. 10.02.2016 on putting under strict protection of the clean forest of red Arnen (Pinus heldreichii) in "Maja e Arnenit", NP "Sharri"
- 9. Decision of GRK No. 03/74 dt. 10.02.2016 on putting under strict protection of the clean forest of red Arnen (Pinus heldreichii) in "Oshlak", NP "Sharri"
- 10. Decision of GRK No. 04/74 dt. 10.02.2016 on putting under strict protection of the natural habitat of the Balcan Lynx (Lynx lynx balcanicus) in "Rusenicë", NP "Sharri"

- 11. Decision of GRK No. 05/74 dt. 10.02.2016 on putting under natural strict protection of the natural habitat of the protected type forzicia (Forsythia europea) "Gubavci" NP "Bjeshkët e Nemuna"
- 12. Decision of GRK No. 06/74 dt. 10.02.2016 on putting under natural strict protection of the heldrahit compounds of maple tree (Acer heldreichii) and arnen (Pinus peuce) "Malet e Prilepit" in the NP " Bjeshkët e Nemuna"
- 13. Decision of GRK No. 07/74 dt. 10.02.2016 on putting under natural strict protection of the mountainous "Bjeshka e Kozhnjerit –Maja e Ropsit" in a NP "Bjeshkët e Nemuna"
- 14. Decision of GRK No. 08/74 dt. 10.02.2016 on putting under natural strict protection of the mountainous area "Bistra" NP "Sharri"
- 15. Decision of GRK No. 09/74 dt. 10.02.2016 on putting under natural strict protection of the mountainous area "Dupnica" NP "Sharri"
- 16. Decision of GRK No. 10/74 dt. 10.02.2016 on putting under natural strict protection of the mountainous area "Kobilica" NP "Sharri"
- 17. Decision of GRK No. 11/74 dt. 10.02.2016 on putting under natural strict protection of the mountainous area "Luboteni" NP "Sharri"
- 18. Decision of GRK No. 12/74 dt. 10.02.2016 on putting under natural strict protection of the source area and upper waterflow of "Lumbardh", NP "Sharri"
- 19. Decision of GRK No. 13/74 dt. 10.02.2016 on putting under natural strict protection of the mountainous area of the community (Fageto Taxetum baccata) in "Gryka", N.P "Sharri"
- 20. Decision of GRK No. 14/74 dt. 10.02.2016 on putting under natural strict protection of the endemic fir forestry (Pinetum heldreichii) In "Koritnik", NP "Sharri"
- 21. Decision of GRK No. 15/74 dt. 10.02.2016 on putting under natural strict protection of therare and specific ecosystems in the mountainous area in "Pashallare", NP "Sharri"
- 22. Decision of the Minister No. 03/2013 / 11. 02. 2013 on the establishment of the Directorate for the administration of the National Park "Sharri" located in Prizren
- 23. Decision of GRK No. 16/74 dt. 10.02.2016 on putting under natural strict protection of natural habitat of special species of macedonian fir (Abies borisi-regis) and brown bear (Ursus arctos) in "Bredhiku" NP "Sharri"
- 24. Decision of GRK No. 17/74 dt. 10.02.2016 on putting under natural strict protection of the area of high mountains "Shutman" NP "Sharri"
- 25. Decision of GRK No. 18/74 dt. 10.02.2016 on putting under natural strict protection of the habitat steno-endemic species diecki bornmullera (Bornmuellera dieckii), in "Lëndina e Shenjtë", NP "Sharri"
- 26. Decision of the Minister No. 04/2013/ 11. 02. 2013 on the establishment of the Directorate for the administration of the National Park "Bjeshkët e Nemuna" located in Peja
- 27. Decision of the Minister No. 5034/14 / 15. 10. 2014 for the announcement under protection the Kosovo specie of Longerower rooster
- 28. Decision of the Minister No. 5035/14 / 15. 10. 2014 for the announcement under protection of the Illyrian sheepdog Deltari Ilir softened adopted local breed
- 29. Decision of the Minister No. 514/15/ 04.02.2015 for the Approval of the Red List of Vascular Flora of Kosovo
- 30. Decision of the Minister No. 1212/15 / 17. 03. 2015 for the Approval of Management Plan for National Park "Sharri"
- 31. Decision of the Minister No. 54/2015, 13.. 11. 2015 on putting under Preliminary Protection a part of Pashtrik Mountain and Vermica Lake as potential area for promulgation the Nature Protected Value in the category of Natural Park
- 32. Decision of the Minister No. 55/2015, 13.. 11. 2015 on Putting Under Preliminary Protection of the Bifurcation Area of the River Nerodime, as a Potential area for Promulgation as Nature Protected Value in the Category of Natural Monument of Special Importance.

