

OFFICE MEMORANDUM

DATE: September 28, 2001

TO: Mr. Ken King, Assistant CEO, GEF Secretariat

FROM: Lars Vidaeus, GEF Executive Coordinator



EXTENSION: 3-4188

SUBJECT: **Croatia: Karst Ecosystem Conservation Project
Submission for Work Program Inclusion**

Please find enclosed the electronic attachment of the above mentioned project brief for work program inclusion. We would appreciate receiving any comments by **October 9, 2001**.

The proposal is consistent with the Criteria for Review of GEF Projects as presented in the following sections of the project brief:

- Country Drivenness: The World Bank received a letter of support from the GEF focal point, the Director of the State Directorate for Nature Protection and Environment, requesting technical assistance and financial support for the preparation of the Karst Ecosystem Conservation Project (June 1999). Subsequent to this, upon the establishment of a new MEPP, the new minister and new GEF focal point, have supported the request for the KEC project (February, 2000). The Government agencies responsible for environment have shown a commitment to identifying and prioritizing environmental problems and finding solutions. The BSAP was endorsed by the Parliament (June 1999). The KEC project is a national priority under the BSAP which identifies conservation of biodiversity in the karst region as a key environmental priority. A National Environmental Action Plan (NEAP), produced with support from the World Bank (2001) includes as priority environmental issues, biodiversity conservation, and within biodiversity, specifies the KEC project as the top priority action. MEPP is currently implementing a medium size GEF grant for biodiversity conservation as part of the Eastern Slavonian Reconstruction. (Please see "D. 4. Indications of borrower and recipient commitment and ownership".)

- Endorsement: The endorsement letter sent to the WB by the Croatia GEF Focal point is attached to this document.

- Program Designation & Conformity: The project supports the objectives of the GEF Biodiversity operational programs for coastal, marine and freshwater ecosystems (OP2), mountain ecosystems (OP4) and forest ecosystems (OP3). Activities will concentrate on the conservation and sustainable use of natural resources of international import in the karst region of Croatia. The project responds to Conference of the Parties

PROJECT BRIEF

1. IDENTIFIERS:

PROJECT NUMBER:	P042014
PROJECT NAME:	Croatia: Karst Ecosystem Conservation
DURATION:	5 Years
IMPLEMENTING AGENCY:	World Bank
EXECUTING AGENCY:	Ministry of Environmental Protection and Physical Planning
REQUESTING COUNTRY OR COUNTRIES:	Croatia
ELIGIBILITY:	CBD ratified on October 7, 1996
GEF FOCAL AREA:	OP 4, OP 3, OP 2
GEF PROGRAMMING FRAMEWORK:	Biodiversity

2. SUMMARY:

The project development objective is to protect the biodiversity of karst ecosystems in Croatia in a way that is participatory, economically viable, and integrated with the country's socio-economic goals. The project will address a key environmental policy issue facing the government – how to manage the country's future growth and development, while protecting the environment, on the national and local level. The project will assist the Government to preempt the potential threats to biodiversity related to tourism and other economic development activities in the region. To do so, the project will assist the Government to address priorities identified in the Biodiversity Strategic Action Plan by (i) building the national capacity to conserve biodiversity and support natural resource management and (ii) establishing community based approaches for biodiversity conservation and sustainable resource use in and between selected protected areas and their associate villages in the karst region. The project will demonstrate linkages, on a local level, between sustainable natural resource use, economic development and biodiversity conservation. It will support rural revitalization activities and increase the role of civil society in environmental decision-making. The project will also support regional, transboundary activities to conserve the biodiversity of the Alp/Dinarid/Balkan karst mountain chain. The project is linked to the World Bank financed, \$250 million Croatia Municipal Coastal Water Pollution Control Project.

3. COSTS AND FINANCING (MILLION US):

GEF:	-Project	5.07
	- PDF:	0.23
	Subtotal GEF:	5.30

CO-FINANCING:	-IA:	n/a
	-Other International:	n/a
	-Government of Croatia	3.18
	-USAID	0.15
	-Private	n/a
	Subtotal Co-Financing:	3.33

TOTAL PROJECT COST (Including PDF-B grant): 8.63

4. ASSOCIATED FINANCING (MILLION US\$)

n/a

5. OPERATIONAL FOCAL POINT ENDORSEMENT:

Name:	Antle Kutle	Title: Director
Organization:	State Directorate for the Directorate for the Protection Of Nature and Environment	Date: 20 July 99

6. IA CONTACT:

Konrad v. Ritter (acting)
ECA
Tel. 202 458 0477
Fax: 202 614 0697
kritter@worldbank.org

A. Project Development Objective

1. Project development objective: (see Annex 1)

The project development objective is to protect the biodiversity of karst ecosystems in Croatia in a way that is participatory, economically viable, and integrated with the country's socio-economic goals. In support of this objective, the project will assist the Government of Croatia to strengthen institutional and technical capacity for biodiversity conservation, integrate biodiversity conservation into physical planning and sectoral strategies, strengthen management of protected areas, and promote entrepreneurial and tourism activities which support sustainable natural resource use and conservation.

2. Key performance indicators: (see Annex 1)

The key indicators of project success are:

- Maintained 2001 level of globally important species on 9,500 square kilometers of high priority karst ecosystems;
- Prepared protected area management plans which follow the guidelines developed in the project in two national parks and one nature park, and implementation of plans initiated;
- Increased protected area and self-generated financial resources for biodiversity conservation in four national parks and one nature park;
- Increased nature-based tourism and other economic activities which further the objectives of development, sustainable natural resource use, and biodiversity conservation.

B. Strategic Context

1. Sector-related Country Assistance Strategy (CAS) goal supported by the project: (see Annex 1)

Document number: 19280HR

Date of latest CAS discussion: 05/11/99

The CAS indicates that to encourage private sector development, Croatia needs to develop and maintain its infrastructure and protect its environment. The CAS also indicates that since a key source of economic growth is Croatia's tourism potential, most of which is nature based, Croatia's natural resource base needs to be carefully preserved. The CAS states that the Bank will help the government with a GEF grant for environmental protection in one of the country's major tourist destinations, Plitvice Lakes National Park (NP).

High unemployment (19%) is identified in the CAS as one of Croatia's major economic problems. Containing poverty is one of the CAS' four key policy objectives. Unemployment in the project region is amongst the highest in the country at about 40%. The project by supporting local level, rural initiatives related to sustainable natural resource use and tourism, aims to increase economic development of the project region.

1a. Global Operational strategy/Program objective addressed by the project:

The project global objective is sustainable conservation of the biological diversity and the ecological integrity of the karst ecosystems in Croatia. Both the Croatian National Biodiversity Strategic Action Plan (BSAP) and the National Environmental Action Plan (NEAP) identify karst ecosystems as the top priority for biodiversity conservation.

Croatia ratified the convention on Biological Diversity on October 7, 1996. The Parliament of Croatia endorsed the BSAP on June 8, 1998. The project will implement selected priority actions outlined in the BSAP including: (i) preservation of the biological and landscape diversity of the karst region as an area

of global value; (ii) improved biodiversity inventorying and monitoring; (iii) raising of public awareness; and (iv) participation in regional efforts to manage biodiversity.

The project supports the objectives of the GEF Biodiversity operational programs for coastal, marine and freshwater ecosystems (OP2), mountain ecosystems (OP4) and forest ecosystems (OP3). Activities will concentrate on the conservation and sustainable use of natural resources of international import in the karst region of Croatia. The project responds to Council of the Parties III guidance by: (i) promoting in-situ conservation of biodiversity in protected areas of biological and ecological interest; (ii) building capacity, especially for NGOs; and (iii) increasing public awareness of nature protection.

2. Main sector issues and Government strategy:

Croatia is endowed with internationally recognized karst ecosystem assets which are in need of conservation. The main issue facing Croatia is the challenge of balancing economic development of an impoverished region with conservation of globally significant natural resources. Accelerated economic development, including that of the tourism industry, in the absence of a strong national and local level capacity to protect natural resources could damage Croatia's ability to safeguard its biodiversity. The government must cope with scarce resources and competing interests in dealing with the following obstacles: (i) insufficient capacity within the Ministry of Environmental Protection and Physical Planning (MEPP) to conserve biodiversity in the karst region; (ii) lack of collaboration between sectors to sufficiently incorporate biodiversity conservation into physical planning and sectoral strategies, and (iii) a general lack of environmental awareness regarding karst ecosystems and a tradition of limited public participation in the decision making process.

Global Significance of the Croatian Karst Ecosystem. Croatia enjoys 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 is applied 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. Croatian karst ecosystems host 3,500 species of flora (283 endemic), 12 species of amphibians, 36 species of reptiles, 200 species of resident birds, 79 species of mammals, and 64 species of freshwater fish (11 endemic). Much of Croatia is karstic. The project selected for its focus the karst region located within the Dinarid Mountain range, which runs through Croatia from Slovenia to Bosnia. The project region was selected because its biodiversity is the most globally significant. 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 trogloditic (eyeless and adapted for an entirely subterranean existence) species and families. These include one new species, genus and family of leech *Croatobranchnus 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 micro-organisms. The travertine barriers, some estimated to be over 40,000 years old, created by these communities have led to the spectacular lakes and waterfalls now protected within two national parks, one of which is included in the KEC 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 part of unfragmented forest in Croatia (almost 50% of forests), the integrity of which is evidenced by the presence of viable populations of large carnivores (wolf, brown

bear, and lynx). The global significance of Croatia's karst ecosystem is evidenced by the international recognition it has received. Plitvice Lakes National Park is on the UNESCO's World List of Natural and Cultural Heritage. The Velebit Mountain Range is part of the UNESCO's Man and the Biosphere Program, and has been identified by the WWF's Forest Hotspot Initiative as one of the ten most important forest areas in the Mediterranean region.

Threats to Karst Biodiversity. The impacts of threats to the karst ecosystem's biodiversity, with the exception of eutrophication in the surface waters of Plitvice Lakes National Park, have not been scientifically documented to date, but are believed to be significant. The BSAP and NEAP note that the lack of systematic inventory and monitoring of the ecosystem and species status has resulted in an insufficient basis for determining the exact nature and magnitude of threats to biodiversity. However, in light of observed habitat changes and fragmentation; water and air pollution; extensive exploitation of natural resources; and introduction of foreign species experienced in the project region, all threats to biodiversity, the BSAP assumes that the karst ecosystem biodiversity is declining. Both the subterranean and terrestrial karst ecosystems are fragile, interconnected, and dependent upon the maintenance of a delicate balance between relief, hydrology, climate and vegetation. The surface ecosystems of predominantly natural forest and traditional pastoral land generally serve to buffer the subterranean ecosystems but this function can be significantly negatively impacted by subtle changes in land-use and vegetation cover. For instance, land-use changes can lead to the rapid influx of water in all parts of a karst cave system resulting in significant changes in the subterranean ecosystems. In recent years, these threats have been partially averted by reduced economic activity, particularly in tourism and agriculture, during and after the war (1991-96). Today, post-war Croatia is on a fast track of economic development, spurred, in part, by a new government (February 2000) and the opening of EU accession discussions. Tourism, once a mainstay of Croatian economy, has traditionally been characterized as "mass tourism" as opposed to "nature-based tourism". As the tourism industry rebounds it could have serious implications for biodiversity conservation. Other sector development projects which commonly negatively impact upon biodiversity, e.g. roads, hydropower, are also proposed for the project region.

Obstacles to Biodiversity Conservation

Limited capacity for conservation management. The primary form of biodiversity conservation in Croatia is its protected area system. About 8.2 % of Croatia's area is under some form of protection. There are eight types of protected areas in the country with national parks (8) and nature parks (10) being the highest level of protection. National and nature parks are managed by the state; other protected areas are the responsibility of the counties within which they lie. Biodiversity conservation is governed by the Law on Nature Protection, noted by the BSAP to be inadequate for purposes of biodiversity conservation and now under revision. Parks are financed by a combination of self-generated revenues, generally from visitor fees, and a minimal allocation from the MEPP budget. The designation of newly protected areas has outpaced the capacity for their management in terms of human and financial resources. Overall, there is inadequate staffing particularly on the local level. MEPP faces serious challenges managing the growing number of protected areas whilst dealing with growing economic pressures. There are currently 14 staff in the MEPP nature protection division. There are 4 staff in the nature protection inspection department. There are no MEPP staff on the county level in the project region and only 4 in the entire country. Some counties have taken the initiative to hire environmental specialists (Primorsko-Goranka), and it is in these counties where one can see best practice of incorporating biodiversity conservation concerns into physical and protected area plans. Capacity for biodiversity conservation is also limited by inadequate quality and quantity of data, as previously mentioned. The lack of a systematic inventory and monitoring of the ecosystem and species status has resulted in an inability to accurately identify trends and patterns in biodiversity and the impacts. This also limits MEPP's ability to ensure appropriate conservation measures. For the scientific information that does exist, there is no one institution responsible for the collation, analysis, processing or dissemination of the karst biodiversity studies that

have been conducted by museums, university faculties, NGOs, and others. Thus decision making and analysis are often based on fragmented and unrelated results of specific scientific research.

Inadequate integration of biodiversity conservation into physical plans and sectoral strategies

Physical planning. Land use plans in Croatia are referred to as "physical plans". Physical plans are governed by the "Law of Physical Planning"(1994, amended in 1998). Physical plans define: natural, cultural or other characteristics meriting special consideration; the basic organization of the space; measures of use; development and protection of the area, with all activities that have priority; measures for improvements and protection of environment; and in case of need, they define the contents of more detailed, physical development plans for narrower areas. Croatia has a national Physical Planning Strategy; county level physical plans; physical plans for areas with particular features (e.g. Velebit Mountain), and protected area physical plans. Physical planning of all types falls under the MEPP. On the county level, the county physical planning offices prepare and implement the county physical plans as well as those for the protected areas, reporting to the MEPP. Implementation of physical plans is reviewed every two years with recommendations for improvements adopted as needed. The management of national parks and nature parks is based on physical plans and in some cases specific park, protected area management plans such as in Paklenica NP. Land-use of the areas surrounding the national parks is managed via county level physical plans.

One of the problems for biodiversity conservation is lack of coordination between physical plans and protected areas management plans. Physical plans are developed independently of protected area plans and do not incorporate biodiversity conservation. Protected area physical plans are generally inadequately integrated with local land-use needs as identified in county physical plans. Protected areas, specifically national and nature parks, have no overall management plans which would typically include business management plans. As part of project preparation, a review of existing county physical plans and protected area physical plans was conducted with recommendations informing project design. Another problem is limited intersectoral coordination in physical plan development. Methods for intersectoral collaboration and guidelines are needed for the integration biodiversity concerns into county level physical plans, sectoral plans, and protected areas physical and management plans.

Sectoral Strategies. Biodiversity conservation is not incorporated in most sectoral strategies, notably in those of the tourism, forestry, and agriculture sectors which have direct impact on biodiversity. Sectoral strategies are not subject to review by the MEPP. Tourism. In the pre-war period, tourism was an economic pillar for Croatia accounting for nearly 12% of the GDP. Although much of the country's attraction to tourists was based on the integrity of its natural resources, in fact there was virtually no awareness of conservation. The Government's intention is to increase revenues from tourism to bolster the national economy and to this end a national tourism master plan is in preparation. In the absence of adequate safeguards, this could result in environmental impacts, e.g. habitat destruction as a result of overuse, and pollution. Nature based tourism should be developed in a manner that recognizes and limits impacts to vulnerable karst ecosystems and biodiversity. Forestry. 70% of the karst region is forested. All forested lands which are not protected areas, as well as forests of nature parks, are managed by Hrvatske Šume (HS), the state-owned national forest authority. Production in these forests is carried out according to forest management plans, which are developed on a 10 year cycle and take into consideration ecological and environmental functions of the forest. However, forest management may not adequately address biodiversity conservation issues, and production forestry reportedly continues to take place in some areas that have recently been assigned protected area status. HS has 15 forest districts and 168 local offices, which do not directly correspond to the administrative units for physical planning or protected area boundaries. This organizational structure poses a challenge to a more integrated approach to multiple land-use planning, yet the harmonization of forest management, physical and protected area planning processes is a clear need for the project region. Agriculture. There is a strong

link between traditional agricultural and grazing practices in the project region and biodiversity. Grazing on highlands and hence the enlargement of meadows have been key factors in the existing biodiversity in the project region. About 50% of the local flora is adapted to open landscapes rather than forests ecosystems. However, significant depopulation of the project region and land mine remnants (about 14% of the forested area in the KEC region is land-mined) have resulted in the cessation of traditional agricultural and grazing practices. The BSAP identified protection of grassland habitats and the revitalization of cattle breeding in the project region as strategic objectives for biodiversity conservation. As examples of successful integration of biodiversity conservation into sectoral programming, the Ministry of Agriculture and Forestry (MOAF), which also considers the karst region as an area of strategic importance for grazing in open grasslands, now promotes livestock keeping in the project region by providing higher than national level subsidies for cows, pigs, sheep, horse and milk. The Croatian Selection Center for Domestic Animals (HSSC) of MOAF coordinates and finances through subsidies a program geared towards protecting autochthonous, endangered breeds of sheep, cow, horse and goat in Croatia. Among these breeds is the Lika Pramenka sheep which is important for the protection of the karst grassland areas.

Lack of environmental awareness regarding karst ecosystems and limited public participation in the decision making process. Participation of the public in decision-making of any kind, including environmental issues, has traditionally been low. Mass media show little interest in environmental issues and protection resulting in a low level of information and education of the general public. While growing, the influence and involvement of NGOs has been limited in the past. Despite the lack of awareness regarding the need to protect karst ecosystems, there is a strong sense of pride among Croats in their natural and cultural landscape and this could easily be tapped if effective mechanisms were put into place.

