Project Brief

1. Identifiers:

Project Number:	
Project Name:	Protected Areas Management and Wildlife Conservation Project
Duration:	6 years
Implementing Agency:	World Bank
Executing Agency:	Asian Development Bank
National Executing Agencies:	Department of Wildlife Conservation, Ministry of Forestry and Environment
Requesting Country or Countries:	Sri Lanka
Eligibility:	Ratified Convention on Biological Diversity in 1994
GEF Focal Area:	Biodiversity
GEF Programming Framework:	OP 1: Arid and Semi-arid Ecosystems; OP 2: Coastal, Marine and Freshwater Ecosystems; OP 3: Forest Ecosystems; OP 4: Mountain Ecosystems

2. Summary:

Sri Lanka's protected areas (PAs) are samples of some of the most species-rich and endemic-rich ecosystems in Asia, and key catchments for major hydro-power and irrigation facilities. Surrounded by some of the poorest people in the country, however, and managed inadequately, they are under increasing risk of encroachment and exploitation. As the first phase of a longer program, the Project will (i) promote organizational and managerial reform; (ii) strengthen the PA management capacity, with pilot programs at seven key PAs; (iii) encourage policy and legislative change to enable sustainable management of the national PA system in multi-stakeholder partnerships; and (iv) establish, endow and operationalize a Trust, outside direct government control, to finance facilitation of community strengthening and partnership-building around PAs. Project outcomes will include: (i) preserving species by maintaining ecosystem integrity; (ii) creating replicable models of community partnership agreements on PA and wildlife management by means of a permanent process to promote partnership building; (iii) putting into effect replicable processes of adaptive PA management targeted on specific threats and opportunities; (iv) establishing replicable approaches to dealing with the root causes of threats, especially poverty and community weakness, through community empowerment, partnership agreements and benefit sharing; and (v) forging long-term international partnerships between governmental conservation agencies and NGOs, thus transferring knowledge and experience among partner institutions.

3. Costs and Financing (US$ million):

GEF:	- Project	US$ 10.2 million
Co-financing:	- ADB:	US$ 12.0 million
	- Other International:	US$ 4.0 million
	- Government/Beneficiaries:	US$ 8.5 million
Total Project Cost:		**US$ 34.7 million**

4. Operational Focal Point Endorsement:

Name: Mr. K.A.S. Gunasekera — Title: Secretary

Organization: Ministry of Forestry and Environment — Date: 8 June 2000

5. IA Contact: Malcolm Jansen, South Asia GEF Regional Coordinator, World Bank
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6. Executing Agency Contact Adrian Ruthenberg, Sr. Sector Specialist Agriculture & Social Sector Department, West, Asian Development Bank
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CURRENCY EQUIVALENTS

(as of 1 August 2000)

Currency Unit	–	Sri Lanka Rupee/s (SLRe/SLRs)
SLRe1.00	=	$0.0128
$1.00	=	SLRs78.41

The Sri Lanka rupee is allowed to float against a weighted average basket of currencies of Sri Lanka's major trading partners. For the purpose of calculations in this report, a rate of $1.00 = SLRs74 is used, which was the rate generally prevailing at the time of loan appraisal.