- 33. Decision of the minister No. 20, 02.09.2016 for tarifs of compensation, permitted actions, measures to prevent damages and additional criteria for determining the compensation of damages caused by wild species of animals strict protected to the domestic animals
- 34. Decision of Municipal Assembly of Prishtina No. 031-311318 dt. 22. 12. 2016 for the recategorization of the Regional Natural Park "GËRMIA" in the category of Protected Landscape.
- 35. Decision of Minister No.23, date 25.04.2017 on local wild species protected for which is permitted to take from nature and their sustainable use

Guidelines. Plans and other documents:

- 1. Guidelines for Management Plans for National Parks in Kosovo, 02. 05. 2012.
- 2. The work plan for the selection of NATURA 2000 sites with indicator of needed data, responsibilities, timelines and tools, 25. 04. 2014.
- 3. Technical Report: Preliminary identification of Natura 2000 sites in Kosovo (Biodiversity Hotspots), 30. 06. 2008.
- 4. Report on the State of Nature 2008 2009, 2010.

Local Biodiversity Action Plans:

- 1. Local Biodiversity Action Plan for Municipality of Dragash.
- 2. Local Biodiversity Action Plan for Municipality of Prizren.

Spatial Plans adopted:

- 1. Spatial Plan for the National Park "Sharri".
- 2. Spatial Plan for MNSI "Ujëvarat e Mirushës".

Approved Management Plans:

I. Management Plan for National Park "Sharri".

Draft documents in process:

- I. Draft Spatial Plan on National Park "Bjeshkët e Nemuna".
- 2. Draft Management Plan on National Park "Bjeshkët e Nemuna"
- 3. Red Book of Fauna in Kosovo

ANNEX H. ONGOING AND PLANNED CONSERVATION INITIATIVES

Table I contains the list of ongoing and planned conservation initiatives in Kosovo. The Team ranked effectiveness of conservation innitiatives as follows:

- Highly effective: The program/organization addresses biodiversity, directly or indirectly, and stakeholder consultations and/or site visits indicate that the work has produced biodiversity conservation results.
- Effective: The program/organization addresses biodiversity, directly or indirectly, and stakeholder consultations and/or site visits indicate that the work has been reasonably effective in conserving Kosovo's biodiversity.
- Neutral: The program/organization addresses biodiversity, directly or indirectly, and results are not evident.
- Ineffective: The program/organization has a focus on biodiversity and results are not evident.

Table I. Biodiversity Conservation Initiatives in Kosovo

Implementer/Funder Dates	Title &Brief Description	Evaluation of Effectiveness	Funding attributed to biodiversity
Swiss Cooperation Programme in Kosovo, 2021 onward	Water & Climate Change Resilience (biodiversity is indirectly addressed). The new strategy (beginning 2021, for 10 to 12 years, currently in planning phase) will shift focus from services to resources and may have a stronger link to biodiversity, especially in integrated water resources management (IWRM). RBMPswill be prepared for the remaining three river basins (see SIDA below) and investments will be made in wastewater treatment plants in Gjakovë/Djakovica and Pejë/Peć (with German Cooperation). These are expected to contribute to aquatic biodiversity conservation/improvements in Kosovo.	N/A: Proposed program that will indirectly address biodiversity conservation has not yet been planned or implemented.	Unknown
The Deutsche Gesellschaftfür Internationale Zusammenarbeit (GIZ) Open Regional Fund for South-East Europe-Biodiversity 2016-2018 (extension through 2020)	GIZ supported development of the Red Book for Vascular Flora in 2013 The regional program has four components: I) Biodiversity Information Management and Reporting (BIMR), 2) Ecosystem Services Assessment and Valuation (ESAV), 3) BioNet-Regional network for biodiversity-related civil society organizations (CSOs), and 4) Transboundary Ecosystem	Highly effective: One of two donor programs that directly address biodiversity conservation, GIZ's focus is transboundary. Although the funding is low considering the goal and challenges, stakeholders agreed that significant biodiversity conservation	3 million Euros for the 6 regional countries