Government commitment and strategy. The new government has demonstrated a commitment to improving the legal and institutional framework for nature protection. Institutionally, the new government took a very positive first step when it elevated the environment sector from a directorate to a ministerial status. Furthermore, by combining environment with physical planning to form the Ministry of Environmental Protection and Physical Planning (MEPP), the government acknowledged the relationship between environmental protection, land-use, and development, and expanded opportunities for inter-sectoral coordination. The MEPP, as a nascent institution, suffers from the country's overall budgetary problems -- but it appears to be going in the right direction. The MEPP has shown commitment to environmental issues by recently revising the major piece of environmental legislation, the Law on Nature Protection (82/94), which broadens the mandate of environmental protection to a more proactive approach emphasizing sustainable development and use of natural resources. In support of this objective, MEPP has established a Department for Sustainable Use of Natural Resources. The draft legislation goes through a second government review (September 2001) before it is submitted to the government and then Parliament for approval (expected in early 2002). The new draft includes all the guidelines, recommendations and concrete measures from the BSAP, as well as addressing all requests from international agreements. The new law integrates EU Directives and harmonizes Croatia's law with existing laws of neighboring countries (Slovenia and Hungary).

Regarding the obstacles to effective conservation, the government's strategy is less well formulated. Currently, the biodiversity and protected management sectors are faced with the same economic problems as the rest of the country. The government, in particular the MEPP, is taking a serious look at economic instruments for environmental protection. The NEAP recommends new approaches to financing environmental programs, including biodiversity conservation. Meanwhile, the protected areas are each seeking opportunities to increase revenues and capture them for conservation activities. Protected area managers and staff are engaging in study tours and exchange programs, funded under project preparation, to national parks in Italy, Slovenia and the U.S. However, the integration of

biodiversity conservation into other sectors' planning, while a strong recommendation of the BSAP, has not taken hold and will be a major goal of the KEC project. This will be accomplished by developing guidelines for sectoral strategies, training, and selected inter-sectoral activities. The government has demonstrated a concern with impacts of tourism on environment. The NEAP recommends a strategy towards tourism that protects natural resources; balances development with sustainability; strengthens eco-tourism and reduces emphasis on mass tourism; and educates tourists and local residents. Several "eco-tourism" conferences have been held in Croatia in 2000 and 2001 bringing together key stakeholder groups to discuss opportunities and strategies. Biodiversity specialists have played key roles in designing and participating in these tourism conference. In the forestry sector, the Forestry Law is being updated in a way that would integrate biodiversity interests and allow other uses of forests e.g. recreation, biodiversity protection, nature based tourism, under certain circumstances.

3. Sector issues to be addressed by the project and strategic choices:

The KEC project aims to preempt the potential threats to biodiversity conservation related to tourism and other economic development activities in the region. To do so, the project will assist the Government to address priorities identified in the BSAP by: (i) building the national capacity to conserve biodiversity and support natural resource management and (ii) establishing community based approaches for biodiversity conservation and sustainable resource use in and between selected protected areas and their associated villages in the karst region. Specifically, the project will assist the Government to strengthen the legal and regulatory framework for biodiversity conservation through review of current environment related legislation and strategies (e.g. national tourism strategy) and harmonization of sectoral legislation and policies, to ensure that biodiversity conservation concerns are adequately addressed and overlapping mandates resolved. It will produce guidelines, and training in their use, for incorporating biodiversity conservation into physical and sectoral planning. The project will strengthen the capacity of MEPP to regulate and coordinate biodiversity conservation issues at the national and local levels and to manage protected areas. It will improve the ability of local staff to manage protected areas by improving the quality and accessibility of data. This will include a thorough inventory and mapping of biodiversity in the project region; evaluating proposed protected area sites; conducting a monitoring program for large carnivores; inventorying biodiversity of caves and related hydrogeology; developing a karst ecosystem biodiversity GIS and database; developing a web-site; and establishing monitoring programs at selected sites. It will increase the capacity for biodiversity conservation on the protected-area level by providing technical assistance, goods and equipment. This will include development of guidelines for protected area management plans; development of three protected area management plans in selected sites; and ranger training programs. Each of the project sites has unique needs in terms of goods and works to improve biodiversity protection which the project will address, e.g. program for the recovery of the Eurasian Vulture (Paklonika NP), program to protect local breeds of sheep (Velebit NP), but there are some activities common for each site which the project will finance including improving the monitoring, field, interpretation, recreational and education facilities; staff skill development; research exchange; and support for "people and parks" programs. The project will assist in trans-boundary tourism marketing plans, as well as biodiversity research, monitoring and projects related to biodiversity conservation, e.g. develop a trans-boundary protected area management plant between Risnjak NP and neighboring national parks in Slovenia. The project will assist in international partnerships.

The project will assist the Government to balance economic development with conservation efforts. The project will fund a protected area system market analysis followed by a promotion and marketing plan. It will fund a protected area financing strategy. It will conduct a tourism development strategy for the project region which identifies local-level opportunities in tourism for artisans, craftsmen, business people, etc. followed by training, e.g. development of business plans, proposal writing. A major (\$500,000 of grant funds) activity under the project is the "Conservation and Rural Revitalization grants" (CRRG) program. This small-to-medium size grants program will be available to farmers, foresters,

entrepreneurs, businesses, NGOs, etc., in the project region, and is intended to finance activities which demonstrate linkages between economic development and conservation. (The guidelines for the grants program will be prepared prior to negotiations). The grants program will encourage activities which demonstrate inter-sectoral collaboration.

The project will increase public participation in conservation decision making, as well as public awareness, through several mechanisms. It will prepare a "how to" guide for protected area managers which outlines steps for community and NGO participation in protected area management. The project will finance a "People and Parks" program in each of the four national parks; local advisory groups; and community outreach and involvement activities in each protected area.

The project finances a small grants program for NGOs specifically for educational activities. The project will prepare biodiversity conservation promotional/education materials including a traveling, mobile exhibit; field guides; material for the karst web-site; TV promotional spots; annual biodiversity festivals; and conduct a pilot biodiversity conservation educational program (designed by NGOs) utilizing the internet, in five schools.

4. Description of the Project Region

Project Region

The project addresses only some of the issues facing the biodiversity conservation sector in Croatia, and confines its activities to the general area of the Dinarids, as previously described, and five of its protected areas, and their associated communities. The Government and the Bank favored a combination of national level attention for issues related to institutional strengthening, intersectoral coordination, and public awareness; and a local level approach to improve protected area management for biodiversity concentration, rural revitalization, and tourism. By limiting the project to a local approach in an area important for biodiversity, the project seeks to increase the possibilities for successful implementation, to have a visible demonstration effect of the linkages between conservation and development, and to focus limited resources.

The project region is a representative karst area of the Dinarids Mountains (see map Annex 2). The 9,500 square kilometer area (17% of total land in Croatia) is defined by the Slovenian border to the north, and the Zrmanja River to the south. Administratively, the region consists of the Lika-Senj county, which is 80% of the project region; Primorsko-Goranka county, 15% of the project region; and Zadar County, 5%. The region contains immense karst aquifers with high quality potable water, large karst springs, and the most extensive forest areas in the Dinarids. Approximately 40% of the project region is designated as protected area. This includes three long established national parks (NP) (Paklenica, Plitvice Lakes and Risnjak), one new national park (Northern Velebit), and one nature park (PN) (Velebit). Paklenica and Northern Velebit National Parks are located within the much larger Velebit Nature Park.

This selection of protected area sites in total provides the project with (i) biodiversity of international value;(ii) importance for economic development; (iii) presence of direct or potential threats to biodiversity; (iv) representative sites for the country and the opportunity for replicability of interventions in other karst areas; (v) importance for overall environmental stability; and (vi) expected sustainability of intervention effects. A detailed description of each of the project protected area sites is found in annex 2.

Protected Area Management in the Project Region

The management of national parks and nature parks is based on physical plans, specific to the site, which, in the project area, vary from park to park. Only Paklenica National Park has an adequate physical plan,

well-coordinated with the county physical plan, and thus serves as a best practice to be replicated in the other project sites. The new North Velebit National Park has no plan at all. The protected areas in the project region also vary considerably in terms of size, staffing, and financing (Table 1).

Table 1: Characteristics of the project protected areas - data for 2000

Protected area	Year of declaration	Size in km²	Number of registered visitors	Employees in protection activities	Financing: National budget/self-financing (%)
NP Risnjak	1953	64	25,000	13	50/50
NP Plitvice Lakes	1949	294	490,000	120	3/97
NP Paklenica	1949	96	70,000	20	30/70
NP Northern Velebit	1999	-	0	1	100/0
Velebit Nature Park	1981	2,000	0	1	100/0

As can be seen above, there are two significantly different groupings of parks: (i) those that have been in existence about 50 years, have a relatively large number of visitors, high degree of self-financing, some level of employees in nature protection, i.e. Paklenica, Plitvice and Risnjak; and (ii) relatively new parks, with no visitor registration, financed largely by the government, few full or part-time staff, i.e. NP North Velebit, and Velebit PN. The GEF funds are allocated according to the level of development, with the newer parks receiving more resources.

Parks are financed by a combination of self-generated revenues, generally from visitor fees, and from the MEPP budget. One of the national parks, Plitvice Lakes, is a major tourist attraction in Croatia and generates considerable revenues from visitor entrance fees. It receives only a small contribution from the National budget (Table 1). However in Plitvice NP, only a fraction of these revenues is used to fund biodiversity conservation activities due to the need to cross-subsidize two loss making hotels that the Park operates and the general park administration department. The servicing of the large debt that the Park incurred to renovate its war-damaged hotels poses another obstacle to setting aside a larger section of visitor revenues that is more commensurate with the biodiversity conservation needs of the Park. Moreover, these financial obligations create a pressure for the Park administration to further promote tourism to the park, potentially with significant negative consequences for the NP ecosystem which is already under considerable stress at the current visitation levels (see Annex 12 for more details). The Risnjak and Paklenica National Parks also derive revenues from visitor fees. Currently these revenues are not sufficient to render the parks financially self-sufficient. These parks intend to increase visitor revenues by attracting more visitors and offering them a variety of nature activities. The Velebit Nature Park and Northern Velebit National Park do not earn tourism revenues at current time, although the potential exists. The Project will include preparation of a general protected area financing strategy.

Physical Planning in the Project Region

County physical plans are of relevance to protection of biodiversity in the project region from two perspectives. First, for the 60% of the project region that is "unprotected", the inadequacy of the county's physical plans in incorporating conservation concerns poses a threat to the biodiversity of the region. Second, county level land-use, construction activities, and economic development, managed through the county's physical plans, have impacts on the protected areas within their boundaries.

Project preparation included a review of county level physical plans for the project region, and protected area management plans for the project's sites. The review indicated the stage of completion, incorporation of biodiversity conservation concerns, realism of plans' recommendations, identification of threats, etc. County plans were found to differ significantly; all had strengths and weaknesses. Project activities have been designed to address the specific shortcomings of each of the three county plans. Similarly, protected area plans varied from none (NP Velebit, Velabiti PN, Plitvice NP) to relatively good plans (Paklenica), to good plans that could use some upgrading (Risnjak). The KEC project will develop physical and management plans for those protected areas that don't have them, and update existing protected area management plans, as needed, to incorporate biodiversity issues.

Economic Activities and Resource Use in the Project Region

Project preparation included a social and rural development assessment (Annex 11). The results significantly guided project preparation. The KEC Project area has experienced profound demographic changes over the past several decades. In Lika-Senj county, which includes Plitvice National Park, Velebit Nature Park, North Velebit National Park, and comprises more than 80% of the KEC region, there has been an extreme and steady depopulation in recent years due primarily to the war and lack of economic opportunities. Population density in Lika-Senj is extremely low at 15 person/square kilometer. The population that remains is very old, and relies largely on pensions for support. The other of the two major counties in the project, Gorski-Kotar District of Primorsko-Goranka county, in which Risnjak National Park is located, has experienced the same depopulation for similar reasons although less hard-hit by war impacts. Similarly, in Zadar county, in the rural region around Paklenica National Park, there are only 120 people living, all elderly. The exact population of the project region is not known. No census has been conducted in the project region since 1990 and due to a number of factors, e.g. war, population data from 1990 is not very useful. The social assessment attempted to establish population data but could only guess at a figure of about 65,000. The project region has a significant "floating" element due to younger people staying with elders on a revolving temporary basis; people living part-time in rural areas and part-time in larger towns where they work; and younger Serbs moving back and forth between Belgrade and their homes in Croatia. While there is a very rich cultural heritage in Croatia, virtually all of its manifestations in the project region, e.g. heritage buildings, traditional foods and beverages; wood arts and crafts; wool, textiles and clothing production are disappearing.

The economic situation in the KEC project region is significantly depressed, even for Croatia. Unemployment is estimated at over 40%. In Lika-Senj, in the 1980s almost everyone had a paying job in forestry, tourism, or government. To supplement their income in one of the state-organized industries, many practiced traditional agriculture on their family farms. The thriving Plitvice Lakes National Park that was attracting 750,000 visitors in the late 1980s was an all-important source of direct employment. It also provided large guaranteed markets for all the agricultural products people could produce.

In the 1990s, the country saw a major decline of all Lika-Senj's productive sectors, loss of jobs, and out-migration of young people. The war started and was largely fought in the Plitvice National Park area. Even with reconstruction, the area remains depressed and has suffered from the national slump in tourism and other sector activities. Forestry jobs in Lika-Senj have declined by at least 60% from some 1,700 to 2,000 jobs in 1991 to between 570 and 700 today as a result of the bankrupting of several sawmills, and because land mines have taken some forests out of production. As far as agriculture is concerned, the significant decline of tourism at Plitvice has undermined demand for produce. Never a mainstay but a strong supplementary activity, it continues its decline. The predominant elderly farm dwellers are unable to maintain the pastoral and crop lands, while the younger people are very often unable to farm effectively due to a lack of resources and a lack of knowledge about how to market their products. The year 2000 gave signs that the tourism industry may be on its way to recovery, increasing demand for related goods and services sectors as well. A total of 6.6million people visited Croatia, and the Plitvice Lakes National

Park received about 480,000 visitors. It is believed by many that establishment of a sound economic base in this region may be an important factor in achieving political stability. But there are many views on the subject of development capacity in the Lika-Senj area. While some see tourism as a likely opportunity, others promote the revitalization of traditional agriculture and native animal breeds.

In the northern part of the study area around Risnjak National Park, forestry was, and remains, the overwhelmingly dominant industry, accounting for approximately 1,100 jobs. This represents about the same employment level as in 1991, accounting for an estimated 70%-80% of total employment in the district. Unfortunately, a decline in employment by the sector is anticipated, as a result of reorganization and modernization. Before the war and independence, municipalities used to own the forests within their boundaries and were able to generate important revenues from this resource. HS now manages the forests providing a very small portion of revenues back to the municipalities. Before the war, many of the communities in the Risnjak National Park study area were visited by tourists, mostly Western European, who were staying in nearby Istria and attracted to the region by the natural and cultural features. Such visitation included day and overnight stays and provided revenues sufficient to diversify the study area's economy beyond forestry. Unfortunately, with war, privatization and the severe decline of the coastal tourism industry and the loss of the Western European tourist, tourism in the area became almost nonexistent in the 1990s. Nevertheless, the recent revitalization in tourism to the coastal areas is a promising development for Risnjak as well.

In the southernmost part of the study area, around Paklenica National Park, tourism is the mainstay of the economy, centered along the coast around Starigrad. Forestry is not an industry of any importance in this southern region. While agriculture was reportedly important to the area in past decades, there are only a few remaining rural villages.

Implications of these findings for project design are presented in section "E. Summary Project Analysis: 6. Social"

C. Project Description Summary

1. Project components (see Annex 2 for a detailed description and Annex 3 for a detailed cost breakdown):

Results of five studies conducted under project preparation were used in designing the project: Social and Rural Development Assessment; Comprehensive Biodiversity Survey; Legal, Regulatory and Institutional Review; Land and Natural Resource Management Plan Review; and Public Awareness and Environmental Education Needs Assessment. In addition to these studies, results of a technical assistance mission sponsored by the U.S. Department of Interior/National Parks Service, conducted in September, 2000; and a study tour of Croatian national park directors to U.S. National Parks, May, 2001, were used to guide both national level and site specific project activities. The three project components are as follows:

Component 1. Build national capacity to conserve biodiversity and support sustainable resource use US\$1.78 million (GEF US\$1.09 million; GOC US\$0.69 million)

Activities to strengthen national capacity fall into five sub-components:

(i) *Strengthening laws and regulatory framework.* The project will finance a review and/or revision of biodiversity-related regulations and sectoral strategies to incorporate biodiversity conservation concerns. The project will finance training in the use of the guidelines to staff from relevant government agencies, including the Ministry of Forestry and Agriculture, Ministry of Tourism, Croatia Forests (HS), Croatia Waters (HV); physical planners; and protected area staff; as well as NGOs and citizens.

(ii) *Strengthening national capacity to ensure biodiversity conservation.* The project will finance 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 will develop and conduct a ranger training program.

(iii) *Expansion of species and taxa under legal protection.* Project preparation studies found that there are two areas in the project region which could be eligible for protected area status; Ogulin and the Kupa Valley. The project will finance feasibility studies for these areas including an analysis of biodiversity in Ogulin and water management issues related to biodiversity conservation; equipment for underwater biodiversity monitoring; and revision of the list of taxa under legal protection in these two areas.

(iv) *Biodiversity inventory, mapping and monitoring.* Biodiversity monitoring and evaluation is an integral part of the KEC Project. This component (Total cost: US\$1.06million, GEF:US\$0.6million) will fund (i) the establishment of an inventory and the mapping of the biodiversity components for priority areas, (ii) monitoring of the biodiversity in project region; (iii) implementation of monitoring programs for large carnivores in migration corridors; (iv) an inventory of the caves and related hydro-geological data; (v) the development of karst ecosystem biodiversity GIS and database, and staff training; and (vi) the acquisition of GIS equipment. Endangered species, identified by the BSAP, to be monitored under the project, as indicator species for karst ecosystem health are: the Long-fingered bat (*Myotis capaccinii*), the olm (*Proteus anguinus*), the Velebit degenia (*Degenia velebitica*) and the Wolf (*Canis lupus*). During appraisal, the project Team will discuss biodiversity monitoring and evaluation with Croatian counterparts and finalize the monitoring indicators.

