Document of The World Bank

Report No: ICR00003039

IMPLEMENTATION COMPLETION AND RESULTS REPORT (TF-91919)

ON A

GEF GRANT

IN THE AMOUNT OF US\$ 3.4 MILLION

ТО

BOSNIA AND HERZEGOVINA

FOR A

FOREST AND MOUNTAIN PROTECTED AREAS PROJECT

April 25, 2014

Environmentally and Socially Sustainable Development Unit (ECSSD) South East Europe Country Unit Europe and Central Asia Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective October 31, 2013)

Currency Unit = Konvertible Marka (KM) KM 1.00 = US\$ 0.7034US\\$ 1.00 = KM 1.4216 KM

FISCAL YEAR January 1 – December 31

ABBREVIATIONS AND ACRONYMS

BiH	Bosnia and Herzegovina
CPS	Country Partnership Strategy
EU	European Union
FBiH	Federation of Bosnia and Herzegovina
FDCP	Forest Development and Conservation Project
FM	Financial Management
FMPAP	Forest and Mountain Protected Areas Project
FR	Forest Reserve
GEF	Global Environment Facility
GEO	Global Environmental Objective
GIS	Geographical Information System
HCVF	High Conservation Value Forests
HEP	Hydro-electric Power
IBTV	NP 'Igman- Bjelasnica-Treskavica-Visocica'
IPARD	Instrument for Pre-accession Assistance for Rural Development
ISR	Implementation Status and Results Report
IUCN	International Union for Conservation of Nature
KM	Konvertible Marka
MET	FBiH Ministry of Environment and Tourism
MSPCEE	RS Ministry of Spatial Planning, Civil Engineering and Ecology
M&E	Monitoring and Evaluation
NBSAP	National Biodiversity Strategy and Action Plan
NP	National Park
NTFP	Non-timber Forest Products
OP	Operational Policy
PA	Protected Area
PAD	Project Appraisal Document
PAME TT	Protected Areas Management Effectiveness Tracking Tool
PCCV	NP 'Prenj-Cvrsnica-Cabulja-Vran'
PDO	Project Development Objective
PMU	Project Management Unit

RS	Republika Srpska
UNEP	United Nations Environment Program

Vice President:	Laura Tuck
Country Director:	Ellen A.Goldstein
Sector Manager:	Kulsum Ahmed
Project Team Leader:	Nathalie Johnson
ICR Team Leader:	Solvita Klapare

Bosnia and Herzegovina Forest and Mountain Protected Areas Project

CONTENTS

Data Sheet

A. Basic Information

- B. Key Dates
- C. Ratings Summary
- D. Sector and Theme Codes
- E. Bank Staff
- F. Results Framework Analysis
- G. Ratings of Project Performance in ISRs
- H. Restructuring
- I. Disbursement Graph

1. Project Context, Global Environment Objectives and Design	1
2. Key Factors Affecting Implementation and Outcomes	4
3. Assessment of Outcomes	9
4. Assessment of Risk to Development Outcome	15
5. Assessment of Bank and Borrower Performance	16
6. Lessons Learned	18
7. Comments on Issues Raised by Borrower/Implementing Agencies/Partners	19
Annex 1. Project Costs and Financing	20
Annex 2. Outputs by Component	21
Annex 3. Economic and Financial Analysis	24
Annex 4. Bank Lending and Implementation Support/Supervision Processes	31
Annex 5. Beneficiary Survey Results	33
Annex 6. Stakeholder Workshop Report and Results	41
Annex 7. Summary of Borrower's ICR and/or Comments on Draft ICR	43
Annex 8. Comments of Cofinanciers and Other Partners/Stakeholders	70
Annex 9. List of Supporting Documents	71
MAP	

INSERT DATA SHEET HERE

AFTER APPROVAL BY COUNTRY DIRECTOR AN UPDATED DATA SHEET SHOULD BE INSERTED <u>MANUALLY</u> IN <u>HARD COPY</u> BEFORE SENDING A FINAL ICR TO THE PRINT SHOP.

NOTE: The Data Sheet is generated by the system using the information entered in the Operations Portal each time you use "Send Draft", "Print" or "Submit Final" functions.

1. Project Context, Global Environment Objectives and Design

1.1 Context at Appraisal

Bosnia and Herzegovina (BiH), with a land area of 51,000 km2 and population of 3.8 million, is endowed with internationally recognized rich biodiversity assets. BiH includes 5 types of climate, 3 agro-climatic regions, and multiple provinces, landscape types and biotopes. BiH covers three globally significant ecosystems and several smaller-scale globally important sites. The country's rich biodiversity includes over 5,000 confirmed taxa of vascular flora, 450 of which are endemic to BiH only. BiH's forest resources are among the richest in Europe with a wide variety of coniferous and deciduous species.

BiH is a post-war country and, as envisaged in the Dayton Peace Agreement, has evolved into a single sovereign state with a decentralized administrative structure. The State of Bosnia and Herzegovina is the central authority and the Federation of Bosnia and Herzegovina (Federation or FBiH) and Republika Srpska (RS) are its two constituent Entities, which are politically, administratively and fiscally autonomous. They have different governance structures: the Federation is decentralized, being composed of 10 Cantons with significant fiscal authority and their constituent municipalities. The RS is centralized, with relatively few functions decentralized to its constituent municipalities and no mid-level governments. In most areas of natural resources management, the Entities have responsibility for creating and implementing all relevant laws. The Federation delegates some authority and responsibilities to the cantonal level.

The conflict associated with the break-up of the former Yugoslavia, between 1992 and 1995, caused heavy damage to natural resources. A minimum of 200,000 hectares became contaminated by landmines, resulting in overexploitation of some rural areas and abandonment of others. Subsequent to the conflict, poverty, inadequate land-use planning, as well as limited capacity of local institutions and lack of awareness of conservation issues, had contributed to unsustainable land use practices and habitat change.

At the time of project preparation, about 2 million people (54% of BiH's population) lived in rural areas, and for them forest and mountain ecosystems served as an important source of subsistence, employment, energy and recreation. It was estimated that at 19%, BiH had the highest proportion of threatened plant species of any European country, and yet only 0.55% of the territory was formally protected - the lowest level in Europe - compared to the regional average of 7%. The few existing Protected Areas (PAs) had been under-funded and largely self-financed, relying on the generation of revenues from various activities. Historically, the largest portion of funding (between 60-90%) came from sales associated with selective thinning of forests. Other revenue sources from forest products included fees for grazing, gathering of non-timber forest products (NTFPs) and hunting (generally less than 10%). National parks obtained some budget support from government authorities, and tourism was also an important revenue source (between 3-25%).

BiH ratified the United Nations Convention on Biodiversity Conservation in 2002. With support of the United Nations Environment Program - Global Environment Facility (UNEP-GEF), Bosnia and Herzegovina was developing its National Biodiversity Strategy and Action Plan (NBSAP), the implementation of which the project would directly support.

The World Bank has been continuously involved in the natural resources/environment sector in the country since 1998. From 1998 to 2003, the Forestry Project, focused on recovery of the forest sector, also helped to improve the protection of forest ecosystems. A follow-on project, the Forest Development and Conservation Project (FDCP), supported implementation of reforms in forest organization and management. The Bank had wide regional experience in GEF biodiversity

projects and forestry operations, including the Croatian Karst Ecosystem Conservation Project, which included similar and nearby landscapes. Through its leading role in the forestry sector, the Bank also played an important role in mobilizing donor support for biodiversity conservation in BiH. To support the country's broader rural agenda, the local initiatives grants under the project aimed to build technical skills for activities eligible for EU funds under the Instrument for Pre-accession Assistance for Rural Development (IPARD) program.

The project was consistent with the 2008-2011 Country Partnership Strategy's (CPS) objective to "improve the environment for private-sector led growth and convergence to Europe" with support for expanded business opportunities and strengthened regional cooperation to manage public goods. The project was also fully consistent with the provisions of the GEF Operational Strategy, specifically with the Operational Program (OP) for Forest Ecosystems (OP3) with additional relevance to the OP for Mountain Ecosystems (OP4) and linkages to the program for Conservation and Sustainable Use of Biological Diversity important to Agriculture (OP 13).

1.2 Original Global Environment Objectives (GEO) and Key Indicators

The Project Development Objective (PDO) was to strengthen the institutional and technical capacity for sustainable protected area management, and expand the national network of forest and mountain protected areas. Because the PDO was considered both local and global in nature, it was also considered to be the global environment objective (GEO). The project would focus on improving the management effectiveness of four existing PAs, bringing two additional sites under protected status, assessing feasibility for another site and promoting sustainable natural resource management and biodiversity conservation activities in or around PAs.

Indicators for outcomes associated with this objective included:

- Area under formal protection increases from approximately 0.6% to 3.0% (i.e., an addition of approximately 120,000 ha);
- Key threats to biodiversity at each PA decrease or remain unchanged;
- Portion of recurrent management costs financed by at least 20% from sustainable tourism, non-timber harvesting and donations, as well as at least 15% from government budget;
- Improved PA management effectiveness as assessed in the Protected Areas Management Effectiveness (PAME) Tracking Tool;
- Public support for PAs maintained at a minimum of 80% of respondents as assessed through public opinion surveys

1.3 Revised GEO and Key Indicators, and reasons/justification

The PDO/GEO was not revised during project implementation, but at Mid-term Review the key indicators were slightly adjusted to better respond to the situation on the ground (see sections 1.7 and 2.3 below).

1.4 Main Beneficiaries

The key beneficiaries would include: (i) national, Entity and local government institutions (including FBiH Ministry of Environment and Tourism (MET) and RS Ministry of Spatial Planning, Civil Engineering and Ecology (MSPCEE)) responsible for PA planning and oversight; (ii) national, nature park and other PA managers in the project area; (iii) local residents and resource users (farmers, forest users, herders, hunters, hikers, service providers to national parks and park visitors); (iv) national and local NGOs; (v) the academic community and research institutes; and (vi) tourists.

1.5 Original Components

Component 1: Protected Area Development would support PA management plans, operations, assessments and facilities development in existing and new PAs.

<u>Sub-component 1a: PA Management Planning</u> would finance development and implementation of new PA plans for the two existing National Parks (NPs 'Sutjeska' and 'Kozara'), for two existing forest reserves (FRs 'Janj' and 'Lom') and for the new NPs 'Una' and 'Igman-Bjelasnica-Treskavica-Visocica' (IBTV). In addition, the project would undertake new feasibility studies to examine the options for expansion of existing and possible new protected areas.

<u>Sub-component 1b: Ecological and PA Management Assessment</u> would establish a Monitoring and Evaluation (M&E) system and support the ecological assessments and periodic assessment of PA management effectiveness.

<u>Sub-component 1c: PA Facilities</u> would support new infrastructure, and limited small-scale building rehabilitation, necessary for improving the operations of existing PAs, and for establishing the newly created protected areas, e.g., trail improvements, new trail creation, signage, resting places, park boundary markings, visitor entry booths etc.

Component 2: Capacity and Support for Biodiversity Conservation would focus on strengthening the institutions responsible for planning, establishment and management of PAs.

<u>Sub-component 2a: Institutional Capacity Development:</u> At the PA-level, training and technical assistance would focus on building competencies in key areas, including: ecosystem-based management focusing on adaptive management, integration of ecological, economic and social aspects, and sustainability, business planning emphasizing financial sustainability and marketing of PAs as quality destinations, and field-level skills in areas such as patrolling, community engagement, visitor management and interpretation. At Entity level, the component would finance capacity building for the environmental ministries and other concerned agencies.

<u>Sub-component 2b: Public Awareness Programs</u> would support the development and implementation of an outreach program to raise public awareness for biodiversity conservation and PAs.

<u>Sub-component 2c: Project Management and Project Monitoring:</u> Limited financing would be provided for project management and associated operating costs, meetings of the Project Guidance Committee, and project monitoring.

Component 3: Local Initiatives in Biodiversity Conservation would support selected grants for biodiversity conservation efforts by local stakeholders, which promote improved natural resource management and generate economic benefits to local communities involved in protected areas management.

1.6 Revised Components

The components were not significantly modified, however in June 2011 the RS MSPCEE requested project assistance in financing *spatial/physical plans for the NPs 'Kozara' and 'Sutjeska'* due to the legislative requirement for all investments, including those under the project, to be accompanied by such plans.

Also, the scope of sub-component 1a activities was revised in early 2013 to include PA management plan preparation and implementation in the Nature Park (NatP) 'Blidinje' instead of the originally planned NP 'Igman-Bjelasnica-Treskavica-Visocica' (IBTV) in FBiH, due to the delay in preparing a physical plan for NP 'IBTV'. This delay stemmed from the controversy over the nature of development proposed by some stakeholders that could potentially involve

significant risks of compromising biodiversity and environmental values of the proposed PA. A risk that activities in all pre-selected PAs may not materialize was already identified at appraisal with a mitigation measure of providing support to alternative PAs.

1.7 Other significant changes

Results Framework Modifications: At mid-term review in November 2010, minor modifications of the results framework were made to better respond to evolving circumstances. For example, since project inception there have been achievements and activities benefiting PA conservation, which were not originally anticipated (e.g., development of high conservation value forests (HCVF), and new plans to develop sustainable game management for special hunting areas adjacent to NPs). On the other hand, it was clear that the original design and expectations did not adequately take into account political and operational constraints (e.g., delays in the start of operation of NP 'Una', low revenue from non-timber forest products and other sources). Hence, the PDO indicator #1 on the area under formal protection was clarified to recognize additional types of PAs. PDO indicators #2, #3, and #4 on threats to biodiversity, PA funding and improvements in PA management effectiveness, were refined to more precisely reflect results attributed to the RS and the Federation, and to take into account practical application of the indicators to existing versus new PAs. Since the modifications to the results framework were minor and served to clarify and not change the existing indicators, no formal restructuring was carried out.

Closing Date Extension: An extension of the closing date for six months was granted in December 2012 to enable implementing agencies to complete the spatial plans for the national parks in RS, which were added as a project activity based on the government's request (see section 1.6). The extension would also allow sufficient time to utilize additional resources generated through savings and favorable exchange rates. In addition, the extension would allow for several local initiative grants to be fully implemented, which had been delayed as a result of the project implementation lag at project start and mid-point.

2. Key Factors Affecting Implementation and Outcomes

2.1 Project Preparation, Design and Quality at Entry

The project preparation period was extensive, over four year from concept stage to Board approval. Management made changes to the team prior to appraisal, resulting in the efficient and high quality delivery of the project. Despite these delays, the project's quality at entry was *satisfactory*. The project responded to the Government's priorities in several key areas and maintained its overall strategic relevance throughout the implementation period. Objectives were set clearly in the context of the CPS and Government strategies. The lessons from similar projects in Central and Eastern Europe and elsewhere were fully incorporated in the design.

Assessment of project design and preparation: The design of the project components and activities was well aligned with its objectives. The number and types of components were fully consistent with the standard organization of components in most protected area projects. The proposed indicators, while needing minor revisions at mid-term, were nonetheless all relevant to measure the proposed outcomes. The number, type and design of components were well aligned with the intended outcomes.

The project design built on a rigorous background analysis and data from various preparation studies, most of which were prepared as part of the biodiversity component of the FDCP's Italian Grant. The preparation studies included generic frameworks (for environmental management plans, social assessments, including participation plans, feasibility studies, and PA management

plans), which were to be applied to any proposed PA investments, as well as site analyses specific to FMPAP. Other biodiversity studies supported under FDCP, which were not a specific part of project preparation (e.g., status of specific species, impacts of hunting on resource use) were also relevant to FMPAP. The selection of areas for inclusion in the project was made through a comprehensive and participatory consultation process and reflected a strong technical consensus on priorities. The project focused on both already formal PAs, and those with completed feasibility studies and expected to be legally proclaimed as national parks in the first years of project implementation.

Alternatives considered: A range of alternatives were identified during project preparation both related to project design and implementation arrangements. The assessment of alternatives incorporated lessons from comparable projects recognizing the importance of broad support in the government, civil society and local communities, use of participatory planning, and establishment of links related to conservation objectives and tangible benefits from sustainable natural resource use.

Risk assessment: The risks identified at appraisal were generally adequate. The risk that establishment of pre-selected PAs may not materialize was probably slightly underestimated and, as other risks, rated 'modest'. While one of the mitigation measures, reallocation of funding to alternative PAs, was correctly identified and later used, operationalization of the newly established NP 'Una' proved to be more challenging than expected, however fully materialized towards the end of the project. Risk of an under-estimated revenue stream from non-timber sources, which proved to be lower than expected, was not identified at appraisal.

Government commitment and stakeholder involvement: BiH ratified the United Nations Convention on Biodiversity Conservation in 2002. With support of the United Nations Environment Program - Global Environment Facility (UNEP-GEF), BiH was developing its National Biodiversity Strategy and Action Plan (NBSAP). A sub-committee for biodiversity, through a working group composed of technical professionals from government ministries, universities and the private sector, guided the NBSAP preparation. The NBSAP committee members were part of the project preparation work, thus ensuring consistency between the proposed project design and the NBSAP.

2.2 Implementation

Project implementation was affected by a number of positive and adverse factors:

Delay in signing of the Grant Agreement: While not unique for FMPAP, the start of implementation was delayed due to government processes required for signing of the legal documents, and the project became effective only eleven months from its Board approval.

Institutional capacity: The project experienced some implementation delays, including slow disbursements and delays with procurement and preparation of technical packages, and was therefore downgraded in both PDO/GEO achievement likelihood and Implementation Progress to Moderately Unsatisfactory (MU; or problem status) just before the Mid-term Review in November 2010. The ratings were downgraded due to concerns about the Project Management Units (PMUs) performance and capacity, and slower than expected achievements of project results, only partial compliance with legal covenants, and lower than expected quality of semi-annual reports. In response, 90-day action plans were designed, agreed and closely monitored and changes in the results framework introduced to account for lost time, while keeping most of the original targets. A supervision mission in April 2011 confirmed that bottlenecks and capacity issues in the project's implementation had been mostly resolved. In RS, the new Assistant Minister was assigned the responsibility to coordinate all donor funded projects. In FBiH, the project team was to be led by the Assistant Minister who was involved in the original project

design. The project's implementation picked up, and project performance returned to Moderately Satisfactory (MS). The March 2012 mission, however, downgraded the project to problem status again due to a low disbursement rate and reoccurring delays in project implementation. To respond to the situation and accelerate project activities, RS appointed a new project coordinator and financial management (FM) specialist. Also, monthly implementation update reports and conference calls were initiated in March 2012. The project experienced a turnaround and the March 2013 mission concluded that significant progress had been made by both Entities on project implementation within the past six months and a majority of project activities had been completed or were underway. The disbursement rate had risen from 55% in October 2012 to 72% in March 2013. This good implementation pace was maintained until project closing.

Legislation: In February 2010, the RS Parliament passed a draft Law on National Parks, which provided a general framework for their operations as Public Institutions, thus permitting direct access to the government's budgetary support. The law also prohibited any wood thinning in the PAs, except for sanitary cleaning. The law on Nature Protection in FBiH was adopted in July 2013.

Budget for PAs: Project implementation significantly benefitted from governments' commitment in provision of financing, as per project design. The NPs in RS in 2008 received less than 10 percent of revenue from government budget. The Law on National Parks specified the Public Institutions status for the NPs, thus allowing access to government budget instead of reliance on income generated from wood cutting. With the law's passage, the budgetary contribution reached over 50 percent of total revenue of the parks in 2012. In FBiH, between 2011 and 2013, the government's annual budget allocations for all PAs reached EUR 500,000. The law on Nature Protection (Official Gazette 66/13), the Law on National Park 'Una' (Official Gazette 44/08) and the Protected Areas Management Plans established provision of adequate annual budget for PA operation, with the actual amount determined each year by Decision of the FBiH Government.

Delays in operationalizing PAs: While identified as a 'modest' risk at appraisal, the operationalization of the new NPs, or implementation of management plans in existing PAs appeared to be more challenging than originally anticipated. While government had allocated budget for *NP 'Una'* operation, disagreements between the Entity, cantonal and municipal levels, and delay in selecting the NP Director and finalizing a staffing plan, prevented progress with making the NP operational. A turning point occurred in 2010, however, with the appointment of the NP Director, and at the end of the project all anticipated activities were successfully completed. The *NP 'IBTV'*, also in FBiH, experienced significant delays in starting preparation of its management plan due to the absence of a physical plan given the controversies described in section 1.6. An alternative PA, NatP 'Blidinje,' was nominated for project interventions, and all foreseen activities completed by project closing.

Similarly, in RS, preparation of management plans for the *NPs 'Kozara'* and *'Sutjeska'* and *FRs 'Janj'* and *'Lom'* was delayed due to poor quality of reports and consultant delays. The plans were finalized and approved eventually and implementation started by project closing. An additional delay that prevented implementation of the management plans was the newly adopted law on PAs requirement that all investments need to be accompanied by physical/spatial plans.

Infrastructure development projects within PAs: As part of the monitoring protocol, beginning in preparation, proposals for infrastructure investments that may have potential environmental and/or financial implications for project PAs were identified and monitored. In particular, these included small hydro-electric power (HEP) concessions granted in 2005/2006, some of which were located in and around PAs. Also road infrastructure investments were likely to have implications for protected area design and management options (e.g., the 5c Corridor in the NP 'Prenj-Cvrsnica-Cabulja-Vran' and NatP 'Blidinje'). Both PMUs systematically collected

information on planned infrastructure activities in and around project PA sites. In FBiH, the Law on Nature Protection and the Spatial Plan covering NP 'Una' prohibited building HEPs and similar infrastructure within the NP. Similarly, the 5c corridor for the proposed road construction was excluded from the spatial plan covering Nature Park 'Blidinje'. The draft spatial plan for NP 'Sutjeska,' proposing construction of a small hydro-power plant, is still being debated as part of the approval process by the National Assembly.