https://www.giz.de/e n/worldwide/40686. html	Management (TEM).	results have been achieved, especially in BIMR and BioNet.	
Swedish International Development Agency (SIDA) 2016-2020 https://www.sida.se/ English/where-we- work/Europe/Kosov o/Our-work-in- Kosovo/	SIDA's KEP supports MESP in the following components: environmental monitoring, assessment and reporting; strengthening capacity for implementation of environmental legislation; conservation of biodiversity; management of transboundary natural areas; establishment of groundwater monitoring network; and river basin management. Activities are aimed at increasing local environmental investments and improving environmental management at central and local levelsin dialogue with partners and stakeholders. Among others, the project includes support for environmental CSOs, updating the national environmental strategy and environmental action plan, developing the Bjeshkët e Nemuna/Prokletije National Park Management Plan, construction of the Malet e Sharrit/Šar Planine National Park visitor center in Prevala/Prevallac, providing support to construct guard posts and collect fees at Bjeshkët e Neumuna/Prokletije and development of alternative and renewable energy sources, which addresses illegal and unsustainable use of wood for household heating.	Highly effective: SIDA is the main donor that supports biodiversity conservation in Kosovo. The SIDA project is ahead of schedule and among its achievements are: the Red Book for Fauna is in process; River Basin Management Plan for the Drin Basin has been completed; four regulatory plans in national parks are in process; the Law on Forestry had been revised and is awaiting government approval before proceeding to Parliament.	5 million Euros 2016- 2020: 3 million of this is for technical assistance (TA) and 2 million is direct budget support
European Union 2018-2020	In the past, the EU provided TA to draft the Strategy and Action Plan for Biodiversity through an instrument that allows rapid response via TA and has provided other TA and training in biodiversity conservation. The EU is planning to invest in solid waste management in municipalities (2018-2020), which could have a positive effect on biodiversity by minimizing the solid waste deposited in waters and on land.	Effective: TA and training in the biodiversity sector was mentioned by most stakeholders as a need in this sector. EU programming has contributed to filling this gap. N/A: Solid waste management activity is in early stage.	20 million Euros in 2018-2020
World Bank	The World Bank works in the energy sector and infrastructure, information and communication technologies (ICT), and transport, and considers	Neutral: The World Bank does not address biodiversity conservation and no biodiversity	N/A

	T .		T
	the environment sector as cross-	results are evident.	
	cutting. In the past, the World Bank		
	supported activities in the		
	environment sector, but no longer		
	does.		
USAID (2013-2018	Currently, USAID focuses on three	Neutral: USAID's current	N/A
and 2019-2024)	objectives: Improved Rule of Law and	activities do not include	
	Governance that Meet Citizens'	biodiversity conservation	
	Needs; Increased Investment and	and no biodiversity	
	Private Sector Employment	indicators are monitored.	
	("economic growth" includes	Given the lack of focus	
	alternative energy and energy	on biodiversity, the	
	efficiency); and Enhanced Human	USAID program is	
	Capital. Although USAID/Kosovo	considered neutralfor	
	does not directly support biodiversity,	biodiversity conservation	
	under economic growth, assistance	results. This is based on	
	has been provided to develop and	stakeholder consultations	
	market wood products from certified	which did not attribute	
	forests (forests outside Kosovo);	biodiversity	
	develop tourism products, including a	achievements to USAID.	
	trail through the Balkans; promote		
	alternative energy at household level,		
	working with manufacturers of pellet		
	stoves; and support LAB's work (see		
Millennium	below).	NI/A: In your carly stage	US\$ 49
Challenge	The MCC Compact has three components; each could indirectly	N/A: In very early stage of implementation (2018-	million
Corporation (MCC)	impact biodiversity: energy and energy	2021).	IIIIIIOII
https://www.mcc.go	efficiency, the bulk of which is support	2021).	
v/where-we-	for weatherization of homes, which		
work/program/koso	could help reduce the use of wood for		
vo-threshold-	household heating; data and data		
program	openness, focused on making judicial		
F. 50	information more transparent, which		
	could improve judiciary decisions on		
	environmental cases and on		
	environmental data collection,		
	especially air quality data; and open		
	data challenge, which will promote the		
	use of data to produce products and		
	services, including environmental data.		
United Nations	Previously, UNDP and Finland were	Highly Effective: Project	Government
Development	involved in "Sustainable Land Use	was successful; it	of Finland
Programme	Management and Conservation of	achieved its aim of	contribution
(UNDP), financed	Biodiversity in Dragashš Municipality,"	providing support to	US\$4,037,68
		,	' ' '
by Government of	but no longer are. Among the	expand Malet e	5
Finland	but no longer are. Among the activities the project supported:	expand Malet e Sharrit/Šar Planine	_
Finland http://www.ks.undp.	but no longer are. Among the activities the project supported: anexpert team that prepared studies	expand Malet e Sharrit/Šar Planine National Park by 14,445	_
Finland	but no longer are. Among the activities the project supported:	expand Malet e Sharrit/Šar Planine	_