(v) *Increasing public awareness and support for biodiversity conservation with active role of NGOs.* The project will finance development of a public awareness strategy; development of a WEB site 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 \$US5.30 million (GEF US\$3.06 million; GOC US\$2.09 million; USDOJ US\$0.15 million)

The project will support 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 three sub-components:

(i) *Promotion of sustainable nature based tourism.* The project will finance development of a local level tourism strategy which includes determination of the nature-based tourism potential in the region and economic opportunities in tourism; a visitor management plan for protected area; and preparation and field works on the European-6 (E-6) hiking trail through the project region (E-6 is a branch of a larger network of hiking trails which spans Europe).

(ii) *Increasing local public awareness and support for biodiversity conservation with active role of NGOs.* The project will finance preparation of national park promotion materials for park visitors, local population, and schools; preparation of field guides for the project region; and fund a small grants program for NGO sponsored activities related to public awareness.

(iii) *Improve protected area management and services for biodiversity conservation.* In each of the five protected areas in the project region, the project will finance refurbishing of existing visitor structures, information kiosks, and research facilities (where they already exist); a "people and parks" program, each to be designed specific to the protected area and intended to ensure direct, community involvement in the decision making process; field works, e.g. trails, signs; data acquisition, processing and interpretation equipment including computers, GIS software; field equipment, e.g. field telephone, binocular, staff uniforms, safety equipment; essentials for monitoring programs; and staff development in skills such as interpretation, education, monitoring, research.

Paklenica NP: The project will finance the "Recovery of the Eurasian Vulture (*Gyps fulvus*) Project" by providing equipment, education material, and monitoring equipment.

Plitvice NP: The project will finance preparation of a park management plan; laboratory equipment for the research facility; and mowing equipment.

North Velabit NP: The project will finance preparation of a park management plan.

Velabit Nature Park: The project will finance preparation of a park management plan; field vehicles; mountain shelters, camp sites, and fire control equipment.

Risnjak NP: The project will finance rescue equipment, horses and equipment; a traveling exhibit; camp site facilities.

(iv) *Demonstration of linkages between rural development and biodiversity conservation.* The main activity under this sub-component is the financing of the Conservation and Rural Revitalization Grants program (CRRG). The CRRG program is designed to enable groups and individuals to carry out activities that contribute to achieving the goals and objectives of the project. The CRRG program will support entrepreneurial projects which demonstrate linkages between sustainable use of natural resources, economic development and biodiversity conservation. Approximately \$500,000 (total amount to be

determined at appraisal) will be available for grants to farmers, artisans, entrepreneurs, businesses, NGOs, etc. Public-private partners or NGOs in partnership with others are also eligible. Grant activities could include 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. The goal of the CRRG project is to encourage projects in biodiversity conservation and sustainable use of biological resources in the KEC project region; community development and increased civil society participation in biodiversity conservation; and NGO activity in conservation. The specific objectives of the CRRG program are to:

- enhance the objectives and activities of the KEC project by ensuring parallel activities are carried out by other organization and individuals
- develop demonstrative approaches and projects that can be transferred elsewhere
- strengthen new and emerging local civic groups and NGOs in order to promote biodiversity conservation, particularly in the areas of community-based initiatives, sustainable use of natural resources; and responsible tourism.
- Demonstrate the link between the objectives of conservation and tangible benefits for local communities

The operations manual for the small grants program will be finalized during project appraisal but the following description of the CRRG program is what is currently envisioned.

Goals and Objectives of CRRG: The goal of the CRRG project is to encourage projects in biodiversity conservation and sustainable use of biological resources in the KEC project region; community development and increased civil society participation in biodiversity conservation; and NGO activity in conservation. The specific objectives of the CRRG program are to:

- enhance the objectives and activities of the KEC project by ensuring parallel activities are carried out by other organization and individuals
- develop demonstrative approaches and projects that can be transferred elsewhere
- strengthen new and emerging local civic groups and NGOs in order to promote biodiversity conservation, particularly in the areas of community-based initiatives, sustainable use of natural resources; and responsible tourism.
- Demonstrate the link between the objectives of conservation and tangible benefits for local communities

Selection Process: Prospective grantees will fill out an application form available on request from the MEPP and also available on the MEPP web-site. All proposal will be evaluated by a committee of representatives (to be determined during appraisal). Successful proposals will demonstrate:

- Demonstrable benefits to biodiversity conservation
- Demonstrative benefits to the livelihood of local people
- Activities bringing benefits to the project region
- Compatibility with other GEF project activities
- Catalytic role of the project
- Positive environmental effect on the karst ecosystem
- Efficiency in achieving tangible results with verifiable indicators

- An activity that can be replicated on a larger scale
- A realistic c plan describing how maintenance and operational expenses (if applicable) will be financed after the grant period
- A clear timeline describing the implementation of the project

In the selection process, priority would be given to projects which:

- Are practical in approach
- Are implemented with the participation of local people and local NGOs or are primarily near the protected area sites in the KEC project
- Improve habitat conservation adjacent to the protected areas
- Foster the provision of information to local people
- Facilitate the strengthening of an NGO network involved in protected area management

The administrative, procurement, disbursement, and application arrangements will be determined during appraisal. The sequencing of the CRRG program within the KEC project will also be finalized. At this time it is expected that the program will start-up in year 2 of the project, giving adequate time to establish the CRRG program and get the KEC project up and running. It is expected that the ceiling for the grants will be \$25,000. The possibility of using a matching grant process will also be discussed during appraisal.

This sub-component will also finance a local cattle breeds protection program; and rehabilitation of the Gacka river springs facility which is a cultural heritage and biodiversity conservation site.

(v) Regional Cooperation Program for Karst Ecosystem Conservation. Under this sub-component partnerships with Croatia's neighbors, particularly Slovenia (Risnjak and Kupa River Project), will be financed to encourage and support trans-boundary solutions to biodiversity conservation. The project will finance the inventory and monitoring of the biodiversity of springs, groundwater, caves, meadows, forests and cliffs of the border region between Croatia and Slovenia in the Risnjak National Park region. It will finance the preparation of the Risnjak National Park Management plan in coordination with Slovenia. The project will finance a tourism marketing plan for the Croatia/Slovenia border region; promotional materials; international workshops; and participation of protected area staff in karst workshops. The project will finance study tours to European countries including France; and participation in international and regional workshops, training and conferences. The project will fund activities related to the US/Croatian National park Service Project (co-financed by the USAID).

Component 3. Project Management and Monitoring US\$1.32 million (GEF US\$0.91 million; GOC US\$0.41 million)

The project will finance the establishment and operation of a central PIU located within the MEPP in Zagreb and composed of a project manager, a procurement specialist and financial management specialist. The government will provide two technical assistants to the central PIU. The project will also finance a local PIU that will be located within the county/municipal physical planning office in Gospić, one of the two county seats included in the project. The local PIU staff to be funded by the project is the project coordinator. The government will provide an administrative assistant and two technical specialists to the local level PIU.

Component	Sector	Indicative Costs (US\$M)	% of Total	Bank financing (US\$M)	% of Bank financing	GEF financing (US\$M)	% of GEF financing
1. Strengthening national capacity to conserve biodiversity and support sustainable resource use.	Institutional Development	1.78	21.2	0.00	0.0	1.10	21.7
2. Community based mechanisms for biodiversity conservation and sustainable resource use in the Karst region		5.30	63.1	0.00	0.0	3.06	60.4
3. Project Management and Monitoring		1.32	15.7	0.00	0.0	0.91	17.9
Total Project Costs		8.40	100.0	0.00	0.0	5.07	100.0
Total Financing Required		8.40	100.0	0.00	0.0	5.07	100.0

2. Key policy and institutional reforms supported by the project:

The project will address a key environmental policy issue facing the government -- how to manage the country's future growth and development, while protecting the environment, on the national and local level. It will strengthen the ability of the newly established MEPP to implement the new (2002) Law on Nature Protection. It will integrate biodiversity conservation concerns into sector politics and physical planning and increase sectoral collaboration for conservation. The project will expand opportunities for nature based tourism while ensuring the ecological integrity of protected areas. The project will support rural revitalization activities and increase the role of civil society in environmental decision-making.

3. Benefits and target population:

The project would have environmental, financial, institutional and social benefits. The primary environmental benefit would be increased national level capacity to protect globally significant biodiversity in the Croatian karst ecosystems. The project would also benefit other regional, trans-boundary initiatives to conserve the biodiversity of the Alp/Dinarid/Balkan karst mountain chain. Financial benefits would include a more cost-effective approach to protected area management. Protected areas would develop management plans which include a business plan with feasible financial targets and adequate allocation of resources for conservation activities. Institutional benefits would include strengthening of the newly established MEPP and its ability to implement the new Law on Nature Protection; increased overall capacity to manage biodiversity conservation for multiple uses through piloting of participatory, community based planning and management approaches; improved coordination across sectors at the national and local level; and sharing of experience of other protected areas and karst regions across the country. Social benefits would be realized by the entire Croatian society, local communities, and tourists. The project will increase the recreational and existence value of the protected areas for urban and coastal populations and tourists by conserving their karst

ecosystems. It will improve the social sustainability of biodiversity conservation by increasing local communities' participation in the decision making process on protected area management and by supporting them in developing small businesses including nature based tourism services. The project will also help local communities realize economic benefits from tourism to the parks, and will contribute to rural revitalization.

4. Institutional and implementation arrangements:

Implementation period: 5 years

Project oversight: The MEPP will have overall responsibility for project implementation and a national level project implementation unit (PIU) will be established in the MEPP Division of General Environmental Policy. The PIU will build on the existence of the KEC project preparation implementation unit. The PIU will be responsible for all procurement, disbursement and financial management aspects of the project as well as oversee the work of consultants, organize seminars and training. The PIU will be responsible for coordinating with other donors in the implementation of components which will be supported through parallel and co-financing. It will also be responsible for all reporting requirements to the Bank and the Government. It will be staffed by a project director, procurement and disbursement specialist, financial specialist and an assistant, funded under the project. Two MEPP environmental specialists will be funded by the government.

The project would also finance a local PIU office in Gospic, the county seat of Lika Senj. The local PIU office, provided by the government, will be in the county department office building which houses local offices for all sectors and for physical planning. This will facilitate local level inter-sectoral coordination and planning. Furthermore, since Gospic has been identified by county officials as the best location for a proposed regional development pole, locating a PIU here offers the potential to coordinate the project with county development plans. The local PIU will be responsible for day-to-day project implementation and local level coordination. The local PIU will be staffed by a project coordinator, funded by the project, with the government funding two technical specialists, and an office assistant. The local level PIU will report directly to the national PIU. Staffing and technical decisions for the local PIU will be the responsibility of the MEPP Division of Nature Protection.

The PIU would be assisted by an inter-agency Project Steering Committee established during project preparation. The Steering Committee consists of 13 representatives from relevant Ministries and institutions, including Ministry of Environmental Protection and Physical Planning, Ministry of Agriculture and Forestry, State Department for Water, and the directors of the protected areas covered by the project. The Steering Committee would be responsible for providing project oversight advice, inter-ministerial coordination, and assistance in resolving issues associated with project implementation. The Minister for Environmental Protection and Physical Planning will be chairman for this committee. The Steering Committee will build on the success of the interagency committee which oversaw KEC project preparation.

Local advisory groups from each of the three main project regions (Plitvice, Paklenica, and the Velebit), selected by, and comprised of, representatives of key stakeholder groups, will also assist the PIU. The functions of the national and local PIU and the terms of reference of staff are included in Annex I of the Project Implementation Plan (PIP).

Financial management

Accounting: The accounting for this project would be maintained in accordance with International Accounting Standards.

Accounts: The national PIU will open and maintain an accounting and auditing system that will ensure the implementation and record all financial transactions associated with the project in a timely manner and comply with internationally accepted accounting standards. This will be used for tracking both government counterpart funds and those provided by the bank. The PIU financial management specialist will coordinate and supervise all functions related to accounting, internal controls, financial reporting and auditing under the project. An adequate accounting system and procedure will be established and maintained wherein accountability of project funds is ensured, and financial records are maintained and reported as required by the bank.

Audits: Project accounts will be audited in accordance with the “Guidelines for Financial Reporting and Auditing of Projects Financed by the World Bank.” Within four months of the effectiveness of the project, an independent auditor, acceptable to the Bank, would be appointed and annual audits of project records and accounts, including audit of the Special Account (SA) and disbursements under Statement of Expenditures (SOEs), will be undertaken in accordance with International Auditing Standards issued by the International Federation of Accountants, the Bank's Guidelines ("Financial, Accounting, Reporting and Auditing Handbook - FARAH") and specific terms of reference (TORs) acceptable to the Bank. The auditor will express a professional opinion on the annual project financial statements and will submit to the Bank an annual audit report within six months after the end of each government fiscal year. The cost of the audit will be financed from the proceeds of the GEF grant as an incremental operating cost.

Financial Reporting Arrangements: In addition to submission of annual audited financial statements, unaudited financial statements would be submitted to the Bank within three months after the end of every fiscal year. The MEPP would also be required to submit to the Bank quarterly project management reports per guidelines issued by the Bank under OP/BP 10.02. The financial report will include: (a) a summary of Sources and Uses of Funds by project categories of expenditures; (b) Summary of Expenditures by project components, for the current fiscal year and accumulated to date; (c) Summary of Statement of Expenditures (SOEs) by individual application reference number and amount; (d) Special Account Statement providing reconciliation of amounts in the Special Account; and (e) Expenditures Reports by disbursement category during the current quarter and next quarter.

Financial Management: The project financial management system, including accounting, financial reporting and auditing arrangements would be established prior to project effectiveness. The financial and accounting procedures, together with a description of the national and local PIU responsibilities for financial, managerial/technical and procurement, are described in the PIP. All necessary steps will be taken to ensure that the project complies with the relevant Bank policies OP/BP 10.02. Disbursements under the project will be based on traditional disbursement procedures and will be converted to disbursements under the Loan Administration Change Initiative (LACI) framework based on quarterly Project Management Reports (PMRs) at a later stage of the project if the project management reporting is successfully implemented. A project financial management system (FMS), conforming to LACI guidelines, will be completed during the first year of implementation. The financial management reports will be generated from the FMS.

Monitoring and Evaluation Arrangements: Monitoring and evaluation of project activities will be undertaken by the national PIU, and will be subject to periodic review by the Bank. The PIU will establish project monitoring and evaluation procedures acceptable to the Bank, and will furnish the Bank with bi-annual project progress reports, together with work programs inclusive of detailed monitoring indicators for the following six month period. Key performance indicators proposed for monitoring are in Annex 1. Arrangement for monitoring will be detailed and agreed upon during appraisal and recorded in the minutes of negotiation. In addition, a mid-term evaluation would be

prepared during the third year of the project. Lessons learned from implementation of project activities will be recorded in a report prepared by the borrower with the assistance of the PIU.

D. Project Rationale

1. Project alternatives considered and reasons for rejection:

Alternatives considered were:

- Include only Plitvice Lakes National Park in the project and focus activities on improving biodiversity conservation in the national park. Plitvice is the most renowned of Croatia's national parks, hence this alternative was proposed. However, since other protected areas in the project region also contain unique biodiversity and extending the project to several protected areas would create synergies, we broadened the scope of the project to cover additional protected areas.
- Focus only on protected areas and improving their management. This was rejected in favor of including project activities in non-protected areas in the project region and the strengthening of linkages between rural development opportunities, biodiversity conservation, and tourism. This will enable the project to have more of a socio-economic impact on the communities associated with the parks; extend the benefits of the project to a wider population; and integrate conservation activities/considerations into regional planning. The social assessment fully supports the need to develop the nature based tourism potential of the region, as well as to identify and support rural development initiatives that link development with sustainable natural resource use.

2. Major related projects financed by the Bank and/or other development agencies (completed, ongoing and planned).

The KEC project is linked to the *Municipal Coastal Water Pollution Control Project* (MCWPC) which is mapped to ECSIN and is scheduled for appraisal in FY03. The objective of the US\$250 million Municipal Coastal Water Pollution Control Project objective is to help the Croatian government combat water pollution and improve water quality in coastal areas. The implementing agencies will be Croatia Waters (HV) for the infrastructure components and the Ministry of Environmental Protection and Physical Planning (MEPP) for the water quality monitoring component. HV and MEPP have been co-implementing agencies for the WB Eastern Slavonian Reconstruction Project (ECSIN) and its associated GEF project, Kopacki Rit Nature Park Project, since 1999. This model of the water infrastructure sector working closely with the environment sector in Croatia, on both the Bank and government side, is thus well established and has proven to be effective. Both the borrower and the Bank (ECSSD and ECSIN) are committed to continuing with this successful approach in the design and implementation of the MCWPC project and the KEC project. It is considered an particularly important linkage as the responsibility for water quality monitoring and all that it entails, e.g. setting standards, enforcement, surveillance, and testing, heretofore resting with HV, will be transferred to the MEPP in early 2002. The MCEPC recognizes that since the most of the surface and ground-waters supplying the coastal drinking water supply and discharging into the Adriatic within the project's region, originate in the karst region of the KEC project, protection and conservation of the sensitive karst ecosystems included in the KEC project are essential for the successful implementation of the MCEPC Project. The MCEPC project will use an integrated water management approach which will include wastewater treatment infrastructure in two selected geographic regions and in selected "hotspots". Co-financing from the MCEPC project to the KEC project will include financing of a specific environmental project component on water quality monitoring and capacity building of MEPP. This component will also finance specialized water quality monitoring equipment, hydrogeological studies in the KEC region, and training. The Municipal Coastal Water Pollution Control Project may also identify and co-finance environmental infrastructure investments in the KEC project region which would not be eligible for financing by the GEF. As the MCEPC is still in preparation the exact amount of co-financing is not yet determined. The KEC project task manager is the environmental specialist on the MCEPC project team and this assignment was made

specifically to ensure the linkage of the two projects and so that the KEC task manager can design the water quality monitoring component of the MCEPC project.

