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FAA SECTION 119

**BIODIVERSITY ASSESSEMENT UPDATE
FOR
SERBIA AND MONTENEGRO**

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Biodiversity 119 Assessment 2005 Update: Serbia/Montenegro

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INTRODUCTION

This Biodiversity Assessment Update is prepared for the U.S. Agency for International Development (USAID) Serbia and Montenegro Mission in response to the Foreign Assistance Act (FAA) Section 119 and Automated Directives System (ADS) 201 requirements on Environmental Analysis for Biodiversity Conservation. The original report was prepared in May 2002 by Loren L. Schulze and DevTech Systems, Inc. This report provides the Biodiversity Assessment Update for the Mission's next Strategic Plan. The strategy period remains open according to the recent strategy guidance from the Agency and E&E Bureau. An update of the Biodiversity Report will be necessary if the conditions to conserve biodiversity change significantly and/or the actions by the Mission are found to have a significant impact on the biodiversity. However, the SOs will be designed for a 5 year period.

The Assessment was conducted by **Alicia P. Grimes**, USAID/EGAT; **Mohammad A. Latif, P.E.** USAID/EE/REO; **Jelena Vujadinovic-Colic**, ACDI/VOCA /Environmental Officer; and **Vasilije Buskovic, M.Sc.**, Institute for Nature Protection and Consultant, Biodiversity Specialist, Montenegro. Jeff Ploetz on behalf of the BEO Compliance Unit (BCU) (ECSS/Devtech System, Inc.) provided necessary support to revise the update. The team interviewed various individuals and organizations (see appendix III), gathered relevant information, performed the required analysis, and prepared the Biodiversity Assessment Update in compliance with the FAA Section 119 requirements addressing:

- (1) The actions necessary in Serbia and Montenegro to conserve biological diversity [FAA Section 119 (d) (1)], and
- (2) The extent to which the actions proposed for support by USAID meet the needs thus identified [FAA Section 119 (d) (2)].

The final draft report was submitted electronically by A. Grimes to Mark Pickett, USAID/Serbia-Montenegro MEO on June 30, 2005. Initial comments on the Montenegro portion were received from Vladan Raznatovic on August 9, 2005 with final comments on September 7, 2005. Final comments on the Serbian portion were received from Mark Pickett, on August 26.

All comments received were analyzed and incorporated in the update as necessary. The team is thankful to all those who contributed to this work including all those interviewed.

The following are attached and complete the Serbia and Montenegro FAA 119 update:

Table 1. Principal Donor Activities in Serbia

Table 2. Principal Donor Activities in Montenegro

Appendix I. Areas of Special Importance for Conserving Biodiversity in the FRY, including maps of protected areas, forest distribution, and the Annotated Ramsar List for Serbia and Montenegro.

Appendix II. Selected Biodiversity Maps produced through the CRDA project

Appendix III. Contacts

Appendix IV. Principal References

PART I. REPUBLIC OF SERBIA

A. Importance of Biodiversity and Actions Necessary for Conservation

1. Importance of Biodiversity in Serbia

The biological diversity of Serbia, both in terms of ecosystems and species is extremely high. The Balkan and Pannonian regions of Europe were an area of refuge for numerous species during the period of glaciation—offering numerous habitats due to geomorphology (mountains, canyons, caves) as well as climatic transition. Hence, ancient “relic” and “endemic” species exist which are found only in Serbia or the Balkans. (For more details see Schulze, *et. al.*, 2002: original FAA 119 Assessment).

The socio-economic importance of Serbia’s biodiversity is extremely significant, but not recognized. Genetic diversity of wild relatives of commercial agricultural crop and livestock species provides an insurance policy and base for future agricultural and drug development (for example there are several wild varieties of crab apples, common pear and cherry trees). Diversity of fungi, wild berries and game species has and continues to contribute to livelihoods. Wetlands and migratory bird habitat has contributed to hunting, fishery and tourist revenues. Forest cover has helped regulate water regimes and air quality.

Critical Habitats

For the purposes of biodiversity conservation, sustainable land use planning and natural resources management (NRM), it is useful for the FAA 119 Biodiversity Assessment (119 assessment) to outline critical habitats and areas of particular interest. The May 2002 119 Assessment report gives a general list of areas of special importance for biodiversity (See Appendix 1). A list and map of protected areas and RAMSAR sites are also included in the May 2002 assessment, as well as in Appendix 1 of this report. The Institute of Nature Protection has a map which includes planned protected areas but this was not available at the time of the assessment team’s visit. (This would be useful for the Mission to obtain).