			Ī
/projects/environme	for the Malet e Sharrit/Šar Planine	and produced data,	
nt_and_energy/sust	National Park Management Plan.	especially absent in the	
ainable-land-use-	KEPA, UNDP, and the GoF hoped to	western part of the NP	
management-and-	replicate this project in Bjeshkët e	to bring the level of data	
conservation-of-	Nemuna/Prokletije National Park, but	in the west to an equal	
biodiversity.html	the MESP was disinterested (Program	level as existed for the	
	Analyst Environment and Energy,	rest of the NP.	
	UNDP, personal communication, May		
	10, 2018).		
Regional	REC has prepared two Biodiversity	Highly effective:	Approx. I
Environmental	Action Plans (BAPs) for municipalities,	Preparation of LEAPs and	million Euro
Center for Central	Dragas and Prizren (BAPs are	two BAPs is entirely	support
and Eastern Europe	required for each municipality by the	attributable to the REC.	program
(REC)- Office in	Law on Nature Protection). REC, with		followed by
Kosovo	SIDA financial support, has developed		small
http://documents.re	26 Local Environmental Action Plans		investment
c.org/publications/L	(LEAPs) that have been adopted by		grants
EAP Brochur Alba	municipal assemblies (The Law on		according to
nian.pdf	Environmental Protection requires		LEAP
'	each municipality to prepare a LEAP).		priorities
	As required, each LEAP includes a		'
	chapter on biodiversity. Also		
	supported by SIDA and implemented		
	by REC, each municipality is provided		
	funds for small investment projects		
	based on priorities of the LEAP.		
Environmentally	ERA was created to address the lack	Highly effective: ERA is a	Unknown
Responsible Action	of protection in Bjeshkët e	strong advocate for	C indiowii
Group (ERA)	Nemuna/Prokletije National Park and	biodiversity conservation	
http://www.eradirec	was one of the promoters of national	in Bjeshkët e Nemuna/	
t.org/wildlife-	park designation. ERA fills gaps in	Prokletije National Park	
monitoring.html	wildlife population assessment,	and for awareness raising	
monicoring.num	including monitoring wildlife using	of the importance of	
	camera traps. Since 2013, the Balkan	Bjeshkët e Nemuna/	
	lynx (Lynx lynx balcanicus) has been the	ProkletijeNational Park's	
		*	
	target species monitored, as part of	biodiversity and the	
	the framework for Balkan Lynx	existing threats.	
	Recovery Program (BLRP). To raise		
	environmental awareness, ERA has		
	organized winter hikes, operated		
	Rugova Youth Summer Camp, and the		
	YouthPROTECT Cross Border		
	Training Course on Protected Areas.		
	Located in Peja, ERA manages an		
	Environmental Education Center,		
	raising awareness of biodiversity		
	conservation and the environment		
FIN 1 C 1 1	among students and adults.		
FINCH	An NGO that works for the	Effective: Strong at	Unknown
	protection of birds and nature, they	raising awareness of	1

	monitor camera traps in Malet e Sharrit/Šar Planine National Park that monitor Balkan lynx (Lynx lynx balcanicus); organize an annual event to commemorate Migratory Bird Day, raising awareness of avian diversity in Kosovo; organize international days for wetlands and biodiversity. FINCH is a volunteer organization with no full time staff, only project-based staff, e.g., for Dragash/Dragaš (Sharr) municipality, they compiled ornithological data; with support of the German group, EURONATUR, FINCH maintains a campsite in Malet e Sharrit/Šar Planine National Park. Birdlife International requested that they compile data for the European Red List of Birds in Kosovo.	resident and migratory bird diversity in Kosovo, strong technical skills in avian biodiversity conservation.	
Kosovo Association of Ecologists (KAE)	The association is mainly comprised of academic staff and students, who work on biodiversity projects, e.g., the UNDP biodiversity project in Dragash; on biodiversity studies supporting the expansion of Malet e Sharrit/Šar Planine National Park; in Mali i Pashtrikut/Paštrik Planine, where KAE collected data on biodiversity values to propose the site as a protected area; on Bjeshkët e Nemuna/ Prokletije National Park zoning; and on the border of Malet e Sharrit/Šar Planine National Park, with Pristina municipality, KAE was actively involved in the biodiversity and natural values assessment for recategorization of the Gërmia site, the only PA in Kosovo's capital city.	Highly effective: Malet e Sharrit/Šar Planine National Park was expanded and the new area was included in the new law; Mali i Pashtrikut/Paštrik Planine was declared as a protected area with Ministerial decree and is in process of gaining full protection. KAE has provided a significant amount of capacity building for national park stakeholders and has introduced courses on park development for students at three universities.	Unknown
Kosovo Energy Corporation (KEK) Reclamation of ash piles	Up to now, KEK has reclaimed 270 hectares by planting with pasture and forest, mainly ash (Fraxinus sp.) and oak species (Quercus sp.). In part, funded by the World Bank, KEK reclaimed land that had been used for open dumping of ash from the Kosovo A thermal power plant.	Neutral: Forest has been planted and has survived since 2011, but the biodiversity value of the forest is low. Forest serves to decrease the amount of dust created that settles over Pristina, resulting in air pollution and creating a health risk.	Original funding: \$10.5 million World Bank grant, Euro 3 million Dutch Government, \$3.5 million KEK contribution; with follow-

