

Document of  
The World Bank

Report No: ICR0000799

IMPLEMENTATION COMPLETION AND RESULTS REPORT  
(TF-50539 TF-53242)

ON A

GLOBAL ENVIRONMENT FACILITY GRANT

IN THE AMOUNT OF SDR 4.10 MILLION  
(US\$5.07 MILLION EQUIVALENT)

TO THE

REPUBLIC OF CROATIA

FOR A

KARST ECOSYSTEM CONSERVATION PROJECT

June 2008

Sustainable Development Sector Unit  
South Central Europe Country Unit  
Europe and Central Asia Region

CURRENCY EQUIVALENTS  
(Exchange Rate Effective May 25 2008)

Currency Unit = Kuna  
1 Kuna = US\$0.21  
1 US\$ = 4.66 Kuna

FISCAL YEAR  
January 1 – December 31

ABBREVIATIONS AND ACRONYMS

BSAP	Biodiversity Strategic Action Plan	M&E	Evaluation and Monitoring
CAS	Country Assistance Strategy	MEPP	Ministry of Environmental Protection and Physical Planning
CARDS	Community Assistance for Reconstruction, Development, and Stabilization	MOAF	Ministry of Agriculture and Forestry
CRRG	Conservation and Rural Revitalization Grants	MoC	Ministry of Culture
CSOs	Civil Society Organizations	MP	Management Plan
DO	Development Objective	Natura	Ecological Network in European Union Territory
DOI	Department of the Interior	2000	
E-6	European 6 Hiking Trail	NEAP	National Environmental Action Plan
ECSSD	Europe and Central Asia Sustainable Development Unit	NGO	Non-Governmental Organization
EMP	Environment Management Plan	NP	National Park
EU	European Union	NPS	United States National Park Service
FMR	Financial Management Report	OP	Operational Program
GEF	Global Environmental Facility	PAD	Project Appraisal Document
GIS	Geographical Information System	PDF-B	Project Development Fund B
HQ	Headquarters	PIU	Project Implementation Unit
HRK	Croatian Kuna	SA	Social Assessment
HS	Hrvatske Šume - Croatian Forest Company	SOE	Statement of Expenditure
HV	Hrvatske Vode - Croatian Waters	TF	Trust Fund
IBRD	International Bank for Reconstruction and Development	UNESCO	United Nations Educational, Scientific and Cultural Organization
ICR	Implementation Completion Report	USAID	United States Agency for International Development
IUCN	International Union for Conservation of Nature	WWII	World War II
KEC	Karst Ecosystem Conservation	WWF	World Wildlife Fund
LAB	Local Advisory Board		

Vice President: Shigeo Katsu

Country Director: Orsalia Kalantzopoulos

Sector Manager: John Kellenberg

Project Team Leader: Karin Shepardson

ICR Team Leader Karin Shepardson

**CROATIA**  
**Karst Ecosystem Conservation Project**

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MAP IBRD No. 31890

<b>A. Basic Information</b>			
Country:	Croatia	Project Name:	Karst Ecosystem Conservation GEF Project
Project ID:	P042014	L/C/TF Number(s):	TF-50539,TF-53242
ICR Date:	06/26/2008	ICR Type:	Core ICR
Lending Instrument:	SIL	Borrower:	GOVERNMENT OF CROATIA
Original Total Commitment:	USD 5.1M	Disbursed Amount:	USD 5.0M
<b>Environmental Category: B</b>		<b>Global Focal Area: B</b>	
<b>Implementing Agencies:</b> Ministry of Culture			
<b>Cofinanciers and Other External Partners:</b> Norway Ministry of Foreign Affairs US Agency for International Development (USAID) Government of the Netherlands			

<b>B. Key Dates</b>				
Process	Date	Process	Original Date	Revised / Actual Date(s)
Concept Review:	06/08/2000	Effectiveness:	09/17/2002	09/18/2002
Appraisal:	11/26/2001	Restructuring(s):		
Approval:	05/23/2002	Mid-term Review:	04/04/2005	03/09/2005
		Closing:	12/31/2007	12/31/2007

<b>C. Ratings Summary</b>	
<b>C.1 Performance Rating by ICR</b>	
Outcomes:	Highly Satisfactory
Risk to Global Environment Outcome	Moderate
Bank Performance:	Satisfactory
Borrower Performance:	Highly Satisfactory

<b>C.2 Detailed Ratings of Bank and Borrower Performance</b>			
Bank	Ratings	Borrower	Ratings
Quality at Entry:	Satisfactory	Government:	Highly Satisfactory
Quality of Supervision:	Satisfactory	Implementing Agency/Agencies:	Highly Satisfactory
<b>Overall Bank Performance:</b>	Satisfactory	<b>Overall Borrower Performance:</b>	Highly Satisfactory

<b>C.3 Quality at Entry and Implementation Performance Indicators</b>			
<b>Implementation Performance</b>	<b>Indicators</b>	<b>QAG Assessments (if any)</b>	<b>Rating</b>
Potential Problem Project at any time (Yes/No):	No	Quality at Entry (QEA):	None
Problem Project at any time (Yes/No):	No	Quality of Supervision (QSA):	None
GEO rating before Closing/Inactive status	Highly Satisfactory		

<b>D. Sector and Theme Codes</b>		
	<b>Original</b>	<b>Actual</b>
<b>Sector Code (as % of total Bank financing)</b>		
Central government administration	30	30
General agriculture, fishing and forestry sector	41	41
Law and justice	9	9
Other industry	12	12
Sub-national government administration	8	8
<b>Theme Code (Primary/Secondary)</b>		
Biodiversity	Primary	Primary
Environmental policies and institutions	Primary	Primary
Export development and competitiveness	Primary	Secondary
Law reform	Secondary	Secondary
Participation and civic engagement	Primary	Primary

<b>E. Bank Staff</b>		
<b>Positions</b>	<b>At ICR</b>	<b>At Approval</b>
Vice President:	Shigeo Katsu	Johannes F. Linn
Country Director:	Orsalia Kalantzopoulos	Andrew N. Vorkink
Sector Manager:	John V. Kellenberg	Laura Tuck
Project Team Leader:	Karin Shepardson	Rita Klees
ICR Team Leader:	Karin Shepardson	
ICR Primary Author:	Karin Shepardson	
	Vera Dugandzic	

## F. Results Framework Analysis

### Global Environment Objectives (GEO) and Key Indicators(as approved)

Project Development Objective is to: (i) strengthen institutional and technical capacity for biodiversity conservation of the Karst environment; (ii) integrate biodiversity conservation into physical planning and sectoral strategies; (iii) strengthen management of protected areas; and (iv) promote entrepreneurial and tourism activities which support sustainable natural resource use and conservation.

Global Environment Objective: To conserve biological diversity and ecological integrity of the karst ecosystems in Croatia particularl in the Dinarid mountain range which includes an estimated 8000 caves- among the deepest and most extensive in the world.

### Revised Global Environment Objectives (as approved by original approving authority) and Key Indicators and reasons/justifications

Global environment objectives and key indicators were not revised.

The Project Development Objective stated is taken from the Grant Agreement

Note: To assess achievement of the GEO, the key performance indicators as described are taken from the PAD and were used in ISR reporting based on most recent updates at the mid-term review (see Annex 10).

#### (a) GEO Indicator(s)

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
<b>Indicator 1 :</b>	Completion of PA Management Plans consistent with international best practice.			
Value (quantitative or Qualitative)	0	5 completed PA management plans		All 5 PA management plans are completed and legally in effect.
Date achieved	09/22/2002	09/22/2005		12/20/2007
Comments (incl. % achievement)	100% and confirmed to be consistent with international best practice			
<b>Indicator 2 :</b>	An integrated sustainable ecological monitoring system is in place and in use.			
Value (quantitative or Qualitative)	0 %	Baseline inventory completed; rangers in all 5 parks inputting data		Baseline inventory and mapping of BD database complete; system installed in

				Ministry of Culture with all parks and rangers/ staff inputting data.
Date achieved	09/22/2002	09/22/2005		12/20/2007
Comments (incl. % achievement)	100% - 12 training sessions conducted on database use for staff.			
<b>Indicator 3 :</b>	Conservation and Rural Revitalization Grants (CRRG) program directly contributes to adoption of more ecological sustainable land and natural resource use practices.			
Value (quantitative or Qualitative)	0%	70% of the CRRG projects include contractual provisions to adopt specific improved practices and 100% of these show clear progress towards fulfilling those commitments.		70% of CRRG project grant contracts include commitment by beneficiary to adopt specific improved practices. From the 70% with these commitments, 86% successfully completed showing clear progress / 14% were cancelled.
Date achieved	09/22/2002	06/22/2005		12/18/2007
Comments (incl. % achievement)	100% target met (with dropped grants excluded).			

**(b) Intermediate Outcome Indicator(s)**

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
<b>Indicator 1 :</b>	Each of the 5 parks is able to provide visitors with a diversity of information and interpretation (I/II) products, which reflect the training provided under the project.			
Value (quantitative or Qualitative)	0 I/II products	Each park has produced 3-4 different I/II products		All parks have 3 or more new materials: guide books, childrens book, calendar, posters, outdoor panels, leaflets, maps.
Date achieved	09/22/2005	09/22/2005		12/18/2007

Comments (incl. % achievement)	100%- target fully met or exceeded by parks. Products were generated as a result of the project training.			
<b>Indicator 2 :</b>	Putting in place a system within each park for tracking trends in visitor satisfaction			
Value (quantitative or Qualitative)	0	Park Managers using the survey at least once a year		First survey executed in all parks for management plan input. Park tourism survey questions were subsequently integrated into annual tourism board surveys and parks are using this data.
Date achieved	09/22/2005	09/22/2005		12/18/2007
Comments (incl. % achievement)	Target Fully Met- 100% Also 6 local tourism training workshops, 2 system wide tourism workshops held.			
<b>Indicator 3 :</b>	Increased and strengthened partnership relating to park management. Number of meetings involving Slovenia and Bosnia.			
Value (quantitative or Qualitative)	0	8 meetings with external partners conducted		Over 8 meetings with external partners focused on international cooperation.
Date achieved	09/22/2002	09/22/2005		12/20/2007
Comments (incl. % achievement)	Proposal for joint hiking trail with Slovenia and Italy (multiple meetings); Plivice meetings with Bosnia and Herzegovina, meeting with Hungary to share database, Austria workshop meeting.			
<b>Indicator 4 :</b>	Number of employed KEC park staff trained in management planning			
Value (quantitative or Qualitative)	0	100 staff trained		66 KEC park staff trained (complete group); over 20 non KEC park staff participated in trainings.
Date achieved	09/22/2002	09/22/2005		12/20/2007
Comments (incl. % achievement)	100% of park staff trained as # of staff was lower than 100 staff estimated and staff from other parks joined the training. Original target -approx. 88% met. Study tours to US and Italy included important training on management			
<b>Indicator 5 :</b>	Expenditures (US\$) on various types of assets (equipment,works) for PA management			
Value (quantitative or Qualitative)	0	US\$1,500,000		US\$2,827,006 - All works and equipment contracts



				fully procured according to workplan (grant and Ministry of Culture contributions).
Date achieved	09/22/2002	09/22/2002		12/18/2007
Comments (incl. % achievement)	186% achieved			

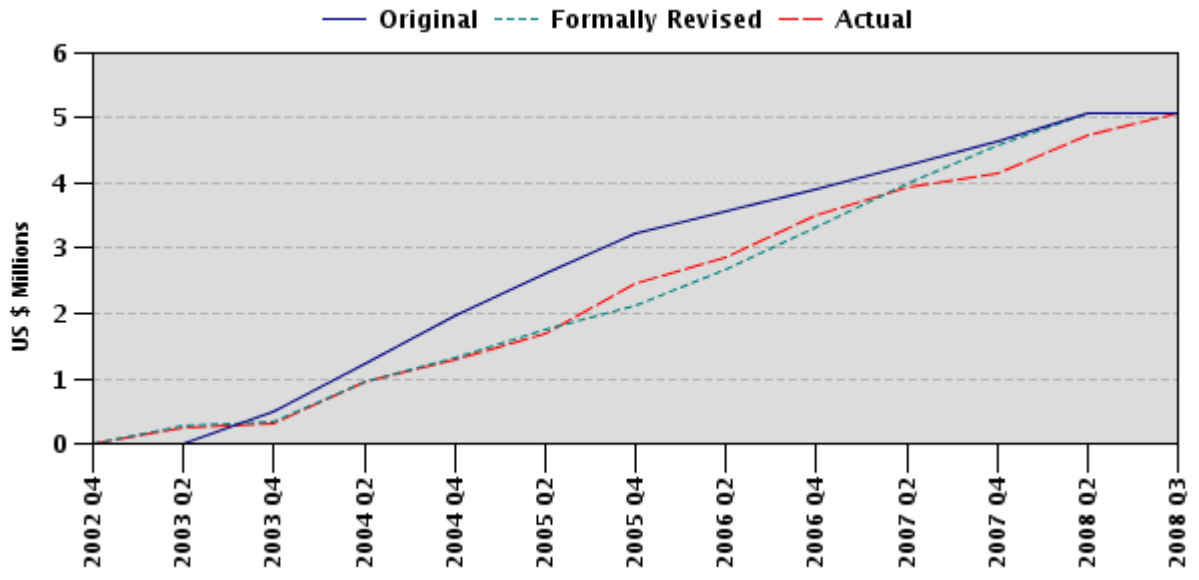
### G. Ratings of Project Performance in ISRs

No.	Date ISR Archived	GEO	IP	Actual Disbursements (USD millions)
1	09/04/2002	Satisfactory	Satisfactory	0.00
2	12/11/2002	Satisfactory	Satisfactory	0.00
3	06/05/2003	Satisfactory	Highly Satisfactory	0.30
4	08/07/2003	Satisfactory	Highly Satisfactory	0.60
5	12/15/2003	Satisfactory	Highly Satisfactory	0.65
6	06/15/2004	Satisfactory	Satisfactory	1.03
7	12/22/2004	Highly Satisfactory	Satisfactory	1.69
8	05/14/2005	Highly Satisfactory	Highly Satisfactory	2.00
9	09/13/2005	Highly Satisfactory	Highly Satisfactory	2.49
10	02/07/2006	Highly Satisfactory	Highly Satisfactory	3.07
11	06/12/2006	Satisfactory	Satisfactory	3.13
12	03/09/2007	Highly Satisfactory	Highly Satisfactory	3.91
13	06/01/2007	Satisfactory	Highly Satisfactory	4.00
14	09/10/2007	Satisfactory	Highly Satisfactory	4.38
15	12/27/2007	Highly Satisfactory	Highly Satisfactory	4.72

### H. Restructuring (if any)

Not Applicable

# I. Disbursement Profile



# 1. Project Context, Global Environment Objectives, and Design

## 1.1 Context at Appraisal

At appraisal, the Country Assistance Strategy (CAS) indicated that Croatia needed to develop and maintain its infrastructure and protect its environment to encourage private sector development. Since tourism, most of which is nature-based, is a key sector for Croatia's economic growth, the country's natural resource base needs to be carefully preserved. In support of these objectives, the CAS recommended that the Bank help the government obtain a Global Environment Facility (GEF) grant for environmental protection in one of the country's major tourist destinations, Plitvice Lakes National Park (NP). The CAS identified high unemployment (19 percent) as one of Croatia's major economic problems; containing poverty was one of four key CAS policy objectives. Unemployment in the project region was identified as among the highest in the country at about 40 percent. Therefore to increase economic development, the project aimed to support local rural initiatives related to sustainable natural resource use, tourism, and biodiversity.