ABBREVIATIONS

ADB	-	Asian Development Bank
BAU	-	business as usual
BCAP	-	Biodiversity Conservation Action Plan
BCS	-	Biodiversity Conservation Secretariat
CBD	-	Convention on Biological Diversity
CBO	-	community-based organization
CCD	-	Coast Conservation Department
DWLC	-	Department of Wildlife Conservation
EA	-	executing agency
EIRR	-	economic internal rate of return
FD	-	Forest Department
FFPO	-	Flora and Fauna Protection Ordinance
GDP	-	gross domestic product
GEF	-	Global Environment Facility
GIS	-	Geographic information system
GTZ	-	German Agency for Technical Cooperation
IDA	-	International Development Association
ICDP	-	integrated conservation-development project
IEE	-	initial environmental examination
IFAD	-	International Fund for Agricultural Development
IT	-	information technology
IUCN	-	International Conservation Union
KPI	-	key performance indicator
MFE	-	Ministry of Forests and Environment
MIS	-	management information system
MPAHA	-	Ministry of Public Administration and Home Affairs
NGO	-	nongovernment organization
PA	-	protected area
PACT	-	Protected Area Conservation Trust
PMU	-	project management unit
PRA	-	participatory rural appraisal
SCF	-	standard conversion factor
SD	-	sustainable development
SOE	-	state-owned enterprise
TA	-	technical assistance
UNDP	-	United Nations Development Programme
USAID	-	United States Agency for International Development

NOTES

(i) The fiscal year (FY) of the Government ends on 31 December.
(ii) In this report, "$" refers to US dollars.

CONTENTS

LOAN AND PROJECT SUMMARY

Borrower	Democratic Socialist Republic of Sri Lanka
Project Description	Sri Lanka's protected areas (PAs) comprise 9,700 square kilometers and account for 15 percent of the total land area. The Department of Wildlife Conservation (DWLC) is responsible for 85 percent of the PAs, and the Forest Department for the remaining 15 percent. These PAs are some of the most species-rich and endemic-rich ecosystems in Asia, and are important catchments for major hydropower and irrigation systems. Surrounded by some of the country's poorest communities, however, they have come under increasing risk of encroachment and exploitation. To protect these ecosystems, the Project embraces a reform of the sector's legal and institutional framework in conjunction with capacity building, ecotourism development, and the establishment of a sustainable financing mechanism for PA management. By developing and pilot-testing decentralized and people-oriented approaches to PA management, including community improvement and benefit sharing, the Project will be instrumental in establishing a PA system in Sri Lanka that protects wildlife biodiversity effectively and generates employment and income.
Classification	Primary: Environment Secondary: Poverty reduction
Environmental Assessment	Category B An initial environmental examination (IEE) was undertaken.
Rationale	Sri Lanka's high population density, levels of poverty and unemployment, and widespread dependence on subsistence agriculture have exerted considerable pressure on the country's PAs. The PA system is central to conserving wildlife biodiversity. It is also important in supporting rural economies through watershed protection, and adds to the economic and cultural values of Sri Lanka through the provision of recreational, ecotourism, scientific, and educational opportunities. The PAs and the services and benefits they provide are currently not effectively protected due to weak institutions, lack of resources, inadequate managerial skills and technical capacity throughout the sector institutions, and lack of cooperation between conservation agencies. To address these weaknesses will require efforts particularly in the areas of human resource development, improvement of managerial systems and technical skills, and the provision of infrastructure and equipment. Greater interagency cooperation is fundamental to this strengthening and the development of a more strategic approach to addressing conservation priorities in

Sri Lanka. Effective PA management cannot take place in the long term without the involvement and support of the local communities. Similarly, rural livelihoods are dependent on a flow of natural resource benefits, many of which cannot be sustained without active protective measures. To build these partnerships requires a greater capacity within the conservation agencies to understand and work with local communities. Fundamentally, effective community empowerment is necessary to allow the communities to plan for their own future and interact with Government agencies and the private sector. Part of this vision will involve low-impact use of PAs and the capturing of benefits by communities and the private sector through ecotourism development. The key need is to strengthen the sector institutions to manage PAs, in partnership with and in the interests of local stakeholders.

Objectives and Scope

The Project aims at assisting the Government to conserve the nation's valuable natural resources and preserve its wildlife biodiversity for the well-being of current and future generations. More specifically, by addressing institutional and legal deficiencies in PA management and pilot-testing participatory adaptive management in priority PAs, the Project is expected to stimulate nature-based tourism and to contribute to the development of a sustainable PA management and wildlife conservation system for Sri Lanka.