2.3 Monitoring and Evaluation (M&E) Design, Implementation and Utilization

Design: The project design included a sound project monitoring and results framework with five PDO level indicators and eight intermediate outcome indicators covering all aspects of the PDO and components. Most of the indicators were well defined, however required minor refinements at the Mid-term Review, to adjust to changing circumstances (e.g., take into account establishment of new types of PAs), and to make the indicators more focused and relevant (e.g., some indicators were more meaningful for existing but not for new PAs). The project introduced the Protected Area Management Effectiveness (PAME) tracking tool to monitor PA management effectiveness at project start, mid-term and completion.

Implementation: Results framework indicators were consistently used to measure project progress throughout implementation in the semi-annual PMU progress reports and Bank's Implementation Status and Results Reports (ISRs). The PAME tracking tool was used to measure and inform protected area managers about progress towards improvement of PAs management effectiveness (PDO indicator). The tool was completed at project start, mid-term and project completion. The project also introduced a modern monitoring system through survey of beneficiaries as a way of assessment of public support to PAs. The surveys were carried out as part of the public awareness campaign in both Entities, and an additional survey to assess public support to PAs was carried out in FBiH at the end of the project.

Utilization: In addition to the PAME tracking tool that continues to be used by the project PAs to identify threats to biodiversity and inform PA management decisions, the project supported baseline ecological assessments in all project PAs. In both Entities, ecological baseline assessments of PAs provide information on the presence of certain species and their habitats in the project sites, status indicators and identify threats by location. In RS, Taxonomic and Geographical Assessment of Species in Preparation of Compiling the Red List of Fauna and Flora provides a complete range of distribution of potentially endangered species. The database of distribution of endangered species that is based on the geographical information system (GIS) will serve as a starting point for all future research and help to make informed decisions on future potential protected areas. In addition, a methodology for identifying and classifying endangered species has been prepared, in accordance with national legislation and internationally accepted criteria for classification of endangered species. In FBiH, the Red List of endangered plants, animals and fungi has been completed. Maps of PAs and GIS database for the entire country have also been completed.

2.4 Safeguard and Fiduciary Compliance

Safeguard compliance: During preparation, it was determined that the project triggers OP4.01 Environmental Assessment and is classified as Category B, whose potential adverse environmental impacts are few and site specific. The project was expected to have an overall positive environmental impact by conserving biodiversity and improving natural resource use. An Environmental Assessment / Environmental Management Plan Framework was prepared and subjected to numerous informal public discussions prior to preparation of the final draft. The final draft was formally disclosed in public meetings in Sarajevo and Banja Luka in June 2007. It was also determined that the project triggers OP4.12 Involuntary Resettlement, and an Access Restriction Process Framework was developed to guide the mitigation of potential negative impacts on livelihoods of population residing near the PAs and their access to traditional use of resources in PAs. The framework was disclosed in public meetings in June 2007 in Sarajevo and Banja Luka. Consultations were held in the communities during the development of the Process Framework.

Consistent with OP4.36 Forests, the project aimed to harness the potential of forest ecosystems to reduce poverty in a sustainable way, integrate forest conservation effectively into sustainable development and protect vital local and global environmental services and values of forests. OP4.04 Natural Habitats was triggered as the project would help to conserve natural habitats and ensure that specific project activities would avoid habitat degradation.

The safeguards reviews conducted during implementation confirmed that safeguard policies triggered by the project were consistently complied with. The project satisfactorily implemented with respect to safeguard policies on environmental protection, and in line with the Environmental Management Framework. Site specific Environmental Management Plans (EMPs) prepared during implementation. All of the works completed were designed and constructed in an environmentally sound manner and in full compliance with the management plans and practices in each of the protected areas.

A social beneficiary survey conducted in FBiH at the end of the project confirmed that the majority of local stakeholders (82.8%) supported project activities. The majority of the respondents believed that the project generally did not have any negative influence on their families and households, but more than half of the participants believed that the project improved the economic situation of the area, in which it is was conducted. Similar results and the overall approval of project activities were also demonstrated by the surveys carried out in RS.

Financial Management: Financial management throughout the project was satisfactory. The two PMUs had adequate financial management arrangements for project implementation. At the start of the project, due to implementation delays there were no regular withdrawal applications submitted. The audited financial statements were delivered on time and the auditors have issued an unqualified audit opinion. The project management recommendation letters issued by the auditors did not contain any internal controls deficiencies or accounting issues. Regular quarterly Interim Unaudited Financial Reports (IFRs) were submitted on time and have been found acceptable to the Bank.

In October 2011, the FM review identified that one of the FBiH PMU vehicles had been paid for but not delivered. This was result of the contractor not releasing the vehicle when its bank blocked it as a debt guarantee. The case underwent court proceedings. While the PMU has made other arrangements to ensure that its transportation needs are covered, it did not manage to recover the funds from the contractor nor receive the contracted vehicle. The issue remained unresolved until the end of project, and finally the GEF account was replenished by the government of FBiH in February 2014.

Procurement: The project experienced initial implementation delays in part due to inadequate procurement capacity in the PMUs, particularly in FBiH. The procurement rating was downgraded to MS a year after it became effective, and further to MU at project mid-term. Additional capacity and training was secured following the Mid-term Review and procurement activities came back on track. In the last year of the project, the procurement rating was upgraded to Satisfactory, and all procurement activities were assessed to be performed in a professional manner, and in full compliance with the World Bank Procurement Policies/Guidelines and procurement plans. This assessment remained effective until project closing.

2.5 Post-completion Operation/Next Phase

There is a strong commitment by the Government of BiH, local stakeholders and the donor community to sustain the biodiversity conservation efforts and build further on the basis established by the project and other initiatives of the National Biodiversity Strategy and Action Plan. Even though more work is needed to ensure long-term sustainability and maximum impact, clear evidence exists that all stakeholders recognize biodiversity as BiH's major asset and efficient protected areas management as critical to maximizing long-term benefits to all. FBiH and RS implementing agencies indicated need for further Bank investments in capacity building, public awareness, trans-boundary cooperation efforts, expansion of biodiversity databases and PAs infrastructure (including integrated fire management programs). A GEF grant of US\$ 5.58 million for the Sustainable Forest and Landscape Management Project approved by the World Bank Board of Directors in January 2014 with an objective to build capacity of forestry sector stakeholders and to demonstrate approaches for sustainable forest and land management through integrated management of vulnerable forest, scrub and pasture landscapes will build on the lessons from the FMPAP. Swedish SIDA has committed resources to publish Red Books in FBiH based on the Red Lists developed under the project.

UNEP is supporting revision of the National Biodiversity Strategies and Action Plan (NBSAP) and development of the 5th National Report to the Convention on Biological Diversity (CBD). Implementation of the strategic tasks identified under NBSAP 2008-2015 is progressing well with good progress in developing a legislative basis and assigning budgetary resources for PAs. Many of the tasks identified in NBSAP have been completed with the support of the FMPAP, including ecological baseline assessments, PA maps, monitoring mechanism and economic incentive measure for nature preservation piloting, design of successful public awareness campaigns. Future important tasks will involve mainstreaming of inter-sectoral approaches in nature management, exchange of scientific and technological information in the field of biodiversity, environmental licensing etc.

3. Assessment of Outcomes

3.1 Relevance of Objectives, Design and Implementation

The project objectives, design and implementation approach remain *highly relevant* to the current global and BiH priorities, and remain consistent with the Bank's CPS 2012-2015. BiH's diversity of flora, fauna and fungi is considered among the richest in Europe, being especially important in terms of global biodiversity due to its high level of endemism and relicts. By ratifying the Convention of Biological Diversity in 2002, BiH has committed to conserve biological diversity, ensure the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources. The project's objectives and design directly contributed to these broad objectives. They remain consistent with the strategic goals of the Convention's Strategic Plan for Biodiversity 2011-2020 and BiH's National Biodiversity Strategy and Action Plan 2008-2015 and its updates. The project is also fully consistent with the current Bank's strategy in the country, CPS FY2012-2015, particularly its outcome of expanded network of protected forest and mountain areas, and strengthened institutional and technical capacity for their sustainable management.

3.2 Achievement of Global Environmental Objectives

The project has *satisfactorily* achieved its Project Development Objective / Global Environment Objective which was to strengthen the institutional and technical capacity for sustainable protected area management, and expand the national network of forest and mountain protected

areas. Over the course of the project, areas under protection in BiH have increased by 5 percent from 0.5% to $5.5\%^1$, including by 3 percent of areas under formal protection. Key threats to biodiversity and forest resources in all project PAs have remained the same or been reduced. The preparation and/or implementation of management plans for all project PAs, baseline ecological assessments and the development of M&E systems in each park and the use of the Protected Areas Management Effectiveness tool tracking have contributed to the reduction in threat level in the PAs and improved both the effectiveness of park management and the visitor numbers and revenue collection. The government's commitment to the PAs is evidenced by the adequate and consistent annual budget allocation to cover recurrent expenditures and priority capital and research and monitoring investments. Commitment to PAs on a policy and legislative level is confirmed by the recently adopted Law on Nature Protection in the Federation (July 2013), and the establishment of PAs as public institutions instead of enterprises in the Republic of Srpska in 2010 through the Law on National Parks. Public support and awareness of the importance of the PAs, specifically their economic and intrinsic value in BiH, has been established through the public awareness campaign in both Entities, the training provided under the project, as well as the Local Initiatives community grants program.

PDO/GEO achievement more specifically can be best illustrated by the PDO indicators, including:

- Increase in PA areas under formal protection (using all IUCN categories) Over the course of the project, areas under protection in BiH have increased by 5 percent from 0.5% to 5.5% (compared to the target of 3%). Formally protected areas have increased by 3%, or in the RS territory to 1.14% (or a total of 72,276.48 ha), and in the FBiH to 2.14% (or 109,563 ha) of the country's territory. In addition, the High Conservation Value Forests (HCVF) in FBiH, which have been certified by the Forest Stewardship Council, cover an area of 28,900ha, and Special Hunting Reserves under sustainable game management plans in RS cover an area of 70,012 ha.
- Key threats to biodiversity for each existing PA decrease or remain unchanged The PAD identified a list of most common threats to biodiversity in each of the proposed project area that were to either remain at the same level or decrease. These mainly involved unregulated extraction of resources (timber, fuel wood, wildlife etc.), infrastructure development, unregulated tourism development, and waste management. In the RS, a law on National Parks (2010) prohibited exploitation of forests, including cutting and transport of forest products, except for sanitary use. Before enactment of the law, the biggest users of revenue from logging were PAs themselves, but government's commitment to set these revenues off by budgetary sources was the right policy. In addition, the project's contribution to equipping the PAs, training of PA management and rangers, as well as project established monitoring systems helped to ensure adequate enforcement of this law. Similarly, there is evidence of a decrease in wildlife poaching as a result of the effective use of monitoring tools and well trained rangers. The project invested in fire-fighting equipment, thus better managing and reducing the extent and severity of forest fires. Any possibility that infrastructure works might be carried out with potentially adverse impacts on biodiversity, as mentioned in Section 2.2 above, was closely tracked during project implementation; the spatial and management plans were an effective tool to eliminate this threat.

¹ Including High Value Conservation Forests, which have been certified by the Forest Stewardship Council and 2 Special Hunting Reserves under sustainable game management plans

- Increase in percentage of actual recurrent costs of operational RS' National Parks from sustainable tourism, non-timber harvesting, donations, government budget Compared to project start when around 10 percent of the parks' revenue came from fees and less than 10 percent from government budget, in 2012 the NP 'Sutjeska' raised 13.4 percent from tourism activities, and fees and services and received 53 percent from government budget. The NP 'Kozara' share of income from fees and services, and tourism reached 10.9 percent, while government contribution amounted to 57 percent of the total revenue. Due to primarily lesser income from tourism as a result of a decrease in the number of tourists during the economic slowdown, the original target of 20 percent of receipts from fees was decreased to 8 percent at the Mid-term Review.
- *FBiH Government budget allocated and utilized for NP 'Una' operations* Between 2011 and 2013, the FBiH government's annual budget allocations reached EUR 250,000. An additional EUR 250,000 annually have been allocated for the support of other protected areas management. The law on Nature Protection (July 2013) established provision of adequate annual budget for PAs operation.
- Improved PA management effectiveness as assessed by tracking tool As per formal reporting requirements by GEF, the Protected Areas Management Effectiveness (PAME) tracking tool was completed at project start, mid-term and completion in the existing PAs (NPs 'Sutjeska' and 'Kozara' and FRs 'Janj' and 'Lom'); in the first year of the project, at mid-term and completion in the NP 'Una'; and at completion in NatP 'Blidinje', since this PA was included in the project at a later stage of implementation. Training on the use of the PAME tracking tool took place early in the project. Discussions during the training revealed that in order for the tracking tool to serve as an effective monitoring instrument, it requires adapting to local conditions of each PA. For example, the users of the PAME tool wanted to see the model adapted to specific classification of the area, given the differences related to threats to biodiversity and sustainable economic exploitation. The adjusted tracking tool was and continues being used in project PAs. Initial challenges in filling the PAME tool and later adjustments for FRs resulted in scoring that has slightly decreased at project completion compared to baseline (e.g., in FR 'Lom' from 56 in 2008 to 48 in 2013, and FR 'Janj' from 53 to 40). On the other hand, NPs, for which the tool is better tailored, showed an increase in scores over time. A good example is NP 'Una' where the score at completion has reached 67 compared to 18 at NP establishment in 2009. NP 'Sutjeska' showed an increase in scores from 58 to 68, NP 'Kozara' score remained at 65, and NatP 'Blidinje' total score was 67 in 2013 (the only time PAME TT completed for this park). Some actual examples of the effectiveness of the monitoring system include: identifying areas, which are most popular with visitors and serve as places for picnics informed decisions to build necessary facilities around these areas; by monitoring the changes in status of rare and endangered plant species, such as rare Yew (Taxus baccata), which grows only at three sites in the NP 'Kozara', it was found that frequent visits to these sites impair the growth of new trees, resulting in limiting access to these sites, and planting additional seedlings.
- *Public Support for PAs maintained* In RS, analysis of the target groups' opinion was carried out as part of the public awareness campaign. Following completion of the campaign, at the end of the project, 94 percent of respondents indicated support to PAs (against the baseline of 80 percent and target of maintaining at least baseline). In FBiH, the social beneficiary survey conducted at the end of the project confirmed that the majority of local stakeholders (82.8 percent) supported project activities.

3.3 Efficiency

The PAD did not provide a formal quantified economic analysis as the project would primarily produce local, national, and global environmental benefits whose value could not be readily quantified. The analysis instead evaluated environmental benefits in qualitative terms and, consistent with GEF requirements, summarized the estimated incremental costs. At completion, a cost-benefit analysis was undertaken to assess the economic efficiency of activities and in particular the generation of positive landscape and watershed services from extending the PA system.

Project design assumed environmental and economic benefits arising through physical investment, development of new strategies, capacity building and training. The project would also support activities to assist communities in and around PAs in developing sustainable and alternative revenue generation. Through the expansion of protected areas covered and stakeholder capacity enhancement activities, the project would generate significant mutual economic and environmental benefits by: (i) creating the opportunity for generating jobs from better utilization of non-timber values of forests, particularly from tourism and recreation, including non-timber forest product collection, sustainable commercial game management; (ii) securing conservation of biodiversity in internationally-important forest habitats including HCVFs; and (iii) conservation and improved management of globally-significant endemic biodiversity and landscape values of critical ecosystems.

The beneficiary survey carried out in FBiH at the end of the project and local initiative grant impact assessments in both Entities confirmed the understanding that the project yielded positive economic returns (for details see Annex 3). On the NP revenue side, there has been an increase in park revenue from tourism and budgetary transfers. While income from tourism in the two existing NPs in RS increased at a slower pace, reaching 13.4 and 10.9 percent, compared to baseline of 10 percent, increased tourism income in the newly established NP 'Una', which due to its location at the Una river offers such activities as rafting and other water sports, increased eight-fold within three years, from KM 22,000 in 2011 to KM 186,000 in 2013. Similarly, there has been a considerable increase in the budget allocation for PA operations, reaching over 50 percent in RS compared to a baseline of less than 10 percent, and amounting to Euro 250,000 per year for NP 'Una'.

Cost- benefit analysis

Given the challenges of assigning monetary benefits to the entire range of economic benefits generated by the project, only one specific economic benefit was included in the quantitative expost economic assessment of project feasibility. The ex-post economic analysis was based on the generation of positive watershed services through the significant, 10-fold extension of the PA system in the country. Other economic benefits not included were, for example, increased sequestration of Green-house Gases (GHG) by forest ecosystems, avoiding GHG emissions through deforestation and forest degradation, biodiversity values, bequest values, and others. A Cost-Benefit-Analysis was conducted to assess the economic efficiency of this project. Sensitivity analysis was also applied for the main simulation parameters: notably the discount rate, carbon price, and watershed benefits, and carbon benefits were reduced by 50%. As required for economic analysis of projects, a <u>With and Without</u> project situation was used for estimating incremental benefits generated by the project. The Net Present Value (NPV) and Benefit-Cost Ratio (B/C-Ratio) were used as criteria to assess the economic feasibility of the project.

Based on the economic evaluation, details of which are presented in Annex 3, it can be concluded that the project resulted in significant positive development impacts. The consideration of only a few of these benefits in the quantitative analysis sufficed to yield positive

economic results. The achieved economic benefits comply largely with what was anticipated during the design stage. This supports the design and implementation of the project, in particular, the selection of investment activities. It also demonstrates that investments in sustainable natural resource management can significantly contribute to economic development in ambitious transition economies, such as Bosnia and Herzegovina, as they generate and safeguard important direct environmental services and foster economic development.

Incremental Cost Analysis

An incremental cost analysis was conducted at the time of preparation (see Annex 3) and demonstrated to the satisfaction of the GEF, that the project, compared to the "without project" scenario, would be an efficient means for BiH to strengthen the institutional and technical capacity for sustainable protected area and natural resource management; while expanding the BiH network of forest and mountain protected areas. Annex 3 examines in greater detail the efficiency of incremental costs. The baseline scenario clearly revealed that without the project the biodiverse rich natural ecosystems would not be sufficiently protected from the major transition-related threats anticipated over the short and medium term.

3.4 Justification of Overall Outcome Rating Rating: *Satisfactory*

The overall PDO/GEO outcomes are rated satisfactory. The PDO/GEO remains highly relevant for local and global natural resource management and sustainable land management agenda. The PDO was largely achieved and most planned outputs were delivered efficiently and cost effectively. Full disbursement of the grant has been achieved² and all project activities originally planned have been executed.

Public support and awareness of the importance of the PAs, specifically their economic and intrinsic value has been established through the public awareness campaign, the training provided under the project, as well as the local initiatives community grants program. The management of the project PAs has been substantially improved. Visitor numbers in parks is steadily growing. For example, the number of visitors in NP 'Una' has increased almost ten-fold (from 3,000 to 29,000) since its opening in 2011. The governments' of both Entities commitment to the PAs is evidenced by the adequate and consistent annual budget allocation to cover recurrent expenditures and priority capital and research and monitoring investments.

3.5 Overarching Themes, Other Outcomes and Impacts (a) Poverty Impacts, Gender Aspects, and Social Development

Local initiative grants demonstrated that the local population can gain tangible benefits as a result of enhanced biodiversity conservation and expansion of protected areas. The initiative was instrumental in raising awareness about the importance of protecting biodiversity and natural resources and also contributed to tourism attraction, thus directly benefitting local initiative grant recipients and other businesses in the area. While the component was limited in scale (although the number of sub-projects exceeded the target), these pilots lay an important basis for replication using other sources of financing (e.g., EU pre-accession assistance instruments, such as Financial Instrument for the Environment (LIFE) - Nature and Special Action Program for Pre-Accession Aid for Agriculture and Rural Development (SAPARD), and Entity-based Funds for

 $^{^{2}}$ Apart from appr. US\$22,000 that had to be replenished to GEF as a results of contracted but undelivered vehicle (see section 2.4 for details)

Environmental Protection (Eco-Funds)). Among other outcomes, support was provided for construction of a small waste water treatment facility and to open dump closure, as well as expansion of beekeeping and medical herb operations. Funding was also granted to the women's association in Kulen Vakuf (NP 'Una') to support carpet weaving and other activities practiced by members of the women's association, which operated near NP 'Una'. The grant supported equipment for the weaving workshop and training. The support to the women's group helped ensure regular income for the women, many of which are widows, and also provided a community and companionship for previously unemployed women who suffered from post-war trauma.

(b) Institutional Change/Strengthening

The project directly contributed to enhancing the administration capacity of PAs, as well as ministry staff through provision of training and increased hands-on experience in PA management. Significant institutional strengthening occurred when individual park teams gained international exposure to other country park systems through study tours and exchanges.

The management planning process and models established under the project in the existing PAs will be applicable to other existing PAs. The experience gained in both the legal and structural formation of newly established PAs can also be readily used in establishment of new PAs outside of the project. Project supported M&E systems not only were used to draw lessons learned but also cultivated a learning culture within the agencies responsible for PA management, enabling them to adjust their operations to take into account these lessons, consistent with modern "ecosystem management approaches" (i.e., adaptation, integration, precaution (avoidance of negative impacts) and sustainability).