			on \$3.2 million for cleanup as part of World Bank's country partnership strategy (2012-2015).
SharrCem and the NGO, Laboratory for Business Activities (LAB)	SharrCem founded LAB in 2014 to support agroforestry and community development. Since then, 78 start-ups have been established, 77 are in agriculture/agroforestry; one is in forestry. In the past, LAB supported forestry projects, but this became too expensive for their budget. Past projects: silviculture treatment on 20 hectares; produced woodchips for school; equipped school with a stove for heating; built a woodchip storage shed; andincorporated monitoring by KFA. LAB also educates rural communities about the importance of the forest, not only for firewood and technical wood but also as a source of water, wildlife, erosion control, and flood protection.	Effective: Forest that received silvicultural treatment is productive, fire has decreased, and the forest produces firewood and technical wood. Also, silvicultural treatments were a good example of paying local people for forestry work that had a positive effect on the forest's biodiversity. The startups may encourage local people to be involved in income generating activities that are an alternative to unsustainable extraction of forest products (data to support this is unavailable).	Unknown
World Wildlife Fund	In 2017, WWF sponsored a forest inventory of GërmiaPA with one German student who was in Kosovo for an internship and two Kosovar students. In August 2018, they will have a 10-day summer camp for secondary school students.	Neutral: Interventions to date have been minor.	Unknown
International Union for the Conservation of Nature (IUCN) 2019-	IUCN will be developing a regional program starting in 2019, which will include Kosovo (according to SIDA).	N/A: Program has not yet begun	N/A

ANNEX I: CURRENT STATUS OF "ACTIONS NECESSARY" FROM THE 2009 ETOA AND 2012 FAA 119 UPDATE

Action Necessary 1. Develop better biodiversity baseline information at both ecosystem (e.g., vegetation/habitat types) and species levels. A "Red List" for Kosovo that indicates the conservation status of threatened species is needed, as is training for the managers of forests and other natural resources in the monitoring of biodiversity.

2012: No Red List has yet been prepared for Kosovo and monitoring and evaluation of species andecosystems has not been accomplished. This is still a strong need before Kosovo can adequatelymanage and conserve their biodiversity.

2018: The Red List for Vascular Plants has been prepared and the Red List for Fauna is in process, to be completed by the end of 2018. However, still a complete biodiversity inventory is missing. Monitoring of most species and ecosystems is still a gap, as is training for park rangers, forest guards and other natural resource managers in biodiversity monitoring. These are included in the "actions necessary" in 2018.

Action Necessary 2. Become a party to international conservation conventions and treaties including the CBD, Ramsar Convention on Wetlands, CITES, World Heritage Convention, CMS, and UNFCCC.

2012: Kosovo is still not a party to the major biodiversity-related international conventions, but, with thehelp of the European Union, it is beginning efforts in this direction. The country has prepared the Strategy and Action Plan for Biodiversity, 2011-2020 (DEP, 2011), which is one requirement forjoining the Convention on Biological Diversity. They are also moving forward with efforts to join the Ramsar Convention on Wetlands. CITES and other agreements necessary before they can be fully incorporated into the European Union.

2018: No change since 2012

Action Necessary 3. Update the Law on National Parks in order to provide a foundation for modern practices in protected areas management and to resolve jurisdictional ambiguities between the MESP and MAFRD with regard to managing forest lands in protected areas.

2012: The Law on National Parks still needs updating. This action is still needed in Kosovo before protected areas can be ensured. It is unknown if the jurisdictional ambiguities between various agencies have yet been resolved although the agency that prepared the Strategy and Action Plan for the Protection of Biodiversity in 2011 is called the Department of Environment Protection, not mentioned in the previous report, so some changes in institutional structure have been accomplished since 2009.

2018: The Law on National Parks has not been amended, and jurisdictional issues remain, as described in the main text. In particular, most of Kosovo's productive forest is in Bjeshkat e Nemuna/ Prokletije and Malet e Sharrit/Šar Planine National Parks, under KEPA rather than KFA, and due to lack of forestry professionals (as well as budget), is not being sustainably managed.

Action Necessary 4. Complete a Strategy and Action Plan for the Protection of Biological Diversity in Kosovo, which provides mechanisms for integrating biodiversity concerns in relevant sectors including water, energy, agriculture, forestry, and transportation.

2012: As noted previously, a process leading up to the 2011 publication of a Strategy and Action Plan (SAP) for Protection of Biological Diversity has been implemented by the Department of Environment Protection. This has been prepared in advance of any efforts to ratify the Convention on Biological Diversity so it has not yet been submitted to the CBD for approval.

2018: Recommended action was completed as of the 2012 report, however, due to inadequate budgets, most of the proposed activities in the SAPB, 2011-2020 have yet to be implemented. In May 2018, the Biodiversity Action Plan was adopted in Parliament, but it remains unclear how it will be supported financially.

Action Necessary 5. Improve public awareness and understanding of biodiversity as a resource for sustainable development, so that citizens can participate actively in environmental decisions and take appropriate responsibility for environmental conservation, leading to greater participation of civil society in biodiversity conservation.