The Project comprises four components. Component A aims at (i) strengthening DWLC to become a decentralized, credible, and effective department fully able to manage its policy development and operational responsibilities for results; (ii) enabling DWLC to be technically able to plan and implement complex conservation strategies; (iii) establishing ecotourism capacity and services; and (iv) establishing informed decision making with effective monitoring and evaluation at all levels. Component B aims to strengthen the management of seven pilot PAs through (i) revision of management plans and subsequent implementation of adaptive management systems, (ii) providing the supportive infrastructure and equipment to enable the staff to complete their work effectively, and (iii) expansion of ecotourism services and products. Component C aims to develop collaborative intersectoral planning through the preparation of the Biodiversity Conservation Action Plan (BCAP), a conservation system review, and endangered species management. Component D will establish the Protected Area Conservation Trust (PACT), a sustainable financing mechanism for community-conservation inter-linkages outside Government.

Cost Estimates

The total project cost, including interest charges, and physical and price contingencies, is estimated at $34.7 million equivalent, of which $17.6 million (51 percent) is the foreign

exchange cost and $17.1 million equivalent (49 percent) is the local currency cost.

Financing Plan

($ million)

Source	Foreign Exchange	Local Currency	Total Cost	Percent
Asian Development Bank	6.6	5.4	12.0	35
Global Environment Facility	7.0	3.2	10.2	28
Netherlands Government	4.0	-	4.0	12
Government of Sri Lanka	-	7.7	7.7	22
Beneficiaries	-	0.9	0.9	3
Total	**17.6**	**17.1**	**34.7**	**100**

Loan Amount and Terms

The equivalent of $12.0 million from the Asian Development Bank's (ADB's) Special Funds resources. The term will be 32 years, including a grace period of 8 years, with an interest charge of 1 percent per annum during the grace period and 1.5 percent per annum thereafter.