Finally, the project influenced nature protection legislation by promoting and demonstrating the management planning process that was subsequently adopted into law.

(c) Other Unintended Outcomes and Impacts (positive or negative, if any)

N/A

3.6 Summary of Findings of Beneficiary Survey and/or Stakeholder Workshops

A Social Beneficiary Survey was carried out in FBiH to assess public support to PAs against the baseline social assessment results. In RS, two rounds of surveys to examine public support and level of awareness were carried out as part of the public awareness component. The baseline social assessment conducted in the six project-supported PAs determined that, in general, the majority of people living directly adjacent to the PAs and depending on these areas for their livelihoods, supported the concept of biodiversity conservation through the protection of land and the objective to change management practices, expand the area under protection, and promote tourism. Local stakeholders living in or around the proposed areas anticipated that they would benefit from improvements in the quality of natural resources, due to more sustainable natural resource management, including increased control over illegal resource extraction. Benefits were also anticipated from tourism-related income and employment opportunities. In addition, respondents expected that activities to expand the PA network would actively promote the revival of local communicates, through improved infrastructure (roads, water, etc.), eco-tourism, and better opportunities for marketing agricultural and NTFPs. Less than 5 percent of those surveyed expressed opposition to changes in PA management and establishment. Their concerns focused on additional or new restrictions on hunting, fishing, forestry, NTFP collection and agricultural production. Findings on the views about possible restrictions showed that the majority were in support of controlling construction, and considered that restrictions on natural resource use would not have significant economic impact. Assessments at project start, however, also showed that local communities needed more information about the process and impacts of establishing

national parks and that this will have to be actively remedied in order to prevent potential conflicts.

The social beneficiary survey conducted in FBiH at the end of the project confirmed that the majority of local stakeholders (82.8 percent) generally support project activities. The majority of respondents believed that the project generally did not have any negative influence on their families and households, but more than half of the participants believed that the project improved the economic situation of the area. Furthermore, approximately half of the participants believed that the project's activities did not have an effect on employment opportunities in the area, in which they live, but a little over a third believed that the project's activities brought about an increase in employment opportunities.

Similar results and overall approval rate of project activities was demonstrated by the surveys carried out in RS, where before the public awareness campaign 92 percent of respondents supported the existing and new PAs, but 94 percent also indicated that more information about PAs is needed. Following the public awareness campaign, a second phase of the public opinion research was carried out. Support to the PAs showed that 94 percent more respondents knew about PAs in their vicinity, including the names and location of RS's NPs, and the percentage of those who indicated a need for more detailed knowledge on PAs decreased, albeit slightly, to 89 percent.

4. Assessment of Risk to Development Outcome

Rating: Low

There are two key risks to sustaining the development outcome of the project: financial and social, both of them assessed as low.

Financial: The project was designed to diminish reliance on revenue from forest thinning and build financial sustainability through an increase of revenue from tourism, and regular and adequate government budget support. Project implementation significantly benefitted from commitment of the governments in provision of financing, as per project design. The NPs in RS in 2008 received less than 10 percent of revenue from government budget. The Law on National Parks specified the Public Institutions status for the NPs thus allowing access to government budget instead of reliance on income generated from wood cutting. With the law's passage, the budgetary contribution reached over 50 percent of total revenue of the parks in 2012. In FBiH, between 2011 and 2013, the government's annual budget allocations for all PAs reached EUR 500,000. The law on Nature Protection (Official Gazette 66/13), the Law on National Park Una (Official Gazette 44/08) and the Protected Areas Management Plans established provision of adequate annual budget for PA operation, with the actual amount determined each year by Decision of the FBiH Government. In RS, the Law on National Parks assigning public institution status to PAs allows for access to government budget revenues, in particular, for protection functions and capital improvements. Similarly, FBiH's Law on Nature Protection ensures that annual budget allocations to the PAs are provided. The improvement of park infrastructure and successful public awareness campaigns have also led to an increase in fees from tourism activities (such as hiking, fishing, rafting, diving). Such dynamics are expected to continue beyond project closing.

Social perception: The project was instrumental in increasing social sustainability though acceptance of PA network expansion by local stakeholders and the public in general. This can be attributed to a number of key project activities, including the state of the art public awareness campaign featuring a famous football player and artist and particularly targeting youth, local biodiversity initiatives, small grant support, and a participatory approach in PA planning.

Government ownership: The relevance and importance of protected areas and nature protection for the governments is evidenced by the consistent and adequate annual budget allocation to cover recurrent expenditures and priority capital and research and monitoring investments. Commitment to PAs on a policy and legislative level is confirmed by the recently adopted Law on Nature Protection in the Federation (July 2013), and the establishment of PAs as public institutions instead of enterprises in the Republic of Srpska in 2010 through the Law on National Parks. The project's activities have established the foundation for the institutional and financial sustainability of the protected areas system in BiH. The baseline biological assessments, the management plans, the M&E systems and databases, and lessons learned through study tours will have lasting and permanent impacts well beyond the close of the project.

5. Assessment of Bank and Borrower Performance

5.1 Bank

(a) Bank Performance in Ensuring Quality at Entry Rating: *Moderately Satisfactory*

The Bank's performance in project identification, support for preparation, and appraisal is rated moderately satisfactory due to extensive time and budget spent for project preparation (see section 2.1 above). In addition, there were minor shortcomings with the way project risks were assessed, and under-assessment of PMUs fiduciary capacity (particularly, procurement). However, project design was rigorous and thorough. Preparation involved detailed field visits, stakeholder interviews and various workshops. During the preparation and design phase, intensive client interaction and cooperation took place leading to a joint project design. The PDO/GEO was clear and realistic with project components and activities well linked and supporting the PDO/GEO outcomes. The PDO indicators and targets in principle provided a comprehensive reflection of the expected project achievements. The project benefitted from background analysis and studies undertaken under the FDCP, and lessons from similar projects in the region and beyond were adequately incorporated.

The project was also timely and consistent with governments' priorities at the time of preparation of the country's National Biodiversity Strategy and Action Plan. The project's objectives were also closely linked to the Bank's Country Partnership Strategy at the time of appraisal, as well as currently.

(b) Quality of Supervision Rating: *Satisfactory*

The Bank provided continuity in supervision by conducting regular supervision missions every 6 months. Interim Project Support missions were organized in response to specific problems in implementation. Actions taken by the Bank during supervision were mostly appropriate, timely and adequate, with some areas of notable achievements. The Bank set high standards for implementation, and consistently maintained a long-term vision with a strong focus on results, building capacity, involving stakeholders and efficient administration. Supervision was also flexible and adaptive to emerging realities. The aide memoires and the ISRs showed direct involvement in supervision. Procurement and financial management performance were regularly assessed and, in the case of procurement, when problems were found, all necessary attempts were made to rectify them promptly. The mission aide-memoires were comprehensive, well prepared and clearly articulated agreed actions for each project component.

The supervision team appropriately flagged critical risks and mitigation measures at the time of project slow-down and was realistic in assessment and allocation of the performance ratings. A

"90-day action plan" to address the critical bottlenecks was introduced at the time of the first downgrade, and monthly performance reports at the time of second downgrade. The team effectively raised issues affecting the project to management's attention. These interventions succeeded in effectively addressing problems that arose and bringing the project performance to a satisfactory completion.

(c) Justification of Rating for Overall Bank Performance Rating: *Moderately Satisfactory*

While considering satisfactory performance of the Bank at the completion of the project preparation and consistently through its implementation, based on the evaluation criteria set in the ICR guidelines, which requires lower of the two ratings be the overall rating, the overall Bank performance is thus rated Moderately Satisfactory.

5.2 Borrower (a) Government Performance Rating: *Satisfactory*

The BiH government commitment and ownership of the project has been high throughout the project cycle. At preparation, the BiH Council of Ministers and the governments of both Entities fully supported project objectives and design, with the country developing its National Biodiversity Strategy and Action Plan (NBSAP). Attention to project activities in FBiH somewhat lessened during elections in 2010, and project implementation was particularly affected during the first half of 2011 due to changes in government. While there was generally strong support and interest in the project from the sector ministries, attention had shifted to different priorities. These changes led to a temporary oversight gap that led to delays in necessary project-level institutional changes.

Despite these challenges that mostly affected implementation arrangements, the governments' commitment to the PAs has been evidenced by the adequate and consistent annual budget allocation to cover recurrent expenditures and priority capital and research and monitoring investments. Commitment to PAs on a policy and legislative level is confirmed by the recently adopted Law on Nature Protection in the Federation (July 2013), and the establishment of NPs as public institutions instead of enterprises in the Republic of Srpska in 2010 through the Law on National Parks.

(b) Implementing Agency or Agencies Performance Rating: *Moderately Satisfactory*

The PMU performance in both Entities in the earlier part of the project resulted in delays, which is reason for a rating that is less than Satisfactory. In the later part however, the PMUs managed to make up for these delays, and once the new PMU management and key staff were in place, implementation proceeded at a fast pace, with quality of procurement documents and technical specifications increasing and disbursements accelerating significantly. In spite of the difficulties at the beginning of the project, the project was almost fully disbursed and all project activities originally planned had been executed. The disbursement rate had been raised from 55 percent in October 2012 to full disbursement of the grant on October 2013. All planned project activities had been carried out and project targets met.

(c) Justification of Rating for Overall Borrower Performance Rating: *Moderately Satisfactory*

The overall Recipient performance is rated Moderately Satisfactory, combining the two above ratings by application of the evaluation criteria rules set out in the ICR guidelines. However, consistently strong commitment and ownership by the BiH Council of Ministers and the governments of both Entities has been noteworthy throughout project preparation and implementation. Implementing agencies' Moderately Satisfactory rating is based on performance during the earlier half of project implementation, while their dedication and commitment to gain the time lost and complete all project activities only with a short extension of the project time, is exemplary.

6. Lessons Learned

- *PA management planning process benefits from use of participatory approaches and carefully thought-through coordination mechanisms* Involving a wide range of stakeholders in the PA planning process contributes to buy-in and ownership of protected areas. During the planning process the use of community meetings and consultation with stakeholders can improve the overall management plan and success of its implementation. A common understanding across national, provincial and local level stakeholders by engaging them in discussions related to goals and strategies should therefore be built early in the process to ensure efficient coordination and execution of the decision making process. By contrast, involving supervisory bodies, with a large number of members, in specific key decisions can cause difficulties due to clashes of interest and strong opinions and this should be avoided.
- *Importance of legislative framework* Some of the initial project implementation delays stemmed from inefficient or contradictory legislative and financial frameworks governing PAs. While many of the problems were a consequence of a broader political context, in some cases they also reflected traditional dependency on legislative approaches, which should be avoided. For example, in FBiH, PA Physical Plans require parliamentary approval, and the appointment of the NP Directors requires Cabinet approval. In the climate of political uncertainty, as it was in 2010-2011, delays in such decisions are likely. While existing legislative frameworks and centralized physical and spatial planning requirements delayed project activities in some PA, the amendment during the project of the financial framework through the adoption of new nature protection laws in both Entities ensured that adequate financing was provided and will continue to be provided after the project closes.
- *Flexibility of sequencing project interventions is crucial in projects that involve a planning phase* Project design conditioned start of park infrastructure investments on completion of the PA management plans. Delays in finalizing and adopting the management plans therefore also delayed start of construction of the necessary infrastructure. While in theory the final decisions on locations and types of any equipment and infrastructure should follow completion of planning process, in practice a phased approach is more appropriate at least for the purchase of some basic equipment (such as vehicles or ranger equipment) and construction of basic infrastructure (such as fire towers in the areas with most visitors).
- *Importance of investments in key infrastructure of protected areas cannot be understated* Infrastructure of protected areas is a basis for quality and sustainable management of protected areas. Small investments in equipping the protected areas with fire-fighting equipment, trails and signs, and off-road vehicles for ranger services bring high returns not only in terms of enhancing protection but also by increasing park revenue. Additional benefits come from enabling local population to engage in economic activities using proximity of the protected areas.

- Public awareness raising is crucial for establishment of new and expansion of existing PAs; small grant initiatives are instrumental for raising awareness At project start, there was little awareness about the importance of biodiversity to local and national economies, the role of local communities, and opportunities that PAs can offer to the local population, including production of eco-friendly produce, sustainable tourism, securing additional sources of funding from the donors and EU etc. Instead, in some instances, expansion of PAs was perceived as a threat to the livelihoods of local communities with loss of territory, natural and material resources. Public awareness campaigns, involving local communities in management planning, and grants provided for local initiatives were all instrumental in ensuring public support. The importance of the local initiative grants should be underlined, as these not only raised awareness about the importance of conservation and protection of biodiversity and natural resources and contributed to improvement of tourist offerings in the protected areas (diverse agricultural products, traditional souvenirs, etc.), but also strengthened the cooperation between the population and the local governments and administrations of protected areas.
- *Importance of biodiversity data and monitoring systems* At project start, there were no systematized data and studies of flora and fauna available, thus prohibiting design of well-targeted interventions. Environmental databases that were created as part of the project's Ecological Baseline Assessment of PAs studies and the preliminary list and GIS database of endangered species of flora and fauna resulting from the Taxonomic and Geographical Assessment of Species are a great achievement for future operations. Capturing baselines, against which to measure progress and test effectiveness is a critical part of project preparation and should not be left until later in the project, thus delaying measuring of success and causing the project to capture an inflated baseline rather than the without-project scenario. Piloting a new monitoring system (PAME tracking tool) under the project, and demonstrating and building awareness of its benefits, creates opportunity to expand the system to other parks, thus increasing the capacity to manage and monitor the park system in the country. A monitoring system should be simple and focused, and allow for flexibility to make changes and add new, more relevant variables that are identified over time.

7. Comments on Issues Raised by Borrower/Implementing Agencies/Partners (a) Borrower/implementing agencies

RS PMU and FBiH PMU prepared the Project Completion Reports in December 2013, and January 2014, respectively. In evaluating project design and achievements, the reports indicate satisfaction with project outcomes, based on the fact that the outputs called for under the project's three components were fully completed. A summary of Recipients' completion reports can be found in Annex 7.

The draft ICR was shared with the PMUs, their comments incorporated in the final report and concurrence received on April 17 from RS PMU and April 18, 2014 from FBiH PMU.

(b) Cofinanciers

N/A

(c) Other partners and stakeholders

(e.g. NGOs/private sector/civil society)

N/A

Annex 1. Project Costs and Financing

Components	Appraisal Estimate (USD millions)	Actual/Latest Estimate (USD	Percentage of Appraisal
		millions)	
C 1: Protected Area Development	3.30	5.20	157.60
C 2: Capacity and Support for Biodiversity Conservation	1.65	1.63	98.80
C 3: Local Initiatives Grants	0.45	0.57	126.70
Total Baseline Cost	5.40	7.40	137.00
Physical Contingencies	0.30	0.00	
Price Contingencies	0.30	0.00	
Total Project Costs	6.00	7.40	123.30
Project Preparation Facility (PPF)	0.00	0.00	
Front-end fee IBRD	0.00	0.00	
Total Financing Required	6.00	7.40	123.30

(a) Project Cost by Component (in USD Million equivalent)

(b) Financing

Source of Funds	Type of Cofinancing	Estimate	Actual/Latest Estimate (USD millions)	Percentage of Appraisal
Government of BiH	In kind	2.50	3.88	155.2
Local Communities	In kind	0.10	0.15	150.0
Global Environment Facility (GEF)		3.40	3.38	99.4
TOTAL		6.00	7.41	123.5

Annex 2. Outputs by Component

Component	PAD Output	Revised Output	Actual End-of-project Output
1a - PA Management Planning	FBiH - Management Plans for 2 newly established PAs - NP 'Una' and NP 'IBTV'; feasibility study for PA 'Prenj, Cvrsnica, Cabulja, Vran' RS - Management Plans for existing PAs - NPs 'Sutjeska', 'Kozara', and Forest reserves 'Janj' and 'Lom'	 FBiH - Management Plan for PP 'Blidinje' instead of NP 'IBTV' (revision agreed mid-2010) RS – Preparation of Spatial Plans for the two NPs added (June 2011) to allow meeting legal obligations 	FBiH – Management Plans for 2 newly declared PAs – NP 'Una' and PP 'Blidinje' completed and approved; F/S completed for PA "Prenj, Cvrsnica, Cabulja, Vran" RS - Management Plans for 4 PAs (NPs 'Sutjeska' and 'Kozara' and Forest reserves 'Janj' and 'Lom') implemented Spatial Plans for the two NPs prepared
1 b - Ecological and PA Management Assessment	Baseline ecological surveys to assess biodiversity and resource use for all project areas	N/A	 prepared FBiH - Baseline Ecological Surveys completed for NPs 'Una' and Nature Park 'Blidinje'; Red List of threatened species (plants, animals and fungi) completed and approved for the whole territory of FBiH. Maps of PAs in BiH and GIS database were also completed under this sub- component. RS - Baseline Ecological Surveys completed for NPs 'Sutjeska' and 'Kozara' and Forest reserves 'Janj' and 'Lom'. The assessments contain the list of flora and fauna in PAs, GIS database and methodology for their monitoring. Taxonomic and Geographical Assessment of Species for preparation of Red List completed Protected Area Management Effectiveness (PAME) tracking tool was adapted for project use and filled in at project launch, mid-term review and project completion
1 c - PA Facilities	New infrastructure and limited small-scale building rehabilitation	N/A	 FBiH - PA priority facilities developed in NPs 'Una' (access pedestrian road and viewing point; solar panels were installed on info houses; minibus for 16 passengers) and Nature Park 'Blidinje' (a bicycle trail in the length of 10 km). In both PAs a number of shelters, benches, info boards, signs, roofing, waste bins, other soft infrastructure installed, field equipment and clothes for rangers procured. Small fire fighting vehicles procured for two PAs. RS - PA priority facilities were developed in four PAs, incl. shelters, game viewing posts, benches, signs,

	1		
			waste bins and other soft
			infrastructure. Small fire fighting vehicles procured
			for all four PAs. The four wheel drive
			vehicle procured for NP 'Sutjeska'
			and off road motor bicycles for NP
			'Kozara' due to the different terrain
			conditions. IT equipment for PAs and
			field equipment and clothes for
			rangers also procured.
2a -	PAs – training and TA on	N/A	FBiH - Capacity building and skill
Institutional	ecosystem-based		development of PA staff and
Capacity	management; business		managers, ministry and PMU staff in
Development	planning; field skills		different aspects of ecosystem-based
			management, business planning and
	Entity and State – support		field skills. Trainings were organized
	on (i) operationalizing parts of the NBSAP, incl. policy,		throughout the duration of project with the total of 390 participants. A
	legal and financial aspects		study tour to NP 'Beverin' in
	of establishing an effective		Switzerland organized to provide
	system of biodiversity		first-hand experience of how parks in
	protection; (ii)		the region are organized both from an
	strengthening cross-border		institutional and financial point of
	initiatives to conserve high		view.
	conservation value		
	ecosystems in the Balkans,		RS - Trainings on business planning,
	through targeted exchanges		sustainable PA management, PAME
	with neighboring PAs		tool application etc. were organized
	Studies – on selected PA		throughout the duration of project
	management issues		with the total of 90 participants. A study tour to National Parks 'Triglav'
	management issues		in Slovenia and 'Hohe Tauer' in
			Austria completed in June 2013.
			At the State (and Entity) level – PA
			management plans, ecological
			baseline studies, taxonomic and
			geographical assessment of species
			studies, PA maps, studies on
			monitoring mechanism and economic
			incentives for nature preservation, as
			well as design of public awareness
			campaign greatly contributed to operationalize NBSAP activities.
2b - Public	Public awareness initiatives	N/A	FBiH - PA campaign completed and
Awareness	with activities such as	1.1/1.1	fully launched; activities included:
Programs	development of promotional		development of a logo and visual
	materials, establishing		identity, website and social media,
	and/or improving PA		promotional spot, promotional song,
	websites, environmental		roundtables and workshop, brochures
	education, media		and promotional campaign materials,
	advertising and public		travel for journalists etc.
	consultation on PA		
	operations and		RS – PA campaign comprised
	management.		analysis of public opinion, development of logo, TV and radio
			shows and reports, spots, printed
			media articles including newspapers
			of wide international coverage like
			National Geographic etc., flyers,
			brochures, web page development
			and workshops for media and
L			L

			children.
2c - Project Management	Project management and operating costs, incl. coordination and administrative staff, procurement, disbursement, financial management and M&E function.	N/A	PMUs performance, incl. procurement, FM and M&E improved substantially within last two years of project implementation enabling to complete all project activities satisfactorily.
3c - Local Initiatives in Biodiversity Conservation	6-10 sub-projects in: (i) PA compatible income- generation, e.g., ecotourism activities, sustainable NTFP extraction, agri- environmental enterprises, environmental certification; (ii) habitat and landscape conservation; (iii) sustainable environmental management (waste mngm, alternative energy); at least one per PA		FBiH – 3 sub-projects (grants) in NP 'Una' and 5 grants in PP 'Blidinje' successfully completed (examples: bees return to area, medicinal plants processing, conservation of water source, wild dump site removal etc.) RS – 6 grants supporting school in nature, beekeeping, cleaning of the glacial lake in NP 'Kozara', reforestation of the tree species, rehabilitation of mountaineers home etc., successfully completed

Annex 3. Economic and Financial Analysis

The PAD did not provide a formal quantified economic analysis as the project would primarily produce local, national and global environmental benefits whose value could not be readily quantified. The analysis instead evaluated environmental benefits in qualitative terms and, consistent with GEF requirements, summarized the estimated incremental costs. At completion, a cost-benefit analysis was undertaken to assess the economic efficiency of activities – and in particular the generation of positive watershed services from extending the PA system.