2012: According to the SAP (DEP, 2011) and Veselaj et al. (2012) there remains a pressing need to improve public awareness about biodiversity conservation and sustainable development. There also remains a need to further civil society participation in conservation understanding and action.

2018: This remains a need and is included in the "actions necessary" in the 2018 report.

Action Necessary 6. Increase economic incentives for biodiversity conservation through the development of sustainable forest products enterprises and ecotourism.

2012: Although it is not known if other donors have begun to support this approach, more efforts are undoubtedly still needed to develop sustainable forest enterprises, ecotourism and other approaches that provide economic incentives to conserve natural resources and biodiversity.

2018: This remains a need and is included in the "actions necessary" in the 2018 report.

Action Necessary 7. Develop the financial and human resources needed to enable the Kosovo Forestry Agency to implement and enforce the Law on Forestry, in support of sustainable forest management, and incorporate the conservation of forest biodiversity as a fundamental principle for such management.

2012: According to the SAP (DEP, 2011) the management of forests and protected areas is still at a low level and more needs to be done in this area. The Law on Kosovo forests dates back to 2003, so apparently nothing much has changed here since the 2009 USAID Biodiversity Analysis.

2018: Financial and human resources are still needed for KFA to implement sustainable forest management (as well as for KEPA and NP administration).

ANNEX J: BRIEF DESCRIPTION OF CURRENT CDCS

USAID's FY 2014 – FY 2018 Strategy is designed to support the achievement of the USG's central foreign policy objective of peace and stability in the Balkans. For Kosovo to become a successful nation, it will have to build the capacity of its governing institutions, strengthen its economy, and improve the education and skills of its citizens. Only by achieving these interconnected objectives will Kosovo be able to integrate into Western European and Trans-Atlantic structures, while ensuring prosperity and stability at home for all of its people.

The CDCS's overarching goal is that "Kosovo Becomes an Increasingly Prosperous Country, Progressively Integrating into the Euro-Atlantic Community, with More Effective and Accountable Governance". The following DOs contribute to the CDCS's goals:

Development Objective (DO) I: Improved Rule of Law and Governance that Meet Citizens' Needs. This DO addresses the current state of nascent democratic institutions in the country. Despite institutional reforms, implementation shortcomings continue, even while a generally adequate body of laws and regulations is in place. Judicial independence and Rule of Law remain weak, and continuing inefficiencies in the system prevent the judiciary from effectively playing its proper role. Members of the National Assembly have limited capacity and technical skills to conduct analysis, draft legislation, and assure oversight. Progress in the devolution of authorities and responsibilities from the center is hampered by municipal administrations that are limited in their ability to efficiently provide public services, and by civil servants beholden to political interests. Given these circumstances, DOI focuses on enhancing the implementation capabilities of the judicial, executive/local administrative, and legislative sectors, while at the same time addressing integration issues and enhanced "voice" for civil society.

DO2: Increased Investment and Private Sector Employment. Kosovo remains the poorest country in the region and suffers from extremely high unemployment. It is overly dependent on imports and has a very small export base. Energy shortages hamstring the economy, and responsible utilization of the country's vast mineral base is hampered by confused, poorly implemented, or even non-existent regulatory frameworks. This DO addresses the alleviation of these circumstances by promoting a more favorable business environment, by encouraging a more diversified economy led by private sector growth, and by continuing to address the energy needs of the country.

DO3: Enhanced Human Capital. The education system in Kosovo fails to address the pedagogical and skills training needs of Europe's youngest population, resulting in vast numbers of unemployed youth without the skills or training required of a growing economy. This DO focuses on strengthening preuniversity education, provides for participant training, and works with the University of Pristina to improve management and pedagogy in key faculties.

ANNEX K: EXTENT TO WHICH THE NEXT CDCS (2018-2023) COULD CONTRIBUTE TO THE ACTIONS NECESSARY TO CONSERVE BIODIVERSITY

At the time the FAA 119 Team prepared this report, the Mission was holding preliminary consultations on the upcoming strategy. The only information available about the new strategy was that it would likely be similar to the current strategy although updated based on stakeholder consultations and analyses.

The FAA 119 Team assumed that the Mission will have the same or similar DOs as the previous strategy, in general: Rule of Law and Governance (DO I); Economic Growth and Private Sector Employment (DO 2); and Human Capital-professional skills (DO 3). The team met with USAID staff and reviewed activities that the Mission is currently implementing to gain an understanding of types of interventions that USAID/Kosovo supports and is likely to support in the future under the new strategy.

Based on this, as well as official documents (referenced in the table) and team analysis, the team identified which of the anticipated DOs **might** contribute to each "action necessary" (Table I). As the CDCS develops, the Mission should update the "extent to which," column 2, based on new information generated for the CDCS and using details in Section IX, Recommendations. Once Table I is updated with the final CDCS information, it will meet the second FAA II9 requirement, "the extent to which the actions proposed for support by the Agency meet the needs thus identified."