### *Global Operational Strategy/Program Objective Addressed by the Project*

The project supported the objectives of the GEF Biodiversity Operational Programs for coastal, marine and freshwater ecosystems (OP2), mountain ecosystems (OP4) and forest ecosystems (OP3). Activities concentrated on the conservation and sustainable use of natural resources of international importance in the karst region of Croatia, the most mountainous and most heavily forested region (70 percent forested as compared to 38 percent for Croatia as a whole). Freshwater resources of the karst include large underground reservoirs providing a natural buffer for rainwater and water circulation—providing water security for Croatia and the surrounding region.

### *Main Sector Issues and Government Strategy*

Croatia at the time of appraisal was faced with challenges to balance economic development of an impoverished region with conservation of globally significant natural resources. Accelerated economic development, including through tourism, without strong national- and local-level capacity to protect natural resources, threatened to erode Croatia's ability to safeguard its biodiversity. The government was coping with scarce resources and competing interests in dealing with the following obstacles: (i) insufficient capacity within government to conserve biodiversity in the karst region; (ii) lack of collaboration among sectors to incorporate biodiversity conservation into physical planning and sectoral strategies; (iii) a general lack of environmental awareness regarding karst ecosystems; and (iv) a history of limited public participation in the decision-making process. Both the Croatian National Biodiversity Strategic Action Plan (BSAP) and the National Environmental Action Plan (NEAP) identified karst ecosystems as the priority for biodiversity conservation. The project addressed priority actions outlined in the BSAP including: (i) preserve the biological and landscape diversity of the karst region as an area of global value; (ii) improve inventory and monitoring of biodiversity; (iii) raise public awareness; and (iv) participate in regional efforts to manage biodiversity.

Post-war Croatia was on a fast track of economic development, spurred in part by prospects of future EU accession. Historically the tourism industry, once a mainstay of the Croatian economy, was based on mass tourism rather than nature tourism. As the tourism industry rebounded, biodiversity conservation suffered and other sector development projects that typically damage biodiversity, such as roads and hydropower, were also proposed for the project region and seen as key threats. Threats to karst ecosystem biodiversity were not well documented at the time of appraisal due to limited scientific data. The BSAP and NEAP

noted that a lack of systematic inventory and monitoring of the ecosystem and species provided an insufficient basis for determining the nature and magnitude of threats to biodiversity. However, habitat changes and fragmentation, water and air pollution, extensive exploitation of natural resources, and introduction of foreign species had been observed in the project region. Both the subterranean and terrestrial karst ecosystems were known to be fragile, interconnected, and dependent upon a delicate balance among relief, hydrology, climate, and vegetation. The predominant surface ecosystems of natural forest and traditional pastoral land generally buffer the subterranean ecosystems but the effectiveness of this function can be significantly reduced by subtle changes in land use and vegetation cover. For example, land use changes can lead to the rapid influx of water significantly altering the subterranean ecosystems. At the time of appraisal these threats had been partially averted by reduced economic activity during and after the 1991-95 war, but were starting to increase.

### *Global Significance of the Croatian Karst Ecosystem*

Croatia enjoys an unusually rich biodiversity of global significance due to its geography, between the Mediterranean and Central-European continental climatic regions, and its geology, which is predominantly karst. The term "karst" originated in Croatia and applies to a specific landscape and morphology characterized by the presence of limestone or other soluble rocks, where drainage has been largely diverted into subterranean routes. The project focused on the karst region within the Dinarid Mountain range, which runs through Croatia from Slovenia to Bosnia, because its biodiversity is the most globally significant (approximately 9500 square kilometers). The Dinarids include hundreds of sinkholes, chasms, underground streams, and caves. Its estimated 8,000 caves are among the deepest and most extensive in the world and render the region a global hotspot of subterranean biodiversity. These subterranean karst habitats support an ever-increasing list of newly discovered endemic troglodytic (eyeless and adapted for an entirely subterranean existence) species and families. These include one new species, genus, and family of leech *Croatobranthus mestrovi*, which was found in a 1300-meter deep cave in the Velebit Mountain in 1994. Additional unique species found in Croatian karst ecosystems are the only known cave sponge, cave clam, and cave polychaete worm.

Croatia is famous for its karst freshwater ecosystems, which include travertine/tuffa-building communities of microorganisms. The travertine barriers, some estimated to be over 40,000 years old, have led to the spectacular lakes and waterfalls now protected within two national parks, one of which was included in the project, Plitvice Lakes National Park. Large areas of the Dinarids, particularly in the Velebit Mountains, are densely covered by forest communities of beech, fir, spruce, and black pine, a relict alpine sub-species found only in the Velebit area. The Karst region contains the largest area of unfragmented forest in Croatia, the integrity of which is evidenced by viable populations of large carnivores (wolf, brown bear, and lynx). Plitvice Lakes National Park is on the United Nations Educational, Scientific, and Cultural Organization (UNESCO) World List of Natural and Cultural Heritage; the Velebit Mountain Range is part of the UNESCO Man and the Biosphere Program, and has been identified by WWF's Forest Hot-spot Initiative as one of the ten most important forest areas in the Mediterranean region.

### **1.2 Original Global Environment Objectives (GEO) and Key Indicators**

The project's **global objective** is to conserve biological diversity and ecological integrity of the karst ecosystems in Croatia particularly in the Dinarid mountain range which includes an estimated 8000 caves-among the deepest and most extensive in the world. The project **development objective** in the PAD was that local residents, tourists, and other visitors to participating national parks and other protected areas in the karst region refrain from practices identified as detrimental to biodiversity conservation and adopt recommended behaviors that preserve and protect the unique features of the karst environment through the following actions: (i) strengthen institutional and technical capacity for biodiversity conservation of the Karst environment; (ii) integrate biodiversity conservation into physical planning and sectoral

strategies; (iii) strengthen management of protected areas; and (iv) promote entrepreneurial and tourism activities that support sustainable natural resource use and conservation.

The grant agreement project objective states: “The objective of the Project is to: (i) strengthen institutional and technical capacity for biodiversity conservation of the Karst environment; (ii) integrate biodiversity conservation into physical planning and sectoral strategies; (iii) strengthen management of protected areas; and (iv) promote entrepreneurial and tourism activities which support sustainable natural resource use and conservation.”

Key indicators included in the PAD were the following:

- Stable or increasing numbers among two to three indicator species in Croatia Karst Ecosystem Conservation (KEC) project region;
- Increased public knowledge of Croatian karst ecosystems, species, and habitats and impacts of human behavior on biodiversity;
- Decreased number of human behaviors destructive to biodiversity in protected areas;
- Users of protected areas in the KEC region increasingly satisfied with park management services;
- Increased numbers and revenues of entrepreneurs in the KEC project region.

### **1.3 Revised GEO (as approved by original approving authority) and Key Indicators, and reasons/justification**

No formal World Bank Board revision of objectives or indicators was carried out. During the mid-term review and the supervision mission in October 2005, a special effort was made to reassess and refine project monitoring indicators. The project development objective as stated in the grant agreement was considered binding, although efforts continued to measure human behavior change through some indicators. Results of this review included the definition of four adapted indicators, which were used for the remainder of the project in ISR reporting and are described in detail in Section 2 and Annex 10.

### **1.4 Main Beneficiaries**

The PAD defined a broad range of beneficiaries with a stake in how the karst ecosystem resources are managed, including the following: (i) national, regional, and local government institutions (including MEPP, Ministry of Agriculture and Forestry (MOAF), Croatia Forest Company (HS), Ministry of Tourism, and Croatia Water Company (HV)); (ii) national and nature parks managers in the project area; (iii) local residents and resource users (farmers, forest users, HS employees, herders, 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.** Build national capacity to conserve biodiversity and support sustainable resource use. Activities to strengthen national capacity were divided into five sub-components:

- (i) Strengthening laws and regulatory framework. The project financed a review and/or revision of biodiversity-related regulations and sectoral strategies to incorporate biodiversity conservation concerns. The project financed training for government agency staff and others on using protected area guidelines—MOAF, Ministry of Tourism, HS, HV; physical planners; protected area staff; NGOs, and citizens.
- (ii) Strengthening national capacity to ensure biodiversity conservation. The project financed preparation of protected area management and planning guidelines, which include biodiversity concerns; guidelines for community and NGO participation in protected area management; a

protected area system market analysis, promotion and marketing plan; a protected area financing strategy; and a pilot project on biodiversity information dissemination. The project developed and conducted a ranger training program.

- (iii) Extending areas under legal protection based on discovery of significant species and taxa. Project preparation identified the Ogulin and the Kupa Valley for further analysis of biodiversity; the project financed feasibility studies—assess water management linkages with biodiversity conservation; funded equipment for underwater biodiversity monitoring; and supported policy updates of the list of taxa under legal protection.
- (iv) Biodiversity inventory, mapping, and monitoring. The project financed consultant services and equipment for inventory and mapping of biodiversity priority areas (identified by the BSAP and Comprehensive Biodiversity Survey); a specific inventory of cave biodiversity in the project region and equipment necessary for such; a study of cave hydrology in the project region; and a monitoring program for large carnivores in the project region. The project financed development of a Geographical Information System (GIS) for the project region, plus the database and staff training for GIS use.
- (v) Increasing public awareness and support for biodiversity conservation. The project financed development of a public awareness strategy; development of a website and TV spots on biodiversity conservation; a guide to karst biodiversity; annual workshops/festivals on biodiversity conservation; and preparation of a traveling exhibition on biodiversity and the KEC Project.

**Component 2.** Establishing community-based mechanisms for biodiversity, conservation, and sustainable resource use in the karst region. The project supported measures to preserve the globally significant biodiversity in the Karst region through community-level activities and capacity building for protected area management. Activities to meet this objective fall into five sub-components:

- (i) Promotion of sustainable nature-based tourism. The project financed development of a local-level tourism strategy that includes assessing the region's nature-based tourism potential and economic opportunities in tourism; a visitor management plan for selected protected areas; and preparation and field works on the European-6 (E-6) hiking trail—a branch of a large network of hiking trails that spans Europe.
- (ii) Increasing local public awareness and support for biodiversity conservation. The project financed preparation of national park promotion materials like leaflets, brochures, posters, calendars, outdoor informational boards, and trail interpretation guides to promote the unique characteristics of the karst area for park visitors, local population, and schools.
- (iii) Improved protected area management and services for biodiversity conservation. In each protected area in the project, the project financed refurbishment of existing visitor structures, information kiosks, and research facilities; a “people and parks” program, each designed and intended to support community involvement in the decision-making process; field works; data acquisition, processing and interpretation equipment; field equipment; and staff development in skills such as interpretation, education, monitoring, and research.
- (iv) Conservation and Rural Revitalization Grants Program. The goal of this sub-component was to demonstrate linkages between rural development and biodiversity conservation through a Conservation and Rural Revitalization Grants program (CRRG). The CRRG program supported entrepreneurial projects that demonstrate linkages among sustainable use of natural resources,

economic development, and biodiversity conservation. Grant activities included support to local communities to develop small businesses such as tourism services, crafts, food services; support of demonstration projects linking conservation and sustainable natural resource use such as traditional agricultural activities, forestry and water resource-related projects; and public education and outreach activities

- (v) Regional Cooperation Program for Karst Ecosystem Conservation. Financial support was provided to encourage partnerships with Croatia's neighbors, particularly Slovenia (Risnjak and Kupa River Project), in support of transboundary solutions to biodiversity conservation. The project financed the inventory and monitoring of biodiversity in the border region; supported harmonization of a cross-border management plan, promoted joint tourism marketing; supported promotional materials and international workshops; and study tours and participation in international and regional workshops, training, and partnership development.

### **Component 3. Project Management and Monitoring**

The project financed the establishment and operation of a central PIU located within the MEPP in Zagreb, comprising a project manager, a procurement specialist, financial management specialist, and an assistant. The project also financed a local PIU located in the county/municipal physical planning office in Gospić, one of the two county seats included in the project.

### **1.6 Revised Components**

Project components were not revised. During implementation, they were partially reorganized for reporting purposes, given that synergies existed across several activities.

### **1.7 Other Significant Changes**

No significant changes were made in the project design, scale of investments, or schedule. During implementation, the responsible line Ministry changed from the Ministry of Environmental Protection and Planning to the Ministry of Culture reflecting government-wide reorganization of responsibilities for Nature Protection. This shift was implemented smoothly and did not disrupt project implementation. Midway through the project, the Project Coordinator accepted a government position within the Ministry of Culture while retaining her project coordination responsibilities. The Bank considered this a favorable transition to a more sustainable management unit embedded fully within government decision-making structures. Other Project Implementation Unit (PIU) staff remained contracted and paid through the Grant until project close, after which time the Ministry retained them on government payrolls for project closing actions. The most significant change in project financing was the addition of a US\$200,000 grant for the CRRG program by the Norwegian Government (just after mid-term) to extend the scope and reach of this successful and in-demand sub-program. Although the amount is not large, in the aggregate it was significant to the CRRG program and allowed seven additional small grants to be financed. Other additional funds that were leveraged by the project are described in detail in Annex 3.