Project design assumed environmental and economic benefits arising through physical investment, development of new strategies, capacity building and training. The project supported activities to assist communities in and around PAs in developing sustainable and alternative revenue generation. Through the expansion of protected areas covered and stakeholder capacity enhancement activities, the project generated significant mutual economic and environmental benefits by: (i) creating the opportunity for generating jobs from better utilization of non-timber values of forests, particularly from tourism and recreation, including non-timber forest product collection, sustainable commercial game management; (ii) securing conservation of biodiversity in internationally-important forest habitats, including HCVFs; and (iii) conservation and improved management of globally-significant endemic biodiversity and landscape values of critical ecosystems.

The beneficiary survey carried out in FBiH at the end of the project and local initiative, grant impact assessments in both Entities confirmed the understanding that the project yielded positive economic returns. While surveys or park monitoring systems did not account for a number of new jobs or income generated, there is clear evidence of increased income from local initiative grants³. The beneficiary survey in FBiH revealed that the most common reasons for support of project activities included the potential for increased employment in PA areas. A little over a third of respondents believed that project activities brought an increase in employment opportunities in project areas. While only a small number of interviewed indicated that they received profit from tourism, the number of those who profited from the sale of food, herbs and plants increased in comparison to 2008.

On the NP revenue side, there has been a considerable increase in park revenue from tourism and budgetary transfers. While income from tourism in the two existing NPs in RS increased at a slower pace, reaching 13.4% and 10.9% compared to baseline of 10%, the increase in tourism income in the newly established NP 'Una', which due to its location at the Una river offers such activities as rafting and other water sports, increased eight-fold within three years; from KM 22,000 in 2011 to KM 186,000 in 2013.

Similarly, there has been a considerable increase in the budget allocation for PA operations, reaching over 50% in RS compared to a baseline of less than 10%, and amounting to Euro 250,000 per year for NP 'Una'.

³ E.g., the women's association in Kulen Vakuf (NP 'Una') which received a grant to support carpet weaving and other activities practiced continues its successful operation beyond project closing. The traditional carpets and blankets use wool bought from family farms engaged in sheep-breeding in NP 'Una' area and are being successfully sold at the park's checkpoints.

Economic Analysis

Introduction

The significance of ecosystems is seldom adequately recognized in economic markets, government policies or land management practices. The tendency to underestimate the value of ecosystems is related, for the most part, to their "public good" quality. Ecosystems and the services they provide generate shared benefits and often encourage free riding. Due to their public nature these services typically go un-priced or are under-priced and do not reflect the true value of what their replacement cost would be. Collectively these features lead to pervasive degradation of ecosystems as a consequence of systemic market failures.⁴

In acknowledging the challenge of sustainable natural resource management and conservation of the environment, this project aimed to enhance the management of PA by: (i) extending the area under protected areas and (ii) improving the operational effectiveness and institutional sustainability of the protected area system in the country. The below paragraphs present an analysis of the project's economic and financial benefits. By estimating the (partial) values of changes to ecosystem services, one can compare the economic and financial benefits at different degrees among the various interventions.^{5,6}

Economic Benefits generated by the Project

With its different components and multiple areas of investments, the project generated a diverse portfolio of economic benefits ranging from direct, tangible benefits to indirect, intangible benefits. A direct, tangible benefit is, for example, the increase in tourism income through an increase in tourists and increase in PA accession and concession fees. On the other side of the scale, indirect and intangible economic benefits of the project are, for example, the improvement of the public administration and the associated delivery of public services triggered by the capacity building of the protected area administration supported by the project. Table 1 provides a selective overview of four categories of benefits that could be associated with the project.

Given the challenges in assigning monetary benefits to the entire range of economic benefits generated by the project, only one specific benefit was included in the quantitative ex-post economic assessment. For this project, the ex-post economic analysis was based on the generation of positive landscape and watershed services through the significant, 10-fold extension of the PA system in the country. Other economic benefits not included are, for example, increased sequestration of GHG by forest ecosystems, avoiding GHG emissions through deforestation and forest degradation, biodiversity values, bequest values, and several more. Further, the economic benefits included in the analysis were strictly limited to those immediately generated and associated with the project. Other beneficial effects, such as, future improvements of forest and other ecosystem management due to capacity building of PA administration are not included.

⁴ http://www.esa.org/education_diversity/pdfDocs/ecosystemservices.pdf

⁵ Nunes, P.A.L.D. and J.C.J.M. van den Bergh. "Economic Valuation of Biodiversity: Sense or Nonsense?" *Ecological Economics*, 2001, vol. 39, issue 2, pages 203-222

⁶ Ecosystem valuation is a difficult and controversial task, and economists have often been criticized for trying to put a "price tag" on nature. However, agencies in charge of protecting and managing natural resources must often make difficult spending decisions that involve tradeoffs in allocating resources. These types of decisions are economic decisions, and thus are based, either explicitly or implicitly, on society's values. Therefore, economic valuation can be useful, by providing a way to justify and set priorities for programs, policies, or actions that protect or restore ecosystems and their services. http://www.ecosystemvaluation.org/1-02.htm

	Tangible	Intangible
Direct	 Improved watershed services (e.g. for drinking water, hydropower generation, etc.) Increase in qualified jobs 	 Reduction in soil erosion Reduction in deforestation Afforestation / reforestation Increase of trees in the agricultural landscape Biodiversity conservation Reduction in GHG emissions
Indirect	 Reduced pressure on protected areas Increased resilience to external shocks 	 Enhancing institutional mechanisms in support of decentralization and delivery of public services by the protected areas administration Strengthened self-governance capacity of communities and community groups

As stated above, selected benefits included in the quantitative economic analysis are those that can be directly and most immediately associated with project implementation. While this especially applies to economic development impacts, it is also a criterion for the environmental impact selected for this analysis. This approach ensures that the results of the economic analysis and quantitative simulation are robust and credible, and that they stay strictly within the project's accounting stance.

Intangible and Intrinsic Value of Forest Conservation

A number of studies on the valuation of ecosystems can be found in the economic literature. The results vary significantly depending on the region, type of ecosystem or ecosystem service and data availability. A study by Costanza *et al.* (1997), estimated the economic value of global ecosystem services at US\$33 trillion per year (by comparison, global GDP is around US\$18 trillion).⁷ Due to numerous uncertainties related to the assumptions, the value produced by the study is considered to be a lower bound estimate. Other studies have focused on targeted and site-specific estimation as global aggregates do not take into account local variation.

Tangible, Indirect Value of Ecosystem Goods and Services

According to Kubiszewski *et al.* (2011), there is considerable variability in ecosystem service values delivered by different land cover types. On a per hectare basis, inland wetlands are estimated to provide one of the highest annual values with US\$14,183/ha/year, out of which water provision and "regulating services" constituted the largest share with US\$11,988/ha/year. For forests, water provision and regulating services were estimated at US\$6,686/ha/year. In comparison, Pearce (2001) states watershed benefits for tropical forests at a range of US\$15-850 ha/year. At the other end of the value spectrum, grasslands and orchards provide the lowest annual values with total estimated values of U\$1,548/ha/year and US\$1,200/ha/year, respectively.

Multiplying these annual per hectare values by their respective share in the ecosystem demonstrates the potentially huge economic benefit of conserving and sustainably managing these ecosystems – simply based on these tangible, though indirect, economic values.

⁷ Costanza, R., R. d'Arge, R. de Groot, S. Farber, M. Grasso, B. Hannon, K. Limburg, S. Naeem, R. V. O'Neill, J. Paruelo, R. G. Raskin, P. Sutton, M. van den Belt. (1997) "The Value of the World's Ecosystem Services and Natural Capital." Nature 387: 253-260.

Methodology chosen for the Economic Analysis

Cost-Benefit-Analysis was applied to conduct the economic efficiency assessment for this project. Sensitivity analysis is applied for the main simulation parameters notably the discount rate, carbon price, and watershed benefit increments. For the discount rate, alternative rates of 2%, 5%, 10%, and 20% are applied. To test the robustness of initial results, agricultural yields, watershed benefits, and carbon benefits are reduced by 50% in subsequent analysis. First, these reductions are executed separately to test the individual impact of these benefit components on overall results. In a last step, these reductions are combined. All sensitivity analyses are run for all four discount rate scenarios. The results of the quantitative results are complemented with qualitative benefits to conclude overall project feasibility.

As required for economic analysis of projects, a <u>With</u> and <u>Without</u> project situation is used for estimating incremental benefits generated by the project.⁸ Taking into account the current situation, and the fact that the environmental as well as livelihoods situation in project areas is likely to continue to decline, even a slowing of an already negative trend represents a project benefit. For example, slowing deforestation and forest degradation is a benefit that can be quantified by the amount of incremental carbon that is not emitted into the atmosphere compared to the <u>without</u> project situation. Likewise, if household income remains stable under a <u>With</u> project situation compared to a possible negative trend from declining agricultural productivity, deforestation, climate change, and other possible impact factors, this also represents an incremental benefit achieved by the project. The Net Present Value (NPV) and Benefit-Cost Ratio (B/C-Ratio) are used as criteria to assess the economic feasibility of the project.

A 15-year period is assumed in assessing the economic feasibility of the project. While project costs are incurred only during the 5-year project implementation period (i.e. through a linear disbursement schedule), benefits are assumed to be generated beyond the lifetime of the project. However, it is assumed that there are no further incremental changes in benefits beyond the immediate project implementation period. This is a rather conservative assessment as it is likely that some of the momentum created by the project, for example through the increased administrative capacity, these benefits will continue to compound relative to a "without" project situation. To align project benefits and costs in the present value calculation, a discount rate needs to be determined as describe above.

Simulations and Results

A range of simulations were run to assess economic feasibility, including robustness checks simulating benefit and discount rate variations. As the overall analysis is only based on the monetary quantification of watershed benefits, these additional analyses allow for a more thorough conclusion regarding project feasibility. Sensitivity analyses were also conducted using alternative benefit values and discount rates.

Overall, results demonstrate the robustness of the analysis and confirm a positive economic impact by the project. Simulation results using alternative assumptions confirm that the economic benefits are indeed (robustly) positive. Only in the extreme case of a 50% reduction in benefits, coupled with high discount rates, does the benefit-cost ratio fall below one. Given this

⁸ For a more detailed discussion of the "with and without" principle in project analysis and evaluation, please refer to (a) Gittinger, J.P. (1984): Economic Analysis of Agricultural Projects, The World Bank pages 41-43 and (b) Belli, P. et al. (2001): Economic Analysis of Investment Operations, The World Bank Institute, The World Bank, pages 17-24.

conservative assessment, and that many economic benefits are excluded, true economic returns are likely to be much higher. Numerical results of economic simulations are summarized in Table 2 below.

	Benefits					
	Baseline	Baseline		Baseline (-20%)		50%)
Discount Rate	NPV	BC-Ratio	NPV	BC-Ratio	NPV	BC-Ratio
5%	13,452,235	2.4	9,350,154	1.920	3,197,034	1.200
10%	8,816,277	1.9	6,018,595	1.545	1,822,071	0.966
20%	4,184,197	1.4	2,711,494	1.097	502,438	0.686

Table 2: Numerical Summary of Economic Simulation Results

NPV = Net Present value; BC-Ratio = Benefit Cost Ratio

Discussion

The ex-post economic efficiency analysis conducted for the project confirms the anticipated positive economic impact. The results of the quantitative simulations are also robust across a range of sensitivity analyses assuming significant changes in discount rates and key benefit parameters. Throughout the analysis, it was emphasized that benefit assumptions were always done conservatively using lower-bound values of associated non-market benefits attributed to the project.

The quantitative analysis was also strictly limited to values that can be clearly attributed to the project. In addition, to the watershed benefits generated by the project, additional benefits can be associated such as biodiversity conservation, GHG sequestration and avoiding additional GHG emissions. There are also the economic benefits arising from better public service delivery resulting from the capacity building efforts. Further, it was assumed that benefits would remain level beyond project implementation, even though it is likely that its positive effects will continue to generate benefits in the future. If additional and downstream project benefits had been considered, the simulations would have yielded even stronger results.

One of the most important unstated economic impacts relates to the capacity building of government institutions at central and decentralized levels. The enhanced capacities of government institutions will improve public service delivery. Given the continuing challenges of natural resource management – not least due to climate change – the aspect of an enhanced functioning of public institutions cannot be underestimated, particularly in a "with" and "without" project scenario. This increased capacity will also help facilitate the implementation of future projects and investments that can build on and continue the achievements of this project. Similar considerations apply to knowledge generation and management achieved by the project.

In summary, based on this economic evaluation, it is concluded that the project as resulted in significant positive development impacts. The consideration of only a few of these benefits in the quantitative analysis yielded positive economic results. The achieved economic benefits comply largely with what was anticipated during the design stage. This supports the design and implementation aspects of the project, in particular the selection of investment activities. It demonstrates that investments in sustainable natural resource management can significantly contribute to the economic development of ambitious transition economies, such as BiH, as they generate and safeguard important direct environmental services and can foster economic development.

Incremental Cost Analysis

An incremental cost analysis was conducted at the time of preparation and demonstrated, to the satisfaction of the GEF, that the project, compared to the "without project" scenario, would be an efficient means for BiH to strengthen its institutional and technical capacity for sustainable protected area and natural resource management; and to expand the BiH network of forest and mountain protected areas. The GEF Alternative cost US\$ 6 million, of which US\$ 3.4 million would be provided by GEF. The GEF Alternative would: (i) support PAs via fundamental planning assistance and financing infrastructure for the establishment of new PAs; (ii) promote and increase public awareness of biodiversity conservation; and (iii) strengthen the capacity to conserve and manage biodiversity at local, national and trans-boundary levels and establish regional cooperation for forest and mountain ecosystem conservation. This would include establishing ecologically-effective PAs, integrating biodiversity conservation into forestry and other activities in and around PAs, improving monitoring of threatened flora and fauna, and effect their recovery, and building public awareness of BiH's biodiversity. The positive results generated by the project would avoid loss of biodiversity and ecological corridors necessary to maintain viability of populations and ecosystems, and would increase revenues from forest resources, improve forest management, and enhance developmental benefits through participatory approaches in forest land use planning.

The baseline scenario envisaged that, regardless of the Government's commitment to biodiversity conservation, without the establishment of an extended network of PAs of sufficient size, biodiversity-rich natural ecosystems would not be sufficiently protected from the major transition-related threats that are anticipated over the short and medium term. Efforts would likely continue to focus on limited investment in existing NPs, and on small PAs, which, while helpful and valid in their own right, would be of questionable viability in terms of establishing larger national coverage of protected landscapes. Government would be unable to commit sufficient budget to establish new PAs and strengthen the management of existing National Parks, and existing Government agencies and NGO groups concerned with conservation would remain weak, ineffective, uncoordinated and isolated. In the absence of this project, expected impacts (resulting from changing land use, including forestry and tourism) would result in a loss of biodiversity, and ecological corridors necessary to maintain viability of populations and ecosystems may be irreversibly disrupted. The estimated cost of the baseline scenario was US\$ 1 million, which was the average annual total budget contribution from central and local authorities for all PAs in BiH at the time of appraisal.

The Project's incremental cost calculation was based on the general guidelines contained in GEF guidance on calculating Incremental Cost. These guidelines define the principle of "incremental cost" as "a measure of the future economic burden on [a] country that would result from its choosing the GEF-Alternative in preference to the course of action would have been sufficient in the national interest." Based on an assessment of the global and national costs/benefits associated with each scenario, the total GEF-Alternative cost was calculated to be US\$ 6 million, with incremental costs totaling US\$ 5 million. In recognition of the fact that BiH would realize some national benefits from incremental expenditures, the Government offered to co-finance the Project by US\$ 2.5 million, while US\$ 0.1 million would be leveraged by grant recipients as parallel co-financing. GEF support of US\$ 3.4 million provided the balance of incremental costs.

	At Appraisal (US\$)					At Completion (US\$)			
	Baseline Cost	Incremental Cost			Total	Incremental Cost Total			Total
				Grant Rec Co-				Grant Rec	
Component		GEF Grant	Gov Co-finance	finance		GEF Grant	Gov Co-finance	Co-finance	
Protected Areas									
Development	1,000,000	1,800,000	1,500,000	-	3,300,000	2,162,702	3,035,298	-	5,198,000
Capacity and Support for									
Biodiversity Conservation		890,000	760,000	-	1,650,000	790,385	839,615	-	1,630,000
Local Initiatives Grants		380,000	-	80,000	460,000	424,913	-	150,000	574,913
Contingencies		330,000	250,000	10,000	590,000	-	-	-	-
TOTAL		3,400,000	2,510,000	90,000	6,000,000	3,378,000	3,874,913	150,000	7,402,913

Overall, the incremental cost analysis estimate was accurate, as the incremental costs incurred as a result of Project activities utilized nearly 100% of the GEF grant, and the co-financing and grant recipient contributions were exceeded. Given the acknowledgement of the broad Project achievements, from a cost-efficiency perspective, the Project achieved a satisfactory result.

Annex 4. Bank Lending and Implementation Support/Supervision Processes

Names Title		Unit	Responsibility/ Specialty					
Lending								
Tijen Arin	Senior Environmental Economist		Environmental Economist					
David A. Bontempo	Operations Analyst	MNSPS	Co-TTL					
Vesna Francic	Senior Operations Officer	ECSUW	Operations Officer					
Marie Simone Lecocq	Forestry Specialist	ECSSD	Forestry Specialist					
Jessica Mott	Sr Natural Resources Mgmt. Specialist		Task Team Leader					
Christian Albert Peter	Lead Environmental Specialist	LCSEN	Task Team Leader					
Patrizia Poggi	E T Consultant	ECCBK						
Jesus Renzoli	Consultant	SASGP	Procurement					
Radhika Srinivasan	Sr Social Scientist	OPSFC	Social Safeguards					
John W. Fraser Stewart	Sr Natural Resources Mgmt. Specialist	CPFIA	Environmental Specialist					
Siew Chai Ting	Lead Finance Officer	CTRLD	Disbursement Specialist					
Sanjay N. Vani	Lead Financial Management Specialist	OPSOR	Financial Management					
Supervision/ICR	· · ·							
Samra Bajramovic	Program Assistant	ECCBM	Program Assistant					
Nandita Jain	Consultant	ECSEN	NRM Specialist					
Nathalie Johnson	Sr Natural Resources Mgmt. Specialist	ECSEN	Task Team Leader					
Mirjana Karahasanovic	Operations Officer	ECSEN	Operations Officer					
Nikola Kerleta	Procurement Specialist	ECSO2	Procurement					
Robert Kirmse	Consultant	CESI2	Forestry Specialist					
Solvita Klapare	Environmental Economist	ECSEN	ICR TTL and Primary Author					
Esma Kreso	Environmental Specialist	ECSEN	Env Safeguards					
Klas Sander	Sr Environmental Economist	LCSEN	Env Economist					
Srecko Latal	Consultant	ECSSD						
Lamija Marijanovic Financial Management Specialist		ECSO3	Financial Management					

(a) Task Team members

(b) Staff Time and Cost

	Staff Time and Cost (Bank Budget Only)				
Stage of Project Cycle	No. of staff weeks	USD Thousands (including travel and consultant costs)			
Lending					
FY04	8.59	41.32			
FY05	9.90	42.26			
FY06	14.55	68.78			
FY07	21.85	142.71			
FY08	22.60	126.84			
Total:	77.49	421.91			
Supervision/ICR					
-----------------	-------	--------			
FY07					
FY08					
FY09	14.00	109.20			
FY10	14.30	77.10			
FY11	14.00	84.38			
FY12	16.70	72.40			
FY13	17.60	72.10			
FY14	13.37	58.40			
Total:	89.97	473.58			

Annex 5. Beneficiary Survey Results

A social assessment / beneficiary survey to evaluate the level of support to PAs was carried in FBiH in October 2013. The main goal of the assessment was to collect quantitative data from population residing in the vicinity of the NP 'Una' and the NP 'Blidinje' on their experiences and opinions of the FMPAP project and PAs in general. One of the key goals of the assessment was to assess whether there had been significant changes in the achievement of a PDO level indicator related to the public support of the project activities in relation to the results of the baseline study, conducted in 2008.

Below is a summary of the assessment, and a full report is available in Project files.

Time of interviews	October 17-21, 2013	
Data collection method	Personal face-to-face interviews in the interviewees' households	
Tools	The questionnaire was developed by the consultant on the basis of the same questionnaire used in the 2008 study	
Polled population	The inhabitants of the project area who live within a 10 mile radius of the area covered by the Project	
Sample size	400 participants, 200 in the NP 'Una', and 200 in the NP 'Blidinje'	
Representativeness	A convenient sample of citizens who live in the area covered by the Project	

Table 1. Basic polling data

Main findings

Awareness and support of the Project. Approximately two out of three respondents (67%) were familiar with the project activities. Participants who lived in the vicinity of the NP 'Una' significantly more often (85%) stated that they are familiar with the afore-mentioned activities in relation to the participants who lived in the vicinity of the NP 'Blidinje' (49%). Participants have most often heard of the project activities from friends, family, or neighbors or via television. The majority of participants or 82.8% stated that they support activities, which protect forest and mountainous regions. Although generally strong, support of the project activities was somewhat stronger in the vicinity of the NP 'Blidinje' in relation to the areas in the vicinity of the NP 'Una'. Participants in the second round of research (2013) significantly more often expressed support of project activities than was the case in the first round of research.