Table I. Extent to Which the USAID/Kosovo CECS (2018-2023) Could Contribute to Biodiversity Conservation Needs

Actions necessary to achieve conservation of biodiversity (consolidated from Table 8, column 2)	DO that could contribute to sustainable management and conservation of actions necessary to conserve biodiversity (if the DO integrates FAA II9 Recommendations) "Extent to Which"
Establish an Environmental Fund (Ekofondi) as a tool to channel ecological taxes for environment and biodiversity-related activities as required by SAPB, 2011-20.	DO I could support the development of the Ekofondi structure and governance.
Hire biodiversity, tourism, and community natural resource professionals, and/or strengthen capacities of KFA and national park directorate staff in biodiversity conservation and monitoring, promotion and development of tourism, sustainable forest management, and community-based natural resource management.	DO 3 could support capacity strengthening in the biodiversity sector.
Approve the Bjeshkat e Nemuna/Prokletije National Park Spatial Plan and when completed, the Management Plan.	Not expected to be within USAID DOs
Develop and approve Regulatory Plans, required to ensure development is environmentally sound, for additional Zone 3 areas in the two national parks.	Not expected to be within USAID DOs
Demarcate, on the ground, outer boundaries and inner conservation zones of the national parks.	DO 2 could support tourism infrastructure for the national parks.
Support MESP efforts to place guard shacks to control	DO 2 could support tourism

movement of goods (especially MAPs/NWFPs, wood, and construction material), to collect fees to enter national parks and track visitation data, and raise awareness of the public about the reasons and importance for implementing these measures.	infrastructure for the national parks.
Train all levels of KFA and KEPA staff and other affected persons in the legal framework for forestry and nature protection so that they become more "meaningful," are not seen as "obstructive," and to enhance standards of professionalism and commitment to their tasks (adapted from the Forest Strategy).	DO 3 could support training to build a stronger professional biodiversity sector.
Develop forest vocational training programs (Forest Strategy). Develop wildlife conservation and hunting vocational training programs.	DO 3 could support forest vocational training and wildlife conservation/hunting vocational training programs, fields with clear shortages of professional staff.
Create an independent, country-level inspectorate (Minister of the Environment and Spatial Planning).	DO I could support the creation of this body. DO 3 could strengthen the capacity of this independent inspectorate
Develop a PES system to contribute to the PA budget and to raise awareness of the importance of biodiversity conservation.	DO I could support a PES and accompanying awareness raising.
Amend the Hunting and Wildlife Management Law (2006) to strengthen governance and rule of law in the wildlife sector by expanding the mandate of forest guards from only forest protection to wildlife conservation and hunting and harmonize the law with EU directives (Birds and Habitat Directives) and other international conventions (Bern, Ramsar, etc.).	Not expected to be within USAID DOs
Harmonize Kosovo's secondary legislation for wildlife management with Red List fauna species to avoid overlap	Not expected to be within USAID DOs
Apply silvicultural treatments to young coppice forests to increase the official harvesting target to sustainably meet the demand in Kosovo for firewood (Forest Strategy).	Not expected to be within USAID DOs
Support KFA to maximize the potential multiple use benefits of forests through land consolidation processes that would promote rational use of public and private forests and through the introduction of systems and tools allowing the private sector to take responsibility for management of certain delineated areas of state owned forests (Forest Strategy).	DO 2 could support land consolidation to provide private sector forest enterprises with incentives to sustainably manage forests.
Conduct national forest inventories on a regular basis, and process and store data for easy access to use for planning purposes (adapted from Forest Strategy).	Not expected to be within USAID DOs
Provide incentives for households to purchase efficient stoves and insulation and to use clean energy alternatives, where available, such as wind, solar, and "clean" fuels.	DO 2 could support private sector enterprises to produce and market household-level clean energy products.
Strengthen cooperation among government agencies, focusing on police, prosecutors, and court systems, to improve enforcement, follow up on reports of criminal transgressions, and judicial outcomes (Forest Strategy and SAPB, 2011-2020)	DO I could strengthen coordination among institutions in the judicial sector (police, prosecutors, judiciary) to improve efficiency and effectiveness of criminal case hearings and outcomes in