Period of Utilization

Until 30 June 2007

Implementation Arrangements

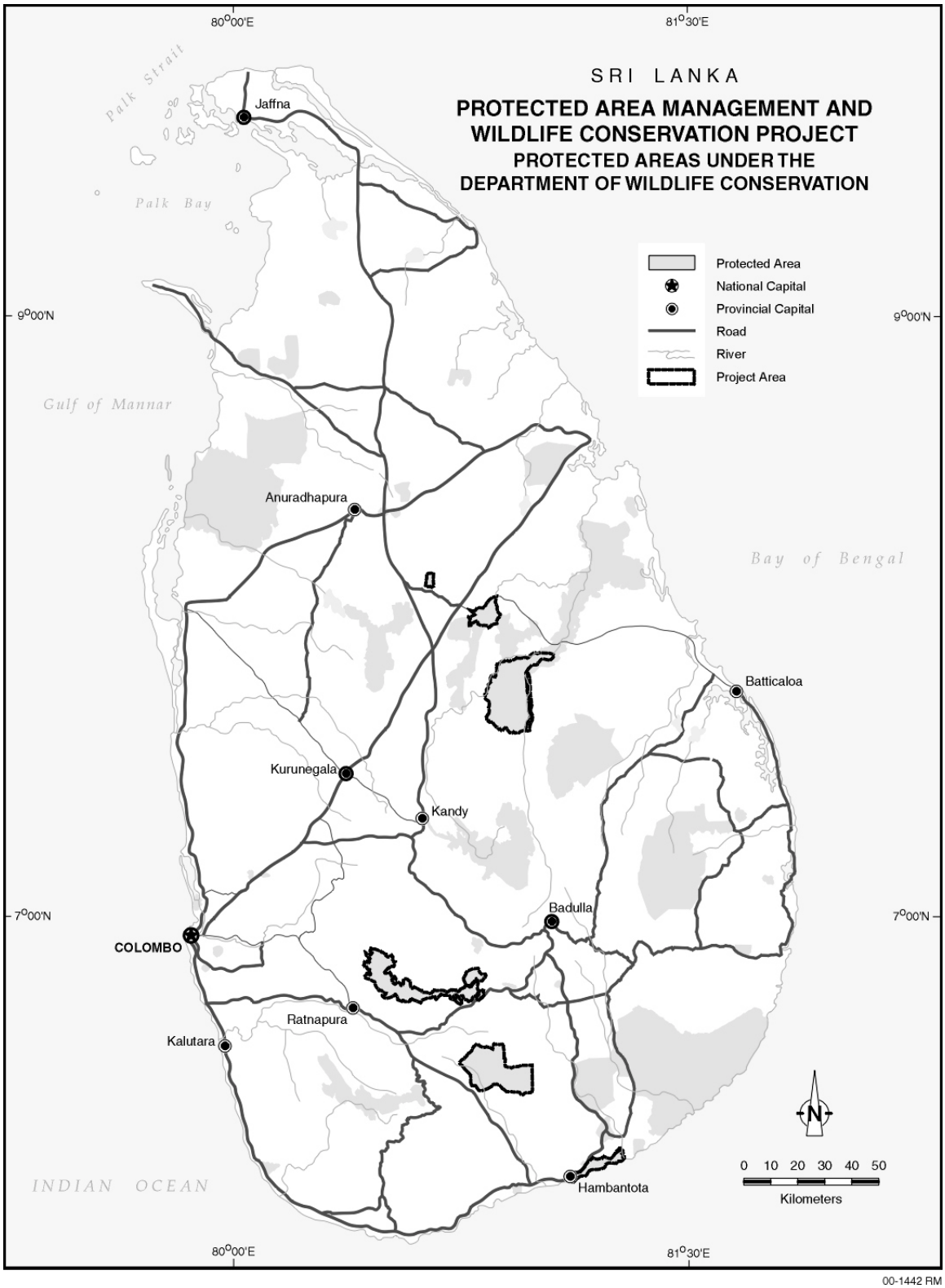
A project management unit (PMU) will be established within DWLC to be headed by a project director. The PMU will be responsible for day-to-day administration and implementation of project activities in cooperation with other key implementation agencies, civil society organizations, and business interests. A branch PMU will be established at each of the pilot sites. Social mobilization and buffer zone activities under the Project will be executed by the PACT through local nongovernment organizations (NGOs) or community-based organizations (CBOs) with relevant experience. Project activities in the impact zone will be based on a village-level agreement derived through a participatory microplanning process linked to conservation goals. A National Advisory Committee on Wildlife Conservation, representative of key stakeholder interests, will be established to serve as a sounding board and adviser to the Project. The collaborative planning activities will be implemented by the Biodiversity Conservation Secretariat under the Ministry of Forests and Environment, using teams drawn from multiple agencies.

Executing Agencies

The Department of Wildlife Conservation within the Ministry of Public Administration and Home Affairs for components A and B, and the Ministry of Forests and Environment for component C. Consultants operating from the PMU will execute component D.