It is expected that the KEC project will be effective about one year before the MCEPC and that this timing will be beneficial to both. It will give the MEPP at least one year to build water quality monitoring capacity through implementation of the monitoring program financed under the KEC project and further develop the working relationship between HV and MEPP. In the first year of implementation the KEC project will review and make recommendations regarding incorporation of biodiversity concerns into sectoral strategies, including the proposed national tourism strategy and the coastal zone development strategy. Both of these strategies will influence the MCEPE project, because the driving force for the MCEPE project is to mitigate existing, and pre-empt future, negative environmental impacts of tourism and economic development on the coast. Additional KEC Year one activities which will provide important information to the final design of the MCEPE project are: (i) biodiversity inventory of caves in the MCEPE project region which can serve as a baseline; (ii) initiation of the KEC water quality monitoring which can be replicated in the MCEPC project region; (iii) hydrogeological assessment of the karst region in the upper watershed of the MCEPE region; (iv) an ecotourism strategy that will incorporate considerations of downstream water quality impacts; and (v) protected area management plans which may identify water pollution control investments that would enhance the KEC project and could be financed under the MCEPE project.

The KEC project will build on the results of the Coastal Forest Reconstruction Project (scheduled for closing in June 2002, through activities targeted to improve intersectoral planning for biodiversity conservation between MEPP and MoFA; interagency training programs, joint workshops and study tours; and development of the management plan for Velebit Nature Park based on guidelines developed under the KEC project for incorporation of biodiversity conservation into the forest strategy. The Forestry project's objective is to restore and protect forest land in the coastal zone of Croatia in order, like the KEC project, to enhance landscape and recreation values of the region and thereby contribute to restored tourism. The Forestry project includes reconstruction of coastal forests destroyed by war activities including the rehabilitation of about 5,800 ha of coastal forests. It also includes forest fire management activities such as prevention through raising public awareness, cleaning and reducing the amount of flammable material, fire detection system and fire fighting roads; as well as equipment e.g. seaplane air-tankers, trucks and fire-fighting equipment. It has assisted with the development of a GIS; research activities; and institutional support to Croatian Forests and the Ministry of Interior (MoI).

In preparation, the project was assisted by the Bank financed "Croatia Emergency Transport/Mine Clearing Project." The "Mine Clearing" project involves (i) clearance of mines in priority areas; (ii) screening and surveys; (iii) quality assurance tests; and (iv) technical assistance and training. The location of land mines throughout most of the country, including the protected areas, and their associated communities, has been mapped and this information was used in designing the project. Activities such as trails, camps, etc. will not be built in the vicinity of land mines. Land mine location information will also be used in assessing the eligibility of projects proposed under the small and medium size grants activity, e.g. forestry and agricultural projects. Funds may be available from the Mine Clearing project, for de-mining, in a case-by-case basis. The costs of de-mining large areas, e.g. a trail corridor throughout a large region; or an entire protected area, are prohibitive and not eligible under the Mine Clearing Project. But, during project implementation, if discrete areas are identified which could be de-mined at a reasonable cost, and then used for project purposes, funds and technical assistance can be applied for, at any time.

The KEC project has generated interest in rural revitalization and a US\$1 million grant has been awarded from the World Bank to Croatia for the "Zadar and Knin-Sibenik Counties: Refugee Return and Regional Development Project." This project region is located on the Northern Dalmatian coast of Croatia, and its objective is to create pre-conditions for Croatian Serb return (including youth and working age people)

and a broader economic development of Dalmatia. The grant program is under preparation and the team is working closely with the KEC team to coordinate strategies.

Completed and ongoing related projects are:

Table 1. Projects financed by the bank

Sector Issue	Project	Latest Supervision PSR) Ratings (Bank-financed projects only)	
		Implementation Progress (IP)	Development Objective (DO)
Bank-financed			
Environment	IDF Grant: MEPP Environment Capacity Building	S	S
Natural Resources	Coastal Forest Reconstruction Project	S	S
Agriculture	Farmer Support Project	S	S
Infrastructure/Environment	Eastern Slavonia Reconstruction Project/Kopacki Rit Nature Park (GEF component)	S	S
Biodiversity	Biodiversity Strategy and Action Plan - completed	S	S
Infrastructure	Emergency Transport & Mine Clearing	S	S
Social	Refugee Return and Regional Development Project		

IP/DO Ratings: HS (Highly Satisfactory), S (Satisfactory), U (Unsatisfactory), HU (Highly Unsatisfactory)

Add in "other" UNDP/GEF - Renewable energy

NA

3. Lessons learned and reflected in the project design:

 Sector & Themes  KM

Experience from other similar initiatives in Central and Eastern Europe suggests that:

- (a) All stakeholders should be involved early in project concept design, specifically local communities and influential decision makers, by inviting them to workshops or public awareness programs, in order to instill a feeling of ownership, build lasting commitment and achieve successful project implementation;
- (b) Conservation management strategies should establish a link between the objectives of conservation and tangible benefits for key stakeholders, specifically including local communities (e.g., economic and community development associated with appropriate forms of rural and ecotourism, etc.);
- (c) In order to achieve environmental, social and financial sustainability, conservation strategies must be site-specific and address local needs and issues;
- (d) Where consumptive use of natural resources is an issue, (e.g., grazing, hunting, fishing, and use of other forest products), resource users must be substantively involved in the design of sustainable

resource management systems, and effective monitoring and control mechanisms need to be developed and applied;

- (e) Applied research and monitoring programs should also be site-specific and targeted to provide direct support for effective conservation management;
- (f) Problems should be solved jointly with clients and not for them; and
- (g) Decentralized responsibility for financial and project management builds local ownership and sustainability of project activities.

The project will incorporate these experiences and build on them specifically by: (i) addressing the links between socio-economic issues and sustainable natural resource use and management through the rural revitalization grants program, (ii) building both the local and national capacity for conservation management, (iii) developing mechanisms for local level participation in conservation and land-use decision-making, e.g. a "People and Parks" program in each protected area; and (iv) ensuring a participatory and transparent approach to project preparation and implementation.

4. Indications of borrower and recipient commitment and ownership:

The World Bank received a letter of support from the GEF focal point, the Director of the State Directorate for Nature Protection and Environment, requesting technical assistance and financial support for the preparation of the Karst Ecosystem Conservation Project (June 1999). Subsequent to this, upon the establishment of a new MEPP, the new minister and new GEF focal point, have supported the request for the KEC project (December 13, 2000, October, 2001.) The Minister of MEPP made a visit to World Bank headquarters April 17, 2001, specifically to reiterate his request for the project.

The Government agencies responsible for environment have shown a commitment to identifying and prioritizing environmental problems and finding solutions. The BSAP was endorsed by the Parliament (June 1999). The KEC project is a national priority under the BSAP, which identifies conservation of biodiversity in the karst region as a key environmental priority. A National Environmental Action Plan (NEAP), produced with support from the World Bank (2001) includes as priority environmental issues, biodiversity conservation, and within biodiversity, specifies the KEC project as the top priority action. MEPP is currently implementing a medium size GEF grant for biodiversity conservation as part of the Eastern Slavonian Reconstruction.

5. Value added of Bank and Global support in this project:

The value added of GEF support for the KEC project comes from providing additional funds to ensure the long-term protection of biodiversity of global importance. Without GEF support to coordinate these activities, Croatia might undertake a series of small activities in different parts of the country, but would lack a mechanism to coordinate the financing, and approaches and geographical targeting of activities. The Bank has assisted Croatia with preparation of the BSAP and NEAP, which both provide a strategic foundation for this project. Bank experience with ongoing project in Croatia's forest, agriculture, water, and biodiversity sectors add value to the KEC project. Through its role as broker, the Bank has and will continue to mobilize donor support for biodiversity conservation in Croatia.

E. Summary Project Analysis (Detailed assessments are in the project file, see Annex 8)

1. Economic (see Annex 4):

Incremental Cost NPV=US\$ million; ERR = % (see Annex 4)

Incremental costs associated with the provision of global benefits through the project were estimated. The global benefits are: (i) increased national capacity to manage protected areas and natural resources sustainably and to conserve biodiversity of global importance; and (ii) increased local capacity for enhanced conservation of globally significant biodiversity and sustainable resource use in the karst region. The total incremental cost of achieving these benefits is US\$8.40 million. The Government of Croatia has committed to financing US\$3.18 million (36%). The GEF grant contribution toward the GEF alternative would be US\$5.07 million (64%). The U.S. Department of Interior is co-financing US\$0.15 million.

2. Financial (see Annex 4 and Annex 5):

NPV=US\$ million; FRR = % (see Annex 4)

Fiscal Impact:

Total government financing for taxes and recurrent costs during the implementation period is estimated to be USD 1.3 million which, at an average of USD 0.26 million/year, is less than 2.0% of the MEPP annual budget (USD15.5 million for 2001). The project has been co-financed by the U.S. Department of the Interior (National Park Service) and USAID. The Karst Ecosystem Conservation project is designed to address concerns of financial sustainability of the national parks it supports by enhancing their ecotourism capacity for revenue generation and developing a financing strategy for the Protected Areas (PA) system.

Croatia has over 50 years experience in attracting significant number of tourists to its national parks, and deriving revenues from user fees, the Plitvice Lakes being a prime example. The rebounding of tourist inflows to the country after a slump in the mid 1990s caused by the war, provides ample opportunity to derive revenues from tourist visits to build on this experience in the national parks supported by the project. The project will fund a PA system market analysis and the development of a promotion and marketing plan. Based on these studies, a PA system financing strategy will develop a visitor fee structure for individual national parks. Furthermore, the project will assist these national parks by building and equipping visitor centers, integrating ecotourism development in park management plans, publishing information material on the parks, and by providing training to park staff in nature interpretation and visitor management.

While project national parks will strive for financial sustainability, some of them may not be able to achieve this at all times for various reasons. To ensure continued funding of recurrent costs in such cases, the PA System financing strategy that will be elaborated under the project may entail a mechanism of cross-subsidization from national parks that have surpluses. Furthermore, the continued partnership with the United States National Park Service and the twinning arrangements under it will ensure transfer of relevant experience in protected areas financing arrangements.

The indebtedness of the Plitvice Lakes National Park (PLNP) related to the renovation of their hotels poses a problem, as revenues from visitor fees may be used entirely to serve the debt rather than fund conservation activities. During project implementation, the project team will work with the Government and the PLNP Administration to restructure this debt in a way that sufficient funds are available to cover recurrent costs of ecosystem conservation. An additional measure that the Government may be advised to

consider is the institution of a legal agreement that each national park earmark a certain pre-determined minimum share of user fee revenues for conservation activities.

The project will support existing and would be local enterprises in setting up and expanding environmentally friendly businesses in tourism services, farming and crafts production, which will help expand the Government's tax base.

3. Technical:

The project is technically justified on the basis of the urgent need to address growing and potential threats to the globally significant biodiversity in the karst region of Croatia. This assessment is based on the BSAP and Comprehensive Biodiversity Survey conducted as part of project preparation. The project seeks to mainstream biodiversity considerations into land-use management plans as well as sectoral management plans. The project components are aimed at addressing not just the immediate issues at hand but also to build capacity to deal with long term priority conservation issues while establishing linkages and technical partnerships with international organizations for regional trans-boundary conservation. The project also aims to strengthen the legislative and regulatory framework for biodiversity conservation and build public awareness and support for biodiversity conservation.

4. Institutional:

4.1 Executing agencies:

The executing agency would be the Ministry of Environment Protection and Physical Planning (MEPP). The MEPP's Division of Environmental Policy would have overall responsibility for project coordination and supervision of progress. The MEPP has sufficient capacity to implement the project as evidenced by its successful completion of the GEF financed BSAP and the Bank financed NEAP; as well as its successful ongoing implementation of three GEF financed projects -- Kopacki Rit -- a biodiversity conservation project, and two climate change GEF financed projects.

4.2 Project management:

The MEPP will have overall responsibility for project implementation and a national level project implementation unit (PIU) will be established in the MEPP Division of General Environmental Policy. An international project management unit has been operational in the MEPP, and former State Directorate, since 1998. It is this unit that has executed the GEF activities and projects mentioned above; prepared the KEC project; and managed donor programs. The KEC PIU will extend the existing management structure to meet the additional management needs. The PIU will be responsible for all procurement, disbursement and financial management aspects of the project as well as oversee the work of consultants, organize seminars and training. The PIU will be responsible for coordinating with other donors in the implementation of components which will be supported through parallel and co-financing. It will also be responsible for all reporting requirements to the Bank and the Government. The project would also finance a local PIU office in Gospić. The local PIU office will be in the county department office building which houses local offices for all sectors and for physical planning. The local PIU will be responsible for day-to-day project implementation and local level coordination.

4.3 Procurement issues:

An assessment of the existing project management unit's capacity to implement the project's procurement plan was carried out in December, 2000. The review addressed legal aspects, procurement cycle management, organization and functions, support and control systems, and record keeping. The review

rated procurement under the project in the high-risk category although public procurement in Croatia is an average risk. The rating is based on the limited experience the PIU has with procurement. The following actions were recommended in the assessment and will be implemented to mitigate the procurement risk: (i) a procurement book containing the guidelines, templates of tender notices, standard bidding documents, evaluation forms, etc. will be prepared and made available to the PIU prior to project launch so that their procurement staff can familiarize themselves with Bank procurement policies, procedures and documents; (ii) a project launch workshop will be held for the PIU after effectiveness of the loan with sufficient time dedicated to procurement issues; (iii) the PIU will hire a local procurement specialist with experience in Bank projects, upon effectiveness, (done September, 2000) with an international procurement consultant retained for at least six months to train the local counterpart; and (iv) intensive procurement supervision will be provided during the first three supervision missions. PIU staff have attended the Bank's 4 week procurement training course in Turin, Italy (in March, 2001) and the Bank's Competitive Grants course in Turkey (March 2001).

4.4 Financial management issues:

As with procurement, the national level PIU will employ a financial management specialist to handle financial management issues. Training needs will be assessed during preparation and met as needed.

5. Environmental: Environmental Category: B (Partial Assessment)

5.1 Summarize the steps undertaken for environmental assessment and EMP preparation (including consultation and disclosure) and the significant issues and their treatment emerging from this analysis.

The project addresses national, global and trans-boundary biodiversity conservation issues. It is designed to preempt the negative environmental impacts which could accompany economic development, particularly tourism, in the karst region. The project activities which could have negative environmental impacts are: (i) *Protected Area facilities improvements* including rehabilitation of existing structures in national parks, such as kiosks, visitor facilities; refurbishing of the local PIU office in Gospic (government financed); upgrading of biodiversity research and monitoring facilities in Plitvice National Park; trail construction in Gorski Kotar; and minor works in fences, small trails, landscaping in the National Park Northern Velebit and the Park of Nature Velebit; and (ii) *Conservation and rural revitalization grants program*, involving small grant awards to farmers, entrepreneurs, NGOs, on a competitive basis, for projects which will increase economic activity in the project area whilst ensuring biodiversity conservation and environmental protection. Small grants could include activities such as conservation of mountain meadows, organic farming, handicrafts production, wood processing.

Mitigation measures to be taken, detailed in the Environmental Management Plan (EMP), will ensure that construction procedures will mitigate for dust and noise; that trails will be individually assessed and designed to take into consideration factors which influence the amount of resource damage caused by trail use; that individual small projects carried out under the small grants program be reviewed under the existing environmental impact assessment procedure (which is fully compatible with the World Bank OP 4.0); and that all project activity sites are clear of land mines. The operation manual for the CRRG program will include environmental assessment guidelines consistent with those of the MEPP. Criteria for selection of small grants awardees will include compliance with existing Croatian environmental standards.

5.2 What are the main features of the EMP and are they adequate?

The EMP provides an assessment of the potential impacts of protected area facilities improvements; and indicates possible projects to be financed under the small grants program. The small grants program will develop an operational manual before negotiations which will include procedures for environmental

review of the small grants projects. The EMP provides a table of activities, potential impacts/issues, mitigating measures, costs, institutional responsibility, and comments.

5.3 For Category A and B projects, timeline and status of EA:

Date of receipt of final draft: December 30, 2000

5.4 How have stakeholders been consulted at the stage of (a) environmental screening and (b) draft EA report on the environmental impacts and proposed environment management plan? Describe mechanisms of consultation that were used and which groups were consulted?

The environmental assessment was discussed during the project design workshop II (October, 2000) with over 80 stakeholders, including NGOs.

5.5 What mechanisms have been established to monitor and evaluate the impact of the project on the environment? Do the indicators reflect the objectives and results of the EMP?

The EMP has designed a monitoring and evaluation program for the project which reflects the objectives of the EMP.

6. Social:

6.1 Summarize key social issues relevant to the project objectives, and specify the project's social development outcomes.

A social assessment (SA) was conducted as part of project preparation. This provided particularly useful information since the demographics of the project region have not been examined since 1991, pre-war, and most of the project region was not included in the recent Croatia Poverty Assessment. The SA study area consisted of the communities in and around the four protected areas that are the focus of the KEC, including: Paklenica National Park (within north Zadar County, at the south end of the KEC study area); Plitvice Lakes National Park in Lika-Senj County; Velebit Nature Park, also in Lika-Senj County; and Risnjak National Park (in the Gorski-Kotar District of Primorsko-Goranska County).

The main findings of the SA relevant to the KEC project are that the population in the project region has declined substantially in the past ten years; the area is economically depressed; and traditional rural and agricultural activities once practiced in the region have largely been abandoned. From available information, the SA estimates the population of the total project region is about 65,000. Since 1991 (the date of the last census), the demographics of the project area have shifted significantly. It is estimated that in Lika-Senj County, which comprises more than 80% of the project area, the population has decreased over ten years from 64,000 to approximately 44,000 people, most of whom are elderly. While unemployment was already high before the war, it is now much higher throughout the project area which includes the poorest county in Croatia (Lika-Senj). Employment in the main towns, such as Gospić and Otocac, is largely in the forestry sector, public sector, and in a few small businesses. Although agricultural pursuits have long been practiced throughout the area, agriculture has not been the economic mainstay of most families in the recent past, but rather has usually been carried out as a supplementary activity. One of the most vulnerable segments of society in the project area are those living in the rural villages and undertaking subsistence agriculture. Most of these people are the elderly living on pensions that often amount to only 150 or 200 Kunas /month (\$25). Perhaps the most vulnerable and poverty-stricken elements of society observed are the Serbs and Croats who have returned to the rural villages in the Plitvice area in the aftermath of war. Both groups tend to be dominated by the elderly and live in isolated settlements with limited access to resources.