## **2. Key Factors Affecting Implementation and Outcomes**

### **2.1 Project Preparation, Design and Quality at Entry**

The project used a government-executed GEF Project Development Fund (PDF)-B grant to support preparation that included extensive public participation over a year and a half. Additionally, a Canadian Trust Fund supported Social and Rural Development Assessment and helped identify and elaborate specific project design and investment priorities. The assessment quality was high and a substantial amount of the feedback and suggestions were taken into account in the final project design. For example, the assessment recommended emphasizing the integration of a People and Parks theme through park education, outreach, research, and community liaison mechanisms, a theme that became the backbone of

the final project design. The assessment also recommended a focus on Rural Economic Revitalization, concentrating on organic products and traditional species, which developed into the project's successful CRRG program. Stakeholder feedback identified the critical loss of heritage and cultural features, including traditional knowledge and historic buildings, due to war damage, which led to several small grants, including for a documentary film to recapture traditional knowledge and revitalization of traditional craftsmanship (production of shingles, <http://www.youtube.com/watch?v=0JsOymgdbXM>). Stakeholder feedback also led to project support for specific investments outside of parks, such as refurbishing an old flour mill at the source of a karstic river, which helped link revitalized cultural traditions with environmental education in partnership with local commerce/tourism boards.

Key lessons learned from earlier operations were taken into account including (i) the decision to decentralize some project PIU staff; (ii) the decision to link the CRRG program management to the park conservation strategies; and (iii) the extensive public participation/consultation designed into the project activities. Design of the CRRG program used a World Bank Manual on good practice in small grants in agriculture projects. The project was well integrated within the Croatia World Bank Country Assistance Program—creating synergies with new operations and building on earlier ones. None of the key risks materialized to affect implementation, so the negligible-to-modest ratings for mitigation in the project appraisal document (PAD) were appropriate. The least-changed risk was that hotel debt servicing in Plitvice Lake National Park drains resources from biodiversity conservation. At the end of the project, the park budget still lacked transparency in the separation of tourism services from biodiversity conservation work, however the park management plan includes costed action plans that provide a new transparency-enhancing tool to track and negotiate expenditure balances across park objectives. A related risk—unsustainably high park visitor levels at Plitvice—is recognized in the 2008 approved Management Plan, which specifies strategies to manage visitors more sustainably, including redirecting them to sites outside the park that the project supported (e.g., ecologically sensitive cave tours). However further options should continue to be explored at Plitvice National Park to better manage tourism demand in line with the park's natural carrying capacity.

The 2007 World Bank Croatia Public Finance Review reinforced the recommendation that government separate park tourism service budget accounts from conservation management activities; however, this had not occurred at the time of the ICR. The project, constrained by its geographic-specific focus, stopped short of addressing more systemic park issues that require a national perspective, including development of a national park financing system. While the project design did not specifically promote moving to a “system” of protected areas (respecting the historic autonomy of parks and the limited geographic scope), by the end of the project, a vision for a national system of parks had gained broad support, thus creating a need and impetus for a more integrated financing plan for the future.

## **2.2 Implementation**

Project implementation was smooth overall. There were no restructuring or significant changes, the project had regular high ratings, and it was never in an “at-risk” status. There was a March 2005 mid-term review with a July 2005 follow-up mission to refine monitoring and evaluation indicators (Section 2.3 below).

A time-consuming implementation issue was the legal transfer of property for the Velebit Nature Park that the Department of Defense donated to the City of Gospić, and the City donated to the Velebit Nature Park. Although the site was identified and agreed in principle during preparation, over time the lengthy legal transfer process became a project risk. Some grant reallocations were considered, but strong support from local city officials ultimately prevailed to complete legal transfers before project close.

Another implementation concern related to government procedures is ensuring that park management plans have a sound legal framework. In Croatia, spatial plans have a higher legal status (parliamentary



approval) than any other plans, including park management plans, which are considered subordinate. Therefore, considerable efforts were made throughout implementation to involve the project Steering Committee and the Ministry responsible for Spatial Planning on harmonization of planning procedures. A close working relationship that relied heavily on informal coordination across ministries was developed, which satisfied both sides.

During later project supervision, the task team leader and the procurement staff were based in the Croatia Country Office, which helped to ensure regular and timely supervision support. The PIU staff decentralized to Gospić were important for maintaining a local presence for CRRG beneficiaries and for local county and municipal engagement.

### **2.3 Monitoring and Evaluation Design, Implementation and Utilization**

Overall the monitoring and evaluation (M&E) design for the project was appropriate with some adjustments at the mid-term review to better capture key project outputs. Project monitoring relied on data collection by the PIU from parks and other sources including outputs of project activities, consultant reports, park progress reporting and external survey data. A detailed review of the performance and impacts of the CRRG program was conducted at project end (see Annex 5 for methodology) to identify lessons learned for future programs in Croatia and elsewhere. The PIU's comprehensive regular reporting on the CRRG program provided a solid foundation for this work. This final report was highlighted as a best practice evaluation model in a World Bank review of over 100 projects with small grant programs, and it will be disseminated through a 2008 publication.

The project development objective in the PAD and grant agreement varied in their inclusion of a modifying sentence focused on changing human behaviours detrimental to biodiversity conservation. Differences in PAD and grant agreement wording were more common at that time without a results framework which in more recent projects help provide a stronger emphasis on the link between objectives and results in the design. While the grant agreement version is considered most "binding", project monitoring did include several indicators to help measure changes in human behavior. One of these indicators, i.e., the number of violations of park regulations, was dropped at the mid-term review because (i) it ran counter to ranger training that focused on issuing warnings rather than penalties for violations, and no historic data on warnings were available; and (ii) staffing levels and violations were strongly correlated, which was a more accurate indication of stronger enforcement than reductions or changes in destructive practices. Further analysis showed that "destructive" practices identified (e.g., littering) were not highest among the main threats to the karst, although improving behaviours still remained very important. All monitoring indicators were extensively reviewed during the October 2005 supervision mission; some indicators were revised, some were dropped, and others were added (See Annex 10 for detailed rationale of performance indicator updates).

### **2.4 Safeguard and Fiduciary Compliance**

Project safeguard and fiduciary compliance was satisfactory throughout the project. All procurement post-reviews and financial management audits were satisfactory (clean and unqualified audits). The small grants program included environmental safeguards screening in its processing guidelines and this was well integrated into the implementation process. Five small grants recipients had problems understanding and/or following procurement rules, which resulted in a return of grant funds (and one legal action). All civil works received environment permits and followed the agreed Environmental Management Plan (EMP), and World Bank supervision missions documented this process. Works at historic sites had special permits (several experienced construction delays related to obtaining permits). Specialized locally certified contractors with traditional skills and tools were required at some historic sites (e.g., the old flour mill restoration at Ogulin). Construction of the Velebit Nature Park headquarters building was halted temporarily to address a church and community-led objection to the building site location due to concerns that a WWII mass grave may have existed on the site (a former military barrack). This objection was

resolved to the satisfaction of the community; the project was redesigned and the building footprint was shifted away from area of concern. This was achieved within existing contract time and budget. Both Bank team leaders were safeguard specialists so no external safeguard support was required.

### **2.5 Post-completion Operation/Next Phase**

The Ministry of Culture through the Ministry of Finance submitted a formal request to the World Bank for continued joint work on Nature Protection investments. Croatia has requested an International Bank for Reconstruction and Development (IBRD) loan for Nature Protection to expand and replicate the KEC project successes to the wider network of National and Nature Parks; advance action plans prepared under the KEC Project park management plans, including investment in critical infrastructure (visitor centers, etc.); strengthen nature protection functions at the county level, and strengthen human resources capacity to meet the challenges of European Union (EU) accession. The Bank has responded favorably to this request and is launching a project preparation mission in July 2008.

## **3. Assessment of Outcomes**

### **3.1 Relevance of Objectives, Design and Implementation**

The project design is highly relevant to current country priorities, including EU accession, which was not formally under way at project appraisal. In 2008, institutional development for strengthening administration for the environment is a high priority with a targeted accession date (when EU legislation would take effect) in the short term (less than five years). The project made a substantial contribution to strengthen this capacity, which helped Croatia during the EU “screening” of readiness for accession- as this sub-sector of the environment was considered to be the most prepared. The CRRG program outcomes and lessons learned are relevant to the design of EU agricultural funds programs for rural development (which includes Natura 2000) and should be disseminated more broadly in this context.

### **3.2 Achievement of Global Environmental Objectives**

**Key Achievements:** Some KEC key achievements are as follows:

- Promoted new Nature Protection Legislation in Croatia making park management plans a requirement.
- Prepared, developed, and adopted into law, five national parks management plans (the first to be legally adopted in Croatia);
- Established visitors’ centers and additional park infrastructure at five sites;
- Significantly enhanced government and public awareness of the importance of karst ecosystems and their potential role in Croatia’s future development strategies;
- Enhanced professional capacity of park managers and rangers; and
- Successfully implemented the small grants program that demonstrated linkages among land use, business practices, and biodiversity conservation.

All KEC activities are either continuing with park budget support or have been completed and established demonstrations for replication to other parks that have additional funds. Evidently, the introduction of management plans and budgeted actions plans for parks is increasing central budget funding for nature protection. Examples of ongoing work include the veterinary faculty’s ongoing research and tracking of large mammals (e.g. bear, lynx) using new state-of-the-art radio collar equipment supplied by KEC; biodiversity inventory work and management planning processes have been replicated to other parks and will continue to be rolled out to more parks and Natura 2000 sites across Croatia (with EU funds); and models of park visitor centers financed and demonstrated through KEC, which will be extended to other parks (called for in new Nature Protection legislation).

Key outcomes of the CRRG program identified by the independent evaluations (see Annex 5) include the following:

- Improved the well being of local people and grant beneficiaries in KEC project area;
- Added social value through grant beneficiary dissemination of their experience with local beekeepers, breeders, and entrepreneurs. Municipal income has increased and regional rural economic development has attracted additional support of US\$700,000;
- Supplied new knowledge and skills that will stimulate other area stakeholders. Modern concepts of natural resource use are beginning to revitalize traditional practices such as the production of shingles, or traditional meadow maintenance, which are environmentally friendly and a potential income-generation source for local households. Rural revitalization and sustainable nature protection activities have generated significant interest among local people;
- Improved beneficiaries' knowledge of and attitudes toward biodiversity and nature protection. Members of local advisory boards, seminar participants, proposal writers, and grant beneficiaries acquired knowledge on actions which combine nature protection and local development potential;
- Demonstrated direct impacts on land and natural resource use, business practices, community attitudes and behavior, and alternative income generation (see section 3.3 below).
- The Program has also improved regional capacity for micro-scale and small-project development. Project grants have helped develop knowledge and skills in project preparation and business practices and increased knowledge on the conservation and protection of nature and biodiversity;

### **3.3 Efficiency**

Financial and economic efficiency were evaluated on the degree to which non-GEF funds could be leveraged to achieve project objectives, which is a basic assumption of GEF Incremental Cost Analysis. An estimated US\$3.3 million in non-GEF contributions anticipated at appraisal was exceeded by more than US\$500,000 after accounting for a falling US\$ exchange rate<sup>1</sup> (Annex 3). A total estimated US\$1,744,051 was provided in additional local-level contributions, with the highest contributions from the National Park Northern Velebit (US\$960,000) and additional investment by small grant beneficiaries to complete their projects as planned (US\$380,000). These estimates are conservative because they do not account for costs of many initiatives enabled through KEC investments, or for recurrent costs at parks, which increased due to project investments. Examples of leveraging beyond planned central ministry funds include supplements from individual park budgets, land donations, and construction works contributed by municipalities that complement KEC-financed works. (See Annex 3)

Current budget projections are for an increased central budget share of spending on nature protection of 20-30 percent over the coming years. Park budgets in the baseline were estimated at US\$1.69 million over the five-year project life; and this was exceeded in the last two years alone (2007-08) with a budget for the five KEC parks of over US\$2.11 million. Park management plans were approved in 2007, and their actions plans with detailed costs are strengthening and improving the transparency of annual budget requests and resulting in higher appropriations.

On the revenue side, Croatia has a sound legal basis to allow parks to promote local concessions and retain user fees, and many parks have already taken advantage of this opportunity. Further work should be done to promote innovations in park financing to enhance local-level revenue collection. This is especially relevant for Croatia as it moves toward a "system of protected areas" requiring stronger financial and institutional links among parks.

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<sup>1</sup> 8.31 Croatian Kuna/US\$1 at appraisal and 4.66 Croatian Kuna/US\$1 at ICR

At appraisal, the CRRG program management cost/grant ratio was considered high at 25 percent but justified because this was a pilot program. At project end, the ratio had dropped to 15 percent because a staff member left and was not replaced, and the government of Norway had added funds to the program.

CRRG impacts on alternative income generation (independent evaluation): The CRRG program has contributed to the economic prosperity of the project areas. Apart from direct income for small grant recipients, and the ability to provide short-term localized employment, an important contribution of the CRRG program lay in safeguarding the future of these sustainable resource use-based activities and services. In terms of direct income, all analyzed projects are financially positive, ie. they have either not generated losses or have started generating positive financial results. Most experienced positive results regarding alternative income generated. As a result, they helped to revitalize almost forgotten crafts and created additional employment. The review was unfortunately unable to gather specific data needed to quantify income gains. In general it appears that beneficiaries of small grants aimed at income generating alternative income seem to have been successful in this regard, though not always to the extent envisaged at the time of proposal writing. Perhaps more importantly than these short-term income gains, however, beneficiaries increased their capacities and received certifications as organic producers, both of which will tend to increase their productivity and incomes over the medium and long term.

### 3.4 Justification of Overall Outcome Rating

Rating: Highly Satisfactory

The project is rated as Highly Satisfactory based on accomplishing key objectives, effective project implementation including for safeguard and fiduciary aspects, wide engagement of local stakeholders in project activities, the project's catalytic effect on the government's overall nature protection program, and contributions to EU accession preparations. The project contributed substantially to advancing nature protection management in Croatia. The government's desire to continue to expand KEC work through increasing government funds, EU funds, and ongoing Bank support ensure many channels of future support to build from this project experience.

### 3.5 Overarching Themes, Other Outcomes, and Impacts

One of the most significant contributions of the project was to provide a solid platform for building an EU-harmonized nature protection system. This catalytic effect of helping Croatia advance toward harmonization with EU Nature Protection legislation was not fully envisioned at the outset of the project and must be attributed in part to adaptive project management, which seized opportunities to demonstrate the relevance and value of the ongoing work toward accession objectives.