Procurement	Civil works, materials, and equipment will be procured in accordance with ADB's *Guidelines for Procurement*. Given that the value of each civil works contract is estimated to be less than $1 million and in view of the competitive nature of the construction sector in Sri Lanka, civil works contracts are not expected to be of interest to international bidders. Thus, all civil works contracts will be awarded to prequalified private sector contractors under local competitive bidding procedures acceptable to ADB. All contracts for supply of materials, vehicles, and equipment costing $100,000 or more will be awarded through international shopping procedures acceptable to ADB, whereas those that are below $100,000 will be procured on the basis of direct purchase.
Consulting Services	It is anticipated that a total of 128 person-months of international and 138 person-months of domestic consulting services will be required in addition to a consortium of international NGOs. The consultants and NGOs will be recruited in accordance with ADB's *Guidelines on the Use of Consultants* and other arrangements satisfactory to ADB for the engagement of domestic consultants.
Estimated Project Completion Date	31 December 2006
Project Benefits and Beneficiaries	With an estimated economic internal rate of return of 18 percent, the project components that were subjected to economic assessment, are economically viable. Most of the direct project benefits relate to the generation of income and employment opportunities in the impact zone of the seven pilot PAs. It is anticipated that, initially, 40,000 households or 180,000 people living in 192 villages near the pilot PAs will directly benefit from the Project. With poverty levels in excess of 50 percent, these communities belong to the country's poorest. Through improved PA management, the Project will address the human-elephant conflict and thereby reduce the considerable losses of crops and lives that the conflict causes every year. With focus on natural beauty and wildlife diversity in the PAs for the development of ecotourism, employment will be generated. The development of ecotourism is also expected to aid the conservation effort by providing an economic alternative to overexploitation of the natural resources of PAs. As a result of project activities such as the upgrading of park facilities, establishment of visitor centers, and promotion of ecotourism, more tourists will be attracted to the project areas. Therefore, the demand for nature guides and locally produced handicrafts will increase. The Project will also generate significant benefits that cannot be quantified. For example, by strengthening the institutional capacity for PA management, mechanisms to be

put in place will ensure that the country's large numbers of native, endemic, and endangered species and ecosystems will be preserved sustainably for the benefit of present and future generations. Other non-quantifiable benefits relate to the carbon sequestration value of forests, the conservation of biodiversity, microclimate amelioration, nutrient recycling, and scientific research and education. Further, both male and female community members will acquire the capacity to better articulate their development priorities through a participatory action planning process.


SRI LANKA
PROTECTED AREA MANAGEMENT AND WILDLIFE CONSERVATION PROJECT
PROTECTED AREAS UNDER THE DEPARTMENT OF WILDLIFE CONSERVATION
Protected Area
National Capital
Provincial Capital
Road
River
Project Area
80°00'E
81°30'E
9°00'N
7°00'N
Palk Strait
Palk Bay
Gulf of Mannar
Bay of Bengal
INDIAN OCEAN
Jaffna
Anuradhapura
Batticaloa
Kurunegala
Kandy
Badulla
COLOMBO
Ratnapura
Kalutara
Hambantota
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Kilometers
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I. INTRODUCTION

1. In 1997, the Government requested the Asian Development Bank (ADB) for assistance to formulate a project to conserve wildlife biodiversity, to develop nature-based tourism, and to strengthen community participation in protected area (PA) management. In response, ADB approved in December 1997 technical assistance (TA) to assist the Government in preparing an investment project.[1] The final report was submitted in February 1999, and an ADB Fact-Finding Mission visited Sri Lanka in April 1999. Subsequently, the Project was found to be eligible, in principle, for cofinancing by the Global Environment Facility (GEF). The World Bank, as a GEF implementing agency, agreed to jointly process the Project with ADB. To modify the project design to be consistent with GEF eligibility criteria and to initiate a policy and institutional reform agenda that was identified during fact-finding, additional TA,[2] to be financed by GEF, was mobilized. A 15-member multisectoral Project Task Force that was appointed by the Minister of Public Administration and Home Affairs (MPAHA) guided TA implementation. The task force also took the lead in developing a new National Wildlife Policy. Consistent with GEF public involvement policy, the TA was implemented in a participatory process involving stakeholder consultation through 15 facilitated workshops at the community, provincial, and national levels. Six additional workshops were held for policy makers and Government staff involved in PA management. A joint ADB and World Bank Appraisal Mission[3] visited Sri Lanka from 17 April to 3 May 2000, and reached an understanding with the Government on the Project's design and accompanying policy dialogue. The project framework is attached as Appendix 1.