Since the assessment, an additional wetland in Serbia has been classified as a RAMSAR site: Slano Kopovo (est. 22/07/04). This is a special nature reserve in Vojvodina with rare and representative examples of salt habitats, and a freshwater depression. It is one of Serbia’s most important bird habitats and regularly supports more than breeding and migrating 20,000 water birds, particularly ducks, cranes, geese and shorebirds as well as a significant number of vulnerable, threatened and endangered species. Unfortunately, the ecosystem is threatened by decreases in water levels due to channel and dam construction on the Tisza River which has lowered groundwater levels as well as agricultural activities. An updated description of Serbia and Montenegro’s RAMSAR sites and their threats are provided in Appendix 1 on critical areas.

Another interesting area to note is the Stara Planina Transboundary Park bordering Bulgaria. It is worth mentioning due to the transboundary activity and the potential results demonstrated there in the area of local governance. Municipalities and communities from both sides of the border have been convening (through the support of the Regional Environmental Center) to set priorities for sustainable development which incorporates

conservation values. This is a potentially very interesting model for community-based natural resources management and development.

2. Threats to Biodiversity: Serbia

The 119 assessment prepared in April/May 2002 identified four general categories of threats to both Serbia and Montenegro: Habitat Degradation, Illegal extraction or poaching, Alien Invasive Species and Pollution. This update found that these types of threats continue, but provides more specific detail.

a. Direct threats/impacts:

As an indicator of environmental degradation, 600 plant species and 270 animal species are under various categories of threat in Serbia (National Environmental Strategy and Action Plan-NESAP). Inventories of fauna are incomplete or inadequate at this time. Decline in biodiversity is directly attributed to:

- Substantial loss of natural habitat due to expanding agriculture (particularly on the Pannonian Plains); drainage of swamps and marshes. The trend of this conversion has slowed in recent years, but it's impacts are still being felt.
- Loss of Habitat and Species due to illegal construction, unregulated tourism, expanding transportation networks and water infrastructure (dams).
- Loss of Habitat and species due to inadequate Protected Areas Network.
- Degradation of forests due to excessive utilization and lack of sustainable forest management which takes into account biodiversity and adequate regeneration.
- Excessive unregulated use and/or Illegal poaching and hunting of animal species, particularly large mammals and birds.
- Overgrazing, particularly in mountain areas.
- Perceived/suspected (unregulated) over-harvesting of Non-Timber Forest Products from forests and meadows, especially edible fungi and snails.
- Industrial pollution and other point source pollution affecting rivers and lakes; solid and hazardous waste.

Agricultural land occupies about 65% of Serbian territory, which was originally covered with forests, shrubs, steppe vegetation and marshes. The original vegetation was removed to obtain areas for either mountain pastures or lowland arable land. Marshes were drained and steppes were irrigated for agricultural crops. These activities have significantly decreased, but the remaining natural vegetation is still endangered by overgrazing by livestock, especially in the mountains.

The degradation and loss of forest cover have increased in the past decade, due to illegal forest cutting, uncontrolled livestock grazing and forest fires. Current forest management does not ensure proper silvicultural treatment, and therefore forest quality and health are declining (the low standing volume per hectare is one of the indicators: 101 m³/ha). The intensity of forest cut is unevenly distributed due to lower transport costs, accessible forests have been overused, and inaccessible forests are not maintained. At the same time the afforestation rate has decreased by 12% a year because of poor financing.

The construction of dams across rivers has destroyed valuable valley ecosystems (i.e. Drina, Piva, Djerdap) and their biodiversity due to 1) new artificial ponds that have created different ecosystems, and 2) physical interruption of species migration, (no fish corridors were constructed). Dyke systems that were constructed to prevent floods changed the water regimes and also caused a loss of wetland communities.

Illegal hunting and fishing increased in recent years and still show no signs of slowing. The illegal export of birds in particular continues and the perception is that it is still an acute problem. Even though there is a lack of monitoring and data on affected populations, people interviewed expressed concerns about foreign poachers and their methods, in some cases documenting incidents with photographs. While it has been expected that implementation of the Convention on International Trade in Endangered Species (CITES) will help to reverse these negative trends, there is still no impact due to continuing institutional constraints and weaknesses, especially inability of Serbia to do effective monitoring. This is due to lack of funds, lack of qualified people, and inadequate equipment.