Chart 1. In general, what is your opinion of implemented activities? Do you strongly support, mostly support, mostly oppose, or are completely opposed to these activities?

Ecology, tourism, and the potential increase in employment were emphasized as the main reasons for support of project activities.

Chart 2. Which are the three main reasons due to which you support the implemented activities? *Multiple answers possible! Only for participants who support the activities*



Various bans, confiscations of land, and the ban of cutting down wood were stated as the most important reasons due to which participants object to project activities.



Chart 3. What are the three main reasons due to which you are opposed to these activities? *Multiple answers possible.*

All respondents NP Una PP Blidinje

Although the majority of participants stated that they possess certain information about project activities, the majority of participants also expressed interest in becoming better informed about this subject, especially participants of the region in the vicinity of the NP 'Una'. Although the difference in interest was not great, participants in the second round of research were less interested in finding out more about the activities within the NP 'Una' and the NP 'Blidinje'. In general, the majority of participants expressed interest in participating in the planning and making of important decisions related to the project activities in the future, in the region of the NP 'Una' and the NP 'Blidinje' - participants living in the vicinity of the NP 'Una' to a greater extent than participants living in the vicinity of the NP 'Blidinje' is still high, participants in the previous round of research were still interested to a greater extent in participating in such activities in relation to the first round of research.

Chart 4. To what extent are you, as one of the citizens of the regions which gravitate in the protected area of the NP Una/NP Blidinje interested in participating in the planning and bringing about of all important decisions connected to various activities?



Profit from tourism. According to the results of the survey, the majority of households in the project areas stated that they did not profit from tourism. Those who profited, most often profited from the sale of food, as well as herbs and plants to tourists. In relation to the first round of

research, a somewhat greater percentage of participants in the second round of research stated that they profit from the sale of food to tourists and from the sale of herbs and plants. A relatively low percentage of participants believed that they will be able to profit more from tourism in the near future. The majority of participants who had dealt with some of the activities on the basis of which they profited from tourism stated that the support of the municipality and the tourism community would help them the most to engage in these activities more. A little over half of the participants found that support from business associations are important in this context, while a little less than half mentioned personal financial as well as external financial sources as important.





The project's potential influence. The majority of participants believed that the project had generally a positive influence on their families and households, on the area in which they live, as well as on the municipality in which they reside. Nevertheless, in relation to the first round of research, the number of participants who stated the proclamation of these regions as protected zones has had a negative effect on the economic situation of their households in these regions has increased.

Chart 6. Do you think the proclaiming of the NP Una/NP Blidinje as protected zones has had a very negative economic effect, a mostly negative effect, a mostly positive effect, a very positive effect, or no economic effect whatsoever on your family/household? Comparison between the two rounds of research



Approximately half of the participants believed that the project activities have not influenced employment opportunities in the region they live in. Nevertheless, a little over a third of the participants believed that the project activities have brought about an increase in employment opportunities.

The perception of threats and the endangerment of the natural environment. A relatively low percentage of participants were aware of the potential threats and factors which could endanger the natural environment in the vicinity of the NP 'Una' and NP 'Blidinje'. Participants who stated that they are aware of certain factors which endanger the natural environment in the place they live or in close proximity to it, most often stated the discarding of waste as such a factor.

Chart 7. Can you state the factors?



All participants who were aware of threats to the natural environment stated that they would like the factors that endanger the natural environment in the regions where the live to be prevented in the future. Stricter punishment for endangering the natural environment was considered the best way to prevent its endangerment, as well as proper garbage disposal.

Evaluation of the influence of the preemption law. Approximately half of the participants stated that the introduction of the preemption law would present a problem to them – more often

participants living in the vicinity of the NP 'Una' than those from the vicinity of the NP 'Blidinje'. A little less than half of the participants stated that limitations regarding the building of new construction facilities and the reconstruction of already-existing facilities would represent a problem, while a little over half stated that limitations as regards the usage of forests and other natural resources would have a negative influence on the economic situation of their households, as well as the village and place in which they live. Furthermore, a little over half of the participants saw improvements in the form of the increase of some other business possibilities in the proclamation of the NP 'Una'/NP 'Blidinje' protected zones. Although participants in the second round of research also more often expressed opinions that there were improvements as well as deteriorations in employment opportunities during the protection of these regions, the answer that the proclamation of these regions as protected zones did not influence employment opportunities was almost twice as prevalent in the second round in relation to the first round of research.

Chart 8. However, the proclamation of the NP Una/NP Blidinje regions as protected zones would probably open up some other business opportunities. All in all, do you have the feeling that all of this could bring about improvements or deteriorations in your current living conditions, or do you think that this would have no influence on the living conditions in which you currently reside? Comparison between the two rounds of research



Resolving conflicts and trust. The majority of participants from the project regions did not have experience with the collaborative resolving of conflicts. Participants who have had such experiences most often stated that these were conflicts about land and livestock. The aforementioned conflicts have still not been resolved, and are resolved by judicial proceedings. As regards to making decisions about their neighborhood or the community in which they live, participants commonly placed their trust in the municipal authorities. The other levels of government, as well as individuals and organizations were state much less often as regards the trust of the citizens of these regions when it came to making important decisions.

Basic demographic data of households. The households in the project regions of the NP 'Una' and the NP 'Blidinje' have two or three members on average. These regions are populated by approximately the same number of men and women. The age structure of these regions is generally balanced, with the proviso that a relatively high percentage of citizens older than the age of 55 is noticeable, especially in the NP 'Una'. Almost two thirds of the members of households in these regions are married. In contrast, every fourth member of these households has never been married. The percentage of members of households who are divorced and those who are widowers or widows is relatively low. As regards to education, approximately every

fourth person of age in these regions has completed elementary school only or less. Nevertheless, 97.7% of the participants of these regions have completed high school, and some have begun college or a higher education program. A little over 5% of the citizens of age of these regions are college graduates. As regards to employment, a little over a third of the citizens of project regions older than the age of 15 are employed, either full-time or part-time, in agriculture or in their own businesses. From these, every fourth person is permanently employed, while every fourth person is unemployed as well.

Forestry and other activities. Almost 0.3% of participants of the project regions above age 15 are employed in forestry or state that forestry is one of their sources of income. As regards to various activities which households perform for their own needs, the chopping up of firewood is emphasized as the most frequent, followed by the much less frequent collecting of forest fruits, mushrooms, and herbs. Participants most often profit from the production and sale of honey, fresh meat, as well as butterfat and butter. According to the participants' evaluations, it seems that the best profit comes from the sale of livestock and the sale of honey.

Owning land. Almost two out of three interviewed households owned parcels of land in the project region, followed by grassland, and forests and pastures. The land is often not registered as the property of these households. Relatively very few parcels of land have been bought, which points to the conclusion that the majority of this land is either inherited or obtained in some other way, excluding purchasing. The most area is covered by forests and pastures. Only two participants stated that they would sell some of the land- this being arable fields. Also, only two participants stated that they owned some mined land in the forest.

Livestock breeding. Participants of project regions rarely dealt with livestock breeding and generally did not have much livestock. On average, they owned the greatest number of sheep and chicks, followed by cows and pigs, whilst goats and rabbits are the least represented. Very few participants who owned livestock, between 7-10%, stated that they currently own more livestock in relation to the period of four years ago. A smaller number of participants expressed the intention of increasing the total number of livestock which they own.

Forestry and legislation. Generally, the majority of participants perceived that a significant part of forests (a min. of 25% to 50%) within the project areas were being illegally cut down. In contrast, approximately a fourth of the participants stated that the forests were not being cut down illegally. Furthermore, almost three out of four participants stated that laws which would limit or ban the cutting down of forests would not influence the income of their households at all. Participants living in the vicinity of the NP 'Una' were more inclined to state that the income of their households would significantly decrease in the case of the adoption of the afore-mentioned law, in relation to the participants living in the vicinity of the NP 'Blidinje'⁹.

⁹ Based on the law on NP 'Una', no commercial forest activities, incl.tree cutting is allowed within park boundaries. However, 30-35% of forests within the park are privately owned and in these areas wood harvesting is allowed for own needs of owners' households, following procedures that require a permit from the NP management. Tree cutting in the publicly owned forests is prohibited, except for sanitary cleaning of the trees. While high level of surveillance is provided by forest guards and rangers in the NP territory, illegal cutting could not been completely eliminated, and based on the NP 'Una' management, may still take place in the peripheral parts of the villages adjacent to or within the park boundaries, but only in small quantities. Another fact to consider is that the park was established 3 years ago, and before, due to depopulation, the area was overgrown and, with park establishment, required gradual cleaning to protect original biodiversity.

Chart 9. In the case of the adoption of laws which would limit to a significant degree or completely ban the cutting down of forest in this area, to what extent would this influence the income of your household?



Conclusions

The majority of participants of the project areas supported the project activities. As the most common reasons for support of the project activities, care for the ecosystems of these regions, tourism, as well as the possibility that employment could consequentially increase in these regions are mentioned. However, a third of the citizens stated that they were not aware of such activities being conducted. Also, individuals who were aware of the project activities most commonly received the information from informal sources- from family members, friends, and neighbors. All of this indicates that it is necessary to take further measures in order for the citizens of these regions to be better informed about the project activities. The majority of the participants expressed interest in participating in the planning and making of important decisions related to the project activities in the future in the regions of the NP 'Una' and the NP 'Blidinje', but interest in the afore-mentioned is smaller than it was in the year 2008.

Although a small number of residents of project areas profit from tourism, the number of individuals who profit from the sale of food, as well as herbs and plants has increased in relation to the 2008 study. Citizens of these regions were skeptical in their evaluation of the possibilities of benefiting from tourism in the near future. The majority believed that the project did not have economic influence on their families, but many believed that it did affect the economy of the place and municipality in which they live. Approximately half of the participants of the project regions believed that the project activities did not influence employment opportunities in the region in which they live. In contrast, a little over a third nevertheless believed that the project activities brought about an increase in employment opportunities in the project areas.

The assessment implies that the project activities not only maintained the public's support at a satisfactory level, but they also increased it. It is necessary to further work on informing and including the citizens in the project activities in order that they may reap the most benefit from them, be more aware of these activities, and be more satisfied with them. The consequence of all of this will be better protection of the ecosystems of these areas but also the easier conduction of project activities, as well as the easier management of potential conflicts in these regions.

Annex 6. Stakeholder Workshop Report and Results

FOREST AND MOUNTAINOUS PROTECTED AREAS FINAL WORKSHOP

Hotel "Mladost", Restaurant "Jezero" Tjentište, National Park Sutjeska Monday, Tuesday and Wednesday, October 7-9, 2013

AGENDA

Day One, Monday, October 7, 2013

12:00 - 12:05	Welcome and introduction, Ministry of Spatial Planning, Civil Engineering and Ecology of the Republika Srpska, Mr. Miloš Jokić
12:05 - 12:10	Welcome address, Mr. Senad Oprašić, Ministry of Foreign Trade and Economic Relations of BiH
12:10 - 12:15	Welcome address, Mr. Muris Hadžić, Federation Ministry of Environment and Tourism
12:15 - 12:20	Welcome Address, Ms. Nathalie W. Johnson, World Bank
12:20 - 12:25	Welcome Address, Mr. Zoran Čančar, Director of NP Sutjeska
12:25 - 12:55	Presentation of results and activities implemented under the project, Ministry of Spatial Planning, Civil Engineering and Ecology of Republika Srpska, Assistant Minister for project coordination and development, Mr. Miloš Jokić
12:55 - 13:25	Presentation of results and activities implemented under the project, Federation Ministry of Environment and Tourism, Assistant Minister in the Sector for Project Implementation Mr. Muris Hadžić
13:25 - 13:40	Coffee break
13:40 - 13:55	Presentation of results and activities implemented under the project, JU National Park "Kozara", Director Mr. Dragan Romčević
13:55 - 14:10	Presentation of results and activities implemented under the project, JU National Park "Sutjeska" Director Mr. Zoran Čančar
14:10 - 14:20	Presentation of results and activities implemented under the project, JPŠ Šume Srpske, ŠG Gorica (Forest Reservation Janj), Director Mr. Jovo Dakić
14:20 - 14:30	Presentation of results and activities implemented under the project JPŠ Šume Srpske, JPŠ Šume Srpske, ŠG Oštrelj-Drinić (Forest Reservation Lom), Director MR. Igor Kneginić
	Or
	Manager of RJ Kozila, Coordinator on behalf of ŠG for Old-Growth Forest Lom, Mr. Sretko Stanković
14:30 - 14:40	Presentation of the sub-project "Organization of "Schools in Nature" for the purpose of protecting bio-diversity of the National Park Kozara", Mountaineers" Association

	Klekovača, Prijedor, Sub-Project Director Mr. Duško Vujičić
14:40 - 14:50	Presentation of the sub-project "Construction of eco-center and developing tourist offer", Municipality Petrovac-Drinić, Municipal Mayor Mr. Drago Kovačević
14:50 - 15:00	Presentation of the sub-project "Beekeeping in protected area of old-growth forest reservation "Lom-Drinić" and earning income from protected are", Head of Family Agricultural Farm, Construction and Environment of RS, Mr. Novo Pećanac
15:00 - 16:00	Lunch
16:00 - 16:15	Presentation of results and activities under the project PE National Park "Una", Director Mr. Amarildo Mulić
16:15 - 16:30	Presentation of results and activities under the project "Park of Nature" Blidinje, Director Mr. Zdravko Kutle
16:30 - 16:50	Presentation of the sub-project "Return of Bee-Keepers to Blidinje", Beekeepers' Association "Iva" Posušje
16:50 - 17:20	Presentation of the sub-project "Along the paths of medicinal plants", Municipality Bihać in cooperation with several associations
17:20 - 17:50	Presentation of the sub-project "Make a Bosnian carpet", Women's Association Kulen Vakuf
17:50 - 19:00	Discussion and conclusions
19:30	Dinner

Day Two, Tuesday, October 8, 2013

08:30	Breakfast	
09:00 - 11:30	Meeting between the World Bank team and Project Implementation Units of both ministries	
	Topics:	
	 Obligations related to closing of the project; Project Completion Report and Conclusions 	
12:00 - 16:00	Tour of the National Park "Sutjeska" for all participants	
16:00	Lunch	

Day Three, Wednesday, October 9, 2013

08:30	Breakfast
09:00 - 14:00	Tour of the National Park "Sutjeska" for the World Bank team

Annex 7. Summary of Borrower's ICR and/or Comments on Draft ICR

Excerpts from the FBIH completion report (a full report available in project files):

Project Evaluation

Achievements of project objectives

The Project is rated satisfactory in achieving its development objectives. All outcome indicator targets were met, and some exceeded.

The project has achieved its Project Development Objective (PDO) and its Global Environment Objective (GEO), which was to strengthen the institutional and technical capacity for sustainable protected area management, and expand the national network of forest and mountain protected areas. Over the course of the project, areas under protection in BiH have increased by 5 percent from 0.5% to 5.5% (including High Value Conservation forests and Special Hunting Reserves). Actual protected area for FBiH is 4.2% of Federation of BIH, i.e **109.563** ha (or 2.14% of BiH).

The preparation and implementation of management plans for PAs in FBiH, baseline ecological assessments for all PAs and the development of M&E systems in each park and the use of the Protected Areas Management Effectiveness tool on a regular basis have contributed to the reduction in threat level in the PAs and improved both the effectiveness of park management and the visitor numbers and revenue collection.

The government of FBiH commitment to the PAs is evidenced by the adequate and consistent annual budget allocation to cover recurrent expenditures and priority capital and research and monitoring investments. Commitment to PAs on a policy and legislative level is confirmed by the recently adopted Law on Nature Protection in the Federation (July 2013).

Public support and awareness of the importance of the PAs, specifically their economic and intrinsic value in FBiH, has been established through the public awareness campaign, the training provided under the project, as well as the Local Initiatives community grants program. Full disbursement of the grant was programmed (100%) and all project activities originally planned have been executed.

Partnership arrangements

The Forest Development and Conservation Project (FDCP) supported implementation of reforms in forest organization and management. It included support for landscape approaches to forest planning and management that incorporate improved information systems, conservation values and stakeholder engagement.

Donor Projects - FMPAP was integrated with FDCP at the conceptual level. The Italian grant of FDCP supported the direct preparation of FMPAP as well as a number of other relevant studies and training, while the ongoing IDA financing supported the state forest inventory, Forest Management Information System, and other initiatives, which were considered part of FMPAP co-financing.

Implementation

(i) The project became effective in April 2009 with over ten months of delay from the board approval date. Implementation of the Project was the responsibility of the Entity environmental ministries lead roles. BiH, represented by the Ministry of Finance and Treasury, was the recipient of the GEF grant and transferred the proceeds to the FBiH and RS Governments by opening two special accounts. The Sector for Project Implementation within the FBiH Ministry of Environment and Tourism (MET) has specialized team, called Project Management Unit (PMU)

that undertakes core implementation functions including oversight, procurement, financial management, annual planning, supervision, monitoring of repayments, reporting and evaluation.

(ii) The project was overseen by a Project Guidance Committee (PGC). This comprised the Sub-Committee on Biodiversity (established in 2002 and including representatives from academia, government, and protected areas), GEF Focal Point from the Ministry of Foreign Trade and Economic Relations, PMU managers, and entity representatives from local government, civil society and the private sector.

Due to changes in government, the project experienced some delays in implementation.

Significant changes and other revisions

a) Mid Term Review (November 8-19, 2010)

Based on the October 2010 desk review, the rating for the PDO and the Implementation Progress was down-graded due to concerns about PMU performance and capacity, and slower than expected achievements of project results. This action put the project in "problem project" status and required the development and agreement on a **90 day** action plan to address the critical issues, and thereby enable a satisfactory rating. The mission expressed some concern over PMU performance in FBiH (for example, TORs and technical specifications for goods and works have been inadequate, requiring repeat submissions for Bank no objections).

This led to the change of PMU head and staff, and employment of additional short-time procurement specialist. Somehow in the same period of project implementation, the Bank team also changed the Task Team Leader.

b) Project Management Unit (PMU)

Implementation of the FMPAP project was administered by the Project Management Unit (PMU) comprising a Manager, Procurement Manager, and Financial Officer.

PMU managed to make up for the lost time in delayed project implementation, which occurred due to the change of PMUs head and staff in the previous period. Once these individuals were in place implementation proceeded at a rapid pace, works and designs clearly defined, disbursements accelerated quite significantly. In spite of the difficulties at the beginning of the project, the project had full disbursement and all project activities originally planned have been executed. The disbursement rate was raised from 55% in October 2012 to fully disbursement of the grant on October 2013. All activities had been delivered and project indicators substantially met. This is a significant achievement given that the project had been only half disbursed some 11 months before the closing date.

The PMU has demonstrated a high degree of dedication and commitment and instrumented realistic solutions to overcome the delays in the Project.

c) Revised components

(i)Revision and Update of the Project Results Framework.

Since project inception there have been achievements and activities benefiting PA conservation which were not originally anticipated (e.g., high conservation value forests (HCVF), and new plans to develop sustainable game management for special hunting areas adjacent to NPs). On the other hand, it was clear that the original design and expectations did not adequately take into account political and operational constraints (e.g., delays in on-site operation of NP 'Una', low revenue from non-timber and other sources). Revisions and updates to the results framework have been proposed to take all of these factors into account.

Key proposed agreed revisions were minor and included: (i) recognition of additional types of PAs in the results indicator for the area under formal protection; (ii) reporting results by calendar year until one month prior to project closing; and (iii) refining one of outcomes indicators to be more precise in monitoring between the RS and the Federation, and updating results and targets where necessary in accordance with the most recent Bank guidelines.

Because the above achievements have basically offset the delays, there were no significant changes in the levels of the final targets.

(ii) Revised Closing date

An extension of the closing date for 6 months was granted in November 2012 to allow time for full expenditure of the grant and to accommodate delays in park infrastructure due to inclement weather. Revised closing date was October 31, 2013.

Assessment of Outcomes

Relevance of Objectives, Design and Implementation

Rated: Satisfactory

The project's objectives, design and implementation remain highly relevant to Bosnia and Herzegovina development and natural resource management priorities. The project has made substantial contributions to the improved planning, monitoring and implementation of a highly diversified protected area and strongly supported and capacitated FBiH agencies for protected areas.

The design of the project components and activities was well aligned with its objectives. The number and types of components were fully consistent with the standard organization of components in most protected area projects. The proposed indicators, while needing revision, were nonetheless all relevant to measure the proposed outcomes. The number, type and design of components were well aligned with the intended outcomes. The funded activities were also all relevant and contributed to the project outcomes as verified during implementation.

Achievement of Global Environment and Project Development Objectives

Rated: Satisfactory

The Project has achieved its Project Development Objective (PDO) and its Global Environment Objective (GEO), which was to strengthen the institutional and technical capacity for sustainable protected area management, and expand the national network of forest and mountain protected areas.

A review of project outputs against the targets for outcome and intermediate outcome indicators reveals a generally positive outlook for the achievement of the PDO and GEO.

Results achieved - summary of PDO indicator measures.

Outcome Indicators

- As a result of the implementation of the project, the area under formal protection (of various types of PA management categories) increased from approximately 0.5% to 5.5% (including High Value Conservation forests and Special Hunting Reserves). Actual protected area for Federation BiH is 4.2% of FBiH, i.e. **109.563** ha (or **2.14** % of BiH).
- Red List of threatened plants, animals and fungi in Federation of BIH was completed.
- The Amendment to the Contract was made for the preparation of PAs Maps in B&H and GIS data base of all PAs in BiH.