#### (a) Poverty Impacts, Gender Aspects, and Social Development

The Project overlapped geographically with several government-designated "Areas of Special State Concern," i.e., parts of Croatia that are war-torn and underdeveloped. A Social Assessment (SA) conducted during project preparation found that the KEC project area was economically depressed, the most depopulated region in the country with the highest out-migration of young people and with traditional agricultural practices largely abandoned. Lika-Senj county, comprising more than 80 percent of the project area, had the highest unemployment rate in Croatia at about 40 percent, and some of the most vulnerable people in the project area were the elderly living on minimum pensions and welfare support. The CRRG Program Evaluation provided compelling evidence that Program funding for 24 projects has enabled better living standards for beneficiaries.<sup>2</sup> Although direct incomes did not rise

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<sup>2</sup> There was no requirement for social impact screening in the CRRG program when assessing proposals, however, the manual required the final reports of each grant refer to "social, ecological and economic results achieved during performance of the project."

significantly, the project contributed to economic survival and provided opportunities for local people to acquire new knowledge and skills that will help secure their future. Funded activities have enabled supplemental employment in additional sectors, for example, catering, transport, and tourism; the parks visitor centers provide employment for local young people and increase local economic development by promoting nature-based tourism. Further economic development in the project area will require development incentives but most of the funded projects have improved local livelihoods.

In the project region, little information on the status of women was identified, although it is well known that a higher share of poorer households are headed by women, most of whom are widows, and that the lives of rural women are difficult as they are responsible for farm work and household duties. The CRRG Program modestly contributed to economic empowerment among rural women by providing funding for entrepreneurial activities. Six of the 24 beneficiaries were women, and local women served on three regional advisory committees that evaluated project proposals and selected finalists.

The Project managed to surmount and reverse a legacy of resentment and narrow the gap between people and parks by consulting a broad range of stakeholders and bringing people most affected by the project into the park decision-making process. Civil Society Organizations (CSOs) involved in current Country Partnership Strategy consultations have praised the KEC project role model. During preparation, the project team consulted some 150 environmental NGOs—a process that was seen as a major novelty during a time when lack of trust in local institutions was rampant, lack of meaningful community participation in park management decisions was the norm, and parks were functioning primarily in isolation. Typically, local people were neither consulted nor involved in any park activities, even if directly affected. During supervision missions, parks' management and local population representatives emphasized how public consultations thoroughly transformed the preparation and development of parks management plans; the CRRG Program; and regional cooperation program (transboundary protected areas with Slovenia and Bosnia and Herzegovina).

#### **(b) Institutional Change/Strengthening**

The project directly influenced Croatian nature protection legislation by promoting and demonstrating the management planning process that was subsequently adopted into law. An independent EU Community Assistance for Reconstruction, Development, and Stabilization (CARDS) project evaluated the project guidance documents on park management planning developed from the project's practical piloting experience (Risnjak) and confirmed that they were the best international practice and fully applicable for EU Natura 2000 sites. A 2006 joint workshop between KEC and the EU CARDS project focused on harmonization of the management planning process and confirmed the widespread demonstration effect of KEC on other parks and donor-financed initiatives. Legal changes updated procedures for designating new protected areas, including broader public input requirements and incorporating scientific research steps that the KEC project undertook for the proposed Ogulin and Kupa River Valley sites.

Significant institutional strengthening occurred when individual parks teams gained international exposure to other country park systems through study tours and exchanges and their five-year engagement with a range of project activities. A USAID-sponsored study tour was particularly effective for building a cohesive team spirit among participating park staff close to project launch. Project design—one large consultant contract plus international experts subcontracting many local teams—proved to be an effective

capacity transfer/strengthening mechanism. The project increased central government capacity in nature protection, and the CRRG beneficiaries reported significant capacity gains.

The “Monitoring Corridors and Population Dynamics of Large Carnivores” project component focused significant attention on the “green bridges” introduced as environmental mitigation during new highway construction in Croatia. Infra-red sensors installed on these green bridges combined with radio collar tracking showed that a significant number of large mammals (bears, lynx, wild pigs, etc.) used the bridges to cross highways safely and reconnect their territory, although some illegal hunting occurred on bridges. The project supported a longer-term monitoring plan to track animal migration patterns and deter illegal hunting, and the national highway company agreed to finance the monitoring plan after the project, an example of “mainstreaming” nature protection responsibilities into the transport sector.

### **(c) Other Unintended Outcomes and Impacts**

The opportune timing of the KEC project provided a just-in-time platform to demonstrate the many changes that will be required in nature protection to achieve EU accession. For example, KEC-modeled management plans are now required for EU Natura 2000 sites and the KEC biodiversity database system will be expanded to all parks and Natura 2000 sites in Croatia. In parallel with the project, the government prepared an implementation plan for EU Nature Protection Directives that cited the KEC project as an important baseline component.

Project-supported biodiversity monitoring resulted in recommendations to revise and update the Red Book on the threatened status of some types of butterflies and confirmed the presence of rare cave-dwelling albino salamanders (*proteus anguinus*) previously unknown in this part of Croatia.

The original project design focused on a specific geographic area of Croatia but project impact was felt at the national level due to regular engagement with stakeholders and park staff throughout the country during workshops and learning/ capacity building activities.

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

The project conducted numerous workshops throughout implementation, including five annual two- or three-day beneficiary and stakeholder workshops, which were important for coordination and communication and included other government agencies, local governments, donors, CRRG beneficiaries, park staff, and NGOs. Park staff participation from outside the KEC region helped disseminate project work more broadly at national level and build a vision of a future “park system” for Croatia, an idea that was receiving full endorsement at project close.

During the project, three national park management planning workshops were held to support piloting, testing, and ultimately, replication of the parks management planning process. Concrete workshop outputs included standard formats for management plan agreements, methodology for stakeholder involvement and participation, management planning guidelines, and action plan agreements, which can also be used to monitor and follow up on management plans. Project consultants helped each park conduct a series of workshops with local stakeholders as part of their park management planning process, and the final workshop, organized jointly with an EU CARDS-financed project “Capacity Building for the State Institute for Nature Protection,” focused equally on progress and on reporting on the park planning process outside the KEC area.

The project piloted Croatia’s first underground karst Cave Management Plan, and used two targeted stakeholder workshops to engage the speleological community on cave-specific objectives and challenges. Agreements were reached on the management plan model at Manita Pec and plans for replication at nine other tourism caves in Croatia. By raising awareness of the project-generated cave inventory and database, the workshops provided an opportunity for caving clubs/hobby speleologists to contribute to data

collection; the workshops were also a national forum for other cave ecosystem issues such the extent and impacts of illegal solid waste disposal in Croatian caves.

In 2006, two international workshops were held with Slovenia and Bosnia and Herzegovina to discuss development of an international karst hiking trail and cross-border tourism promotion. Long-term working relations, which were established among the staff at Risnjak (with Slovenia) and Plitvice National Parks (with Bosnia and Herzegovina) and international counterparts, are ongoing and reflected in park actions plans that specify continued cross-border cooperation. At the end of the project, the Austrian-Croatia chamber of commerce expressed interest in financing work to realize the transboundary karst hiking trail plans.

Eight project-supported workshops were held to deepen understanding of tourism potential in the KEC area—two information-sharing, and six capacity-building workshops. A final report, “Assessment of the Tourism Patterns and Recommendations for Sustainable Tourism Development in KEC Area,” defined two tourism promotional programs, “The Wild Large Carnivores of Risnjak NP,” and “The Velebit Park and Mills of the Gacka Valley,” offered through collaboration between the parks and local tour operators. Effective project coordination efforts with Ministry of Tourism addressed bottlenecks in the process of local branding of nature- and park-related products.

#### **4. Assessment of Risk to Development Outcome**

Rating: Moderate

The risk to development outcome was rated moderate based on the importance of the project to EU accession, which is the primary government agenda at project end and the foreseeable future. In the context of EU membership, nature protection will become a higher priority and with effective preparation, Croatia will absorb additional EU grant funding for complementary rural development actions and for Natura 2000 payment schemes. Most risks identified in the PAD did not materialize due to well-implemented mitigation measures, and risks that remain are being mitigated after introducing park management plans that improve funding transparency and management of visitor access. More systemic park financing reforms should align with political decisions for a wider system of protected areas and harmonize with concurrent public finance decentralization (consistent with EU reforms) anticipated in the near term. Protected areas and sustainable inland nature-based tourism assume greater importance in a global context of climate change that may disproportionately affect Croatia’s coast. Institutional changes could occur; for example, responsibility for nature protection could be returned to the Environment Ministry. However, given the past smooth transition, no major disruptions would be expected.

#### **5. Assessment of Bank and Borrower Performance**

##### **5.1 Bank**

##### **(a) Bank Performance in Ensuring Quality at Entry (*i.e., performance through lending phase*)**

Rating: Satisfactory

The quality at entry and thoroughness of project preparation, including extensive stakeholder input, was a significant factor to overall project success. The Bank and consultant team was extensive, well-qualified, and included team members with local Croatian knowledge. Preparation was paced well to allow sufficient time for multiple stakeholder inputs, which were taken into account in the final design. Key project investments and activities were identified clearly up front and based on rigorous analysis that eased tracking of project progress and outcomes against the PAD. The project implementation manual and the CRRG program manual were detailed and functional and incorporated lessons learned from earlier operations. Some monitoring indicators were adjusted mid-stream, a practical and flexible

response to new and more reliable information that emerged during implementation rather than poor project design. A more elaborated project development objective in the PAD than the grant agreement could be considered a preparation flaw given the heavy weight of evaluation of impacts and outcomes against PDO today.. However it was not considered a significant issue for action given that the grant agreement version correlated most directly with project components. Overall project implementation is impressive in terms of how closely it went according to plan, including closely adhering to the original disbursement schedule (ICR data sheet). In hindsight the project should have planned for financial management software rather than rely on Excel spreadsheets, which proved time-consuming for a project of this scale with multiple donor funds to track. Further simplification of procurement procedures for small grants might also be considered in hindsight, however procedures were already simplified so this would be constrained by World Bank fiduciary requirements.

### **(b) Quality of Supervision**

Rating: Satisfactory

The Bank team's quality at supervision is considered fully satisfactory. The Bank team composition shifted over time, but despite transitions, always maintained continuity on the historical perspective. Bank missions participated regularly in stakeholder workshops to understand issues and add an international perspective to discussions. The core supervision team was fully decentralized during the last two years of the project, which facilitated quick response on implementation issues such as the need to shift the building footprint for the Velebit Nature Park building. Mission reports consistently raised important strategic and implementation issues that helped encourage the client to maximize benefits from this project. The Bank team requested a CRRG independent evaluation, exemplifying extra efforts taken to increase the value of project metric outcomes to extract lessons learned. Procurement, financial management, and environmental safeguards were satisfactory throughout the project, except for a few difficult CRRG grants with cancelled or returned funds, which are well documented in the final impact assessment report.

### **(c) Justification of Rating for Overall Bank Performance**

Rating: Satisfactory

Overall Bank performance was satisfactory and is well appreciated by the client, and validated by a government request to continue to work together through a follow-on loan largely based on the value the client places on the international perspective the Bank team brought, and the quality of Bank systems and team support.

## **5.2 Recipient**

### **(a) Government Performance**

Rating: Highly Satisfactory

Government performance refers to central government partners—primarily the Ministry of Culture and PIU with overall project leadership. Government performance is rated as highly satisfactory based on clear ownership, commitment to project objectives, and support for sector reform adjustment consistent with project objectives. Throughout this project the government actively engaged stakeholders in a manner that stood out above other Bank projects in Croatia at the time. The Ministry was effective in convening Steering Committee members and in sharing information with other Ministries in a collaborative fashion, and openly and professionally promoted some tougher discussions on conflicts



relating to forestry, hunting, and spatial planning procedures.<sup>3</sup> Key project issues were resolved in a timely manner and all fiduciary responsibilities were met such that the project stood out in the overall Bank/Croatia portfolio. The government maintained excellent relations with other donors and was proactive in seeking follow-up donor and own-budget support to continue activities under the project. Transitional arrangements after closing were exemplary and further demonstrate commitment—project staff were retained on government budget to complete fiduciary and reporting tasks, and the project director was promoted to leadership responsibilities within the Ministry (highest civil servant position).

#### **(b) Implementing Agencies Performance**

Rating: Highly Satisfactory

Implementing agencies are the Park Management units in the five project parks; their performance is also rated as highly satisfactory based on their high level of engagement in the project and their openness and willingness to change and test new methods of local management. They demonstrated local ownership by investing additional funds and by involving other local stakeholders in continuing project work. Park management units facilitated timely resolution of local-level issues and helped facilitate work with local partners. Their dedication to the project and effective voice and openness to discussing problems contributed to effective problem solving and overall project success.

#### **(c) Justification of Rating for Overall Recipient Performance**

Rating: Highly Satisfactory

Client performance is rated highly satisfactory based on the extent to which the project objectives were fully integrated with their ongoing work agendas. The cohesive government and park management teams openly discussed key issues and constraints experienced between national and local levels, which led to proactive solutions on priority actions.

### **6. Lessons Learned**

Key lessons learned include:

**Thorough preparation lead to a well-tailored design:** Project preparation was extensive and included, for example, a detailed gap analysis between county planning documents and protected areas plans, extensive public consultations, and a social and rural development assessment, all of which strongly influenced the final design and led to a range of different but specific investments that were supported for each park, and some activities common to all parks.

**Government and park staff ownership and continuity are critical to project success.** The project enjoyed solid ownership from both responsible Ministries and park staff. Transfer of the project from MEPP to the Ministry of Culture in March 2004 was smooth and key PIU staff were retained. Many unaccounted-for hours of park staff time supported project tasks and although additional staff were needed, there were enough for regular participation in capacity-building activities and return-knowledge transfer, critical for sustainability.

**Decentralized management of the Small Grants Program and strong support of local self-government was critical to program success:** The local PIU office in Gospic, in the county of Lika Senj, helped facilitate local-level inter-sectoral coordination and planning. Since Gospic was a proposed

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<sup>3</sup> Agreements were reached on the need for legislative reform to create “one” forestry law; spatial plans were harmonized with park management plans; and monitoring of illegal hunting on green bridges was reinforced.

regional development pole, co-locating PIU staff there offered potential for close coordination between the program and county development plans. Decentralized management supported an enhanced direct partnership with end beneficiaries such as community-based organizations, NGOs, entrepreneurs, and local residents. Extensive local stakeholder involvement, including local governments, was crucial for long-term project sustainability.