Some of the most expensive hotels, with the highest standards, are in the Kopaonic National Park area and are ecological disasters. In most areas with high seasonal tourism, a strong negative impact on natural resources derives from illegal and uncontrolled construction in absence of land use permits from the local authorities; the pollution of rivers in the vicinity of tourist resorts; high levels of energy consumption; and a lack of facilities for the proper management of both solid and liquid waste.

Up to 400,000 tons of hazardous waste is freely disposed annually in Serbia. Serbia has 180 landfills but only one of them meets European Union (EU) criteria. These landfills have local impacts on biodiversity, as well as significant effects on groundwater and substantial effects on tourism and human health.

b. Threats due to Institutional/Legal and Socio-Economic factors

Much of the root causes driving the trends and impacts from threats above are based on legal, institutional and market failures which provide no incentives for conservation and sustainable use.

1. Continued uncertainty regarding status and related issues affecting governance overall:
The general undercurrent of uncertainty and lingering affects from a difficult transition, conflict and international sanctions has impacted progress in institutional stability, reforms and investments necessary to advance environmental protection. Changes in administrations have reflected shifting priorities in development objectives. Overall, environmental protection is receiving a lower priority. This is reflected for example in the “down-grading” of Ministry of Environmental Protection to the Directorate for Environmental Protection which now has less of a voice concerning planning and development investments, issues and actions. Furthermore there is an acute conflict between environmental and development objectives. For example, it is not clear to what extent protected area planning and zoning is being incorporated into revised Physical

Plan for the republic. Protected area boundaries and plans are currently not being recognized by developers. This is an extremely acute problem at the moment.

2. Serious lack of host country agency coordination and serious conflict between development and environmental objectives. As environment has not been a priority, there is particular institutional ‘confusion’ and fragmented jurisdiction over different subsectors. The lack of coordinating mechanisms such as the National Environmental Strategy and Action Plan (NESAP) and Biodiversity Conservation Strategy and Action Plan (BSAP) to guide cross sectoral planning and investments during the last 5 years has not helped. These processes have recently been launched (NESAP apparently 1 year ago and BSAP to be launched shortly) and are a positive development. However coordination still seems to be problematic, including amongst donors. For example, the UNDP representative the team met with was unaware of the NESAP process that is currently underway in Serbia by the European Agency for Reconstruction (EAR). The lack of a centralized agency to oversee protected areas hampers coordination among individual public enterprises which administer forests and protected areas.
3. Inadequate implementation and enforcement of environmental laws: This includes legislation related to Environmental Impact Assessments (EIAs), environmental protection and sustainable use. Currently there is a lack of secondary legislation, guidelines and means to implement newly reformed laws. This is compounded by a lack of knowledge due to inadequate monitoring of environmental quality. With respect to biodiversity specifically, inventories and monitoring systems for major species groups are incomplete and a complete lack of monitoring of biological communities. Monitoring and enforcement of standards and regulations is adversely affected by fragmented institutions, inconsistent nature of legal and organizational frameworks with limited mandates, insufficient human and financial resources, lack of modern inspection equipment and low fines. The situation is further aggravated by inadequate incentive systems and lack of access to environmental information by the public.
4. Lack of public awareness about environment and biodiversity issues. Environmental attitudes are partly demonstrated by behaviors which include dumping of solid waste at random throughout the landscape. Citizens and communities are particularly unaware of the value of biodiversity and the extent of the threats and their implications. People are passive about getting involved in decision-making or advocacy or taking responsibility for their actions. Businesses, municipalities and public institutions which allow rapid development of tourist, transportation and other infrastructure without any regard to environmental impact are disregarding costs to future generations and society.
5. Lack of adequate and effective protected area and forest management: The current system of protected areas in which forests and parks are administered by public enterprises continues to be problematic. As mentioned in the original 119 Assessment for Serbia/Montenegro, enterprises currently rely on financing gained from natural resources extraction for their entire budget (excluding staff salaries). This potentially sets up a conflict of interest for sustainable use and is aggravated by a lack of systems