Civil society participation in environmental (or any type of) decision making is weak. The environmental NGO movement in Croatia is in its early stages of development. While there are numerous entities identifying themselves as environmental NGOs, they are small and fragmented, and have limited resources and capacity. There is no tradition of community participation in local decision making. Some residents expressed resentment because they could no longer use areas, now protected, for economic activities. This sentiment is limited to the Velebit area, as the other national parks have all been in existence for over 50 years.

The SA identified a broad range of groups and individuals who have a stake in how the Karst ecosystem resources are managed. They include: (a) government institutions at the national, regional and local levels (including MEPP, MOAF, HS, Ministry of Tourism, HV); (b) managers of national and nature parks in the project area; (c) local residents and resource users (farmers, forest users, HS employees, herders, service providers to national parks and park visitors); (d) national and local NGOs; (e) the academic community and research institutes; and (e) tourists. Annex 11 identifies and evaluates the role of specific stakeholders that are most able to influence the project, likely to be most affected by the project, and have potential to contribute knowledge or others support it. The results of the SA have been used to define activities for the project as follows:

The project aims to establish a sound public participation program and to ensure that decision-making be decentralized to the local level as much as possible. The KEC project includes, at each of the protected area sites, a "people and parks" integration program to strengthen the links between the national parks, protected areas and the local populations who live in and around them. The program will include the development of local, community advisory groups that include a range of stakeholders (for example, park residents, adjacent communities, park managers, NGOs). These groups will serve as advisors to the PIU. The project includes a tourism initiative to boost the local economy which includes: baseline research of supply-side/product; market analysis; survey of tour operators' perceptions (international and national operators); "comparable" evaluation (for example, Slovenia); identification of, and packaging, business opportunities; constraints; and an action strategy. The project is a vehicle for rural revitalization by promoting linkages between biodiversity conservation and rural development issues. The small grants program for rural development provide opportunities in line with stakeholders' interests and the suitability of the resource base. The project includes, under the small grants program, a specific program for environmental education and public awareness that will draw upon, and build the capacity of, environmental NGOs.

Specific social outcomes are delineated in Annex 11.

6.2 Participatory Approach: How are key stakeholders participating in the project?

The project has been developed with a participatory approach beginning with pre-identification. During pre-identification missions to Croatia, the World Bank team met with national, regional, and local level government authorities; NGOs; scientists and academics; research institutes; and local communities to discuss conservation of biodiversity in the karstic regions of Croatia. The BSAP, which guided identification of the KEC project, itself, was a participatory process with over 100 stakeholders involved in its preparation. An inter-sectoral steering committee and counterpart team was established at identification. National and local level workshops at milestones in project preparation used a participatory process and involved a wide range of stakeholders. Key stakeholders that participated in the project identification and preparation phase included representatives from relevant Ministries and Institutions, including Ministry of Environmental Protection and Physical Planning, Ministry of Agriculture and Forestry, Ministry of Tourism, Ministry of Culture, Ministry of Economy, State Directorate of Tourism, Chamber of Commerce, Croatia Forests, Croatia Waters, private sector tourism, Institute 'Hrvoje Pozar', Croatian Building Institute Ltd., Geological Research Institute, Natural History

Museum, Zagreb University, county level authorities, local level protected area managers, and representatives of approximately 30 NGOs.

The SA team met with the full range of stakeholders, including Croat and Serb villagers; town residents; and representatives of community-based organizations (CBOs), nongovernmental organizations (NGOs), international relief agencies, local businesses, and all levels of government.

Reports of all preparation workshops, including an evaluation by participants, were produced in English and Croatian, widely disseminated and posted on the MEPP web-site. All preparation reports were produced in Croatian and English and also posted on the web-site. Results of the preparation reports, as well as the SA, were discussed in a series of local level meetings. To pilot an approach for local level dissemination of information during preparation, the project team prepared a brochure “Karst Ecosystems Conservation: Information on Project Preparation” in Croatian and English, posted the brochure on the web, and distributed over 500 copies which were discussed in a series of local level meetings. Feedback from the participants indicated that this was an effective tool in disseminating information and, throughout project implementation, similar pieces will be produced for discussion purposes. Input from the local and national level meetings and workshops was incorporated into the final project design which was the topic of a national workshop (October 2000). The workshop report is on the MEPP web-site. Stakeholders will participate in the implementation of the project components at all three levels of participation, namely information sharing, consultation and collaboration as indicated below (also see Annex 11).

- National Park management and staff will contribute to and be recipient of information in a number of project components that directly affect national parks and biodiversity management and monitoring in the Karst region. This includes: development of policies and guidelines for the system of protected areas in the karst; give support to newly protected areas; development and implementation of biodiversity information inventory; mapping and monitoring system; strengthening local PA staff capacity; and the development of regional and international vehicles for cooperation. Park management will also play an important role in ensuring public awareness of and subscription to the goal of Karst ecosystem conservation, notably through people and parks liaison committees, and more informally, taking into account local populations’ needs in planning park activities.

- Active participation and feedback of local farmers, households, NGOs, and businesses will be integral to the implementation of demonstration projects on sustainable resource use, to be financed under the Small-Medium grants program. This group of stakeholders will also actively participate in the rural revitalization program, as recipients of project support and information, as well as members of decision-making committees, such people and parks liaison committees and local small grant administration boards. Local communities, businesses and county and municipal governments will also collaborate in the preparation of the management plans of the Velebit Nature Park and Northern Velebit National Park.

- The public at the national and local levels will be informed about the importance and values of karst ecosystems through a variety of media, including TV spots, booklets, annual workshops, traveling exhibition, and a project newsletter. NGOs will play an active role in this effort.

- Current and potential tourism service providers in the region, tour operators nationwide, protected areas, the Tourism Institute, and the Ministry of Tourism will both be providers and recipients of information in the context of the supply/demand analysis of feasibility of nature tourism in the Karst region and on the carrying capacity and revenue breakeven targets for the national parks. The development of pilot marketing plans and action plans for the nature tourism product in the karst region will heavily rely on the collaboration of these stakeholders to be most beneficial to sustainable tourism development in the region.

6.3 How does the project involve consultations or collaboration with NGOs or other civil society organizations?

During project preparation, the SA included NGOs as a key stakeholder group, and a separate study on public awareness and public participation in biodiversity involved consultations with NGOs. There are about 150 NGOs dealing with some aspect of the environment in Croatia. A meeting was held during project identification with environmental NGOs to discuss technical issues on karst biodiversity conservation and the project objectives. The World Bank and counterpart preparation team has met with national and local NGOs that are working in the project region to discuss the project and relevant NGO activities and get input on project design. The project was discussed in a national level meeting between the Minister of MEPP and 200 members of NGOs (October 13, 2000). NGOs have been included in all national and local level workshops during project preparation. Specific project activities have been designed to be carried out by NGOs, including a small grants program for NGOs related to public awareness and education projects.

6.4 What institutional arrangements have been provided to ensure the project achieves its social development outcomes?

The SA identified social development issues, existing structures and mechanisms needed for community participation in the project and necessary resources, and recommendations on how best to structure and finance community-based protected area organizations so as to facilitate a partnership with protected area management, with concerned NGOs, and with county development committees. The implementation of the project will include the establishment of a community advisory group for each park and surrounding community. These groups will include local residents and other relevant stakeholders and will convene for the purpose of consultation on various park and protected area management as well as local planning issues.

6.5 How will the project monitor performance in terms of social development outcomes?

The project will finance periodic SAs to monitor social development outcomes identified in the initial SA carried out during project preparation. Annex 11 presents a list of social development outcomes and indicators as well as a plan for social development outcome monitoring and evaluation.

7. Safeguard Policies:

7.1 Do any of the following safeguard policies apply to the project?

	Policy	Applicability
	Environmental Assessment (OP 4.01, BP 4.01, GP 4.01)	Yes
	Natural habitats (OP 4.04, BP 4.04, GP 4.04)	No
	Forestry (OP 4.36, GP 4.36)	No
	Pest Management (OP 4.09)	No
	Cultural Property (OPN 11.03)	No
	Indigenous Peoples (OD 4.20)	No
	Involuntary Resettlement (OD 4.30)	No
	Safety of Dams (OP 4.37, BP 4.37)	No
	Projects in International Waters (OP 7.50, BP 7.50, GP 7.50)	No
	Projects in Disputed Areas (OP 7.60, BP 7.60, GP 7.60)	No

7.2 Describe provisions made by the project to ensure compliance with applicable safeguard policies.

An environmental assessment was prepared under project preparation and is provided in the EMP.

F. Sustainability and Risks

1. Sustainability:

1a. Institutional sustainability

The national government agencies responsible for biodiversity conservation, the local projects area municipal governments, and the local protected area management and technical staff are in full support of the project. The project preparation counterpart team includes representatives from local level protected areas, protected area advisory boards, county management; national level government officials and private sector experts from biodiversity conservation, forestry, water, agriculture, and tourism.

On the field level, where day-to-day project implementation will occur, the local PIU will work closely with the directors of the protected areas, as well as the local authorities responsible for physical planning, forest management, and environmental protection. The local PIU office is located within the county offices which manage local level environment, forestry, agriculture and water activities which will contribute to sustainability. Through capacity building and institutional strengthening and increased coordination between various implementing agencies at the local, regional and national level, institutional sustainability has been addressed.

1b. Social sustainability

The project has tried to achieve early involvement of key stakeholders in project preparation and implementation, including policy makers, citizens and NGOs, to ensure social sustainability of the project. Future initiatives, to involve the local communities by developing activities to reduce pressure on the natural resources through effective management and alternatives, increase in public awareness and support for biodiversity conservation, will also contribute to social sustainability. The inclusion of a "people and parks" program into each of the five protected areas will ensure community involvement in decision making. To demonstrate sustainable economic development, compatible with biodiversity conservation, the components will be responsive to the needs of the local residents.

1c. Financial Sustainability

The Government's contribution to the project of US\$3.18 million includes taxes (US\$1.27 million); some investment costs -- facilities and refurbishing costs (US\$1.42 million); and US\$0.50 million to cover recurrent costs (staff). The 39% level of government contribution reflects the extremely strong commitment to the project. The Project incorporates measures to ensure financial sustainability of protected area maintenance and eco-system conservation in the Karst region. The Government recognizes the importance of conservation of Karst ecosystems and minimization of the negative impact of protected area visitation for the sustainability of tourism in the long run. It is committed to ensuring that protected area operations and maintenance and conservation activities are financed adequately and in a sustained fashion. To this end, MEPP has decided that in the Plitvice Lakes National Park an adequate amount from the visitor revenues be dedicated to the above activities (Annex 12 addresses the specific issues of the financial sustainability of Plitvice Lakes National Park.) In the Risnjak, Paklenica and Velebit National Parks, where there is potential for increased at the visitation level, project components, such as demand analysis and marketing plan development, based on carrying capacity assessments, will help improve visitation and hence revenues. The recent revitalization of tourism to Croatia will be a complimentary, positive factor in this direction. At times when visitor revenues are insufficient to cover necessary operation and maintenance and conservation costs, the Government is committed to provide complimentary funding.

2. Critical Risks (reflecting the failure of critical assumptions found in the fourth column of Annex 1):

Risk	Risk Rating	Risk Mitigation Measure
From Outputs to Objective		
Proposed changes in legislation and policy not adopted	N	The project will support a national public awareness program targeted at key audiences, including politicians and Parliament, to explain the benefits of biodiversity conservation and need for changes in legislation. For the purposes of EU accession, which Croatia is discussing, it is mandatory that the environmental legislation be harmonized with that of the EU.
Inter-sectoral conflict among agencies responsible for land-use and natural resource management planning	M	Stakeholders will be involved throughout preparation and implementation of the project to build collaboration and support for the project objectives, design and activities.
Lack of support by local communities and counties for sustainable management and use of Karst ecosystems	M	The project will demonstrate the economic benefits of using sustainable technologies and conserving biodiversity.
From Components to Outputs		
Delayed contribution of counterpart financing	M	Periodic visits to MoF to share progress of project activities
MEPP does not allocate adequate (full-time) staff and office facilities for national and local PIU	M	Discussions are on-going to ensure that a full-time national and local PIU are established prior to implementation of the project
Overall Risk Rating	M	

Risk Rating - H (High Risk), S (Substantial Risk), M (Modest Risk), N(Negligible or Low Risk)

3. Possible Controversial Aspects:

The project will seek to ensure that visitation to the national park be kept at a level that is sustainable from a biodiversity conservation point of view. However, in the light of its large hotel related debt with annual debt servicing requirements of US\$3-4 million and the need to cross-subsidize loss-making hotels and general administration function in the park, park management will feel obliged to increase the annual

number of visitors beyond the 2000 level of 490,000. The project will seek to ensure that an adequate share of the visitor revenues be allocated to park maintenance and biodiversity conservation activities to render tourism sustainable. This would likely mean that fewer resources would be allocated to subsidize the above mentioned departments. Privatizing or transferring the hotels might provide a solution to the financial aspect of the problem, but it would likely also mean a decrease in staff which would be contrary to the government's goal of reducing unemployment in the area. The project will work together with MEPP, Ministry of Finance and Park Management to find a solution that is socially and environmentally sustainable. Annex 12 provides an outline of available options.

G. Main Grant Conditions

1. Effectiveness Condition

(a) a financial management system, satisfactory to the Bank, shall have been established; and (b) a project coordinator at the central and local PIUs, as well as a procurement specialist, financial manager, and administrative assistant at the central PIU, appointed under the TORs specified.

2. Other [classify according to covenant types used in the Legal Agreements.]

H. Readiness for Implementation

The engineering design documents for the first year's activities are complete and ready for the start of project implementation.

Not applicable.

2. The procurement documents for the first year's activities are complete and ready for the start of project implementation.

3. The Project Implementation Plan has been appraised and found to be realistic and of satisfactory quality.

The following items are lacking and are discussed under loan conditions (Section G):

I. Compliance with Bank Policies

1. This project complies with all applicable Bank policies.

The following exceptions to Bank policies are recommended for approval. The project complies with all other applicable Bank policies.

Rita Klees
Team Leader

Kevin Cleaver
Sector Director

Andrew N. Vorkink
Country Director

Annex 1: Project Design Summary

CROATIA: CROATIA KARST ECOSYSTEM CONSERVATION PROJECT

Hierarchy of Objectives	Key Performance Indicators	Monitoring & Evaluation	Critical Assumptions
Sector-related CAS Goal:	Sector Indicators:	Sector/ country reports:	(from Goal to Bank Mission)
	<p>Each PA in the KEC region has in place and enforces a management plan that incorporates BC concerns and was developed with participation of local stakeholders.</p> <p>PA tourism marketing plan and support programs for biodiversity friendly local businesses in place.</p>	<p>Parliamentary gazette</p> <p>CAS updates</p> <p>Government “State of the Environment” reports</p>	<p>Biodiversity protection and sustainable natural resource management contribute to local economic development, and poverty alleviation.</p> <p>Political stability and stable economic development.</p>

GEF Operational Program:			
Promoting conservation of biological diversity and ecological integrity of mountain, forest, freshwater ecosystems, and associated landscapes of karst region (OP2, OP3, OP4).	Maintain level of globally important species, habitats, and communities.	National biodiversity information and monitoring reports	Continued Government commitment to biodiversity conservation.
	Regional Collaboration and Coordination Program for Karst Ecosystem Conservation is established.	National biodiversity inventories Official gazette	Biodiversity conservation benefits local stakeholders.