**Aggregating most project consultant services into one large contract was efficient and effective.** The one-contract arrangement created a long-term partnership/engagement with a core team of international professionals who subcontracted many local teams to execute tasks, which resulted in capacity building or training for local consultants. Furthermore, the longer-term contract fostered and promoted consultative park management plans, which take time and repeated efforts to involve local communities. The lead firm from a bordering EU state was also a positive factor for this type of longer-term engagement.

**To achieve a balance among types of small grant activities, it is recommended that each type of activity is funded through different windows.** Income-generating projects were in higher demand than education and capacity-building projects; however, the need for capacity-building remained at the end of the project. A better balance might have been achieved through dedicated funds for capacity building rather than having a single window for education, capacity building, and income generation projects.

**Support projects that improve on existing project ideas.** The CRRG Program proactively encouraged local people to prepare project applications and the Program fostered entrepreneurial pursuits. Project proposals that were not selected in the first round were given additional support to improve on their ideas and proposals, with the result that more than half were accepted in the second round. All applications were retained in a database for consideration in case additional funding became available. Unfinanced project proposals from Primorsko-Goranska county were retained and later included in the project pipeline for the EU Regional Operational Programs. Such lists and databases not only provide ideas for further development but also incentives for more proactive local rural development.

## **7. Comments on Issues Raised by Borrower/Implementing Agencies/Partners**

### **(a) Borrower/implementing agencies**

Comments by the Borrower on the Draft ICR are presented in Annex 7 and were very positive concerning outputs/results. No new issues were raised.

### **(b) Cofinanciers**

The Norwegian government who directly financed additional CRRG grants has continued to provide support to the Ministry of Culture focused on replicating the GIS/computer and land aspects of the biodiversity database system the KEC project initiated, to other parks in Croatia.

### **(c) Other Partners and Stakeholders**

The Bank in its 2008 consultations for the new Partnership Strategy for Croatia received comments from NGOs/CSOs that they highly appreciated the opportunity for public involvement in the KEC project in particular.

The EU delegation in Croatia reviewed the draft ICR and wrote “Thank you for the document. I went through it, and I do not have any comments I would highlight except to compliment all involved in the team for the work done on this project.”

## Annex 1. Project Costs and Financing

### (a) Project Cost by Component (in US\$ Million equivalent)

Components	Appraisal Estimate (US\$ millions)	Actual/Latest Estimate (US\$ millions)	Percentage of Appraisal
<b>STRENGTHENING NATIONAL CAPACITY TO CONSERVE BIODIVERSITY AND SUPPORT SUSTAINABLE RESOURCE USE.</b>	<b>1.83</b>	<b>1.91</b>	<b>104</b>
<b>COMMUNITY BASED MECHANISMS FOR BIODIVERSITY CONSERVATION AND SUSTAINABLE RESOURCE USE IN THE KARST REGION</b>	<b>4.88</b>	<b>5.01</b>	<b>103</b>
<b>PROJECT MANAGEMENT AND MONITORING</b>	<b>1.26</b>	<b>1.38</b>	<b>110</b>
<b>UNALLOCATED</b>	<b>0.40</b>	<b>0</b>	<b>0</b>
<b>Total Baseline Cost</b>	<b>8.37</b>	<b>8.30</b>	99
Physical Contingencies	0.00	0.00	
Price Contingencies	0.00	0.00	
<b>Total Project Costs</b>	<b>8.37</b>	<b>8.30</b>	99
Project Preparation Facility (PPF)	0.00		
Front-end fee IBRD	0.00	0.00	
<b>Total Financing Required</b>	<b>8.37</b>		

### (b) Financing

Source of Funds	Type of Cofinancing	Appraisal Estimate (US\$ millions)	Actual/Latest Estimate (US\$ millions)	Percentage of Appraisal
Borrower		3.30	3.26	99
Global Environment Facility (GEF)		5.07	5.04	99

## Annex 2. Outputs by Component

### Component 1. Build National Capacity to Conserve Biodiversity and Support Sustainable Resource Use

***Development of Karst Ecosystem Biodiversity GIS and Database.*** The project constructed, established, and maintained a Karst Ecosystem Biodiversity Database on national and local levels. Construction of a database with adequate technological support and education for its use has a permanent value and makes a considerable contribution to the long-term and sustainable management of biological diversity in Croatia. All data collected during the inventories of speleological objects, flora and fauna were entered in a central database that also contains historical data from literature and museum collections. All priority-area maps of habitat, land cover, elevation, infrastructure, tourist facilities, zoning, physical planning, etc., are also stored in a custom-designed GIS. An initial pilot database was completed for Risnjak NP and the software was installed in all five parks. The parks can access, query, and update their area information through a custom-designed database and GIS. The **Karst Ecosystem Biodiversity database** satisfies requirements in park management planning, and complies with information systems under development at the Directorate of Nature Protection of the Ministry of Culture, and of State Institute of Nature Protection for EU harmonization tasks.

**The GIS includes maps of karst habitat in scale 1:25,000 and land cover maps in scale 1:25,000 for five protected areas.** All species and subspecies of fauna and flora are included (with coordinates) in the GIS database. The best possible information on the position was recorded from literature data. Inventory data collected through the project included exact GPS readings for each field record. The GIS database allows records of the location of each species to be plotted. All analyses carried out were distributed on DVD during GIS training. In defining the GIS system, all relevant GIS systems were analyzed and discussed at a GIS workshop held in Zagreb in January 2004. Land cover maps (1:100000 scale) were prepared in cooperation with another project (2002-2005-CORINE Land Cover Database for Republic of Croatia). **The GIS system** has been set up, installed in the Ministry, and loaded with all data. System access is available from Parks through the internet. **The project procured hardware and software for the GIS/IT system.**

***Training.*** Under the project, several training programs were developed and conducted including: **using GIS; biodiversity monitoring; conducting state-of-the-art interpretation and education related to biodiversity conservation; and ranger training** that included park services for visitors, assistance in park monitoring activities, cooperation with local communities, and establishing volunteer programs. A workshop was designed and conducted in each of the five parks to discuss the need for a “people and parks” program, which was subsequently prepared for each of the five protected areas. A complementary training program including NGOs, communities, county and park staff on the theme of “people and parks,” was developed according to the needs analysis and implemented through a mutually agreed training plan. USAID through the US National Park Service collaborated effectively on park staff training programs both before and during project implementation.

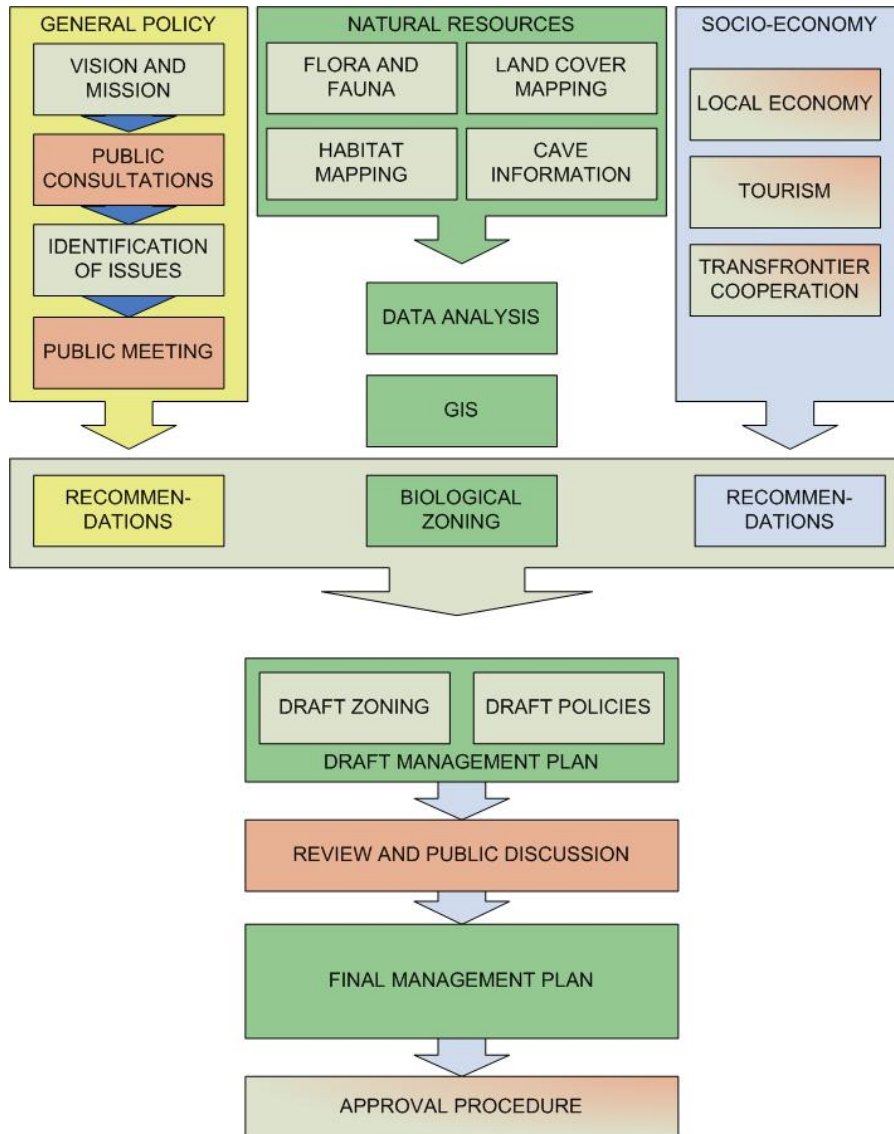
***Biodiversity Inventory and Mapping.*** The main objective was to compile and assess existing and new biodiversity data in the KEC region in reference to: disappearance of endemic taxa, taxa already under threat, habitat degradation and loss of diversity, links among endemic and endangered species and habitats in the KEC area, loss of individual climatic zone and zonal forms of vegetation, and as yet undiscovered species and taxa in the underground karst habitats. A **systematic inventory of flora** was carried out in the five KEC priority areas and in the two areas of Kupa Valley and Ogulin. For the **inventory of fauna**, several taxonomic groups were selected and their distribution is being studied: some groups of mammals, insects, birds, cave fauna. A digital map (1:25,000) of flora and fauna and karst

habitats was developed for the KEC database. A **methodology** for the Biodiversity Inventory and Mapping was established in accordance with domestic and international best practice, and is being used in other parks across Croatia. Some **recommendations for the revision/update of Red Book** on the threatened status of butterfly species resulted from the inventory investigation.

***Inventory and Mapping of Caves and Subterranean Biodiversity.*** Since speleological objects represent an important feature in the karst area, the project also carried out **an inventory of all known speleological objects** and underground fauna and flora inventory on specific objects. A **methodology** was developed for cave inventory, in accordance with domestic and international best practice, and a **database on speleological objects** of the KEC priority areas was established. **The Manita Pec cave management plan** was developed through participatory workshops, and considered a model for at least nine other caves that are tourist attractions in Croatia. Two workshops were organized to propose the methodology and involve the speleological community in KEC project activities.

***Management Plan Guidelines and Preparation.*** Five protected area management plans within the KEC (NP Risnjak, NP Plitvice Lakes, NP Northern Velebit, NP Paklenica and Nature Park Velebit) region were finalized. All park directors underlined the important role that public consultative planning processes played in the preparation and development of the park Management Plans (MPs). All MPs were first approved by their respective park management boards. Final approval was granted by the Ministry of Culture and the State Institute for Nature Protection in November 2007. KEC MPs were the first to be approved in Croatia, and the guidelines developed and lessons learned will be used to develop MPs for the remaining 14 protected areas and all future protected areas. The target year to develop and adopt MPs for all protected areas is 2010. Park management plans identify the vision and overall objectives of the protected area and lay out a general management approach that covers a decade and provides for updating after five years if required, which will be 2012. The MPs provide a preparation and implementation framework for action plans and annual operating plans. Action plans lay out steps, timeframes, and budgets for specific objectives such as constructing a visitor center, improving forest management, improving visitor management and outreach, etc. During the project, two action plans per park were prepared and additional action plans identified in management plans that will be prepared over the next five years.

**Guidelines for management planning** were developed in parallel with the pilot management plan for Risnjak NP and the four other KEC parks, based on existing and approved methodologies adopted at international level (International Union for Conservation of Nature (IUCN), World Wildlife Federation (WWF), Eurosite and Europarc). The methodology was adapted to Croatia circumstances and legal basis for nature conservation.



The scheme of management planning process followed in the KEC Project.

**Monitoring Migration Corridors and Population Dynamics of Large Carnivores.** The objective was to ensure conservation of large carnivores and to strengthen capacity for national and local-level conservation and management of large carnivores. During the project the distribution and population dynamics of large mammals were monitored in cooperation with the veterinary institute using modern equipment and instruments procured under the project such as global system for mobile communication (GSM) collars for bears and lynx, infrared sensors on highway green bridges, and molecular analysis of organic material. Monitoring results were used to prepare park management plans, provide inputs on hunting policies, and inputs for Croatia's preparations to implement the EU Habitat's Directive. **Bear and lynx population monitoring programs** include the following: (i) **population sizes and distribution of large herbivores (lynx and bear)**; (ii) migration corridors in the KEC area; (iii) impact assessments on populations; and (iv) guidelines on public use and facility development for agricultural and forestry management practices. Monitoring results will be used to maintain or restore the corridors appropriately. **Genetic analysis** of bear droppings was conducted to estimate population size. The monitoring plan includes additional recommendations for follow-up activities to be carried out in the five protected areas.

**A monitoring plan on the green bridges** along the highway Rijeka-Zagreb and Split-Zagreb has been set up and carried out during the project lifespan, and after project completion the highway company has agreed to cover monitoring costs. Other large carnivore studies conducted in parallel with KEC (the Croatian brown bear management plan, wolf telemetry tracking) have combined efforts and submitted their data for inclusion in the KEC-developed comprehensive database.