II. BACKGROUND

A. Sector Description

2. Sri Lanka is a tropical island of 65,610 square kilometers (km^2), considered to be one of the most biologically rich per unit area. Government policies and programs have resulted in high indices of human development; however, civil conflict has drained resources from the economy and inhibited growth in international tourism since the early 1980s. In 1998, the average life expectancy was 73 years, infant mortality rate was 15 per 1,000 live births, the adult literacy rate was 91 percent, and the primary school enrollment rate was close to 100 percent. The population growth rate at 1.2 percent annually is low by world standards; however, the 1998 population, estimated to be 18.8 million, represents an average population density of 299 persons per km^2 that is forecast to reach 371 in 2025.

3. The population is 78 percent rural, about a third of the land area is under permanent cultivation, and marginal lands are increasingly brought into production. Natural forest cover is less than 22 percent of the land area, and deforestation continues at an annual rate of 1.1 percent of forest cover due to a high demand for fuelwood[4], timber, farmland, infrastructure projects, and agricultural land-clearance schemes. Local authorities are predicting catchment damage, which means that serious water shortages are emerging and the trend is expected to worsen.

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1 TA 2942-SRI: *Biodiversity Conservation Project*, for $800,000, approved on 12 December 1997.

2 TA 3273-SRI: *Protected Area Management and Wildlife Conservation Project*, for $330,000, approved on 13 October 1999.

3 The Mission comprised A. Ruthenberg, Sr. Sector Specialist/Co-Mission Leader; Sumith Pilapitiya, Sr. Engineer World Bank/Co-Mission Leader; H. Du, Sr. Programs Officer; E. Fischer, Sr. Counsel; R. Dobias, Sr. Environment Specialist; S. Tanaka, Social Development Specialist; S. Ranawana, Project Implementation Specialist, SLRM; and Wandert Benthem, Consultant provided by the Government of the Netherlands.

4 Wood provides about 57 percent of all energy consumed in Sri Lanka.

1. Significance of Protected Areas

4. Sri Lanka is a global biodiversity hot spot.[5] About half of its species are endemic, including all freshwater crabs, 90 percent of amphibians, 25-75 percent of reptiles and invertebrates, around 50 percent of freshwater fishes, 26 percent of flowering plants, 14 percent of mammals and at least as many nonmigrant birds. Species richness is extreme and, although little studied, there are known to be over 3,368 species of flowering plants, 314 ferns, 575 mosses, 190 liverworts, 896 algae, 1,920 fungi, 400 arachnids, 242 butterflies, 117 dragonflies and damselflies, 139 mosquitoes, 525 carabid beetles, 266 land snails, 78 fresh-water fishes, 250 amphibians, 92 snakes, 35 freshwater crabs, 21 geckos, 21 skinks, 322 nonmigrant birds, and 86 mammals. The island also provides critical habitat for internationally mobile species, including 5 species of endangered marine turtle, about 100 species of waterfowl, and many other migratory birds.

5. The PA system represents the ecosystems that support these species. It therefore provides (i) global benefits by maintaining endemic lineages, species, and higher taxa that would otherwise go extinct, ecosystems that are under threat elsewhere, and populations of migratory species; and (ii) national and local benefits by maintaining biodiversity resources and all the use, option, bequest, and existence values associated with them. By safeguarding ecosystems that protect important economic infrastructure against floods, landslides, soil erosion, and siltation, the PA system also generates substantial indirect use values. The PAs in the Mahaweli Development Area, for example, sustain 25 percent of the country's rice harvest, while 17 percent of the national energy supply comes from hydropower facilities that depend on protected catchments and are fed by rivers arising in the PA system.

6. The PA system contributes to enriching the lives of hundreds of thousands of Sri Lankans and smaller numbers of overseas visitors through provision of recreational opportunities.[6] The system also provides the resource base for developing the globally competitive ecotourism[7] potential of Sri Lanka. Development of ecotourism can generate greater support for conservation and build partnerships between government agencies, the private sector, and communities that help reduce rural poverty by providing employment and increasing tourism revenues. PAs also provide the prime outdoor laboratories for scientists and students to learn more about the functioning of natural ecosystems. They also have the capacity to sustain far greater use as a resource for education and scientific research aimed at documenting the nation's biological wealth. By these means, the wildlife resources of the PA system can be used sustainably in diversifying the Sri Lankan economy and further enriching its culture. Managing PAs sustainably will generate locally captured values that help improve the quality of life of local people who currently have on average the least secure livelihoods in the country.