	the biodiversity sector.
Strengthen the environmental crime sector by training select	DO 3 could strengthen capacity of key
members of the judiciary and the police officers (currently four) in the environmental crimes unit.	staff (police officers, prosecutors, judiciary, inspectors) involved in the environmental crimes sector.
Increase the penalties for environmental crimes.	DO I could provide support to normalize penalties for environmental crimes.
Strengthen the EIA and permitting processes by: training staff in the EIA process (especially those responsible for reviewing EIAs); increasing the number of staff assigned to review and monitor EIAs, in particular, inspectorate staff; involving national park administration in the EIA decision making process when actions are planned in PAs; ensuring transparent review, decision making, and follow up actions (e.g., compliance with requirements, fines and other legal actions taken).	DO I could strengthen the EIA process. DO 3 could strengthen capacity of EIA, permitting, and monitoring staff.
Build a community of support for environmentally sound development by strengthening the eco-tourism sector through training Ministry of Trade and Industry-Tourism Department, MESP park directorate staff, private sector tour operators, and eco-tour guides; developing tourism products, such as bird guides, plant guides, trail guides, and guides to national parks and other areas of eco-tourism interest; strengthening transboundary eco-tourism, by coordinating on marketing transboundary eco-tourism products; and strengthening the MAP sector by training entrepreneurs in processing, marketing, branding, and by providing incentives, such as grants as loans.	DO 2 could strengthen the eco-tourism sector by supporting the development of tourism products and marketing and could strengthen the MAP sector by supporting marketing, branding, and grants or loans to enterprises. DO 3 could strengthen professional capacities in the eco-tourism sector and in the MAP sector.
Provide opportunities for communities adjacent to national parks and other PAs to benefit from natural resources, such as through wood and MAP collection and participation in ecotourism opportunities.	DO 2 could support a range of community-based, private sector activities around PAs, such as tourism and sustainable MAP and wood collection. DO 3 could strengthen capacities of communities and CBOs in community-based income generation activities linked to PAs.
Encourage coordination and cooperation among environmental journalists and biodiversity-related academics, CSOs, and media companies (national TV station, etc.) to strengthen the demand for investigative environmental journalism products.	DO I could strengthen coordination and cooperation among environmental journalists, academics, CSOs, and media.
Train environmental journalists in environment and biodiversity specific investigative journalism.	DO 3 could strengthen capacities of environmental journalists to improve investigative skills.
Build capacities of biodiversity-related CSO staff in advocacy, fundraising, and other sustainability measures.	DO 3 could strengthen capacities of environmental CSOs.
Improve public awareness and understanding of biodiversity as a source for sustainable development, so that citizens can	DO I could raise awareness of biodiversity as a means of strengthening

participate actively in environmental decisions and take	civil society's knowledge and
responsibility for conservation, leading to greater participation	understanding of the importance of
of civil society in biodiversity conservation (FAA 119, 2012).	biodiversity conservation.
Increase cooperation among biodiversity-related institutions,	Not expected to be within USAID DOs
including NGOs, and teacher associations/schools (adapted	
from the SAPB, 2011-2020).	
Train teachers at all levels on measures to increase the	DO 3 could strengthen capacity in
environmental and biodiversity conservation curricular	environmental education for teachers, as
portfolio (SAPB, 2011-2020).	a means of teacher professional
	development (as required by teacher
	licensing legislation).
Develop a full inventory of plant and animal species in Kosovo	Not expected to be within USAID DOs
followed by a computerized biodiversity information system	•
(SAPB, 2011-2020).	
Provide incentives and forums for cooperation and data	Not expected to be within USAID DOs
sharing within and among ministries, such as data on MAP	r
populations and sustainable use.	
Develop a database, available to the public, with information	DO I could support development of an
on the EIA and construction permitting processes, including	EIA and permitting database to improve
status of EIAs and permits and with the capability for public	GoK transparency.
input/comment.	Gork transparency.
Conduct biodiversity baseline surveys (updated from FAA 119	DO 2 could support development of
(2012), such as:	target baseline information geared to
	tourism development as a means of
population and habitat studies for species in Kosovo, especially those listed in the Directive for Wild Birds and Directive for	increasing economic growth and private
Habitats; for flora and fauna in national parks; inventory of	sector employment opportunities.
birds in Malet e Sharrit/Šar Planine National Park; inventory of	
invasive species (SAPB, 2011-2020); and study of potential	
impacts of climate change on Kosovo's biodiversity and the	
potential impacts from climate change on forest fire incidence,	
insects, and diseases.	N
Prepare Management Plans for threatened/endangered,	Not expected to be within USAID DOs
keystone wildlife (e.g., Rupicapra rupicapra, Lynx lynx balcanicus,	
Canis lupus, and Ursus arctos)	
Conduct a country-wide hydrological study to determine	DO 2 could support a country-wide
water flow requirements in Kosovo's river basins, including	hydrological study to contribute to
flow needed to maintain aquatic ecosystems.	environmentally sound and evidence-
	based decision making in the hydropower
	sector.
Conduct economic analyses for use of renewable energy	DO 2 could support economic analyses
options that include natural resource valuation and accounting	to contribute to environmentally sound
and use these as a basis for decision making prior to approving	and sustainable economic growth in the
additional hydropower projects.	power sector and to support evidence-
	based decision making.

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