***Assessment of Ogulin and Kupa River for Protected Area Status.*** The main objective was to compare the areas of Ogulin and Kupa River Valley with other priority areas and identify species and habitats that need particular attention (threatened and endemic). Two reports were prepared (for Ogulin and for the Kupa River) on availability and integration of inventory data, and the plan for future activities, including recommendations to declare these sites protected areas. Under Croatia's Nature Protection legislation (introduced during the project), the KEC studies fulfill the first requirement (scientific analysis) for declaring sites a protected area. Subsequent steps include public consultations on a draft a legislative act for protection (inter alia: the level of protection and other institutional arrangements), and legal enactment. Croatia is actively expanding its territory under protection so several other sites (Neretva Delta and Mreznica River) are more advanced in the second stage and are the primary government focus in the immediate term. Therefore it could be several years before funding is secured and a decision is taken on the Ogulin and Kupa River Valley sites.

***Research and Monitoring in Plitvice Lakes.*** The key objective was to develop a comprehensive biodiversity research and monitoring program for Plitvička jezera NP to protect park biodiversity. An integrated monitoring program was prepared that included biodiversity, geology, hydrology, data from groundwater wells, and water quality analyses (existing Plitvička jezera NP data on water quality monitoring included). This was added as a component of the GIS database, and used to make recommendations on future research activities.

***Designate Network of Highly Significant Biodiversity Hotspots.*** The objective was to manage protected areas according to requirements for biodiversity hotspot conservation. Hotspots were proposed as components of the five park management plans in the KEC area. Each management plan describes resources with details on areas of particular interest, and zoning that takes these special sites into consideration. The management plans aim to ensure adequate conservation of these sites and recommendations for changes in physical plans were made.

## **Component 2. Establishing Community Based Mechanisms for Biodiversity, Conservation, and Sustainable Resource Use in the Karst Region**

***Analysis of Tourism Potential and Capacity Development.*** One objective was to assess visitors' perceptions of tourism, tourism potential in KEC parks, areas of interest, and develop two pilot tourism programs. The results were used to compile a database on tourism in the KEC area, to support the management planning process, and provide a baseline for monitoring tourist satisfaction in the parks. A Report on "Assessment of the tourism pattern and recommendations for the sustainable tourism development in the KEC Area" was completed and includes: assessment of tourism marketing potential of protected areas; review of tour operators' perceptions; assessment of visitor attitudes, assessment of tourism sector comparables, and identification of activities with potential for economic growth and development. Recommendations focused on ways to better involve the local community in tourism work, including training local tour guides on park-specific knowledge. **Two sustainable tourism promotional programs** "The wild large carnivores of Risnjak NP" and "The Velebit Park and the mills of the Gacka valley" were defined. Two workshops (introduction and final workshops on tourism potential) and six capacity-development training workshops were held in the KEC project region.

**Transboundary Cooperation.** The objective was to promote transboundary cooperation in biodiversity conservation through linkages between local communities and parks on either side of the borders, achieved through two international transboundary workshops focused on developing a trilateral international karst trail among partners from Italy, Slovenia, and Croatia and cooperation between Bosnia and Herzegovina and Croatia in the Plitvice Park surrounding area. Discussions resulted in a project outline agreement for the trail, and this established relations and stimulated follow-up meetings to continue cooperation. The KEC established efficient working relations among the partners, who are now pursuing funding for the trail. The Austria-Croatia chamber of commerce has expressed interest in funding but the future of the international karst trail now depends on the institutional project partners.

**Conservation and Rural Revitalization Grants (CRRG).** The project included a US\$0.57 million CRRG Program to provide grants to local people for projects that demonstrate linkages among sustainable use of natural resources, economic development, and biodiversity conservation. The program, launched in April 2003, financed 23 projects including beekeeping, sheep and goat raising, organic farming, ecotourism, grassland management, and restoration of cultural heritage sites; there were relatively few capacity-building and environmental education projects. A US\$200,000 Norwegian grant financed seven additional projects. Six out of 23 GEF-supported projects were eventually cancelled, resulting in 24 successful grants. Most cancellations resulted from beneficiaries failing to apply the procurement rules set out in the Operations Manual/agreements. Several interventions for corrective action were taken, and some grant funds were misused but most funds were recovered. Several types of CRRG grants are described in detail below:

- **Protection of Biodiversity through Traditional Management of Meadows.** Seven CRRG beneficiaries were small farmers in remote villages who used their resources to revive traditional land use (e.g., the Matak farm), which were supported due to high anticipated synergy between rural development and biodiversity protection. Without cattle grazing and regular mowing, large areas gradually returned to thickets or forest. Floristically, grassland is several times richer in biodiversity than forest. Project funds purchased traditional equipment, cattle, sheep, and goats for the farmers. Although goat breeding is forbidden in some areas under the Law on Forests, an agreement was reached between ministries to allow this to be piloted under controlled conditions in the area of Nature Park Velebit through a CRRG project.
- **Protection of Local Breeds of Cattle, Sheep, and Horses.** To maintain open grassland ecosystems and their biodiversity, proposals were prepared for the CRRG to protect local breeds. A background report was produced to facilitate the application process, and several small grants were executed. One project supported conservation of the endangered “buša” cow. Agricultural experts estimated that only about 30 of this breed remained in the project region.
- **Ecological Value of Forest Honey Production.** The ecological importance of the project on honey production is the link between forest pastures in production of high quality honey and conservation of coniferous forests of the high karst. Old stands of fir (*Abies alba*) in particular need protection as they have been degraded by an increasing rate in Gorski kotar during the last decade. Honey ‘medun’ is rare elsewhere in Central Europe, highlighting the importance of conservation for the KEC region. The anticipated cooperation with the Risnjak NP is seen as an important value added since it contributes to biodiversity conservation; five farmers were financed for beekeeping.
- **Tourism and Local Communities.** CRRG helped strengthen the role of the parks for regional development, especially for bordering communities. The project supported local communities in managing and even replacing some tourism activities, including ecological and rural tourism.
- **Management Plans for the Parks and CRRG.** Under the CRRG program, KEC parks became a communications nexus between local people and the KEC project.
- **Ecological Agriculture and Conservation of Biodiversity.** The KEC project supports *ex situ* conservation of biodiversity by supporting cultivation of medicinal and nourishing herbs on



small farms to promote income generation and prevent unsustainable herb collecting from protected areas.

- **CRRG Education Projects.** CRRG education projects were linked with the wider project training program, which was endorsed by the Ministry. The CRRG program also supported the railway school educational program, the distance learning program, and websites for biodiversity.
- **Cultural Heritage.** Cultural heritage projects were selected based on elaborated ideas of integrating cultural and nature protection by reviving and rehabilitating small mills, stone rainwater tanks or creating an ethnographic museum to educate about conservation and promote tourism. Projects that link biodiversity conservation in a protected area contribute to preserving traditional handicrafts and cultural heritage, and educating local people and visitors.

**Expanded Infrastructure and Equipment for Parks.** The project supported construction of the new **Velebit Nature Park Headquarters (HQ) Building and Visitor/Information Centre** in Gospić (US\$703,000 from the Grant), which was completed in November 2007. County and city officials highlighted the importance of the HQ visitors' centre to Licko-Senjska county. It not only demonstrates the links among economic development, tourism, and nature conservation but also has substantial potential for increasing economic opportunities, especially among young people in this war-torn, highly depopulated region of Croatia; local people view it as a means to attract more nature tourists. Licko-Senjska county developed a major partnership with the Velebit Nature Park management through the KEC Project. The county donated the land for the new building and financed demolition of military barracks at the construction site.

An education center on birds of prey and repopulation of white vultures in the canyon of Mala Paklenica was completed at *National Park Paklenica* in mid-June, 2007 and opened officially in mid-November, 2007 (US\$172,710 from the Grant). The project helped Risnjak National Park to construct a pedestrian bridge over the Kupa River to enable easy hiking/park visitor access to the river source, a karstic educational site, a hiking shelter for visitors and rangers, and to adapt the park conference room for multimedia (US\$225,000 equivalent from the Grant).



KEC Project (US\$35,000 equivalent from the grant) helped *National Park Northern Velebit* finance rehabilitation of a macadam road from the park entrance of Babina Sica to the Zavizan meteorological

station which as combined with park and county funds to finance further road extensions. Including this park in the project also promoted the use of additional government funds to expand the park headquarter/visitor center.

Park equipment provided through the project was selected by park staff through a prioritization process and included monitoring and inventory devices (monitoring equipment for bats and traps, large mammal monitoring, digital cameras, global positioning system (GPS) devices for tracking), computer servers, PC's and software, audio-visual and miscellaneous items; laboratory equipment for researching and monitoring park biodiversity to serve external scientists and students, a PCR Thermal Cycler; diving equipment, field vehicles (4x4), snowmobile, furniture for park HQ building, audio-visual equipment for multimedia room, and a meteorological station (near the Risnjak Park management building). The project supported design and printing of park promotional materials, and publication of park management plans.

### **Component 3. Project Management and Monitoring**

***Design and Implement a Monitoring Program.*** A biodiversity monitoring program for KEC priority areas was developed to improve basic information for biodiversity conservation. Inventory and mapping results facilitated population viability analysis; distribution of species, and distribution of habitats. Monitoring equipment procured by KEC PIU was used for this work. The MEPPP established the Institute for Nature Protection that is responsible for biodiversity monitoring on the national, regional (county), and local levels. The only existing lab for monitoring in the KEC region is in Plitvice NP. The monitoring program provided feedback to help measure KEC project effectiveness; and served as a model for a national program, taking into account the financial and human resources of the MEPP.

***Project Oversight.*** The MEPP as Government Implementing Agency had overall responsibility for project implementation during September 2002-March 2004. At the beginning of project implementation, a national-level project implementation unit (PIU) was established in the MEPP Division of General Environmental Policy. The PIU built on the KEC project preparation implementation unit and was responsible for all project procurement, disbursement, financial management, and oversight of civil works, consultants, seminars, and training. The Croatian Government Division of General Environmental Policy—in particular nature protection division—was transferred from the MEPP to the Ministry of Culture, Directorate for Nature Protection. Therefore, from April 2004 to project closing, the Ministry of Culture (MoC) assumed overall responsibility for KEC project implementation. The PIU was responsible for coordinating with other donors regarding implementation and project co-financing, and for all reporting requirements to the Bank and the Government of Croatia. The PIU was staffed by a project director, procurement and financial specialists, program coordinator, and program officer, funded under the project.<sup>4</sup> The project also established a local PIU office in Gospic, the capital of Ličko-Senjska county, which enabled local-level inter-sectoral coordination and planning. Since county officials identified Gospic as the best location for a proposed regional development pole, locating a PIU there enabled coordination of county development plans. The local PIU handled day-to-day project implementation and local-level coordination, and was staffed by a project field coordinator and project assistant.

The national PIU was assisted by an inter-agency Project Steering Committee established prior to Board presentation. The Steering Committee comprised Ministry and institutional representatives, including Ministry of Environmental Protection and Physical Planning, Ministry of Agriculture and Forestry, State

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<sup>4</sup> Around mid-term, the PIU Director (a former Ministry staff) was rehired as government staff (no longer paid through the project) while retaining the project Director position, effectively mainstreaming the project into ongoing government programs.

Department for Water, and the directors of the protected areas under the project. The Steering Committee was responsible for providing project oversight advice, inter-ministerial coordination, and assistance to resolve issues associated with project implementation. The Minister of Culture (previously the Minister of Environmental Protection and Physical Planning) became a chairman of this committee. Local advisory groups from each of the three main project regions (Plitvice, Paklenica, and Velebit), comprising representatives of key stakeholder groups, assisted the National PIU and Steering Committee.

The PIU KEC lacked accounting software to record data on project expenditures so the procurement and financial management specialist used Excel spreadsheets for each kind of data reporting, which was cumbersome and time-consuming. Despite some inherent risks with this system, it was effective, however it is recommended in hindsight to invest in project accounting software.

### **Annex 3. Economic and Financial Analysis**

Financial and economic efficiency were evaluated on the degree to which non-GEF funds could be leveraged to achieve project objectives, which is a basic assumption of GEF Incremental Cost Analysis. An estimated US\$3.3 million in non-GEF contributions anticipated at appraisal was exceeded by more than US\$500,000 after accounting for a falling US\$ exchange rate. A total estimated US\$1,744,051 in additional local-level contributions was realized, with the highest contributions from the National Park Northern Velebit (US\$960,000), and additional investments by small grant beneficiaries to complete their projects as planned (US\$380,000).

These estimates are conservative because they do not account for costs of many “spin-off” projects enabled through the KEC investments (e.g., ongoing large mammal monitoring), or for recurrent costs at parks, which increased due to project investments. All KEC activities are either continuing with park budget support or have been completed and established demonstrations for replication to other parks that have additional funds. Evidently the introduction of management plans and budgeted actions plans for parks is increasing central budget funding for nature protection. Examples of ongoing work include the veterinary faculty research and tracking of large mammals (bear and lynx) using state-of-the-art radio collar equipment supplied by KEC; biodiversity inventory work and management planning processes are already replicated to other parks and will continue to be rolled out to more parks and Natura 2000 sites across Croatia (EU funds); and models of park visitor centers financed and demonstrated through KEC, which will be extended to other parks in the future (embedded in new Nature Protection legislation).

GEF funds were leveraged with other funds during both implementation and project follow-up. Examples of leveraging beyond planned central ministry funds include supplements from individual park budgets; land donations; and construction works contributions from municipalities that complement KEC-financed works. During the project, Norway provided bilateral donor support to extend the CRRG program, and the United States Agency for International Development (USAID) supported a lessons learned study tour for park managers to visit the National Parks system (complementing a KEC-financed study tour).

KEC project results have generated significant interest and additional financing from other donors such as the EU, Norway, Austria, and France, to continue project investments. Two Norwegian Bilateral Project Cooperation Programs (Protected Areas Management Systems Project 2006-08) and an EU grant program continue to help the Ministry of Culture and the State Institute for Nature Protection expand the KEC project GIS to county-level structures and other National Parks. A bilateral program with France established exchange relations between two French regional parks and Croatia to support county-level management plans based on the KEC management plan model. The Austrian-Croatian Chamber of Commerce has initiated cooperation to follow up on the KEC-supported proposal for an international karst hiking trail.

The following table describes project activity financing—funding sources and local beneficiaries.