2. Poverty Around Protected Areas

7. Current estimates of poverty indicate 21 percent of all Sri Lankans have incomes below the current Government poverty criteria.[8] Although abject poverty is rare[9], current figures from

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5 Myers, N., R.A. Mittermeier, C.G. Mittermeier, G.A.B. da Fonseca, and J. Kent, 2000. Biodiversity Hot spots for Conservation Priorities. *Nature* 403:853-858.

6 In 1999, there were about 369,000 local and 79,000 international paying visitors to national parks.

7 Ecotourism is nature tourism that includes environmental education and supports conservation, often by enhancing the quality of life of local people so that they will not be obliged to extract PA resources in order to survive.

8 Sri Lanka does not have an official poverty indicator. For policy purposes, those eligible to receive SLRs500 or more per month under the Government's Samurdhi program are classified as being in poverty.

the UNICEF show more than two million Sri Lankan children exhibit signs of growth stunting, one third are underweight for their age, and one half of all pregnant women are malnourished and anemic. Government poverty programs have focused on improving rural livelihoods by developing skills with extension and credit support, and providing infrastructure and marketing support. Despite these efforts, the incidence of poverty in rural areas remains high, and at about 25 percent is higher than the 15 percent in urban areas. Previous poverty studies indicated only limited regional variation in poverty, but preliminary analyses[10] of more recent data indicate large disparities in the incidence and intensity of poverty between regions. All social indicators, including access to electricity, safe water, and sanitation, vary widely between provinces, and are considerably worse in the plantation and/or rain-fed agriculture provinces of Uva, Sabaragamuwa, North Central, and North West.

8. Among the estimated 1.5 million rural people who live close to a PA boundary, average poverty incidences are typically much higher than the national average. The median among villages studied during project preparation was 52 percent, more than double the national average based on Samurdhi participation rates. The de facto official poverty line, which is measured by the percentage of the population receiving the Government's Samurdhi welfare payments whose calculation is based on household income levels, is much higher in the villages close to PAs. Poverty is associated with not only low level of incomes but also lack of secure incomes and employment. Such insecurity can be traced to an unstable resource base, including landlessness. Landless households are dependent on insecure tenurial agreements with landowners; lack recognized land titles, limiting them to informal moneylenders; and obtain low prices for farm produce as a result of dependence on middlemen and lack of alternative market access. Thus, the overall pattern among communities near the PAs is one of significant poverty.

9. Low and unpredictable incomes are key features of poverty. The resulting insecurity means that many households have at least one member who is searching for work opportunities, formal or otherwise. These individuals are used as casual labor by wealthier neighbors and outsiders, and are vulnerable to being co-opted in support of livestock grazing, logging, poaching, and gemstone mining within the PAs. Demand for land, tenure insecurity, and lack of income all make the poorer and more marginalized members of communities close to PAs particularly likely to use protected ecosystems as subsistence resources, for farmland, cattle grazing, and fuelwood in particular. The institutions mandated with PA management has not yet developed an effective capacity to respond to this situation, so there is steady erosion of the PA system and the wildlife and floral resources it contains. A scenario of continually increasing demand outside the PAs implies that protected ecosystems will be increasingly under pressure in the future. This highlights the vicious circle that unites human poverty with resource impoverishment.

3. The Protected Area System

10. Three Government agencies are directly involved in protecting ecosystem resources: the Department of Wildlife Conservation (DWLC) in MPAHA, the Forestry Department (FD) in the Ministry of Forests and Environment (MFE), and the Coast Conservation Department (CCD) in the Ministry of Fisheries and Aquatic Resources and Development. Other concerned agencies

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[9] Defined as an income below one's "purchasing-power parity dollar" per day, which applies to about four percent of Sri Lankans.