- As a result of the implementation of the project, key threats to biodiversity and forest resources in all protected areas (PAs) have been reduced. Indicator is measured by the PA M&E systems and PAME tracking tools.
- The FBiH Government budget annually allocated EUR 250,000 equivalent and utilized for NP 'Una' operations in the period from 2011 to 2013 (during project implementation that was in total EUR 750,000 equivalent). The government commitment to the PAs is evidenced by the adequate and consistent annual budget allocation to cover recurrent expenditures and priority capital and research and monitoring investments. The following additional funds from the FBiH budget in the total amount of EUR 250,000 equivalent have been annually allocated, for support programs for better functioning of other protected areas management in the Federation.
- As a result of project implementation two Management Plans for NP 'Una' and NatP 'Blidinje', which were formally approved by the Ministry of Environment and Tourism and adopted by the Government of FBiH are under implementation. Training Course on Applications of PAME Tracking Tool in PAs Management was held. Both new NPs are using M&E and the PAME tracking tool on a regular basis, to guide and assist more effective PA management and improved both the effectiveness of park management and the visitor numbers and revenue collection. Visitor numbers in both parks is steadily growing.
- Public support is reflected through participation in workshops and local initiatives program which fosters tremendous support for the PAs.
- The research on this issue confirmed the percentage of public support for PAs.

Intermediate Outcome Indicators

- One new national park (NP 'Una') and one new Nature Park (NatP 'Blidinje') were legally declared, and 'Prenj-Cvrsnica-Cabulja-Vran' area was proposed. Feasibility study for PA 'Prenj-Cvrsnica-Cabulja-Vran' is completed and accepted by Federal Ministry of Environment and Tourism. The new Law on Protection of Nature in FBIH is adopted on July 26, 2013.
- Establishment of New Protected Areas Igman: Preparation of the 'Igman-Bjelasnica-Treskavica-Visocica' (IBTV) management plan was expected to start in 2011. A feasibility study has been completed (in May 2007 before FMPAP started) and the first draft approved by Parliament in February 2012. Due to the lack of a physical plan for Igman, which is a precursor to developing a management plan, it has not been possible to initiate this activity. Therefore the activity has been dropped from the procurement plan and the resources originally allocated have been re-allocated to other priority activities.
- Two protected areas NP 'Una' and NatP 'Blidinje' have management plans under implementation. Management Plans completed and accepted by Federal Ministry of Environment and Tourism.
- M&E system, including tracking of key habitat and species, and PAME tracking tool are used in all PAs for management planning and decision-making.
- The project developed Facilities in accordance with PA management plans. Priority Facilities as identified in management plans were financed and established in all PAs. Facilities for new PAs, such as shelters, benches, visitor signs, site enhancement, and other "soft" infrastructure, e.g., new trail creation, resting places, viewpoints etc., in NP 'Una' and NatP 'Blidinje' are completed.
- Number of participants completing training programs and positive participant feedback exceeded target value (390 for FBIH 130 % achieved). Training was organized and realized very successfully, including workshops, round table sessions and a study tour, with very qualified trainers, experts for relevant sectors, as well as trainers from protected areas in regions with their experiences in the field. More than 300 participants have attended trainings

and taken active participation in discussions. Technical assistance for trainings included review of outcomes, monitoring and evaluation of activities and related reports.

- Public awareness campaign fully launched and completed. Contract and all planned activities for Public awareness Campaign are completed. Program will be continued beyond Project closing, using materials and strategy developed under Project.
- In the last Project period, the Project implementation was timely and well-coordinated. PMU managed to make up for the lost time in delayed implementation. All activities from Procurement Plan were contracted and completed before revised Closing date on October 31, 2013.
- Eight (8) grants for eligible subprojects grants awarded and implemented, and outcome and impact evaluation completed. Three (3) grants for NP 'Una' and five (5) grants for NatP 'Blidinje' were successfully completed. Sub-projects achieved objectives based on the following criteria: biodiversity conservation, social and economic feasibility and sustainability of sub-projects. The realization of sub-projects contributed to public awareness rising about the importance of conservation and protection of biodiversity and natural resources and contributed to improvement of tourist offer in the protected areas (diverse agricultural products, traditional souvenirs, etc.). Sub-projects could be used as an example of good practice in other protected areas.

Overall, the project had a satisfactory achievement of its development objectives.

Efficiency

As required for a full-sized GEF project, an incremental cost analysis was done during the project preparation. Project design has not fundamentally changed and GEF funds are being used to finance activities of global benefit that would not have taken place without these resources. Generally, cost levels vs. expected outputs were well estimated at appraisal. Project results were achieved, or exceeded, with lower total costs from those estimated at appraisal, and therefore the project can be considered efficient. Compared to similar projects in Eastern Europe, the project remains cost-effective. Cost levels are within those of projects with comparable approaches and outcomes.

No formal economic analysis was completed for project implementation.

Justification of Overall Outcome Rating

Rating: Satisfactory

The overall PDO/GEO outcomes are rated satisfactory. The PDO/GEO remains highly relevant for local and global natural resource management and sustainable land management agenda. The PDO was largely achieved and most planned outputs were delivered efficiently and cost effectively. Full disbursement of the grant was programmed and all project activities originally planned have been executed.

Public support and awareness of the importance of the PAs, specifically their economic and intrinsic value in FBiH, has been established through the public awareness campaign, the training provided under the project, as well as the Local Initiatives community grants program. The management of the two parks has been substantially improved. Visitor numbers in both parks is steadily growing. Over 80,000 hectares of biodiversity rich habitat is being effectively managed in the two parks (NP 'Una' and NatP 'Blidinje'), with enhanced management interventions, surveillance and community participation.

The government of FBiH commitment to the PAs is evidenced by the adequate and consistent annual budget allocation to cover recurrent expenditures and priority capital and research and monitoring investments.

Assessment of Risk to Development Outcome

Rating: *Modest*

The risks identified during project design are generally relevant. The overall risk rating with mitigation was assessed to be modest and remains so through implementation. The results framework has been reviewed in light of current and anticipated risks, particularly those associated with government approvals of plans, appointments, etc. and annual targets modified. The overall outcomes, however, remain unchanged.

Assessment of Bank and Borrower Performance Bank

(a) Bank Performance in Ensuring Quality at Entry

Rating: Satisfactory

The Bank identified an area of support that was and remains relevant to the FBiH environment. The Project development objective (PDO) of the FMPAP is to strengthen the institutional and technical capacity for sustainable PA and natural resource management, and expand the BiH network of forest and mountain PAs.

Project activities targeted highly priority areas identified in the country's strategic development documents. Outcomes (supported by the design) struck an appropriate balance among three key areas.

(b) Quality of Supervision

Rating: Satisfactory

The Bank provided continuity in supervision by conducting regular supervision missions.

Actions taken by the Bank during supervision were mostly appropriate, timely and adequate, with some areas of notable achievement. The Bank set high standards for implementation, and consistently maintained a long-term vision with a strong focus on results, building capacity, involving stakeholders and efficient administration. Interim Project Support missions were organized in response to specific problems in implementation. Supervision was also flexible and adaptive to emerging realities. The Aide Memoires and the ISRs showed direct involvement in supervision. Procurement and financial management performance were regularly assessed and, in the case of procurement, when problems were found these were rectified promptly. The mission aide-memoires were comprehensive, well prepared and clearly articulated agreed actions for each project component and, thus, helped ensure that the PDO was achieved.

Based on the October 2010 desk review, the ratings for the PDO and the implementation progress were down-graded due to concerns about PMU performance and capacity, and slower than expected achievements of project results. Critical risks were appropriately flagged and addressed in a timely manner. After the MTR, a "90 day action plan" was agreed to address the critical issues, and thereby enable a satisfactory rating. The team effectively raised issues affecting the project to management's attention and PMU responded actively and speedily to issues raised. These interventions had succeeded in effectively addressing problems that arose.

Somehow in the same period of Project implementation, the Bank team changed the Task Team Leader.

(c) Justification of Rating for Overall Bank Performance

Rating: Satisfactory

The Overall Bank performance is rated *Satisfactory*, based on similar ratings for Ensuring Quality at Entry and Quality of Supervision, and especially to reflect the timely guidance provided to the client, both technically and administratively, during project supervision.

Turnover of TTL did not cause slowdown of project performance, on the contrary - clearly articulated agreed actions plan, revisions and updates to the results framework ensured that the PDO was achieved, without significant delays or problems in implementation.

The Bank was proactive in responding to client requests and was effective in eventually developing a mechanism with the client that worked in delivering a multi-sectorial project in a complex administrative structure with often competing interest and weak Government leadership.

Overall Bank performance was satisfactory given the high quality and responsiveness of supervision, and the Bank followed up safeguard issues diligently.

Borrower (a) Government Performance

Rating: Satisfactory

The Government of the Federation BiH performance is rated *Satisfactory*.

At preparation, the government strongly supported the Project and its objectives. However, from the outset of implementation, the dynamic has shifted somewhat as the country has gone through elections. Due changes in government, the project has been experiencing some delays in implementation over the first half-year in 2011. Generally, there was strong support and interest in the project from the sector Ministry, even though attention shifted to other priorities. These changes have led to a temporary hiatus that delayed key organizational actions for enabling proper implementation, as well as delays in pursuing critical legal and institutional adjustments in reorganizing the administration and functioning of the government sector that were imperative for the overall direction and success of the Project.

Upon full transfer of responsibilities to the MET, and appointment new PMU team composition in April 2011, project implementation improved significantly to fully implement of project activities.

The FBiH Government budget annually allocated EUR 250,000 equivalent and utilized for NP 'Una' operations, also reflects the Government's strong interest in this project. The government commitment to the PAs is evidenced by the adequate and consistent annual budget allocation to cover recurrent expenditures and priority capital and research and monitoring investments. The additional funds from the FBiH budget in the total amount of EUR 250,000 equivalent have been allocated, for support programs for better functioning of other protected areas management in the Federation. SIDA has committed resources to publish the Red List book once it is completed. The Government funding was always timely delivered.

(b) Implementing Agency or Agencies Performance

Rating: Satisfactory

The Sector for Project Implementation within the FBiH Ministry of Environment and Tourism (MET) have a specialized team, called Project Management Units (PMU), that undertook the core implementation functions, including oversight, procurement, financial management, annual planning, supervision, monitoring of repayments, reporting and evaluation. After Mid-Term review and proposed "Action plan", PMU changed the head and staff, and employed another short-time procurement specialist. The PMU team was confirmed in its new composition in April 2011.

PMU managed to make up for the lost time in delayed project implementation, which occurred due to the change of PMU's head and staff in the previous period. Once these individuals were in place, implementation proceeded at a rapid pace, works and designs clearly defined, disbursements accelerated quite significantly. In spite of the difficulties at the beginning of the project, the project had fully disbursed and all project activities originally planned have been executed. The disbursement rate has been raised from 55% in October 2012 to full disbursement of the grant on October 2013. All activities had been delivered and project indicators substantially met. This is a significant achievement given that the project had been only half disbursed some 11 months before the closing date.

The PMU has demonstrated a high degree of dedication and commitment and instrumented realistic solutions to overcome the delays in the project.

(c) Justification of Rating for Overall Borrower Performance

Rating: Satisfactory

The overall Borrower performance is rated Satisfactory, based on ratings for the Government and the main implementing agency and also based on the dedication, commitment and contribution of all who participated, including the PA Managers, social promoters, consultants in various range of project activities who were able to successfully work with and engage beneficiaries in PA communities that contributed to the project's achievements.

Lessons Learned

Some key lessons learned from the project include:

(a) An effort should be made to ensure that key stakeholders share the vision of park management and protection before project effectiveness and throughout project implementation. Decisions about PA management often elicit strong opinions from a range of stakeholders. To build and maintain a common understanding across national, provincial and local levels, PA managers must engage stakeholders in discussions of key goals and strategies before project effectiveness. Otherwise stakeholder support is often just congealing at the end of the project when investments and resources dry up too soon to cement the new support. In PAs the park's commitment to building local awareness of project activities, the importance of biodiversity to local and national economies, and the role of communities in co-management established the groundwork for a very successful project and for the government to extend project activities beyond the Bank's involvement.

(b) In order for a project to be successfully implemented, it is necessary to have a full engagement of the people in charge of direct implementation of project activities, including environment inter-institutional and inter-sectoral cooperation, planning and reporting, the preparation of annual work programs and budgets, preparation of TORs and specifications for goods and works bidding documents, preparation of quarterly and annual progress reports etc. This can be illustrated by situation with PMU performance and their changes of head and staff and internal composition. Once these changes were in place, implementation proceeded at a rapid pace, works and designs clearly defined, disbursements accelerated quite significantly. Both Entities have a range of laws, regulations and plans that govern nature conservation in the broadest sense. Procedures for the establishment of PA, including NPs, are laid out, as are the requirements for their operations. However, some of the constraints experienced by the project stem from inefficient or contradictory legislative and financing frameworks. While many of these problems are a consequence of the broader political context, in some cases they also reflect a traditional dependency on legislative approaches. In FBiH, PA Physical Plans require parliamentary approval, and the appointment of a NP Director requires cabinet approval. In the current climate of political uncertainty delays in these and similar decisions appear likely.

(c) *More attention must be paid to M&E*. Adequate attention to M&E design, implementation and utilization is important for every operation, but is essential for a project that proposes to test a new modality for park management that would serve as the model for other parks. Capturing baselines against which to measure progress and test effectiveness are a critical part of project preparation, and should not be left until later in the project, when this could delay measuring success and cause the project to capture an inflated baseline rather than the without-project scenario. By piloting a new system under the project, and being able to confirm that the system works and improves the management of the park, it was possible to mainstream and expand the system to other parks – thus increasing the capacities to manage and monitor the park system. Monitoring system should be simple and focused, so that the user may make changes and add new, more relevant, variables as identified.

(d) *The achievement of project outcomes is only validated by quantitative data put in place by a strong results framework and monitoring and evaluation system.* In this project, one of the positive aspects of the design was that the project design required monitoring of wildlife in the parks throughout the project period as well as beneficiary surveys to monitor the opinions of project beneficiaries.

(e) Creating some alternative income generation opportunities. Facilitation assistance was provided to design these initiatives so that the process is fair and transparent, and beneficiaries are assisted in choosing and designing appropriate and feasible activities. Objectives of the subprojects – Local initiatives grants, were achieved based on the following criteria: biodiversity conservation, social and economic feasibility and sustainability of subprojects. The realization of sub-projects strengthened the cooperation between local stakeholders (especially local population) and local government and administration of protected areas. The realization of subprojects also contributed to public awareness rising about the importance of conservation and protection of biodiversity and natural resources and contributed to improvement of tourist offer in the protected areas (diverse agricultural products, traditional souvenirs, etc.). Sub-projects could be used as an example of good practice in other protected areas. Local initiatives in conservation could serve as models for accessing other small grant programs such as the entity Eco-Funds and EU pre-accession instruments. Benefits to the PA system and conservation in the country are expected from supporting a "learning culture" within the agencies responsible for PA management so that lessons learned and knowledge generated through the project can be disseminated to a wider audience. Several project activities supported knowledge transfer, capacity building and outreach so that lessons learned and experiences gained from the project can be replicated in different regions of the country.

Proposed arrangements and activities for future operation

The FMPAP should be adapted as a model for PAs management. It should be replicated and extended to other Protected Areas in the country. The GEF, World Bank and the Ministry of Environment should seriously consider launching of a Phase-II of FMPAP to stabilize the achievements of the concluded project. This project should keep in view the lessons learnt in FMPAP implementation. Capacities for PA management, even though improved through FMPAP, are still weak.

Priority activities for biodiversity conservation in FBiH to be considered for the preparation of future GEF projects

1. Development of Red Books - Development of Red Lists was supported within the FMPAP. The next step in this process is the development of Red Books. Without the support of the projects with sufficient funds available for biodiversity conservation goals it would be difficult to develop such documents, even though they are of great national importance.

2. Creating strong links with tourism development in BiH with rural, eco and medical tourism and the potentials of PA and recreational forest areas development - Potentials for and its role in economic development in BiH are considered high. The number of visitors is increasing, as well as demand for tourist destinations. Rural, eco and medical tourism fit well within the alternative livelihoods in and in the vicinity of PAs, and provide the opportunities for local development and protection of natural resources by local population themselves as their resource base, if adequate approach is taken. This activity relies on promotion of the possibilities for livelihoods that are based on sustainable practices (e.g., organic agriculture, small craftsmen souvenirs production, medical herbs, etc.) Local initiatives sub-projects in FMPAP could be used as an example of good practice in other protected areas and serve as models for future Projects based on cooperation between local stakeholders (especially local population) and local government and administration of protected areas.

3. Integrated fire management programs for existing and future protected areas and high conservation value forest - Within the last two years, fires have caused devastating effects to one existing PA (Nature park 'Hutovo Blato'), and one future PA ('Prenj Cvrsnica Cabulja Vran'). The fire is a direct threat to biodiversity in BiH, especially in Herzegovina - the area rich in rare, endemic and endangered species and habitats. Existing capacities of the parks and institutions in FBiH to deal with fire protection systematically are inadequate. This issue is directly linked to climate change adaptation as well.

4. Enable cross-border partnerships in managing trans-boundary protected areas - Cross-border cooperation is important in the context of EU requirements and the effectiveness of biodiversity conservation. Having this principle in mind, the attention needs to be focused on the cooperation between the Entities on PA management. Good example is already established cooperation between NP 'Una' in BiH and PAs in Croatian NP 'Plitvice' and NP 'Krka'.

Excerpts from the RS completion report (a full report available in project files):

Introduction

At the end of 2007, the biodiversity of Bosnia and Herzegovina (BiH) was insufficiently protected. At that point, in BiH there had been more than 20 protected areas covering only about 0.55% of the territory. The National Environmental Action Plan (NEAP) has realized the importance of biodiversity, natural and cultural heritage, threats and the need to expand the area under the regime of conservation and protection, but specific activities generally lacked.

Forest and Mountain Protected Areas Projects (FMPAP) was approved in 2008 and became effective at the beginning of 2009. Total project costs are 6.00 million US dollars for four years, including GEF grant in the amount of 3.40 million US\$ (1.7 million US\$ for FBiH and 1.7 million US\$ for RS), contribution of entity Governments 2.51 million US\$ (1.255 million US\$ from FBiH and 1.255 million US\$ from RS). The Republic of Srpska Government contribution refers to regular grants that the RS Government every year provides to national parks 'Sutjeska' and 'Kozara'.

Ministry of Finance and Treasury of Bosnia and Herzegovina was the recipient of the GEF grant, and for the realization of the project it has opened two special accounts to which it transferred means to Governments of FBiH and RS. Project Management Unit (PMU) was the Department for Project Coordination of RS Ministry of Spatial Planning, Civil Engineering and Ecology (MSPCEE) in the RS and the Department for Project Implementation of Federation of Bosnia and Herzegovina Ministry of Environment and Tourism (MET) in FBiH.

As for Republic of Srpska, Forest and Mountain Protected Areas Projects (FMPAP) has been implemented in four existing protected areas: NP 'Kozara', NP 'Sutjeska', forest reserve 'Janj' in the Sipovo municipality and forest reserve 'Lom' in the Drinic municipality.

Assessment of the operation's objective, design, implementation, and operational experience Assessment of the operation's objective

The project development objective (PDO) was to strengthen the institutional and technical capacity for sustainable management of protected areas and natural resources and the expansion of the network of forest and mountain protected areas in Bosnia and Herzegovina. Observing this goal at the end of FMPAP project implementation, it can be said that it has been achieved in full. This claim is confirmed in the analysis given below containing actual indicators of project objectives.

• The first indicator of achievement of the development objective was to increase the total area under formal protection (using all IUCN categories) from approximately 0.6% to 3.0%.

During the implementation of this project, in the Republic of Srpska there has been a significant increase in the area under formal protection, from only 0.83 % or 20,552.7 ha to 2.93% or 72,276.48 ha.

Contribution to increasing of protected areas size in Republic of Srpska is reflected in the protection of high conservation value forests in accordance with the principles defined by the Forest Stewardship Council - The Forest Stewardship Council (FSC), which are, depending on the objectives and the level of protection, classified in the appropriate category by the International Union for Conservation of Nature and Natural Resources - International Union for the conservation of nature and Natural Resources (IUCN). Currently, there are 50,123 ha of area under protected forests of high conservation value. These areas are identified in the field; their boundaries are determined and their protection is established in accordance with a defined purpose and IUCN category of protection, all in accordance with the Regulations on the manner of proclaiming, marking, financing and mode of management of protected forests and special purpose forests (Official Gazette of RS, no. 57/09). Entire area of 50,123 ha under protected forests of high conservation value has been protected over the course of the FMPAP project duration.

In addition to the significant increase of protected areas in the Republic of Srpska, protection of high value forests conservation, contributing to increase in the total area of protected areas in BiH was achieved by proclamation and protection of two nature parks – 'Gromizelj' with an area of 831.33 ha and 'Lisina' with an area of 560.64, with total area of 1,382 ha. The two nature parks are protected under the provisions defined by IUCN for category I b, i.e., Wilderness Area.