**Expenditures per National Park  
Period: 12 / 2002 - 02 / 2008**

<b>Public Company Name</b>	<b>Funds Spent - Total Directly Related to KEC Project IBRD GEF Trust Fund (TF) 050539 Norwegian TF 053242 STATE BUDGET/MoC US\$</b>	<b>Additional Investment from Local County Authorities to Support Related KEC Project Activities US\$</b>	<b>Total 4 = 2 + 3 US\$</b>
1	2	3	4
National Park Paklenica	1,198,909	221,503	1,420,412
Park of Nature Velebit	1,922,026	185,646	2,107,672
National Park Plitvice Lakes	818,064		818,064
National Park Northern Velebit	1,072,869	956,902	2,029,771
National Park Risnjak	1,213,448		1,213,448
Gacka River Walley	49,861		49,861
Beneficiaries - subgrants (CRRG)	571,561	380.000 ***	950,019
Ministry of Culture (equipment)	220,480		220,480
<b>TOTAL</b>	<b>7,067,218</b>	<b>1,744,051</b>	<b>8,811,269</b>

Grant 5,169,545  
Borrower (MoC) 1,897,673

Borrower Funds Spent 2002-2007 1,897,673 1,364,051 3,261,724  
PAD - Borrower funds planned for five years =  
3.298.260 US\$ / ratio spent vs. planned = 98,89 %

\*\*\* /Additional investment by **small grants beneficiaries**, to complete the project as planned = approx. US\$380.000

## Annex 4. Bank Lending and Implementation Support/Supervision Processes

### (a) Task Team Members

Names	Title	Unit	Responsibility/ Specialty
<b>Lending</b>			
Rita Klees	Senior Environmental Specialist	ECSSD	Task Team Leader, Environment
John Fraser Stuart	Senior Biodiversity Specialist	ECSSD	Biodiversity
Tijen Arin	Natural Resources Economist	ECSSD	Economic Analysis
Karin Shepardson	Senior Environmental Economist, GEF Regional Coordinator	ECSSD	GEF Advisory Support
Ana Marija Frankic	Consultant, Ecologist	ECSSD	Ecology
Gonzalo Castro	Senior Biodiversity Specialist	ENV	Biodiversity
Valencia Copeland	Program Assistant	ECSSD	Administrative/Costs
Jan Post	Principal Biodiversity Specialist	ENV	Biodiversity
Anthony Whitten	Senior Biodiversity Specialist	ENV	Biodiversity
Jane Holt	Sector Leader, ENV	ECSSD	Management Review
Vladimir Skendrovic	Operations Officer	ECAHR	Local Country Operations
Douglas Morris	Park Manager, US Park Service	USNPS	Park Management and Training
Marjory Anne Bromhead	Sector Leader, NRM	ECSSD	Management Review
Jose Martinez	Procurement Specialist	ECSPF	Procurement
Gurdev Singh	Consultant, Procurement	ECSSD	Procurement
Hiran Heart	Financial Management Specialist	ECSPF	Financial Management
Janis Bernstein	Sr. Environmental Specialist, Social	ECSSD	Social Assessment
Martin Schneider-Jacoby	Consultant, Biologist	ECSSD	Biologist
Voltaire Andres	Consultant	HRLDC	Leadership Development Center
Rimma Dankova	Consultant	ECSSD	Economist
<b>Supervision/ICR</b>			
Karin Shepardson	Sr. Operations Officer	ECSSD	TTL, Environment
Ljiljana Boranic	Team Assistant	ECCHR	Administrative Support
Rita Klees	Senior Environmental Specialist	ECSSD	TTL, Environment
Vera Dugandzic	Operations Analyst	ECSSD	Bank Operations
Vanja Frajtic	Communications Asst.	ECCHR	Communications
Lamija Hadzagic	Financial Management Specialist	ECSPS	Financial Management
Agnes I. Kiss	Lead Biodiversity Specialist	ECSSD	Biodiversity
Douglas K. Morris	Consultant	ECSSD	National Parks

Martin Schneider-Jacoby	Consultant	ECSSD	Biodiversity
Antonia G. Viyachka	Procurement Spec.	ECSPS	Procurement
Christopher Cosslet	Biodiversity Consultant	ECSSD	Biodiversity/Small Grants Evaluation

**(b) Staff Time and Cost**

Stage of Project Cycle	Staff Time and Cost (Bank Budget Only)	
	No. of staff weeks	US\$ thousands (including travel and consultant costs)
<b>Lending</b>		
FY96		13.83
FY97		0.00
FY98		1.80
FY99		66.54
FY00		109.40
FY01		80.82
<b>Total</b>		272.39
<b>Supervision/ICR</b>		
FY01		8.94
FY02		79.24
FY03		85.27
FY04		79.66
FY05		64.72
FY06		37.17
FY07		53.22
<b>Total</b>		408.22

## **Annex 5. Methodology for CRRG Impact Assessment, Including Beneficiary Survey**

The Conservation and Rural Revitalization Grants Program (CRRGP) was reviewed at the end of the project in an impact assessment to provide recommendations for future activities in biodiversity protection, protected area management, and local/regional sustainable development. Key observations and lessons learned from this review are presented in Section 6 and in more detail in this annex. The objective was to evaluate the quality of the design and implementation of the CRRGP (clarity, relevance, effectiveness, transparency, sustainability, replicability) and impacts on biodiversity, sustainable natural resource use, local economic activities, and local attitudes towards Protected Areas and Biodiversity. The evaluation focused on the following four elements:

- Process and results of sub-projects submission and selection
- Impacts on community attitudes and behavior (natural resource use practices)
- Impacts on alternative income generation
- Lessons learned

The review considered all 30 CRRG grants, provided a more in-depth analysis of ten grants (visited by the consultant team) and presented case studies for two of the ten. The data gathering methods and analysis techniques used in the evaluation were desk study, field visits, and interviews. Consultants carried out in-depth analysis on all reports and decisions of the local advisory board (LAB) meetings, press clippings and reports on the project grant selection process, work reports of KEC/PIU and project-related press clippings. Based on the above reviews, the local consultants and the PIU jointly selected ten projects for in-depth analysis based on the following criteria: (i) achieved results; (ii) covered almost all KEC project geographic area; and (iii) covered all three grant categories: small business and infrastructure investments, capacity building and business management, and environmental education and public awareness.

Field visits were undertaken to ten beneficiaries (projects), with a total of seventeen field visits and interviews conducted with beneficiaries, non-beneficiaries, members LAB, representatives of local and county government, and protected areas. Semi-structured interviews covered key areas of interest for project evaluation. However, interviews also included several follow-up questions, which varied according to the initial responses. Although initial plans were to interview only beneficiaries of the ten selected CRRG grants, short questionnaires were also prepared for non-beneficiaries in the project area to draw on a wider pool of information on CRRG program results and to compare responses from non-beneficiaries and beneficiaries.

Out of 30 projects, six grants were cancelled due to failure to understand or respect procurement guidelines and one grant was cancelled due to a lack of counterpart funds. In the misprocurement cases, funds were returned in all but one case, which was pending legal action in municipal court at project close.

In the assessment of failures and sustainability of projects financed through the CRRG program, special attention was given to qualitative perceptions of interviewees regarding lessons learned in the last five years, and to recommendations for additional grants related to local development based on sustainable use of natural resources. This process evaluated attitudes and recommendations related to future grant programs.

Key messages taken from the CRRG impact assessment review include the following:



**Be clear from the beginning:** Avoid unrealistic expectations among potential beneficiaries concerning potential availability of financial resources for individual projects being prepared.

**Planning is crucial:** Detailed planning makes it easier to implement a small project and avoid major changes in contract deliverables, which are generally not allowed. Planning requires experience on both sides, so knowledge was gained from this experience.

**Keep application process as simple as possible:** The application procedure was too complicated for most potential beneficiaries to complete without hands-on assistance, despite the excellent organization of educational activities by the KEC/PIU.

**Easier to support individuals than associations:** The PIU attempted to promote establishment of associations, and encouraged associations to send in proposals (beekeeping association, agricultural co-operative, tourism association, eco-agriculture). However, most successful projects were managed by individuals.

**Role of local advisory board (LAB) could have been broader:** For future grant programs, it is recommended that LABs have a more active role in supervision of grant activities—not just approval.

**Ensure that support is closely tied to park management plans:** Benefits to protected areas from sustainable rural development can be optimized when designed in concert with park management plans. Adoption of park management plans by karst area parks provides an excellent opportunity to do this. Most CRRG grants were implemented prior to completion of these plans so missed the opportunity to be placed within their more strategic context (e.g. harmonize outcomes and targets).

**Local PIU is critical to success:** All projects of this type need to maintain an office in the project area and people/experts working in the field to help applicants with project preparation and share know-how on applying project funds.

**Ecotourism and ecological production are among the most promising economic activities for the region.**

**Lack of capital for investment is a major and ongoing constraint for entrepreneurs in the region.**

**Separate funding for income-generation projects from education and capacity-building projects:** During project preparation, the potential areas for small grants were thoroughly evaluated. The importance of capacity building and education was less appreciated by potential beneficiaries than small business and infrastructure investments. Potential beneficiaries were more interested in short-term returns rather than long-term development, which is understandable given the difficult socio-economic situation in the project area. However, capacity building remains an important need and future programs should ensure that adequate capacity-building opportunities are available, particularly for entrepreneurs in target sectors. This could be achieved by allocating dedicated funds for capacity building rather than having a single fund for education, capacity building, and income generation

**Continue supporting sustainable rural development in the context of parks management:** Based on knowledge and skills gained during the CRRG Program, the overall recommendation is

to find further avenues of support for rural revitalization and nature conservation projects. In terms of the level of economic development in the KEC project areas, additional support for local development incentives is needed to achieve rural revitalization and biodiversity conservation. The CRRG demonstrated positive results that provide a model for further activities.

**Adopt an inter-sectoral approach:** The Croatian Government, relevant Ministries, and regional and local self-government are encouraged to consolidate efforts to form a common inter-ministerial framework that supports rural revitalization, eco-tourism, small-scale entrepreneurship and biodiversity conservation in areas surrounding protected areas. The Ministry of Culture, the Ministry of Agriculture, Forestry and Water Management, and the Ministry of Environmental Protection, Physical Planning and Construction and the Ministry of Sea, Tourism, Transport and Development can cooperate to jointly address this objective and support related activities incorporating biodiversity conservation. Regional and local self-government should also offer further support, in coordination with national bodies.

**Examine financing options:** In addition to grant support, loan support for biodiversity-friendly businesses could be considered. For example, a micro-credit scheme with low-interest loans, favorable grace periods, etc., could help finance projects that contribute to biodiversity conservation and rural revitalization.

**Build on existing project ideas:** The CRRG Program encouraged local people to prepare project applications, and initiated good entrepreneurial ideas. However, many good projects were not funded and these applications should be retained in a database to be considered when new sources of funding become available. For example, all project proposals prepared in Primorsko-Goranska county for the CRRG Program were included in the list of projects within the scope of the EU Regional Operational Programs. Such lists should be used and built upon because they provide incentives for local rural development.

**Build on existing capacities:** The CRRG grants contributed to knowledge and skills development in project preparation, doing business, and conservation and protection of nature and biodiversity, all of which should be the basis for further activities in the region.

**Additional financial support should be set aside for training on project preparation:** The need for assistance in preparing projects proposals is obvious. The KEC project has shown that people would welcome such initiatives.

**Continue monitoring impacts on income, attitudes, behaviors and biodiversity:** Review findings captured emerging information and as the expression goes, ‘only time will tell’ about the sustainability of impacts. Direct impacts measured within the project timeframe were relatively small and their ultimate impact will depend on future uptake/dissemination by others. Efforts should be made to continue monitoring the CRRG Program and projects arising from further support. Longer-term monitoring, with leadership and support from nearby parks, would address remaining questions about sustainability of income gains and measurable impacts on biodiversity.

## **Annex 6. Stakeholder Workshop Report and Results**

Throughout project preparation and implementation many stakeholder workshops and meetings were held. The final KEC workshop, held in December 2007, in Gospić showcased promotional materials that the KEC parks have produced such as leaflets, brochures, outdoor informational boards, trail interpretation guides, and park nature guide books to promote the unique characteristics of the karst area. The World Bank communications group helped finance the production of a short documentary “Guardians of the Karst” highlighting KEC project results using Dobar dan komunikacije d.o.o. production company. The documentary was shown during the final workshop in Gospić (see supporting documents list) that brought together stakeholders that had regular contact with the project throughout the five-year implementation period. However, stakeholders and participants reported great satisfaction upon viewing the cumulative results of the project (the sum was greater than individual perspectives on certain parts) and underscored the extent to which activities initiated by KEC were being sustained through ongoing local community and nature protection work in Croatia.

### **Excerpt from Closing Workshop Press Coverage:**

NOVI LIST, TUESDAY 11 DECEMBER 2007 (English translation)

TWO DAY WORKSHOP IN GOSPIĆ AS PROJECT TO CONSERVE THE KARST ECOSYSTEM COMES TO AN END - **Small grants hasten development of entrepreneurship in Lika, Milan Tomašević, Gospić** - After five years, the “Karst Ecosystem Conservation” project is nearing its end. The project is planned to end on 31 December, so Gospić hosted a final workshop on the results of the KEC project, organized by the Ministry of Culture of the RoC.

**Grants to the Local Population.** “This is definitely the largest project in the field of environmental protection in the Republic of Croatia,” the assistant minister in the Minister of Culture, Zoran Šikić said. The project will be the backbone and model on which a system of natural conservation will be built in Croatia for which we have adopted a dynamic plan of action until 2010”, said Šikić. “The project is extremely important and valuable, not only for the Lika-Senj County, but also the entire area it covered. The small grants given have been an impulse for the development of enterprise in this area, primarily bee-keeping, and raising livestock and medicinal herbs. This is in line with our long-term strategic development goals, but it is also the foundation of future projects,” said the deputy prefect of the Lika-Senj county, Dražen Peranić.

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

Ministry of Culture Comments, June, 2008:

The KEC project has successfully implemented selected Biodiversity Strategy and Action Plan of Croatia who defined priority actions for karst ecosystems notably by preserving the biological and landscape diversity of the karst region, improving biodiversity inventory and monitoring, raising awareness and participating in regional efforts to manage biodiversity through transboundary initiatives.

The project has had a wider national impact outside the KEC area and this is seen as the added value of the project.