Global Objective:	Outcome / Impact Indicators:	Project reports:	(from Objective to Goal)
<p>Project Development Objective :</p> <p>Protect the biodiversity of karst ecosystems in Croatia in a way that is participatory, economically viable and integrated with the country's socioeconomic needs.</p>	<p>Maintained 2001 level of globally important species on 9,500 square kilometers of high priority karst ecosystems; (indicator species: the Long-fingered bat (<i>Myotis capaccinii</i>), the olm (<i>Proteus anguinus</i>), the Velebit degenia (<i>Degenia velebitica</i>) and the Wolf (<i>Canis lupus</i>)</p> <p>Prepared protected area management plans which follow the guidelines developed in the project in two national parks and one nature park, and implementation of plans is initiated;</p>	<p>National biodiversity monitoring and evaluation reports</p> <p>Project monitoring reports</p> <p>Socio-economic surveys</p>	<p>Continued political support for biodiversity conservation and sustainable resource use, despite changes in Government</p>
	<p>Increased protected area and self-generated financial resources for biodiversity conservation in four national parks and one nature park;</p>	<p>National Park annual financial reports.</p>	
	<p>Increased nature-based tourism and other economic activities which further the objectives of development, sustainable natural resource use, and biodiversity conservation.</p>	<p>National and regional tourism sector reports</p>	

Output from each Component:	Output Indicators:	Project reports:	(from Outputs to Objective)
<p><u>1. Built national capacity to conserve biodiversity and support sustainable resource use</u></p> <p>1.1. Biodiversity related regulations harmonized with conservation objectives</p> <p>1.2. Developed tools for enhanced national capacity to ensure biodiversity conservation</p>	<p>Legal and regulatory review completed by 1st year. Intersectoral mechanisms for coordination developed and operational by 1st year.</p> <p>Clearinghouse for dissemination of biodiversity and karst information established by 2nd year. Guidelines for national protected areas management and planning developed by 2nd year. Guidelines for local and NGOs participation in protected area management developed by 2nd year. PA system market analysis completed by 1st year; promotion and marketing plan, and PA financing strategy developed by 2nd year. Protected areas ranger training programmes developed by 3rd year</p>	<p>For all outputs: PIU reports, supervision reports, implementation completion report</p> <p>Official gazette Parliament agenda</p> <p>Published book of guidelines Published book of guidelines</p> <p>Market analysis and marketing plan report Financing Strategy report</p> <p>Training manual</p>	<p>Legislation and policy amended to support the regulatory revisions.</p> <p>Capacity developed under the project is used effectively and regularly by agencies involved to enhance biodiversity conservation.</p>
<p>1.3. Species and taxa under legal protection expanded</p>	<p>Feasibility of the establishment of the Ogulin PA assessed by 3rd year. Feasibility of the establishment of the Kupa Valley PA assessed by 3rd year. List of taxa under legal protection revised by 3rd year. Network of highly significant biodiversity spots designated by 3rd year. Analysis of Ogulin biodiversity and water management issues completed and monitoring program developed by 4th</p>	<p>Feasibility study report Feasibility study report</p> <p>Official Gazette Government decree</p> <p>Analysis report Monitoring manual</p>	<p>Legal protection is enforced effectively.</p>

	<p>year. Equipment for underwater monitoring in Ogulin area purchased and in use by year 2.</p>		
1.4. Improved biodiversity inventory, mapping and monitoring	<p>Karst flora and fauna inventory developed by 4th year. Biodiversity monitoring equipment purchased by 1st year. Monitoring of biodiversity components carried out in priority areas by 5th year. Equipment for the monitoring of migration corridors and populations of wolf purchased by 1st year. 50% of monitoring carried out by 3rd year. Inventory of the caves and related hydro-geological data established in priority areas. GIS equipment purchased by end of 1st year. 40% of staff trained in GIS and database development by 3rd year. Karst ecosystem biodiversity GIS and database developed by 5th year.</p>	<p>Inventory books. Monitoring reports Monitoring reports Inventory reports Training reports GIS maps and database</p>	<p>MEPP remains committed to monitoring activities, turnover of personnel trained in this field is minimal; resources needed for the operation and maintenance of equipment during and beyond project period are provided.</p>
1.5. Increased national public awareness and support for biodiversity conservation with active role of NGOs	<p>Public awareness strategy and educational materials developed by 1st year. Website for Karst biodiversity developed and operational by 2nd year. Serial of TV-spots developed and running by 2nd year. Booklet on biodiversity in the karst area of Croatia developed by 2nd year 5 annual workshops and festivals carried out by end of 5th year. Traveling exhibition on biodiversity and KEC project has visited at least 12 cities by end of 5th year</p>	<p>Strategy report Educational materials Web site Booklet Workshop reports Newspaper reports</p>	
2. Established community-based mechanisms for biodiversity conservation and sustainable resource use in the			

Karst region			
<p>2.1. Supported sustainable nature based tourism in karst region</p> <p>2.2 Increased local public awareness and support for biodiversity conservation with active role of NGOs</p>	<p>Nature based tourism strategy developed and under implementation by end of 2nd year. At least two workshops held in local Karst areas on sustainable tourism. Preparatory and field works on mountaineering path in Gorski kotar - extension of E-6 completed by 3rd year.</p> <p>Park promotional materials and brochures for park visitors and local population prepared by 3rd year. Biodiversity field guides for project region prepared by 3rd year. At least 5 activities in education and public awareness raising by NGOs financed through small grants by end of 2nd year; at least 10 more financed by end of 5th year.</p>	<p>Strategy paper</p> <p>Workshop reports</p> <p>Brochures, promotional materials</p> <p>Field guides</p>	<p>Tourism strategy is implemented.</p>
<p>2.3 Improved protected area management</p> <p>2.3.a. NP Plitvice Lakes Improved planning and management system</p> <p>2.3.b. NP Paklenica Improved interpretation facilities and developed skills</p>	<p>30 % of park staff have taken at least one professional training course by end of 3rd year. 60% have taken at least one course by 5th year. Management plan developed by 2nd year and under implementation by 3rd year. Biodiversity research and monitoring facility established and operational by 2nd year. Biodiversity information system established and operational by 2nd year.</p> <p>Visitor center constructed and equipment purchased by 3rd year. 30 % of park staff have taken at least one professional training course by end of 3rd</p>	<p>Training reports</p> <p>Management plan</p> <p>Park biodiversity monitoring reports.</p> <p>Training report</p>	<p>Park management and biodiversity monitoring plans are implemented.</p> <p>Turnover of trained personnel minimized.</p> <p>National Park sets aside sufficient resources for the operation and maintenance of equipment and facilities.</p> <p>Turnover of trained personnel</p>

<p>2.3.c NP Risnjak Improved Interpretation and Monitoring Facilities and Skills Development</p>	<p>year. Building of cage, references, rings, satellite, telemetry completed to save the Eurasian vulture; leaflets produced about the Eurasian vulture; equipment acquired for monitoring the vulture by 3rd year.</p> <p>Acquired equipment to upgrade visitor center interpretation and education facilities by mid 3rd year. Acquired field equipment and GIS software by 2nd year. Biodiversity monitoring data acquired, processed and interpreted by 2nd year. 50% of NP staff received training by 2nd year, 100% have received training by 5th year. 90% management enhancing equipment acquired by 2nd year.</p>	<p>National Park biodiversity monitoring reports. Training report</p>	<p>minimized.</p> <p>National Park sets aside sufficient resources for the operation and maintenance of equipment and facilities.</p> <p>Turnover of trained personnel minimized.</p>
<p>2.3.d NP Northern Velebit Planning and Management System</p>	<p>Visitor center and information points constructed and equipped, and access paths built, fencing completed by 3rd year. Trails designed by 2nd year, 50% of constructed and signed by 3rd year and 100% by 4th year. 4x4 vehicles acquired by end of 1st year. 75% of field equipment acquired by 2nd year. 60% of office technology equipment acquired by 2nd year. 50% of NP staff received training by 3rd year, 100% have received training by 5th year. Park management plan developed by 2nd year. Hardware and software acquired to establishing biodiversity information</p>	<p>Training reports NP Management plan</p>	<p>National Park sets aside sufficient resources for the operation and maintenance of equipment and facilities.</p> <p>Turnover of trained personnel minimized.</p> <p>NP Management Plan implemented.</p>

<p>2.3.e. PN Velebit Improved planning and management system</p>	<p>facility by 3rd year. Equipment to improve protected area management acquired and functioning by end of 1st year. Visitors center in Gospic completed by 2nd year. Visitor center and information points in other location (tbd) by 3rd year. Fencing, access roads, landscaping and furnishing of visitor centers completed by 4th year. Trails designed by 2nd year, and constructed and signed by 4th year. Vehicles acquired by 3rd year. Visitors center information equipment acquired by 4th year, field equipment acquired by 5th year.</p> <p>80% of office equipment and software acquired by 2nd year. 50% of NP staff received training by 3rd year, 100% have received training by 5th year. Park management plan developed by 2nd year. 80% of biodiversity monitoring equipment and GIS software acquired by 3rd year. GIS training course conducted by end of 1st year. Equipment improving protected area management acquired by end of 1st year.</p>	<p>Training reports</p> <p>Park management plan</p> <p>Rural Revitalization Grants' Commission reports</p>	<p>Turnover of trained personnel minimized.</p> <p>National Park sets aside resources for the operation and maintenance of equipment and facilities.</p> <p>NP Management Plan implemented.</p>
<p>2.4. Demonstrated linkages between rural development and biodiversity conservation</p>	<p>Rural vitalization grant program ready to disburse by end of 2nd year At least 50 local farmers and entrepreneurs supported under the small grants program by end of 5th year. Old mills in the Gacka River spring revitalized by 2nd year. 30% of analyses for the</p>	<p>Inventory and monitoring reports</p>	<p>Small projects carried out under the grant scheme foster the stewardship of local communities for biodiversity conservation.</p>

<p>2.5. Supported Regional Cooperation Programme for Karst ecosystem conservation</p>	<p>protection of local cattle breeds carried out by 2nd year, 70% by 3rd year and 100% by 4th year.</p> <p>Inventory and monitoring of biodiversity of springs, groundwater, caves, meadows, forests, cliffs for border region between Croatia and Slovenia carried out - 30% by 3rd year, 60% by 4th year and 100% by 5th year.</p> <p>Developed and implemented trans-boundary management plan between NP Risnjak and neighboring National Parks in Slovenia by 5th year.</p> <p>Tourism marketing plan developed with RPs Skocjanske Jame, Sneznik i Kocevsko-kolpa by 3rd year. Promotional materials for Croatian-Slovenian park system developed by 3rd year.</p> <p>International Workshop - elaboration of regional cooperation programme- held by 3rd year.</p> <p>Croatian karst experts participate in karst conservation conferences in wider region once a year between 2nd year and 5th year.</p> <p>Two study tours to Europe carried out by 3rd year.</p> <p>Partnership program in national parks carried out</p>	<p>Trans-boundary management plan, implementation plans</p> <p>Tourism marketing plan</p> <p>Promotional materials</p> <p>Workshop report</p> <p>Conference reports</p> <p>Study tour reports</p>	<p>Political relations between and among the countries of the region remain friendly and conducive to cooperation in biodiversity protection.</p> <p>Tourism marketing plan implemented.</p>
---	--	---	--

Project Components / Sub-components:	Inputs: (budget for each component)	Project reports:	(from Components to Outputs)
<u>1. Building national capacity to conserve biodiversity and support sustainable resource use</u>	\$1.78m	For all components: Project progress reports Bank supervision reports and mid-term review Disbursement reports Procurement documents/contracts Quarterly Project Management Reports (PMR)	For all components: Timely contribution of counterpart financing. MoE maintains adequate (full time) staff and office facilities for PIU
1.1 Strengthening of laws and regulatory framework	US\$0.02m		
1.2. Strengthening national capacity to ensure biodiversity conservation	US\$0.33m		
1.3. Expansion of species and taxa under legal protection	US\$0.18m		

1.4. Biodiversity inventory, mapping and monitoring	US\$1.06m		
1.5. Increasing public awareness and support for biodiversity conservation with active role of NGOs	US\$0.19m		
<u>2. Establishing community-based mechanisms for biodiversity conservation and sustainable resource use in the Karst region</u>	US\$5.30m		
2.1. Promotion of sustainable nature-based tourism in karst region	US\$0.21m		
2.2. Increasing local public awareness and support for biodiversity conservation with active roles of NGOs	US\$0.11m		
2.3. Improving protected area management	US\$4.12m		
NP Plitvice Lakes	US\$0.52m		
NP Paklenica	US\$0.39m		
NP Risnjak	US\$0.44m		
NP Northern Velebit	US\$1.69m		
PN Velebit	US\$1.08m		
2.4. Demonstration of linkages between rural development and biodiversity conservation	US\$0.70m		
2.5. Regional Cooperation Program for Karst Ecosystem Conservation	US\$0.17m		
3. Project Management	US\$1.32m		

Annex 2

CROATIA: CROATIA KARST ECOSYSTEM CONSERVATION PROJECT

CROATIA: Karst Ecosystem Conservation (KEC) Project

Incremental Costs and Global Environmental Benefits

Overview

1. The general objective of the GEF alternative is to protect and conserve karst ecosystems in Croatia. The project development objective is to protect the biodiversity of karst ecosystems in Croatia in a way that is participatory, economically viable, and integrated with the country's socio-economic needs. The GEF alternative will: (a) build national capacity in biodiversity conservation and sustainable resource use; and (b) establish community-based mechanisms for biodiversity conservation and sustainable resource use in the Karst region. This will include: a review and revision of the legal and regulatory framework to incorporate biodiversity conservation and sustainable natural resource use; strengthening the national capacity to ensure biodiversity conservation; promoting public awareness and support for biodiversity conservation with active role of NGOs; incorporating biodiversity conservation in land-use plans, land development and natural resource use in the Karst region; establishing effective planning and management systems for protected areas; demonstration of linkages between rural development and biodiversity conservation; and establishing a Regional Cooperation Programme for Karst Ecosystem Conservation. The GEF Alternative intends to achieve these outputs at a total incremental cost of US\$8.41million to be financed by the GEF (US\$5.07million), and the Croatian Government (US\$3.18million). The proposed GEF Alternative should be viewed as complementary to ongoing activities in the karst Region of Croatia.

Context and Development Goals

2. Located between the Mediterranean and central-European continental climatic regions with a predominantly karst geology, Croatia enjoys unusually rich biodiversity. Karst is a term applied to regions characterized by the presence of limestone or other soluble rocks, where drainage has largely diverted into subterranean routes. Its existence is dependent upon the maintenance of a balance between relief, hydrology, climate and vegetation. The Dinarid Mountain range, which runs through Croatia from Slovenia to Bosnia, is one of the best known karst regions in the world and the term "karst" originated there. The karst features in the Dinarids include hundreds of sinkholes, chasms, underground streams, cavities and an estimated 8,000 caves. Croatian cave systems are among the deepest and most extensive in the world and contain subterranean pools, lakes, streams and rivers. Sites included in the project area have received international recognition. Notably, (i) the Velebit Mountain range (within the Dinarids) is part of the UNESCO's Man and the Biosphere Program and has been identified by the WWF's Hot Spot Initiative as one of the ten most important forest areas in the Mediterranean region; and (ii) Plitvice Lakes National Park is on UNESCO's global list of Natural and Cultural Heritage.

3. The biodiversity of the Croatian karst ecosystem is of global significance and hosts 3,500 species of flora (283 endemic), 12 species of amphibians, 36 species of reptiles, 200 species of resident birds, 79 species of mammals, and 64 species of freshwater fish (11 endemic). Croatia's subterranean karst habitats support an ever increasing list of newly discovered endemic and trogloditic (eyeless and adapted for an entirely subterranean existence) species and families, including one new species, genus and family of leech *Croatobranthus mestrovi*, found in a 1300

meter deep cave of the Velebit mountain in 1994. A great number of relict species and taxa of flora, originating from the tertiary period, survived in Croatia's montane forest and pasture ecosystems because the area was never glaciated. This also resulted in a prevalence of a higher diversity of aquatic fish than in other parts of Europe. The karst freshwater ecosystems also include travertine/tuffa-building communities of micro-organisms. The resulting 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. Large areas of the Dinarids, particularly in the Velebit 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 part of unfragmented forest in Croatia (almost 50% of forests), the integrity of which is evidenced by the presence of viable populations of carnivores (wolf, brown bear, and lynx). The Dinarids are also an important trans-European forest mountain corridor between Slovenia and Bosnia Herzegovina.

Baseline Scenario

4. Croatia gained independence from the former Yugoslavia in 1991. In 1993, the Government launched a successful stabilization program bringing down inflation and stabilizing the exchange rate. However, by 1998, the initially buoyant economy slowed down and by 1999 it contracted (by 0.3%). There were two main reasons for this. First, the progress made in public finance reforms, and in the banking and enterprise sectors was inadequate. Second, the earlier economic growth was based largely on reconstruction efforts and domestic consumption, instead of investments that would have enhanced the country's competitiveness. This, in turn, contributed to the large current account deficit which has been financed increasingly from external borrowing, thereby leading to a rapid and unsustainable build up in external debt. In early 2000, a newly elected government and a new President came to power promising economic restructuring and stabilization, and stronger integration with the western world. This year has also brought some positive developments in the economy. Notably, the GDP started to grow again mainly thanks to local consumption, exports to the EU and a major increase in tourism, especially to the Dalmatian coast. Moreover, arrears in government payments, in particular to farmers, have been reduced. The growth in the rate of inflation has been dampened. The most important economic challenges facing the Government are large scale unemployment which now stands at about 20% of the workforce which is even higher in rural areas and among older sections of the populations is even higher. Coupled with a troubled pension system and high levels of relative poverty and inequality, unemployment carries the potential of social tensions. Government's fiscal revenues remain low. Another problem that the Government needs to address is the very low level of investments and nearly non-existent financial intermediation which is largely the cause of the former. Foreign direct investments remain low as well.

5. The key environmental policy issue for the government is how to manage the country's future growth and development, while protecting the environment. Central issues include: the strengthening of environmental agencies, management and enforcement of environmental protection; and integration of environmental concerns into sector policies and plans. In February 2000, the Government established the Ministry of Environmental Protection and Physical Planning (MEPP) and included within it the agency formerly responsible for environmental protection, the State Directorate for the Protection of Nature and the Environment (SDPN), and the Ministry of Physical Planning. By virtue of elevating the main organization in charge of environment from a state directorate to a ministry, the government has given a strong signal that it is serious about its commitment to the environment. The major environmental legislation, the Law on Nature Protection is being revised, broadening the mandate of environmental protection to a more proactive approach, emphasizing sustainable development and use of natural resources.

In support of this objective, MEPP has established a department for Sustainable Use of Natural Resources. An Institutional Development Fund (IDF) grant is helping the Government to prepare its National Environmental Action Plan (NEAP) designed to detail environmental priorities and set the basis for future cooperation. A Bank/GEF Biodiversity Strategy and Action Plan (BSAP) was prepared in 1999.

6. The same karst ecological conditions, which have led to the development of rich subterranean biodiversity, also render the area extremely susceptible to environmental impacts. Due to the rapid influx of water throughout a karst cave system, subtle changes in land-use and vegetation cover on the surface can result in immediate and sometimes catastrophic changes in the subterranean ecosystems. Currently in Croatia, surface land is predominantly natural forest and traditional pastoral land, which provides a buffer for the subterranean ecosystems. However, in the absence of mechanisms to ensure sustainable land-use practice, the buffer provided by these surface ecosystems could easily be damaged, and the subterranean ecosystems could quickly and negatively be affected. Consequently, the threats to the biodiversity of the Karst region relate to the existing and potential changes in land-use that would remove the buffer that protects the subterranean ecosystem ecosystem or directly impact the montane forest and pasture ecosystems and aquatic species of the Adriatic watershed.

7. BSAP identifies the principal threats to Croatia's unique biodiversity as habitat transformation, fragmentation and degradation; and pollution including solid waste and waste water, road construction and drainage associated with tourism and municipal developments. These are compounded by a weak institutional policy and legal framework for the protection and conservation of biodiversity, limited institutional capacity for conservation management, lack of collaboration between sectors to sufficiently incorporate biodiversity conservation into physical and land-use and sectoral strategies, and a general lack of environmental awareness and the importance of Croatian karst biodiversity.