In the IUCN category III, Natural Monument, in the course of FMPAP project implementation, several small areas were protected: Cave Ljubacevo 45.45 ha, Cave Orlovaca 27.01 ha, Nature monument 'Zuta bukva' 0.5 hectares, Cave Rastusa 11.39 hectares, Pitfall Ledana 28.26 ha, Cave Vaganska 12 ha, Cave Datlo 43.42 hectares, Cave Pavlova 13.4 and total area of 181.43 hectares; and in the IUCN category IV, Habitat/Species Management Area, University town area of 27.38 ha.

With existing and newly declared protected areas, total area of protected areas in the RS is 72,276.48 hectares. This area represents 2.93% of the RS territory, i.e. 1.41% of the Bosnia and Herzegovina territory.

• Key factors endangering biodiversity in each area, according to the composite indicators are reduced or remain at the same level.

Factors of biodiversity endangering can be divided into global and local factors of endangering biodiversity of Republic of Srpska.

Global factors of biodiversity endangering in Republic of Srpska, such as climate changes or acid rains, can be very slightly affected, and they practically remained at the same level as at the beginning of the project.

Local factors of biodiversity endangering in Republic of Srpska are factors, which we could influence and thanks to the implementation of FMPAP project, local factors of biodiversity endangering in Republic of Srpska are significantly reduced.

This is due to, above all, investments in equipment and infrastructure of protected areas, training of people who take care about conservation and management of protected areas, as well as the preparation of plans and documents, which will be used to manage protected areas.

Investments in firefighting equipment, vehicles with water tanks for firefighting has significantly reduced earlier expressed threat of fire to biodiversity of protected areas. Providing equipment, i.e., containers for controlled disposal of garbage for protected areas decreased pressures on biodiversity from pollution with garbage. The implementation of Component 2 project provided quality training to people who care about conservation and management of protected areas, including: ecosystem-based management, field skills in areas such as patrolling, community engagement, managing visitors and translation, which contributed to a significant reduction of key factors threatening the biodiversity of the Republic of Srpska.

Reduction of the key factors threatening the biodiversity of the Republic of Srpska was also achieved by implementation of sub-projects under Component 3 of the FMPAP project, i.e., giving support to efforts to protect biodiversity for participants who promote the advanced management of natural resources and generate economic benefits for the local communities involved in the management of protected areas.

Republic of Srpska Law on National Parks from 2010 banned the economic exploitation of forests from RS NPs, which implied the cutting and transport of forest products. This has involved the construction of temporary forest roads and other temporary supporting infrastructure, which constituted a major threat to biodiversity of NPs at that time. As these activities are not carried out, already three years self-regenerating processes in forests of RS NPs largely neutralize the aforementioned effects and further destructive factors to biodiversity of these protected areas have been prevented. The Republic of Srpska budget now replaces previous income from sales of timber.

• Increasing the share of funding of recurrent costs of management from sustainable tourism, at least at the level of 20% (including entrance charges and use) and the collection of non-wood products, donations and government grants - at least 15%.

In the course of the FMPAP project implementation there was a major change in the financing of protected areas. Republic of Srpska Law on National Parks from 2010 banned the economic exploitation of forests. This Law has significantly altered the structure of financing of national parks and abolished a significant source of revenue from the forestry sector.

This forced the managers of parks to seek new sources of funding, i.e., increase the share of funding from the income from tourism, the collection of non- wood products, donations and government grants. Also, the new management plans for NPK, NPS and forest reserves 'Lom' and 'Janj' envisage significant changes in the financing of protected areas that are based on their own revenues (revenues from tourism and permitted economic activities of park managements), revenue received from projects funded from EU sources and other donations, along with the existing, but less public funding. As a result of these changes in the financial affairs of the NPs,

during the 2012 and 2013 was quite more stable than in the previous period. For NP 'Sutjeska', total regular expenditure for the period between Jan 1, and Dec 31, 2012¹⁰ was covered by the tourism and service fees with 13.4 %, while the contribution of the Government of RS was 53% of total revenue. In NP 'Kozara', 10.9 % of total expenditure is covered by income from fees and services, and tourism, while the contribution of the Government of RS was 57 % of total revenue. Financial data demonstrates that income from tourism, fees and services has still not reached 20% of total revenue. There are several reasons for this and main one is that income from tourism should be higher.

Unfortunately, tourism industry in BiH in the past 5-6 years is experiencing stagnation, which is a global trend caused by economic crisis. In addition, national parks in Republic of Srpska still do not have adequate tourism product, marketing strategy or tourism infrastructure to offer high quality tourism services. New management plans, prepared within FMPAP, recognize these problems and plan number of measures for improvement of tourism activities, including improvement of existing and building new infrastructure, development of tourism offer, improvement of guide services, etc. With FMPAP investments in national parks' infrastructure some positive steps forward have been made, but this needs to be continued in the future for tourism to keep momentum and reach planned 20% of total national parks' revenues.

Achieved stabilization of financial conditions in the protected areas contributed to more stable operations and protection within the protected area, which directly influenced the reduction of the key factors threatening the biodiversity of protected areas and achieving of projected goals of the FMPAP project.

• Improved **management effectiveness of protected areas** by the assessment of monitoring instrument.

During the period of FMPAP implementation, assessments of the efficiency of the management of protected areas were conducted. These assessments were carried out through various projects (during the preparation of management plans, UNPD Study Program on sustainable activities in protected areas). Based on the results obtained by these assessments, appropriate interventions in the management of protected areas were carried out in order to increase the management efficiency. Already in 2009 in both NPs and forest reserves, PAME Tracking Tool (TT) was used to maintain overall efficiency. Tracking Tool has been used as basis for planning new activities in protected areas. Thus, for example, established system of monitoring of situation and events in protected areas monitored at which areas are visitors linger most, which places are favorite for picnics and the starting of fire and adequate infrastructure¹¹ was planned and built in those areas. By monitoring the status of rare and endangered plant species, such as rare Yew (Taxus baccata), which grows at only three sites in NP 'Kozara', it was found that intensive visits to those sites impair growth of new trees, so the activities to limit visit to these sites and planting of new seedlings were undertaken.

¹⁰ Recurrent costs for the reporting period (Jan-Dec 2012) for NP Sutjeska total 2,212,291BAM and total income generated from fees, services and tourism activities was 297,504 BAM. In NP Kozara, revenue generated from fees, services and tourism totals 137,836 BAM. The Government contribution for NP Sutjeska amounted to 1,156,800BAM, and for NP Kozara in the reporting period it has amounted to 726,200 BAM (without salaries for PMU employees).

¹¹ In order to ensure the needs of visitors and the protect nature in places where visitors usually start fire, supervised places for lodging fire were arranged to prevent fires, and by construction of footpaths the uncontrolled trampling of endangered plant species in these localities was prevented.

Development of management plans for both NPs and forest reserves TTs were adopted and planned for use in the management of protected areas.

• Maintaining **public support for protected areas**, based on the analysis of at least 80% of the respondents.

In order to obtain a complete picture of public perception of protected areas in the Republic of Srpska, as the first phase preceding the implementation of the public awareness campaign, an analysis of target groups' public opinion was done. Questionnaires were designed in a way to provide insight into the level of awareness, knowledge and attitudes related to protected areas and biodiversity. The obtained results indicated that 92% of respondents support the existing and expansion of new protected areas, however, when asked about the level of information on protected areas, 32.7 % of respondents said they were not satisfied with the current level of awareness of protected areas. Because of these responses, during the development of awareness campaign, the public has been additionally informed about existing protected areas, their essential role in the protection of natural values, for which they were declared as such, efforts that must be invested in order to improve that protection and increase the efficiency of management.

The participants gave full support to the improvement of protection and more efficient management of existing protected areas during the workshops that have been organized in the framework of this project, as well as during other activities, such as the development of management plans, in which general public, as the interested party, was involved. After finishing the campaign, the consultants have conducted the second phase of public opinion research¹² in order to evaluate the success of the campaign and track changes of public opinion. Repeated research has shown that the campaign had some positive impact on the population through increased public awareness about protected areas. This conclusion can be drawn from the fact that at the end of the campaign, support to national parks and creating new protected areas increased to 94% of respondents. In addition, more people knew about protected areas in their vicinity, how many National Parks and rainforest reserves there are in the RS, and where they are exactly, and also a smaller number of respondents felt that they needed more information on protected areas (89%).

• Number of protected areas with **developed management plans** that include management approaches and instruments based on the protection of ecosystems.

At the beginning of the project, only NP 'Sutjeska' had completed and adopted management plan. The management plan developed in the framework of this project is the fourth management plan for this NP. The last management plan for the period 2003-2012 was prepared in 2002 as part of the Forestry Project ("National Forestry Programme") for Bosnia and Herzegovina. NP 'Kozara' has not had a management plan, and the plan developed by the FMPAP for this NP is the first management plan, although the park has been operating for 45 years. Forest reserves 'Janj' and 'Lom' have never had management plans previously.

¹² Panel research method was used, i.e. multiple inquires of the same respondents over certain timeframe and using identical questionnaire. Research was done over the phone as this method was adequate for such dispersed sample. Sample consisted of 50 people who were asked to follow up the campaign in order to evaluate its effectiveness in the end. Sample consisted of students, hikers, researchers, journalists and general population.

With this FMPAP project, new, long-term management plans were developed for a time period of 15 years. Management plans have been completed and submitted to the relevant Ministry.

However, in addition to long-term management plan, which have been prepared within FMPAP, NP 'Sutjeska' and NP 'Kozara' also operated and managed its protected areas on the basis of short-term and annual plans, because by Law on National Parks (RS Official Gazette 75/10) upon the proposal of the director, the board of directors of the National Park passes the annual program for the protection and business management of the National Park and the financial report, which have been approved each year by ministry responsible for environmental protection.

Management of forest reserves 'Janj' and 'Lom' so far was done on the basis of current forestmanagement plans (basics) that are made for a period of 10 years, and for which the Ministry of Agriculture, Forestry and Water Management of the Republic of Srpska gives its consent before the application.

As the short-term, annual plans for management of national parks and forest-economic fundamentals of forest reserves are also considered management plans, for which relevant line Ministries give their consent prior to the application provided their content is satisfactory¹³ and it can be deemed that in the Republic of Srpska there are four protected areas that have developed management plans, which were used for their management so far.

Assessment of the design

The project is designed to provide assistance for the improvement of management of Bosnia and Herzegovina natural resources. FMPAP is designed to build on the Forest Development and Conservation Project (FDCP), which was funded by the International Development Association (IDA). In addition to direct work on components of FDCP, FMPAP has also built onto many technical results of FDCP activities.

During the design of the project, the existing division of responsibilities within BiH has been taken into account, which assigns leadership role to the entity Ministries of Environment. However, the project was also designed so that the implementation arrangements provide links with other agencies at different levels of government that have key contribution, including the Ministry of Agriculture, Water management and Forestry (MAWMF) in both entities, the Ministry of Foreign Trade and Economic Relations (MFTER) as contact persons (Focal Point) for the GEF, as well as municipal institutions. Significant working relationships have been established between staff in the field managing the protected areas and national forest one, at the local level, in order to help to avoid potential conflicts related to land use rights and access to natural resources.

In the design of the project itself, the emphasis was placed on participation of civil society and the private sector in the system of protected areas, aiming to achieve long-term sustainability. Such manner of project design offered opportunity to build and strengthen partnerships with NGOs on a range of activities for protected areas management including community mobilization, awareness raising, helping existence and environmental management. In most project activities, the NGO sector has been identified as a key partner and was included in discussions, workshops and decision making processes regarding the future appearance and functioning of protected areas

¹³ Management documents that were used before (short-term, annual plans for management and forest-economic fundamentals of forest reserves) contain all elements of plans including assessment of current situation, needs, strategic and operational goals and activities that need to be implemented in relevant planned timeframe.

in RS. In addition to continued growth of tourism in the country, the project was also supposed to provide support for partnership with the private sector with a focus on capacity-building for sustainable tourism.

The project was designed to increase the area under formal protection (different protection regimes, mostly multifunctional, and which depending on the objectives and the level of protection had to be classified into the appropriate IUCN categories of protected areas management). In the preparation of the project, a number of threats to biodiversity in protected areas of national parks 'Sutjeska' and 'Kozara' and forest reserves 'Janj' and 'Lom' were identified. Having this in mind, the project was designed in such manner that all threats to biodiversity of protected areas were identified in detail and subsequently to establish safeguard mechanisms to eliminate, reduce or mitigate identified threats.

In order to build financial sustainability and reduce dependence on income from forest harvesting, the project was designed to help authorities of protected areas in the development of management plans, which would include the most appropriate and feasible options for diversification of income given the objectives of the protected area conservation.

Clear goals were set to fund share the costs of the current management at a level of at least 20% from sustainable tourism (including charges for entry and use) and the collection of non-wood products, and donations, as well as at least 15% from the government budget. FMPAP was designed to also achieve better efficiency and management of protected areas, in accordance with the evaluation using the instrument for monitoring the Protected Areas Management Effectiveness (PAME).

The design of the project was also supposed to achieve an institutional, social and environmental sustainability of protected areas. It planned to achieve institutional sustainability by training and with an increasing build-up of experience in the field, in protected area management, project management and policy analysis. The plan for the project was to utilize existing administrative and organizational structures. Social sustainability was to be achieved by involving relevant subjects in the development of approach for the whole country in the direction of expanding the network of protected areas, incorporating the attitudes and needs of the community in the management of protected areas, building awareness of the benefits of biodiversity conservation and gaining experience with participatory approaches to sustainable management of natural resources.

With all the aforementioned characteristics, FMPAP was designed to try to ensure the support of the general public with protected areas through the implementation of specific project activities aimed at strengthening public awareness, improving and raising level of understanding about protected areas.

An insufficient accuracy of key indicators can be pointed out as a deficiency in the design of the project, which should have served as a benchmark of achieved results and projected goals.

Assessment of the implementation

Part of the FMPAP project, which was implemented in the territory of the Republic of Srpska, was realized by the Project Management Unit (PMU) in the RS, which was part of the Sector for Coordination of projects in the Ministry of Spatial Planning, Civil Engineering and Ecology (MSPCEE). Ministry of Finance and Treasury of BiH signed the Grant Agreement with the World Bank, which defined amount of funds allocated to BiH, while RS Ministry of Finance signed Project Agreement with the World Bank, which defined account was opened by Ministry of Finance and Treasury of BiH authorizing Ministry of Spatial Planning, Civil Engineering and Ecology to withdraw funds and

make payments. For the realization of the project in the territory of RS, Project Management Unit (PMU) in the RS was allocated US\$ 1.7 million.

FMPAP in the RS area was realized through three components and their sub-components.

✓ Component 1: Development of protected areas. This component of the project provided support for protected area management plans, business management, and evaluations, and has facilitated development of existing and new protected areas.

Sub-component 1a): Management planning of protected areas.

The project financed, through this sub-component, the **development and implementation of** new protected area **management plans** for the two existing National Parks 'Sutjeska' and 'Kozara' and the existing forest reserves 'Janj' and 'Lom'. In addition, new feasibility studies were prepared to review opportunities to expand existing protected areas and potential new protected areas. During preparation of these documents, various models of how to spread and manage protected areas were drafted and discussed, new protection zones were established, with different protection regimes in accordance with the Republic of Srpska Law on Nature Protection ("RS Official Gazette", No. 113/08), which, depending on the defined protection regime, were classified into the appropriate IUCN category. Final management plans worked out in detail possible models for managing protected areas involved in the project and a decision, to choose the best in the current situation, was made. Also, in these management plans, possibilities of future financing of protected areas were discussed in detail. The management plans developed and implemented a financing model that foresees diversification and the ratio of funding sources.

Within this sub-component, special-purpose areas Physical Plans for NP 'Sutjeska' and 'Kozara' were drafted. Since Spatial Plan of the Republic of Srpska defined use policy and land management in national parks by 2015, with an emphasis on the tourism operation, it was logical to make spatial plans for these parks in the framework of this project. The aim was to set rules of sustainable development and use of the protected area by these spatial plans. Before these spatial plans for area of NP 'Sutjeska', the last spatial plan was made in 1986, while for area of NP 'Kozara', no spatial planning documentation was ever made.

Sub-component 1b): The environmental and assessment of protected areas management. One of the key elements for the realization of the project was to ensure the adoption and widespread use of the instrument for Protected Areas Management Effectiveness (PAME), in order to be able to carry out assessments of management effectiveness of protected areas. Training for use of PAME tool involved 16 staff involved in the management of protected areas, including managing directors and their staff, representatives of JP Forestry "Sume RS" and representatives of the Institute for the Protection of the Cultural-Historical Heritage of RS. Training was held in NP 'Kozara'' and consisted of three parts: interactive presentations, group work and discussions and conclusions. As part of this training, the participants reviewed PAME tool and adapted it for local use. The process of discussions resulted in a conclusion that the list of threats should be expanded and that new threats should be added (the use of chemicals and proprietary rights, such as the lack of clear documentation, owners' conflicts, conflicts of interest and political lobbies). This training also led to the conclusion that different tools for monitoring the effectiveness of the management of national parks and forest reserves should be developed.

The held training accomplished its main objective, i.e., improving of general understanding among managers and their staff and other relevant participants of PAME tool for monitoring of Protected Areas Management Effectiveness.

This tool for monitoring the implementation and use in the decision-making process represented one of the key performance indicators for the first component of the project. It was also one of the conditions for design of the next study projects that had been planned for implementation under this sub-component of the project (Study on ecological baseline assessment of protected areas of RS and Taxonomic and Geographical Assessment of Species of Republic of Srpska).

The project has **established a system of Monitoring and evaluation (M&E)**, both for protected areas, and the project itself.

This included support for the initial assessment of the environmental condition that was used as an input for the planning of protected areas management and decision making, as well as for monitoring the state of biodiversity and monitoring of key habitats and species. During the implementation of this sub-component two very important projects for biodiversity of Republic of Srpska were implemented:

- Study on ecological baseline assessment of protected areas of RS,
- Study: Taxonomic and Geographical Assessment of Species in Preparation Compiling of the Red List of Fauna and Flora of Republic of Srpska.

Actual results of these projects fully meet the objectives of this sub-component of FMPAP project.

The implementation of project to design **Study on ecological baseline assessment of protected areas of the RS** through fieldwork collected many of the data, on the basis of which the initial environmental database for all four project sites was formed. This ecological database represents consolidation and amendment of the literature with data obtained in field work in the projected areas. The database contains information on the presence of certain species and their habitats for all four project sites, status indicators and identified threats in specific locations. The very architecture of this database and the data in it are high-quality baseline for continued work on the impact analyses and defining of measures to eliminate or mitigate any negative impact on the biodiversity of the four protected areas.

By implementation of project **Study of Taxonomic and Geographical Assessment of Species in Preparation Compiling of the Red List of Fauna and Flora of Republic of Srpska**, a complete range of distribution of potentially endangered species of flora and fauna in the Republic of Srpska was obtained.

A preliminary list of endangered species of flora and fauna has been prepared based on review of relevant literature from different fields, present specific knowledge and experience of the experts, the legislation in force in the Republic of Srpska and Bosnia and Herzegovina, international conventions (Bern, Bonn, Washington Convention, Habitats Directive, IUCN list of globally threatened species, CITES, EMERALD network, etc.) and the available literature data on endangered species.

Based on the obtained preliminary list of endangered species of flora and fauna, it is now possible to determine the share in the distribution of endangered species in the whole country, in relation to their distribution in the current and future potentially protected areas.

This is achieved by creating a comprehensive database, made in a geographical information system (GIS). This GIS database will serve as a starting point for all future research and protection of species and habitats.

In addition to this, within the framework of this project, a methodology for future categorization of endangered species has been prepared, in accordance with national legislation and internationally accepted criteria for classification of endangered species. This project sets the basis and defines the methodology of making Republic of Srpska Red List of flora and fauna.

The project has, due to all of the above, contributed to strengthening of the capacity for biodiversity conservation and sustainable management at local and entity level. At the entity

level, the project has contributed to building the capacity of the Ministry in charge of environmental protection, so that this institution will be able to provide leadership in preserving the biodiversity of the Republic of Srpska in the near future.

<u>Sub-component 1c): Facilities in protected areas.</u> The project has funded the **provision of technical and material resources** needed for business management of protected areas. Within this sub-component of the project, 13 contracts were implemented, involving the procurement of IT infrastructure (software and hardware), passenger and utility vehicles, tractors, vehicles with water tanks for fire-fighting and the necessary fire-fighting equipment, weather stations, containers for disposal and waste collection, clothing and footwear. All purchased technical and material resources were evenly distributed in all four protected areas, while the portion was retained for the material equipping of PMU.

The project has provided support for the rehabilitation of existing and **construction of new infrastructure** necessary for the improvement of the existing protected areas and the establishment of the newly-formed protected areas. Generally it is so-called "soft" infrastructure, improving of existing trails, development of new trails, setting the marks, resting areas, marking the boundaries of the park, the entrance points of protected areas, etc. Within this sub-component of the project, construction and equipping of the info center in NP 'Kozara', wooden cabins for visitors and info centre in Sipovo, benches, covered resting areas and jogging trails in Drinic, were financed. The result of these project activities is that these investments improved the products and services that protected areas now offer and thereby increased revenues from its own activities, such as entrance fees, souvenirs, etc.

✓ Component 2: Capacities and support for biodiversity protection. This component of the project was focused on strengthening the institutions responsible for the planning, establishment and management of protected areas.