The project raised capacities of parks for systematic inventory and monitoring of ecosystems and species which contributes to the build national inventory and monitoring capacities. Project results on this field will build Croatian authorities' ability to accurately identify patterns and trends in biodiversity and the magnitude of threats to biodiversity. This also facilitates national ability to ensure appropriate conservation measures of protected areas. The project has used biodiversity conservation internationally recognised best practices, standards and tools that are now available for application elsewhere in Croatia.

The project has high potential of replicability of its results to the remaining 14 national and nature park of Croatia. First management plans of KEC project were used as a standardize model for development of management plans in Croatia, in respect to the format as well as in methodology of its development with broad participation of all stakeholders. The project developed management planning guidelines which are used by other parks planning activities.

KEC parks NP Risnjak, NP Northern Velebit, NP Plitvice Lakes, NP Paklenica and PN Velebit were in November 2007 designated by the Government (Narodne novine, 109/07) as a sites of the national ecological network, to be in future proposed for EU ecological network NATURA 2000. As it is known NATURA 2000 SITES are designated to fulfill obligations of EU countries under the Habitat Directive on conservation of natural habitats and of wild fauna and flora. Habitat Directive requires development of management plans and measures for NATURA 2000 sites. With development and adoption of management plans for KEC parks prepared on the international standards, Croatia as a candidate country has preliminary fulfilled obligation coming out of the Habitat Directive. Additionally, one of the strategic goals of the Ministry of Culture, as responsible governmental authority for nature conservation, is that other national and nature parks of Croatia (14) use KEC model of management plans adopted to their circumstances, to develop their own management plans by 2010.

Monitoring system for biodiversity, information system and data base model for KEC parks could be and are replicable for the other 14 parks in Croatia.

Small grants Programme has been successful and experiences gained through the Programme can be used in the region and on national level.

National Workshops organized to share experience and results of the project were active element of introducing new practice of exchange of experience and communication on nature conservation issues in Croatia, which are often used for other projects.

Practice of improved park's communication with local people gained very positive reflects in management planning works and could be used as a model for other 14 parks in Croatia.

Among lessons learned we can mention that the project success depends on

- the best project planning practice, well defined scope and works schedule (procurement plan),
- Excellent communication between implementing agency(ies) and WB project teams,
- support to the PIU from the implementing agency, which was excellent by the Ministry of Culture,
- stakeholders and local people are willing to cooperate if positively approached by the parks staff,
- sharing of experience between people involved in the project contributes to the social value of the project,
- the project contribute to the income of local people and to local economies by well planned and economically justified project activities.

Among the project results we can also mention:

- the Ministry, parks, beneficiaries and stakeholder learned much on project preparation and implementation methodology both from project preparation and implementation,
- attitudes and behavior of people involved in the project directly influenced natural resource use and business practices,
- building and establishment of visitor's centres and parks infrastructure at five sites will increase capacities of parks to present natural values as well as to increase funding of their activities,
- equipment purchased for biodiversity research and monitoring for five KEC parks as well as procured servers, PC's, general and GIS software ensure that the technical capacity of the Park Management offices is sufficient to properly protect the parks resources,
- audiovisual equipment procured for four parks will enable holding presentations and workshops within the Parks premises and is aimed to attract more visitors,
- the project has developed a dedicated environmental information system for the storage and analysis of data arising from standardised biodiversity inventory and monitoring practices that will have an immediate application for a national systematic review of biodiversity patterns and threats as a precursor to designing a national system plan for protected areas,
- capacity building of park staff and other stakeholders in the preparation of the management plans and related aspects; a number of training programmes at different institutional levels: in interpretation, monitoring, using GIS system,
- high local community participation and stakeholder involvement from an early stage in the project provides support and sustainability of the agreed objectives and actions of the management plans prepared in the project,
- the Ministry, parks and local governments demonstrated ownership by investing additional funds in supporting or continuing the project work, like in a case of building the HQ of Nature park Velebit,
- the project was deeply included in daily work of institutions mentioned which contributed to overall project success.

The World Bank role was highly appreciated by the Client in the project preparation and implementation period due to the strong guidance of the Bank team as well as Bank's flexibility in adjusting project activities to strategic needs of the Ministry. The WB role was crucial for the project success.

Due to the very good project results and cooperation with the World Bank, Ministry of Culture requested the World Bank to continue joint work on nature conservation in Croatia and to plan a future investment for nature conservation. Croatia has requested the IBRD loan for nature protection to expand KEC project to other protected areas.

Croatia Ministry of Finance Comments June, 2008

Herewith, I would like to confirm that we do not have any comment to the subject draft ICR. We do hope to have more successful projects as this one. This is certainly because of the lot of effort and enthusiasm of the teams both on the Bank and the Borrower side.

## **Annex 8. Comments of Co-financiers and Other Partners/Stakeholders**

### **Summary of Participation by Other Donors**

During preparation, the **U.S. Agency for International Development (USAID)**, the **U.S. Department of the Interior (DOI)** and the U.S. National Park Service (NPS) worked with the KEC project team to help identify project components for the five protected areas included in the project. DOI-NPS financed a technical assistance mission of three protected area management specialists for three weeks to assist with KEC project design, and sponsored a Croatian delegation of protected area managers to visit U.S. National Parks. DOI/NPS worked with the KEC project team and MEPP to design a program "Practical Training in National Parks" financed, in part, by USAID/Croatia. This program was designed to improve visitor interpretation services in two KEC project national parks; and to provide job training to local youths to assist in the reintegration of war-affected populations in the KEC project region. This US\$120,000 program was carried out during June 2001-April 2002.

The **Dutch Partners for Water Program** financed a US\$100,000 project to support KEC project activities by providing Dutch expertise in groundwater pollution and biodiversity conservation in preparing karst conservation guidelines. In 2005, the **Government of Norway** donated an additional US\$200,000 to the project, earmarked for the CRRG component. During project implementation, Croatia established the **European Union** Delegation in Zagreb and was formally invited for accession negotiations with the European Union. In parallel with the KEC project, the EU CARDS program financed several grants focused on Nature Protection. A joint workshop was held between KEC and the Capacity Building project for the State Institute for Nature Protection in November 2006 to help reinforce common and complementary objectives of both programs.

### **Other Partner Comments on ICR**

#### Comments from US Embassy, Zagreb:

Thanks for sending these reports. I have no comments, other than that it looks like it was a very useful project. You're probably aware that our USAID program in Croatia has closed. Because of that, it's unlikely there will be any financial support for future projects through the embassy. But we're happy to be supportive in any other way we can.

#### Comments from the EU Delegation, Zagreb

Thank you for the document. I went through it and I do not have any comments I would highlight except to compliment all involved in the team for the work done on this project. As you know, we are currently running a Natura 2000 project with the SINP and expect some preliminary results to start coming in after the summer break. That is why I also think it would be useful to meet in July to coordinate activities. Looking forward to seeing you in Zagreb.

## Annex 9. List of Supporting Documents

1. National Park Paklenica Management Plan, 2007
2. National Park Rsijnak Management Plan, 2007
3. National Park Northern Velebit Management Plan, 2007
4. Nature Park Velebit Management Plan, 2007
5. National Park Plitvice Management Plan, 2008
6. Conservation and Rural Revitalization Grants (CRRG) Program Impact Assessment, 2008
7. Manual for Project Preparation for Conservation and Rural Revitalization Grants Program for Karst Ecosystem Conservation Project, 2004
8. Social and Rural Development Assessment, Blackstone Corporation, September, 2000
9. Report from the First Park Management Planning Workshop held at National Park Plitvice Lakes, Agriconsult, November 2003
10. Report from the Second Park Management Planning Workshop held at Risnjak National Park, Croatia, Agriconsult, March 2005
11. First Annual Workshop Report, October, 2003
12. Report of Project Launch Workshop, 2002
13. Report of the Third Annual Workshop held at National Park Northern Velebit, October, 2005
14. Annual Management Planning Workshop Joint with EU CARDS Project for Institutional Strengthening of the State Institute for Nature Protection
15. Progress Report of the Project Financed from the Grant of the Kingdom of Norway, December, 2005
16. Biannual Progress Reports from Agriconsult 2002-2007
17. Assessment of the Tourism Pattern and Recommendations for the Sustainable Tourism Development in the KEC Area, March 2005
18. Guidelines for Development of Management Plans
19. Guidelines for Evaluation of Management Plans
20. Nature Guide to Velebit National Park
21. Cave Inventory Study
22. Manita Pec Cave Management Plan
23. Other Promotional Materials and Guides
24. Project Website: [www.kec.hr](http://www.kec.hr)
25. Films by Project posted on World Bank U-tube website:
26. Guardians of the Karst Video Describing Project Results  
<http://www.youtube.com/watch?v=UnWCttNoA24>
27. Shingle - Preserving the Old Skills - Documentary Video Produced by one of the Conservation and Rural Revitalization Grants  
<http://www.youtube.com/watch?v=0JsOymgdbXM>



## Annex 10. KEC Project Update of Monitoring and Evaluation Indicators

As follow-up to the midterm review, all M&E indicators were reviewed to evaluate their validity for measuring project impact and their utility for capturing important project objectives and outcomes. The following table describes key revisions to monitoring indicators agreed by the client and Bank management.

OUTCOME <sup>5</sup>	INDICATORS FROM MTR A.M.	CHANGE MADE	NEW INDICATORS	COMMENTS
Significant reduction in destructive practices	Number of law violations (tickets issued)	Indicator dropped		Ambiguous, and not a legitimate measure of project objectives
Increased PA management capacity;	Number of employed KEC park staff trained in management planning	Revised to include all staff training, not only formal training in park management.		Input/activity indicator rather than outcome or output indicator, but linkage to institutional capacity is likely to be strong. Also, useful to track project implementation progress
	Number of employed GIS and interpretation staff	Dropped		Project focus is on upgrading skills of existing staff, not on adding new staff
	Adoption of modern approach to park management planning in the 5 parks (providing model for others as well)		<b>New Indicator #1: Completion of PA Management Plans, consistent with international best practice. <i>Interim target</i> = stakeholder comments obtained and incorporated into 3 draft PA Management Plans (verified by Ministry). <i>End of project target</i>: 5 completed PA management plans</b>	International best practice includes: clear PA vision/mission statement; objectives-based zoning and strategies; strong stakeholder participation and partnership; knowledge and science-based; adaptive management approach; includes

<sup>5</sup> This column includes both outcomes identified in Annex 1 of the PAD, and additional outcomes not explicitly or clearly defined in the PAD, but agreed upon by the mission and PIU as being highly significant to project objectives.

				priorities and costs; includes or provides clear direction for detailed action plans
Improved public knowledge and appreciation of the karst ecosystem and Protected Areas	Number of park publications on biodiversity (interpretive materials)	Revised (see new indicator #2)		Quality and diversity of interpretive materials is more important than the number of them
	Number of interpretive panels in the parks		<b>New indicator #2: each of the 5 parks is able to provide visitors with diverse information and interpretation products that reflect training provided under the project.</b> <i>Interim target:</i> information/interpretation training completed by park staff; <i>End of Project target:</i> each park has produced 3-4 different I/I products	Training in interpretation services has stressed production of high quality, well-targeted educational, informational and interpretive materials in a range of media
Improved scientific knowledge of the karst ecosystem in the project area, providing basis for better management	Number of scientific projects	Dropped		Basic research is not a main objective of project—focus is on applied research for more effective monitoring
	Increased number of scientific databases	Revised (see new indicator # 3)		Meaning and relevance of the indicator and reporting format unclear
			<b>New indicator # 3: an integrated, sustainable ecological monitoring system is in place and in use</b> <i>Interim targets:</i> Identification of key indicator species; baseline inventory 50% completed. <i>End</i>	The monitoring system should include: baseline flora and fauna inventory that is updated regularly; intensive tracking of selected indicator species; user-friendly and accessible

			<i>of Project Targets:</i> baseline inventory completed; rangers in all 5 parks inputting data)	GIS/information management system
Increase and improve physical assets (equipment, civil works) for PA management	Expenditure (\$\$) on various types of equipment and infrastructure	Retained		Input indicator rather than output or outcome, but directly linked to management capacity and useful for tracking project implementation performance
Enhanced visitor satisfaction with park services	Response to visitor survey, summarized by response to question regarding whether the visitor “learned something new?”	Revised	<b>Revised indicator:</b> establishing a system within each park to track trends in visitor satisfaction. <i>Interim target:</i> preparing a visitor satisfaction survey to be used by all the parks; <i>End of project target:</i> Park managers using the survey minimum of once per year	As project time frame insufficient to expect significant changes in visitor satisfaction, focusing instead on establishing a tracking system. Croatian park managers are not accustomed to soliciting input from visitors as feedback, so their adoption and use of a visitor satisfaction survey would represent a significant step in modernizing park management practices
	Number of visitors	Dropped		Not under control of the project activities (many other factors involved), and project time frame insufficient to expect statistically significant change
Increased and strengthened partnerships relating to park management	Number of KEC workshops, meetings  Number of meetings with Slovenia and Bosnia and Herzegovina	Slightly revised and consolidated		Count only those meetings and workshops involving the external partners (including transboundary). While the indicator does not

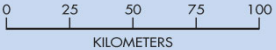
				address the usefulness or outcomes of these meetings, having them at all represents a significant positive change in park management practice
Demonstrate the viability of biodiversity-friendly resource use (CRRG Program)	Verification that grant funds were distributed for productive purposes [consistent with Operational Manual]	Retained		Important to demonstrate that the CRRG funds are well administered and closely monitored
	Number of CRRG projects	Dropped		No target set for total number of grants/projects; project numbers are less significant than their quality and linkage to project objectives.
			<b>New Indicator #4: CRRG program directly contributes to adoption of more ecologically sustainable land and natural resource use practices. <i>Interim target:</i> 70% of all CRRG project grant contracts include commitment by beneficiary to adopt specific improved practices. <i>End of project target:</i> 100% of the CRRG projects with such contractual provisions show clear progress toward fulfilling those commitments.</b>	Specific improved practices include: application for certification of ecological production (by designated control stations of MAFW); preservation of meadow landscapes (through grazing or mowing); measures to promote environmental soundness of tourism development, etc.



### CROATIA KEC PROJECT REGION

- KEC PROJECT REGION
- NATIONAL PARKS
- NATURE PARKS
- NATURE PARKS (PLANNED)
- RIVERS
- MAJOR TOWNS
- ★ NATIONAL CAPITAL
- REGION BOUNDARIES
- INTERNATIONAL BOUNDARIES

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