8. Under the baseline scenario, it is expected that the Government of Croatia expenditures related to ecosystems management biodiversity conservation in the project area over the period of the project will be approximately US\$24.131 million. These expenditures are detailed as follows.

i. The **Directorate for Nature Protection of the Ministry of Environment and Physical Planning** will spend an estimated US\$9.431 million on central and protected area level operating costs, nature protection and sustainable natural resource use programmes, wildlife damage compensation to local populations.

ii. The **Ministry of Agriculture and Forestry** considers the karst region as an area of strategic importance for grazing in open grasslands. It promotes livestock keeping by providing higher than national levels subsidies for cows, pigs, sheep, horse and milk. Promotion of grazing on highlands and hence the enlargement of meadows is beneficial to biodiversity conservation as about 50 % of the local flora is adapted to open landscapes rather than forests ecosystems. The total cost of these subsidies over the project period may be estimated as US\$12.981 million.

iii. The **Croatian Selection Centre for Domestic Animals (HSSC)** of MOAF coordinates and finances a program geared towards protecting autochthonous, endangered breeds of sheep, cow, horse and goat in Croatia. Among these breeds is the Lika Pramenka sheep which like other local breeds that were selected during the last centuries to survive hard conditions are important for the protection of the karst grassland areas. Breeders of Lika Pramenka and other domesticated species under protection receive an annual subsidy. According to HSSC, in 1999 the total subsidy payments made in the Licko-Senjska and Primorsko-Goransk counties was equivalent to

US\$387 thousand. Assuming that the same annual outlays will be made by HSSC during the 5 year project period, the total sum may be estimated as US\$1.720 million.

9. The National Parks located in the KEC Project area are expected to allocate their own resources (mainly from visitor fees) to biodiversity protection within their borders. These expenditures may be conservatively estimated as US\$1.691 million over the project period.

10. A number of natural resource management and biodiversity conservation activities in Croatia are being financed by other international development agencies, or will be under implementation during part or all of the proposed GEF project:

i. The **World Bank Coastal Forest Reconstruction and Protection (CFRP) Project** has been under implementation since 1996 and is scheduled to close in June 2002. Its main objective is to restore and protect forest lands in the coastal zone of Croatia in order to enhance landscape and recreation values of the region. There is partial geographical overlap with the KEC Project. The CFRP Project is supporting reforestation activities that are believed to allow for the return of the native climatic forest communities after one rotation. The project is spending a total of US\$2.2 million on this component. It is estimated that about 20% of this amount, or US\$440 thousand, account for biodiversity conservation in the KEC Project area. The CFRP Project is also investing US\$40 million in improving the existing fire management system to enhance the capacity of fighting annually recurrent large scale fires. Given limited geographical overlap, it is estimated that 10% of this amount, or US\$4 million, may be considered as part of the baseline for the KEC Project.

ii. The **Government of the Netherlands** has provided trust funds in the amount of US\$300 thousand to support the preparation for and introduction of forest product certification in Croatia. Certification will contribute significantly to the introduction of sustainable management practices in Croatian forests which will also ensure due attention to biodiversity conservation..

iii. The **Ecological Center Large Carnivore Program** monitors and protects bears, wolves and lynx in the Karst region. The annual funding of this program amounts to approximately US\$23 thousand and is projected to continue over the KEC Project period of 2001-2005. The total baseline cost is estimated as US\$115 thousand. Of this amount, about US\$64 thousand will be provided from the Croatian Central budget, US\$29 thousand from Swiss grant funds and about US\$23 thousand from German grant funds.

11. Despite being completed before the implementation of the KEC Project, the BSAP should be considered as part the of the baseline scenario since most of its findings provided the basis for the project. The KEC Project will implement recommendations made in the BSAP. The production of BSAP cost approximately US\$170 thousand, of which US\$102 thousand was a GEF grant and the rest Government of Croatia contribution.

12. The NEAP the Government of Croatia is in the process of preparing and which will have biodiversity conservation as one of its components is also considered part of the baseline since it will further strengthen the institutional basis for the attainment of the KEC Project objectives. Of the US\$273 thousand IDF grant, approximately US\$35 thousand will account for biodiversity conservation related action planning.

13. Although not considered part of the baseline since they are not within the KEC project area, the following projects are noted for their contribution to biodiversity conservation in Croatia:

i. **Regional Environmental Center for Central and Eastern Europe** is carrying out a trans-boundary project within the Regional Environmental Reconstruction Program of the Stability Pact. The US\$1.45 million project is called Promotion of Networks and Exchanges in the Countries of South Eastern Europe, financed by the **Swiss Agency for Cooperation and Development** and includes biodiversity protection in the Neretva River Area of Croatia and Bosnia and Herzegovina. The component will be implemented in 2000-2001 and cost approximately US\$98 thousand.

ii. The Ministry of Science and Technology will spend US\$138 thousand to finance the following biodiversity-related projects:

- Biological and ecological characteristics of Vransko lake in Cres Island
- Biodiversity protection of the Adriatic Sea
- Characteristic species and coastal ecosystems in South Adriatic
- Research on Adriatic Sea mammals
- Structural and metabolic characteristics of phytoplankton in Adriatic
- Mariculture: biological, genetic and ecological valuation
- Ecology and protection of endangered national ornitofauna
- Creation and transformation processes of organic matter in Adriatic
- Vegetation map of Croatia
- Review of ichthyosystems and fish population dynamics in coastal waters
- Biodiversity of selected areas in Adriatic
- Insects population in coastal area and island of Croatia
- Long-term changes mechanisms in North Adriatic
- Fauna of Croatian Adriatic islands

14. **Costs.** Total expenditures under the Baseline Scenario are estimated at US\$30.88 million including US\$30.39 million from the Government of Croatia, US\$0.44 million through international cooperation and US\$0.05 million from national and international NGOs.

15. **Benefits.** Implementation of the Baseline Scenario will result in improvements in the legal and institutional framework for biodiversity conservation. Furthermore, in the Karst region important measures will be taken to enhance resource management, through: on-going MEPP support to protected areas and sustainable resource use; incentives for the protection of autochthonous livestock breeds; protected areas recurrent expenditures on the resource conservation; improvement in the capacity to prevent recurrent large scale fires that have negative impacts on forest eco-systems; and the protection of large carnivores. However, additional resources are needed to enhance the information base, monitoring and management planning for and public participation in the conservation of globally significant Karst ecosystems. The GEF grant will address these issues at the local and national levels.

Global Environmental Objective

16. The GoC ratified the Convention of Biological Diversity in 1996. The World Bank/GEF Biodiversity Strategic Action Plan (BSAP), completed in 1999, identifies “the preservation of the existing values of the biological and landscape diversity of the Karst region as an area of global value and ensuring the coordinated management of all natural resources in this area” as a strategic objective.

17. **Scope.** The GEF Alternative would build on the baseline scenario and make possible activities and programs that would not be undertaken under the Baseline Scenario. This would include strengthening capacity at the field and national levels for planning and managing land-use for conservation and sustainable use of biodiversity; establishing effective inter-sectoral participatory planning and sustainable management of natural ecosystems and associated landscapes at selected project sites and thus protecting key freshwater, forest mountain and coastal ecosystems; supporting participatory approaches to sustainable natural resources conservation in key protected areas; supporting environmental education and awareness programs; developing mechanisms to reduce non-sustainable resource use; and promoting ecotourism development.

18. **Costs.** The total costs of the GEF alternative is estimated at US\$39.16 million, detailed as follows:

i. Building national capacity to conserve biodiversity and support sustainable resource use: Legal and regulatory framework review and subsequent revisions to incorporate biodiversity conservation and sustainable use of natural resources (Law on Nature Conservation and other sectoral laws); strengthening the national capacity to ensure biodiversity conservation; increasing public awareness and support for biodiversity conservation with active role of NGOs – US\$2.29 million (GEF financing: US\$1.10 million);

ii. Establishment of community-based mechanisms for biodiversity conservation and sustainable resource use in the Karst region: Incorporating biodiversity conservation in land-use plans, land development and natural resource use in the Karst region; effective planning and management systems for protected areas; demonstration of linkages between rural development and biodiversity conservation; establishing a Regional Cooperation Program for Karst Ecosystem Conservation (exchange of information, tourism promotion and partnerships with other Karst regions) – US\$35.67 million (GEF financing: US\$3.06 million);

iii. Project Management: Support for operating costs of national level and local level Project Implementation Units (PIU) – US\$1.30 million (GEF financing: US\$0.91 million)

19. **Benefits.** The Project will increase national level capacity to protect globally significant biodiversity in the Croatian karst ecosystems. This will include a review and revision of Croatia's legal and regulatory framework as well as sectoral and land-use plans to incorporate biodiversity conservation; devising a tourism strategy that will strive to achieve the dual goal of financial resources for conversation activities and minimizing tourism's harm to the ecosystems; the expansion of species and areas under legal protection; development of a biodiversity information inventory, mapping and monitoring system; and raising public awareness about the significance of the Karst ecosystems as a national and global heritage. The project will also improve local capacity for enhanced conservation of globally significant biodiversity and sustainable resource use in the karst region. Specifically, the project will develop effective planning and management systems for protected areas; provide monitoring equipment; and train rangers. The project will also improve social sustainability of biodiversity conservation by increasing local communities' participation in the decision-making process on protected areas management; supporting them in developing small businesses, such as tourism services; and in reviving biodiversity friendly traditional land-use practices.

Incremental Costs

The difference between the cost of the Baseline Scenario US\$30.88 million and the cost of the GEF Alternative US\$39.29 million, US\$8.41 million represents the incremental cost of achieving sustainable global environmental benefits. Of this amount, the Government of Croatia has committed to financing US\$3.18 million, USAID will finance US\$0.15million and US\$5.07 million is requested from GEF.

Incremental Cost Matrix

Component Sector	Cost Category	Cost (US\$ Million)	Domestic Benefits	Global Benefits
1. Building capacity to conserve biodiversity and support sustainable resource use	Baseline	0.51		
	With GEF Alternative	2.29		Increased national capacity to manage protected areas and natural resources sustainably and to conserve biodiversity of global importance.
	Increment	1.78		
2. Establish community-based mechanisms for biodiversity conservation and sustainable resource use in the Karst region	Baseline	30.37	Enhanced biodiversity protection and sustainable resource management in the karst region.	
	With GEF Alternative	35.67		Increased local capacity for enhanced conservation of globally significant biodiversity and sustainable resource use in the karst region.
	Increment	5.30		
3. Project Management	Baseline	0	Not applicable	
	With GEF Alternative	1.32		Not applicable
	Increment	1.32		
Totals	Baseline	30.88		
	With GEF Alternative	39.29		
	Increment	8.41		

Attached please find the STAP Comments. The Summary section is followed by detailed comments. After each comment, *in italics*, are *the task manager's comments*.

Please note, the STAP review was conducted after the October 2000 pre-appraisal of the project, based on the draft PAD which was prepared in anticipation of presentation to the GEF Winter Intersessional meeting. It was decided in January 2001, after preparation of the PAD and the STAP review, that the project needed to be placed “on hold” due to the GEF budget shortfall. Project preparation was also put “on hold”, no further preparation missions were conducted. Therefore, the project is essentially the same as the one evaluated by the STAP reviewer in December, 2000, with the exception of changes made, per notes below, to address STAP comments.

GLOBAL ENVIRONMENT FACILITY-STAP Expert Comments

COUNTRY: Croatia

PROJECT: “Karst Ecosystem Conservation Project (KECP)”

DATE: 27 December 2000

REVIEW BY: Janis B. Alcorn, Ph.D.

Note: Comments are based on my review of the Project Appraisal Document dated November 2000, and supplementary budget information about funding levels for project components.

Summary:

The project targets an area of globally-important biodiversity -- the Croatian Highlands. The Karst topography and evolutionary history of the region have created a wealth of endemic species, including unique biota in the labyrinth of underground waterways and caves that could offer global economic benefits as well as generating income as tourist destinations.

In the face of immediate threats from increasing tourism and road-building in a region with weak institutions following years of war, the project uses an appropriate strategy of land use planning, policy reform and capacity building for protecting rare biodiversity within a significant watershed for coastal towns and regional tourist destinations. It wisely espouses a landscape approach (the approach now being advocated by conservation experts) by focusing on an area with a land-use mix of protected and nonprotected zones (40 percent protected and 60 percent nonprotected).

The careful attention paid to the decentralized project management structure should yield benefits. More benefits could be gained if the institutions in that decentralized framework are directed to use a learning approach for adaptive management.

This project aims to create world-class parks. Approximately ninety percent of the funding is dedicated to consolidating the protected areas. The project also includes a small “rural revitalization” program for sustainable forestry and local eco-enterprises. The extreme levels of poverty, the high percent of elderly indigent in the project area, government’s desire to rebuild

revenues from local taxes, and the other postwar social problems present particularly difficult conditions for concerned Croats to consolidate public support for conservation. The project's prospects for success would be better if there are also additional investments for rebuilding local civil society institutions and empowering an active constituency for conservation among the citizenry in this area.

Detailed comments: and KEC project preparation team comments *in italics*

1. Scientific and technical soundness of project:

Relevant policies have been identified for reform. But the process by which citizens will be encouraged to contribute to the content of these reforms is not described. NGOs are mentioned, but NGOs do not necessarily represent a constituency and may simply represent their own interests. NGOs' public outreach efforts to enhance awareness of packaged messages about conservation values will be ineffective unless the NGOs also work to strengthen citizen involvement in environmental governance.

Task Manager Reply:

We agreed that the process by which citizens will be encouraged to contribute, and who these stakeholder groups would be besides NGOs, needed to be articulated in the Project Appraisal Document (PAD). The project design was thus strengthened to account for these issues as follows: Using the results of the stakeholder analysis which was conducted as part of the project's "Social and Rural Development Assessment", we have moved beyond just consideration of NGOs and identified additional stakeholder groups, their interests at stake in relation to the project, their potential influence on the KEC project, and the potential impact of the project on the stakeholder group. The stakeholder analysis (found in the PAD Annex 11) showed that the stakeholders most affected by the project are the rural poor; Serbs and Croats returning to villages; young people; local entrepreneurs; people living within and adjacent to parks; the tourism industry; community based organizations (crafts, mountaineering). Project component two was revamped, based on the STAP input, and stakeholder analysis, to become "Establish community-based mechanisms for biodiversity conservation and sustainable natural resource use in the project region." Within the component, activities were more clearly spelled out which address the issues of the project impacts on stakeholders and vice versa.

Based on the STAP review, the conservation and rural revitalization program was expanded from \$100,000 to \$500,000 and is designed to bring project benefits to the local rural poor, entrepreneurs, local communities, etc. The results of the social assessment were very compelling to the MEPP which fully supported an emphasis on realization of project benefits to local communities

A tourism development strategy for the project region was added to the project. Results will feed into the rural revitalization grants program by identifying opportunities for local crafts people, entrepreneurs; etc. to benefit from the project.

NGOs do have a comparative advantage in respect to environmental education as this has been one of the key activities of many environmental NGOs. NGOs have been active in project design and are very familiar with the project. The project builds on this capacity, by including a small grants program for environmental education which will be open to NGOs.

Several activities which are specifically addressed to local level biodiversity conservation concerns and economic development were added: the activity to protect local breeds is a community-based program. The revitalization of the Gacka river springs site is designed to

rehabilitate what was once a local level tourist site demonstrating biodiversity-friendly cultural heritage preservation.

A “People and Parks” activity is now included in the KEC project, protected area specific programs. The April 2001 study tour of the protected area directors to U.S. National Parks, included a focus on community involvement in park management and subsequent to this, each protected area has developed site specific “People and Parks” community participation activity which will be assisted by the KEC project. Activities which will be conducted include community advisory groups for each park; eco patrols using community volunteers; monthly programs for local residents on conservation issues; etc.

Technical soundness can only be evaluated in the context of the funding levels within any given component. The level of effort and funding for developing sound, local land-use plans may need to be increased if the goals of participatory, decentralized mechanisms (p.52) are to be met. The documents provide little information about how the budget will be allocated within each of the three components (p.52 - \$1.86 million earmarked for policy reform; \$3.2 million for land use plans, PA management systems, and a regional research, tourist promotion, and cooperation program with other Karst regions; and \$0.5 million for project management; other budget pages only contain zeros).

Task Manager Reply

The project budget, cost tables, have been completed in detail, and a summary of them is attached. It is important to note that the Government contribution is \$3,181,563 or 38% of the total project costs. The budgets and scope of work for technical assistance for development of specific protected area and land use plans have been reviewed by the project preparation team and government and determined to be adequate.

If expensive research, computerized programs, capacity building for park staff, park infrastructure, and networking with other research groups receive most of the project's funds, then the parks will remain isolated, and as a consequence the project could fail in its efforts to protect the fragile Karst landscape from being damaged by rapid, ecologically-inappropriate development for short-term economic gain. But if the project invests as much in enabling citizens' participation in governance and land use planning as it does in building park administration, then the project has a greater likelihood of achieving sustainable protection for the Karst landscape.

Task Manager Reply

Agree. Based on the STAP review and internal department review of the PAD, the project focus was revised moving resources from component 1 (which tended to be capacity building and studies, to component 2 (which focuses on community based mechanisms to improve biodiversity conservation – as described above). We also moved resources to the “Regional Cooperation Program” in the KEC project which is designed to prevent the “isolation” of the projected areas and biodiversity conservation in the KEC region. This activity will finance joint Slovenia/Croatia transboundary approaches to biodiversity conservation in the protected areas

on either side of the border. It will also finance study tours; participation in international conferences; and a tourism marketing plan that is Tran boundary.

2. Global benefits and/or drawbacks.

The project site merits GEF investment. KECP targets a globally and regionally significant area of biodiversity, which is well-described in the project documents. Areas of unique biodiversity are associated with Croatian Karst sinkholes, caves and underground channels. Aside from their general scientific interest, these unique underground biota also offer new genetic information for blueprints for synthesizing novel chemical compounds for medicinal and other uses of global value. In addition, the project takes advantage of an opportunity to protect the world's livestock genetic resources by maintaining locally-adapted varieties of sheep and cattle.