<u>Sub-component 2a): The development of the institutional capacity.</u> Within this sub-component of the project, three projects for education and training for protected areas managers and decision makers in relevant institutions Republic of Srpska were implemented:

- Training on the Business Planning for Sustainable Protected areas in the RS,
- Trainings for the PA managers and institutions, and
- Study tours

Training and technical assistance was focused on building competence in such areas as: management based on an ecosystem that focuses on adaptive management: integration of environmental, economic and social aspects and sustainability, business planning with a focus on financial sustainability and marketing of protected areas as quality destination; field skills in areas such as patrolling, community engagement, managing visitors and translation. These results are achieved by implementing **Training on the Business Planning for Sustainable Protected areas in the RS**.

This training was attended by the representatives of the Ministry of Environment, Forestry and Finance, whose competences are correlated with natural resources, as well as members of the National Parks' management. Participants of this training developed a pragmatic approach in the development of business plans, based on modern concepts, accepted by most financial and micro-financial institutions. The concept of development of business plan for protected areas, took into account both their current financial situation (e.g., annual income, wages, costs), as well as the existing decision-making process on the approval or rejection of potential development projects. Since this approach relies on modern theories of management and entrepreneurship, the training was attended by participants with a reasonable basis for the successful implementation of activities and projects which are made in business plans.

During this training the participants:

- gained an understanding of the essential concepts of business planning, and specific business planning in protected areas;
- received information about the key elements of business ideas and ways of their realization;
- were trained to identify and adopt the most important elements of business planning in the management of protected areas, using the appropriate forms and criteria;
- received information about appropriate sources of short-term and especially long-term sources of financing;
- received insight into the basic motivational factors that influence the development of business plans for protected areas.

Given the critical role of the forestry and tourism sector, coaching and training projects covered employees in these sectors.

This project also funded building of capacity in the respective RS Ministry of Spatial Planning, Construction and Environment, which is responsible for the management of protected areas, as well as the Republic Institute for the Protection of the Cultural-Historical Heritage of RS, responsible for the protection, study and proposing extensions of existing and proclamation of new protected areas. Implementation of these project activities made these institutions qualified for providing stronger leadership in order to be prepared for the convergence with the EU and to strengthen regional cooperation.

<u>Sub-component 2b): Programs for raising public awareness.</u> The project has also provided support for the **development and implementation of programs to reach the public** in order to raise public awareness on the protection of biodiversity and protected areas. To this end, under this sub-component, a campaign for improvement and raising public awareness on protected areas in the Republic of Srpska was implemented.

Public awareness campaign, through the media campaign and direct work with local communities pointed to the value of biological diversity, the need to preserve and expand protected areas, as well as the need to establish links with similar international protected areas. During the implementation of this campaign, activities that contribute to a better understanding and valuation of both national parks (as one type of protected areas), and the existence and importance of the rain forest reserves (as specific type of protected areas), were developed.

All activities under this campaign were conducted with the aim to increase the overall level of knowledge of the local population about the principles and benefits of sustainable management of protected areas, while taking care to ensure optimal input information for key participants.

<u>Sub-component 2c): Project Management and Project Monitoring.</u> Within this sub-component limited funding was provided for project management and operational costs; the meeting of the Committee for directing the project at the state level and project monitoring. Consequently, many specialized activities where required specific skills were needed during a short period of time at periodic intervals, such as drafting terms of reference for specific sub-project activities, were implemented through the engagement of individual consultants. By selecting the consultant for the implementation of occasional specific actions, the capacities were built and institutional strengthening in all components of the project PMU on various tasks.

Since at the beginning of the project implementation PMU within MSPCEE did not have all necessary staff, the financial management and procurement specialists had been appointed in this PMU. RS PMU has also signed a memorandum of understanding (MOU) with local experts for financial management and procurement who have already had experience with projects financed

by the Bank. These experienced professionals: (a) established systems of financial management and procurement in MSPCEE PMU, (b) provided financial management and procurement services and in-service training of PMU staff during the first three months after project effectiveness, and (c) provided advice to the staff of PMU. As a result of this cooperation, a financial manual was prepared.

✓ Component 3: Local initiatives for biodiversity protection.

The implementation of the FMPAP project provided support for efforts to protect biodiversity to participants who would promote the advanced management of natural resources and generate economic benefits for the local communities involved in the management of protected areas. Proposed projects for co-financing had to prove that they would lead to the alleviation of significant threats to global biodiversity or that they would contribute to the monitoring of biodiversity, and to include arrangements for the assessment of their impacts.

Also, the proposed projects had to be meet one of the following three criteria: (i) generate revenues compatible with protected areas, e.g., activities of eco-tourism (accommodation in <u>handicraft business</u>, training guides, building tracks), sustainable exploitation of forest by-products, agro-ecological enterprises, help to eco-tourism and agriculture for obtaining environmental certifications, (ii) protection of habitats and landscapes, for example, restoration of sites and landscapes, participatory management of grazing, and (iii) sustainable management of the environment, e.g., waste management, promotion of alternative energy. To ensure sustainability, the project has provided technical assistance to facilitate the design and selection of proposals of sub-projects and to assist in the monitoring of their implementation.

Users were asked to give their own contribution of at least 20 percent of the total budget of the sub-project. The proposed sub-projects were identified and selected through public consultations, including local entities, taking into account the possibilities for solving the constraints resulting from the management of protected areas.

A total of six grants in the amount of US\$ 20,000 and 100,000 were provided. Protected area of NP 'Kozara' has been awarded two grants:

- "The organization of schools in the countryside in order to protect the biodiversity of the National Park Kozara" to Mountaineering society "Klekovaca", Prijedor,
- Project of habitat and landscapes conservation "In the future over Tisa", Ecological Society "Kozara" in Prijedor

Protected area of forest reserve 'Lom' has been awarded two grants:

- "Beekeeping in a protected area of rainforest reserve "Lom" and earning income from a protected area", to Family agricultural farm, user Novo Pecanac, Drinic.
- "Building of Eco-center and the creation of tourism offer", Petrovac municipality, to the Municipal administrative department, Drinic.

In NP 'Sutjeska' grant has been awarded to Association for help in emergency situations, "Wolf", Foca for sub-project "Cleaning and ranching (restocking) of Crno Jezero and Sutjeska". In FR 'Janj' grant has been awarded to Tourist Organization of Sipovo municipality, Sipovo for subproject "Preserving, real improvement, sustainable use and valorisation of biodiversity".

Implementation of the complete project, at Bosnia and Herzegovina level, in Implementation Status & Results (ISR) was assessed mainly with grade Moderately Satisfactory, with periodic grades of Moderately Unsatisfactory, but with the project approaching the closing date and the accelerated implementation of initiated activities, it was rated Satisfactory.

During the implementation of individual sub-projects, there were also some delays and deviations from the dynamics of the implementation of certain activities, which was negotiated during the negotiations. Delays in the implementation of individual contracts entailed the start of implementation of other contracts too. The most prominent example was the delay in the implementation of projects in the sub-component 1c): Objects in protected areas whose implementation was scheduled to begin only after management plans were made and adopted. Management plans were supposed to identify the need for these facilities in protected areas on the basis of which projects in the sub-component 1c) were supposed to be implemented.

However, delay in the design of Management plans, delayed the implementation of projects in the sub-component 1c). Delay in preparation of protected areas management plans has occurred because Ministry of Spatial Planning, Civil Engineering and Ecology appointed a committee for monitoring of preparation of management plans whose members were representatives of all institutions relevant for protected areas, including representatives of national parks management, forestry companies, local communities etc. Due to large number of members and need to reach consensus, decision making and adoption of the consultant's reports were long and complex, while TOR has not provided different way of monitoring consultant's work. This was the main reason for poor ratings of the project implementation during this period. Having decided that the implementation of projects in the sub-component 1c) does not need to wait for the completion of the Management plans, their implementation started.

Assessment of the operational experience

If one considers the number of similar projects realized by RS PMU, the experience gained with the implementation of this project is very valuable. By implementing this project, members of the PMU have mastered many skills of writing and publishing calls for funds, reporting skills, writing project tasks and gained extensive knowledge of the bank's procedures and manner of implementation of projects.

In addition, many lessons were learned during the implementation of specific project activities, which are described in detail in the next item, and which will be used in the implementation of future similar projects to protect biodiversity and natural and cultural values of the Republic of Srpska in general.

Thanks to this project, **RS** PMU is formed, and personnel wise and materially capable of performing all necessary functions.

Evaluation of the borrower's own performance during the preparation and implementation of the operation, with special emphasis on lessons learned that may be helpful in the future

RS PMU, at the beginning of the project, did not have the necessary capacity for full implementation of all project activities. This was particularly evident in financial management and procurement. Due to this fact, in the beginning of the project implementation, additional efforts had to be made to fully enable the PMU and to achieve its full functionality. Thanks to the full support of the Bank's team, this PMU has reached full functionality. The fact that has significantly contributed to this is that during the design of the project one sub-component, which was focused exclusively on project management and project monitoring, was envisaged.

During the project implementation RS PMU team tried to ensure the achievement of project development objective. In this context, RS PMU team was trying to successfully prepare, contract and implement all the planned sub-projects from all sub-components of the project.

The PMU promptly responded to all the requirements of the Bank by participating in joint events and by providing all requested information. Reporting to the bank on the implementation of project activities was always in an appropriate form, containing complete and required information without delay.

Procurement and financial management projects were accessed on time, so that all planned project activities were contracted in accordance with the approved procurement plan.

By participating in this project implementation RS PMU has learned more lessons that will be of great benefit in the future. Benefits from the lessons learned will not be only for PMU team, but also for the relevant Ministry, as well as public institutions, agencies and institutes involved in the protection of nature and management of protected areas, as well as many other participants in the implementation of specific project activities.

Below is a review of the **experience gained and lessons learned** with explanations:

✓ Big control bodies of project implementation hinder the realization and increase the likelihood of conflict.

During realization of the project of creating Management plans for protected areas, including the development of Spatial plans for special purpose areas, we have learned that if a control body is formed, the potential for conflicts and conflict of interest with many members dramatically increases with the achieved results of project activities. This further leads to complications in the implementation of planned activities, "not meeting deadlines", increasing costs and uncertain end of the project. Accordingly, we have learned that it is better and more efficient to form smaller control bodies for the project activities implementation, and put more emphasis on intensive participation of key participant in the implementation of project activities itself. This would give the possibility to all participants to achieve their interests through actual implementation of the project itself, instead of being judges for the results of project activities.

✓ The beginning of projects implementation should not be conditioned by completion of other projects.

In the case of projects implementation delay in the sub-component 1c) due to waiting completion of management plans design for protected areas, we have learned that this is a bad practice and if possible it should be avoided in the future. This is especially true for large projects, projects to be implemented in several phases and for which there is an increased risk that there could be some delays in their implementation.

✓ It is necessary to invest more in equipment and infrastructure of protected areas. Infrastructure of protected areas makes the basis for quality and sustainable management of protected areas, as well as appropriate protection. The implementation of projects in the subcomponent 1c) and equipping of protected areas with fire-fighting equipment, off-road vehicles for ranger services, corresponding infrastructure taught us that in this way a lot more is done in improving the management and protection of the protected area, reducing the pressures and threats to biodiversity than it is achieved by investing in training and education.

By investing in appropriate infrastructure of protected areas sustainable tourism exploitation of protected areas is implemented, which accomplishes main objectives of the FMPAP project related to increase in income from own activities, as well as enabling local people to engage in some form of economic activity using the proximity of protected areas as an advantage.

Generally, issues such as infrastructure local communities in or in the vicinity of protected areas, transportation, construction projects, schemes of settlements and the creation of renewable energy are not considered at the community level, but are rather left the decision-making scheme from top to bottom, within which community participation is often omitted, omitting, therefore, the sustainability aspects.

The community can and should be an integral part of the identity of protected areas. It should be a mutually beneficial relationship that also supports the principles of nature conservation and sustainable living style of communities in and around protected areas, but it is, above all, necessary to provide investment in infrastructure which opens the full potential of protected areas.

✓ Without additional education and information, both general and professional public on protected areas, a great resistance is encountered with the establishment of new or expansion of existing PA.

In the Republic of Srpska, there have been two national parks for more than 60 years. The public has an awareness of the existence of these parks, but there is little knowledge about categories and protection regimes in them. There is even less knowledge with general and professional public about other protected areas. In general, very little is known about types of protected areas, categories and protection regimes in them. The prevailing opinion is that the protection of some areas prohibits any activity in them, which is automatically considered a loss of territory, natural and material resources, which directly threatens the livelihood of local communities in the area. In addition to this problem, during the implementation of the project, we have learned that it is difficult to establish new or expand existing protected areas, if it is not possible to achieve certain economic benefits from them, i.e., exploit them for tourism or other purpose. There is no awareness of indirect life benefits in/around environment of protected areas, such as: opportunities to produce eco-friendly food in them, the use of a variety of additional sources of funding from various projects in protected areas from EU funds or certain donor funds. In the course of this project we have learned that for any activities related to the establishment of new or expansion of existing protected areas detailed educational-informative activities of civil society and local communities must be pre- planned and carried out, in places where protected areas are proposed, or where they will be extended.

Due to the importance of described learned lessons and the issues we encountered during the implementation of this project in the next chapter "Description of the proposed arrangements for future operation of the project", we have proposed that in future, attempts should be done to continue, under this project already started campaign for the promotion and raising the level of public awareness of protected areas in the Republic of Srpska.

✓ Existing models for managing or monitoring of management effectiveness must be tailored specifically for each protected area.

This is a lesson that was learned during maintenance of Training on the Protected Areas Management Effectiveness Tracking Tool / PAME and during the preparation of Management plans for protected areas. The differences in the characteristics of different protected areas such as national parks, strict nature reserves or areas of resource management require a completely different approach to strategic management and therefore it is necessary to adapted already available models of management or monitoring the effectiveness of protected areas management to the particular nature and purpose of the protected area. Lists of threats of protected areas or sustainable economic exploitation also differ among individual protected areas and it is necessary to invest efforts to revise existing available models and adjust them to the real situation on the ground.

✓ The availability of data from recent scientific studies of biodiversity of the Republic of Srpska is poor

In the last twenty years, there have been few organized, systematic studies of RS flora and fauna. Systematized data on all studies do not exist, except for individual findings. Data from the few conducted studies is mainly poorly accessible.

There has never been an obligation to leave all data on research in the administration of protected areas or institutions that have allowed research on a specific location. If you want to get to the results of research, mainly, there is first a question regarding financial compensation for the transfer of the requested data by the authors of the study. All this forces the authors to use the old literature data, which due to insufficient volume of recent studies have not been innovated and supplemented.

Consequently, future projects will need to be based on more recent field research, and less on the available literature data. This is significant because already in the process of implementation of this project, i.e., specific projects we have been working a lot with available literature data, which is partially innovated and amended, and all future studies should be based on the results obtained in this project (environmental databases created during the implementation of the project Ecological Baseline Assessment of protected areas of the RS and the preliminary list and GIS database of endangered species of flora and fauna resulting from implementation of Taxonomic and Geographical Assessment of Species of Republic of Srpska project).

Due to the importance of this lessons learned, i.e., recognized problem in the next chapter "Description of the proposed arrangements for future operation of the project", we have proposed that in future involvement of the Bank, regarding the protection and enhancement of biodiversity of the Republic of Srpska, attempts are made to develop projects which would enhance IT infrastructure that would encompass the systematic organization, implementation, and finally the availability of data on scientific studies of biodiversity of the Republic of Srpska.

Evaluation of the performance of the Bank, any cofinanciers, or other partners during the preparation and implementation of the operation, including the effectiveness of their relationships, with special emphasis on lessons learned

The Bank has made a significant contribution in defining priorities, preparations and evaluation of projects, monitoring and supervision of individual contracts and the entire project. In addition, Bank's team, during the whole period of the project, provided constant support and professional consulting to RS PMU team.

Also, the Bank team promptly responded to all the queries regarding professional or technical assistance, requirements for evaluation and approval. With this approach, the Bank has helped in solving all the issues that have arisen during the implementation and helped in making implementation of the project faster and more efficient.

The design of the project, by which one entire sub-component was focused exclusively on project management and project monitoring, enabled the quality training to PMU for full functionality in the implementation of all other planned activities.

During the project implementation RS PMU team has adopted many of the skills that are necessary for doing business with the Bank and implementation of the project in which the Bank is involved. Many lessons were learned, as follows:

✓ For projects that are financially supported, it is necessary to ensure proper management of the implementation and monitoring of project activities.

In order to ensure the achievement of the objectives of the funded project, it is necessary to establish proper project management with timely and well-coordinated actions. These actions imply the timely procurement procedures, contracting, implementation of commitments, expenditure of funds and mandatory reporting during project implementation. This lesson learned is of the importance to the responsible Ministry, to which RS PMU belong, from the standpoint of the future financing of protected areas and other projects from the field of nature protection.

Description of the proposed arrangements for future operation of the project.

Implementation of FMPAP led to the actualization of the project development and global environmental objective of strengthening the institutional and technical capacity for sustainable management of protected areas and natural resources and the expansion of the network of protected areas. The project has implemented many activities in order to achieve the project objective. Most of implemented activities achieved their projected goals.

However, for the sustainability of the achieved results and goals, in the future, it will be necessary to continue some of the activities started by this project. To this end, we will try to briefly present **our proposals for future arrangements** that might be supported by the Bank:

✓ Continuation of Campaign for improvement and raising public awareness level regarding protected areas in the Republic of Srpska.

One of the lessons learned during this project, is that resistance is mainly met in the public when dealing with or talking about the establishment of new or expansion of existing protected areas. The analysis of the causes of this resistance brought us to the conclusion that the public is not sufficiently informed about the types of protected areas, categories and protection regimes in them, i.e., what the local community gains from a protected area in its territory.

During the realization of FMPAP, a Campaign for the promotion and raising public awareness of protected areas in the Republic of Srpska was implemented. During the development of this campaign the public was informed about the existing protected areas, their essential role in the protection of natural values for which they are declared as such, efforts that must be put in to facilitate improvement that protection and increase the efficiency of management. The public campaign was partially successful in bringing public knowledge closer to the protected areas, but without further continuation of the campaign in this modified form the achieved results will not have a long-term effect.

Therefore, we use this space and opportunity to emphasize the need to continue funding of the project that would be aimed at informing and educating both general and professional public about protected areas, the benefits of life in/or surrounding protected areas (opportunities to produce ecologically healthy food in them, the use of a variety of additional financing sources of projects in protected areas from certain donor or EU funds, etc.).

✓ Continued investment in equipment and infrastructure of protected areas.

As we have already pointed out in part of the lessons learned during the implementation of the FMPAP project - by investing in infrastructure of protected areas, multiple targets in the field of efficient management of protected areas are achieved, reductions of threats to biodiversity, as well as enabling sustainable economic exploitation of protected areas. Based on these lessons learned we suggest that the trend of investment in the infrastructure of protected areas continues in future.

In the future, it is necessary to invest in road infrastructure in order to enhance the accessibility of protected areas, municipal infrastructure in order to ensure a safe water supply in protected areas, drainage and wastewater treatment and collection of waste in order to protect the environment in protected areas, as well as make an investment in tourism infrastructure within each protected area in order to increase and diversify tourism services in protected areas.

✓ Construction of Central scientific-research biodiversity database of Republic of Srpska.

During the realization of FMPAP we found out that in the last twenty years, there were few organized, systematic studies of flora and fauna in RS. In addition, data from these studies are generally poorly available, because it was never required for all data on research to be left in the administrations of protected areas or institutions that have allowed research on a particular location.

For the future operation of the project, we suggest activities that would enhance IT infrastructure that would encompass the systematic organization, implementation and ultimately the availability of data for scientific research of Republic of Srpska biodiversity. In Europe, information systems on research activities are being built for several decades already, with the generic name of CRIS (Current Research Information Systems). Information system of research activity recently came to life in the Republic of Srpska (E-CRIS.RS). E-CRIS.RS is managed by the National E-CRIS center of the Ministry of Science and Technology. National E-CRIS.RS currently only contains a database of research organizations and researchers, and a database of research projects has not yet been established, and with this alone nor the results of these projects.

Future projects should support the creation of a central database of all existing and future scientific research projects of Republic of Srpska biodiversity. This may be an upgrade or an expansion of the existing E-CRIS.RS database at the Ministry of Science and Technology, or creating a new database, specific only to the field of biodiversity at the Ministry of Spatial Planning, Civil Engineering and Ecology, or at the Institute for Protection of Cultural, Historical and Natural heritage of RS.

In any case, one of the conditions of financial support of such a project should be the availability of research data, whether only to researchers and scientific research organizations, which are registered in that database, the administrations of protected areas and institutions that have allowed research on a specific location or to everybody, publicly available data.

Annex 8. Comments of Cofinanciers and Other Partners/Stakeholders

N/A

Annex 9. List of Supporting Documents

Project Appraisal Document (May 8, 2008, Report No. 39952) Financing Agreement (December 18, 2008) GEF Grant Agreement (April 16, 2008) Implementation Support Mission Aide-memoires (2008-2013) Implementation Status and Results Reports (2008-2013) Procurement Plans (2008-2013) TORs of various consulting assignments FMPAP M&E-Progress Reports PAME Tracking Tools RS Project Completion Report (December 2013) FBiH Project Completion Report (January 2014) FBiH Facilitation Assistance for Sub-projects Preparation Under the Project Component: "Local Initiatives in Biodiversity Conservation" – August 2013 RS Facilitation Assistance for Sub-projects Preparation Under the Project Component: "Local Initiatives in Biodiversity Conservation" – October 2013

FBiH 'A Quick Social Evaluation of the Project for the Protection of Forest and Mountainous Areas in B&H – Follow-up Study' – October 2013