Task Manager Reply

Based on STAP comments, the project strengthened the activity to protect the region's livestock genetic resources by adding to the sub-component "Demonstration of linkages between rural development and biodiversity conservation" a specific activity "Project for the Protection of local cattle breeds, sheep, horses" which will be funded for \$33,000. The project also added an activity for protection of the Eurasian vulture in Paklonika National Park.

3. Fit with GEF goals, strategies and priorities, fit with relevant conventions The project fits GEF strategies, priorities and goals, and it will implement part of the National Biodiversity Strategic Action Plan (BSAP) under the international Conservation on Biological Diversity. It has been designed to complement other, existing biodiversity projects.

4. Replicability. The project should provide additional, globally-useful lessons about ways to integrate biodiversity protection into larger landscapes that support rural livelihoods as well as tourist ventures. If the land use planning proves successful in this subregion of Croatia, it can be extended to other areas of the country and elsewhere. In order to jumpstart this effort, I would recommend that the project design staff consider lessons learned from Australian efforts to integrate biodiversity conservation concerns into land use planning. (Contact Nick Abel at CSIRO for information about lessons on bringing together different interest groups and negotiating "satisfying" outcomes from their Lupis pilot program for land use planning with GIS - nick.abel@cse.csiro.au)

Task Manager Reply

We have contacted Mr. Abel and will use information he provides. The Croatian National Parks study tour to the U.S. included discussion on incorporation of biodiversity conservation into land use planning. This objective of the project will be enhanced by the recent (2000) merger of environmental planning and land-use planning into one ministry, the Ministry of Environmental Protection and Physical Planning.

5. Sustainability. The current government has indicated its commitment to conservation by expanding the protected areas system and taken action to address environmental issues. Although the project does face uncertainties related to the post-war situation, it builds on existing institutions and addresses the needs of local residents, both of which bode well for sustainability.

Landmines pose problems to wildlife, residents and tourists, but the project documents do not quantify this problem so it is hard to evaluate the level or distribution of threat they pose. Nor do the project documents indicate that any effort is being made to remove the landmines.

Task Manager Reply

The project is working closely, as do all World Bank projects involving land-use, with the Bank financed “Croatia Emergency Transport/Mine Clearing Project”. The PAD was revised to include discussion of the coordination of the two projects. The emergency project includes a “Mine Clearing” component which involves (i) clearance of mines in priority areas; (ii) screening and surveys; (iii) quality assurance tests; and (iv) technical assistance and training. We have consulted frequently with the task manager of the mine clearing component, Mr. Jacques Bure, who has visited some of the project region. The project has a map of the location of land mines throughout the country, and the protected areas, and their associated communities, included in the project are well-mapped in terms of landmines. This information was used in designing the project activities, e.g. trails, camps, etc. will not be built in the vicinity of land mines. This information will also be used in assessing the eligibility of projects proposed under the small and medium size grants activity, e.g. forestry and agricultural projects. Funds may be available from the Mine Clearing project, for de-mining, in a case-by-case basis. The costs of de-mining large areas, e.g. a trail corridor throughout a large region; or an entire protected areas, are prohibitive and not eligible under the Mine Clearing Project. But, during project implementation, if discrete areas are identified which could be de-mined at a reasonable cost, and then used for project purposes, funds and technical assistance can be applied for, at any time.

The likelihood of sustainable conservation gains is enhanced by the project’s attention to incentives for local people to undertake sustainable development options through the “rural revitalization program.” However, while the program is partially driven by the government’s concern to stop out migration from the area, it is unclear whether this special program could be a magnet to bring new migrants and additional threats to the area’s biodiversity.

Task Manager Reply

The project is designed to pre-empt threats and impacts to biodiversity particularly those of increased economic activity in the project region. One way of stopping out migration is to provide opportunities for economic development in the region. In parallel to improving biodiversity conservation in the protected areas, the project will finance activities which will help to mitigate the future impacts, e.g. preparing a nature-based tourism strategy for the region; determining carrying capacity for the parks; preparing land use plans with biodiversity conservation strategies incorporated, etc.; involving local communities in protected area management.

It is also unclear how land use regulation will be enforced. Will police and judicial systems impartially enforce the laws and policies?

Task Manager Reply

The MEPP which enforces land use regulations has demonstrated a very strong commitment to enforcing the land use laws and policies since its inception in 2000. We expect this to continue during project implementation.

Financial sustainability is addressed by reliance on return of park fees to the parks of origin, although the documents indicate this may not be adequate in some areas with few tourists.

Task Manager Reply

The project will finance significant parts of the visitor infrastructure, such as building or remodeling of visitor centers, equipment and furniture for these visitor centers, and building of trails, in the national parks. Improved facilities could increase visitor fees. The project will also finance the development of a financing strategy for the protected areas system to ensure financial strategy. One of the options that will likely be considered in the development of this strategy is "cross-subsidization" among national parks. Such a scheme would help those national parks that in some or all years are not able to generate enough revenues from tourism to cover all their operating expenses, including for biodiversity protection and monitoring.

The description of new ecologically sustainable enterprise options (crafts, etc) is vague, but if these options are not carefully evaluated for their financial viability, they could fail to provide good incomes and create further disillusionment with the park. The project documents indicate an awareness of this concern and note that market research will be done as a first step.

Task Manager Reply

Yes we agree and added activities accordingly. The project at the time of the STAP review included a "Protected Area system market analysis, promotion and marketing plan." As well as development of a "Protected Area Financing Strategy". These activities have been maintained in the KEC project, and based on the STAP review, two new activities added. Under the "Nature Based Tourism in Kart Region" sub-component, the project will finance development of a strategy for local level tourist related activities, based on a market analysis. Next the project will finance, based on the results of the analysis, training for local communities in terms of business development opportunities. These activities will lead into the Rural Revitalization grants program, as they include training in proposal preparation. The Rural Revitalization grants program selection criteria will include consideration of the financial viability of the proposed projects.

The project will also need to build capacity for community-based monitoring of indicators of ecosystem health so local residents and officials will have the capacity to gather information for adaptive management of the resource base into the future.

Task Manager Reply

The “People and Parks” program for each protected area will include community-based monitoring activities. The use of local volunteers for eco-patrols and ranger programs (and training) will be another opportunity to develop community monitoring capacity.

A GIS and remote sensing based inventory and monitoring system are proposed, but budget will need to be invested in good ground truthing for these high tech tools to be most valuable.

Task Manager Reply

In preparing the cost tables, we worked closely with local GIS companies to get realistic costs for equipment, monitoring, A specific activity “GIS” equipment, was incorporated into the “Biodiversity inventory, mapping and monitoring” sub-component, and it spells out in detail what is being purchased, and again, these costs were provided by local GIS firms.

Sustainability will be enhanced if the project promotes an overtly flexible learning approach to ensure that the results from biological and social monitoring are used to make adjustments to park (and project) management.

The project will “demonstrate linkages between economic development and conservation”. Demonstration seems premature. A learning approach would be recommended. Given the opportunity costs associated with conservation, and the difficulty of finding enterprises that benefit local rural people whose livelihoods have been negatively affected by park restriction , it would be best for the project to involve local people in monitoring whether the technologies and enterprises being promoted actually provide adequate benefits to people. Information thus obtained can be used to identify problem areas, and then to adjust technologies, marketing products, and outreach messages accordingly.

Task Manager Reply

Good idea which we hadn't thought of. So the “Demonstrate Linkages Between Economic Development and Conservation” sub-component was revised. We dropped pilot projects which had been suggested but not ground truthed. We designed the rural revitalization project so that the grants would be more spread over the course of the KEC project, so that learnings could be taken into account. We provided funds so that annual workshops to review the results of the grants activities could be held. The criteria for selection of small/medium size grants will include relationships to previous projects and consideration of their results.

6. Linkages to other focal areas and programmes at regional levels. The documents indicate that collaboration is planned with Karst regions in Slovenia, and possibly Romania, and that this new project will complement existing GEF and Bank projects in Croatia.

7. Degree of involvement of stakeholders in the project.

The stakeholder analysis included in the documents demonstrates the design team's thorough approach to evaluating stakeholders interests. Project implementation staff may find useful practical orientation and guidance in the new manual "Stakeholder Collaboration: Building Bridges for Conservation", available from the Ecoregional Conservation Strategies Unit at WWF-US.

The stakeholder analysis indicates that hunting and other traditional uses of biota currently contribute to rural subsistence livelihoods. The social analysis identifies the importance of addressing the local "legacy of resentment" toward parks. Project staff will face the challenges of changing park staff's attitudes toward people. The project will need to provide park staff with tools for seeking and using local input in order to build new public support for the parks.

Task Manager Reply

As mentioned before, the "People and Parks" program for each protected area has been added to the project, based on the STAP review, and will be one mechanism to seek and use local input. The project also includes local level advisory groups for each of the projected areas. The U.S. Department of Interior/National Park Division is co-financing a national park partnership activity. This activity will provide technical assistance for protected area staff capacity building including in the area of community involvement.

On p.6, limited public participation in decision-making is identified as a key issue facing conservation in the Croatian Highlands. The PAD (p.8) states that the project will establish decentralized, participatory approaches for conservation and sustainable use, but it is unclear if the project promotes democratic decision-making or only participation in implementation of pre-existing plans (see Rietbergen-McCracken & Narayan's 1998 World Bank publication on participation tools). While it is noted that local government will be involved in project management, it is not clear the degree to which it will be involved in decision-making. A good system of bi-directional checks and balances between national and local levels would ensure that decision-makers at either level do not bend the law or avoid enforcement actions. Conflict resolution institutions will also require attention.

Task Manager Reply

Limited public participation in any form of decision making is part of the legacy of the previous government. The project promotes democratic decision-making and recognizes the differences between consultation and participation; and participation and decision making. One of the prime factors in locating a KEC project management office in the field, and in Gospic, a county seat, is that by placing the center of project decision making in the heart of the county, in a multi-sectoral office (e.g. forestry, agriculture, land use, environment), which houses both national level and local level decision makers, is to foster multi-sectoral coordination/cooperation and also provide a system of bi-directional checks.

The STAP review comment on conflict resolution institutions is an excellent idea. We added to the program of activities under the “Local Community and NGO Participation” sub-component for each protected area, funds for a facilitator in the event of the need for formal conflict resolution measures. The local advisory groups for each protected area could function as the voice of conflictual perspectives.

The project could benefit from incorporating innovative “farmer-based research” techniques to build local pride, as well as use local knowledge and involvement to achieve real progress in developing and disseminating habitat-friendly management practices for pasturing animals, etc.

Regional and international stakeholders will benefit from attention to coordination and networking between Karst ecosystem support groups; and together they will provide scientific information to decision-makers. The value of that information could be enhanced if incentives were used to encourage scientists to apply their research skills to practical questions of interest to land-use planners and policy makers.

Task Manager Reply

The “Regional Cooperation Program for Karst Ecosystem Conservation Project” has been expanded to include funds for participation in international workshops on karst, transboundary research (with Slovenia) for biodiversity conservation, and study tours. These would be incentives for researchers to examine “practical questions of interest to land-use planners and policy makers”.

8. Capacity building aspects.

The project will rely on twinning with U.S. National Park Service. This will strengthen park administration and financial management. However, the social conditions of the vast majority of US parks are very different from those in Croatia. I would recommend that the project also support training tours to UK and other parts of Europe, where Croatian park staff could observe park management practices in parks where residents continue to pursue their livelihoods in the traditional cultural landscape inside park boundaries. Management issues are different in such situations, as compared to US parks.

Task Manager Reply

Agree. It should be noted that, with the exception of Plitvice, the communities, where they exist at all, within the national parks, are very small, e.g 10-20 people. The twinning arrangement was established based on the U.S. National Parks Service interest, and experience, in providing technical assistance to national parks in Europe. It builds on USAID’s environment program in Croatia. The technical assistance provided has been funded by the USG. Based on the STAP review, we added to the project financing of study tours to European countries with karst resources, e.g. France; participation in European conferences on topics related to the project; and presentation of an international conference in Croaticans by the MEPP.

Tools to build the learning approach should be introduced to build the longterm capacity for local government and citizens to adaptively manage the region in a well-informed, democratic

fashion. The project management framework provides an excellent framework for local-national cooperation, and it offers an ideal context for introducing such a learning approach.

9. Innovativeness of the project. The project will attempt to integrate biodiversity concerns into regional land use planning. This isn't a new concept, but the project could provide innovative approaches and processes for working with multiple stakeholders to achieve these objectives in other biodiversity areas that are both attractive to international tourists and basic to the livelihoods of rural poor.

Attachment 1 – STAP Comments – KEC project summary cost tables

Project Financing Plan (US\$ million)

	Local	Foreign	Total
Barrower	3.18	-	3.18
GEF	3.84	1.24	5.07
USAID	-	0.15	0.15
Total	7.02	1.39	8.41

Breakdown of GOC Contribution (US\$ million)

Component	Investment	Recurrent	Total non-tax	Tax	Total GOC Contribution
1	0.34	0.07	0.41	0.27	0.68
2	1.08	0.25	1.33	0.77	2.09
3	-	0.18	0.18	0.23	0.41
Total	1.41	0.50	1.92	1.27	3.18

Estimated Disbursements (US\$ million)

FY	1	2	3	4	5
Annual	0.88	1.52	1.42	0.76	0.49
Cumulative	0.88	2.40	3.82	4.58	5.07

Financing Sources by Component (US\$ million and %)

Component	Indicative Costs	% of total	Bank financing	% of Bank financing	GEF financing	% of GEF financing
1	1.78	21.2	0	0	1.10	21.7
2	5.30	63.1	0	0	3.06	60.3
3	1.32	15.7	0	0	0.91	18.0
Total Project Costs	8.41	100.0	0	0	5.07	100.0

Local vs. Foreign Costs (US\$ million)

Project Cost by Component	Local	Foreign	Total
Component 1	1.41	0.37	1.78
Component 2	4.29	1.02	5.30
Component 3	1.32	0	1.32
Total Baseline Costs	7.02	1.39	8.41
Physical Cont.	0	0	0
Price Cont.	0	0	0
Total Project Costs	7.02	1.39	8.41
Total Financing Required	7.02	1.39	8.41

Project costs by component and subcomponent (US\$ million)

Component 1	1.78
1.1 Strengthen Laws and Regulatory Framework	0.02
1.2 Strengthen national capacity to ensure biodiversity conservation	0.33
1.3 Expansion of Species and Taxa under Legal Protection	0.18
1.4 Biodiversity inventory, mapping and monitoring	1.06
1.5 Increased public awareness and support for biodiversity conservation with active role of NGOs	0.19
Component 2	5.30
2.1 Nature based tourism in karst region	0.21
2.2 Increased local public awareness and support for biodiversity conservation with active role of NGOs	0.11
2.3 Improve Protected Area Management	4.12
NP Plitvice Lakes	0.52
NP Paklenica	0.39
NP Risnjak	0.44
NP Northern Velebit	1.69
PN Velebit	1.08
2.4 Demonstration of linkages between rural development and biodiversity conservation	0.70
2.5 Regional Cooperation Programme for Karst Ecosystem Conservation	0.17
Component 3	1.32

Project Costs by Procurement Category (US\$ million)

CW	G	CS	SG	TR	TOTAL
0.79	1.54	1.58	0.73	0.43	5.07
16%	30%	31%	14%	8%	100%

III guidance by: (i) promoting in-situ conservation of biodiversity in protected areas of biological and ecological interest; (ii) building capacity, especially for NGOs; and (iii) increasing public awareness of nature protection. (Please see “B. 1a. Global Operation Strategy”.)

- Project Design: Sector issues, root causes, threats and barriers affecting global environment in “B. 2. Main sector issues and Government Strategy”. Description of proposed project activities is provided in “Project Description Summary –1.Project Components”. The project logical framework, including a consistent strategy, goals, objectives, outputs, inputs/activities, measurable performance indicators, risks and assumptions may be found in “Annex 1 Project Design Summary”. Incremental Cost Analysis and a description of global environmental benefits of the proposed project are provided in Annex 2.
- Sustainability: Project sustainability from institutional, social and financial points of view is discussed in “F. 1. Sustainability”.
- Replicability: The replicability of the project will be affected by the adaptation of the project activities to local conditions. Lessons learnt from experience with similar initiatives in Central and Eastern Europe have been integrated in the project design. These are discussed in “D. 3.Lessons learned and reflected in the project design”. The project will also undertake international cooperation activities which will help with replication in neighboring Karst regions as discussed in “C. Component 2, (v)”.
- Stakeholder Involvement: Detailed information on the level and mode of stakeholder participation in the project design as well as in project implementation is presented in detail in “E. 6.2 Participatory Approach and 6.3 How does the project involve consultations or collaboration with NGOs or other organizations?”
- Monitoring & Evaluation: Please see “C. 4. Institutional and implementation arrangements – Monitoring and Evaluation Arrangements”.
- Financing Plan: Please see “C. Table: Financing Plan”
- Cost-Effectiveness: An incremental cost analysis was carried out for the project and is presented in “E. 1. Economic” and in Annex 2. Project alternatives considered and rejected in favor of the current design are discussed in “D. 1. Project Alternatives Considered”.
- Core Commitments and Linkages: Please refer to “D. 2. Major related project financed by the Bank and/or other development agencies”.
- Consultation, Coordination and Collaboration between IAs: Please see “E. 4. Institutional - 4.1 Executing Agencies”

- Response to Reviewers: The comments of the STAP reviewer and the task manager's response including comments on how the STAP comments were included in the project design are attached to this document as Annex 3.

Please let me know if you require any additional information to complete your review prior to inclusion in the work program. Many thanks.

Distribution:

Messrs.: E. Torres, UNDP
A. Djoghla, UNEP (Nairobi)
K. Elliott, UNEP (Washington, DC)
M. Gadgil, STAP
M. Griffith, STAP (Nairobi)
Y. Xiang, CBD Secretariat
W. Kennedy, EBRD

cc: Messrs./Mmes. Klees, Arin (ECSSD); Ritter (Acting RC); Castro, Mackinnon, Khanna, Aryal (ENV); ENVGC ISC, Relevant Regional Files