[10] World Bank . 2000. Sri Lanka - Poverty Update. (draft)

include the Central Environmental Authority, the Department of Agriculture, and the Land Commissioner. The primary responsibility for protecting wildlife resources, however, lies with DWLC. Under the authority of the Fauna and Flora Protection Ordinance of 1937, DWLC manages 73 national reserves and sanctuaries, covering 8,218 km^2 or 12.4 percent of the total land area.[11] Additional DWLC functions include (i) issuing permits and collecting fees related to PAs or pertaining to wildlife generally; (ii) reviewing environmental impact assessments for activities that may affect a PA; (iii) operating elephant rehabilitation and reintroduction facilities; and (iv) managing bungalows, campsites, and other visitor facilities in the PAs. These management activities, however, do not effectively respond to the main threat to the PA system, which is the encroachment pressure that results from a strong demand for land and subsistence resources - especially fuelwood and other resources for consumption or sale - and such illegal and commercial resource exploitation as grazing, logging, poaching, and gemstone mining. The result is frequent conflicts of interest between local people and PA managers, and a steady erosion of the PA system and its wildlife and floral resources.

4. Key Sector Issues

a. Legislative Framework

11. The Fauna and Flora Protection Ordinance (FFPO) of 1937 governs the protection of wildlife throughout the country. Despite various amendments, the FFPO is outdated and ineffective as a tool with which to address pressures on the country's ecological resources. New legislation is needed to support new standards for ecosystem and habitat management, the role of communities living in the buffer zones, and the role of the private sector in supporting PA management and ecotourism development. Multiple and overlapping responsibilities are also assigned to government departments under current laws, with 12 separate laws to govern forest management implemented by 10 separate agencies, and another 12 laws to govern land management, which are also implemented by 10 separate agencies. Thus, there is a need to harmonize wildlife-related law, especially the National Forestry Policy and National Wildlife Policy and the law in line with both, to respond effectively and comprehensively to the Convention on Biological Diversity, and to develop a comprehensive Biodiversity Conservation Action Plan (BCAP) to consolidate all other initiatives within a consistent framework.

b. Institutional Framework

12. Multiple and overlapping responsibilities in the wildlife and biodiversity sector requires close interagency cooperation. However, such cooperation has proved hard to accomplish although a number of coordinating bodies have been established, including a Biodiversity Conservation Secretariat within MFE, a National Committee on Sustainable Development, and a Committee on Integrating Environment and Development. FD, within MFE, has an important portfolio of biodiversity-related responsibilities at various levels of decision making, the integration of which with those of DWLC is identified as critical priority by intersectoral studies including the National Environmental Action Plan (1991, revised in 1994 and 1997), National Conservation Review (1997), and Biodiversity Conservation in Sri Lanka: a Framework for Action (1998).

[11] FD manages an additional 70 PAs covering 1,486 km^2 or 2.4 percent of the land area.

c. Institutional Capacity

13. DWLC has been transferred repeatedly to different ministries, and has experienced a high turnover of directors. Its operations and culture follow largely a reactive, centralized, "command and control" model that is no longer able to deal with the complexities it faces. It is inward looking in its thinking and procedures, when most challenges are best met by looking outward in a strategic and proactive manner. It needs to be able to work more effectively with other stakeholders, including other Government agencies, nongovernment organizations (NGOs), the private sector, and local communities. The management systems of DWLC require a stronger technical and managerial capacity at all levels, transparent and responsive budgetary systems, clear lines of accountability and reporting, mechanisms for performance monitoring, and incentives to maximize staff motivation. The current system for managing conservation finances is also inadequate, since PA revenues are variously directed in many small transactions to the Wildlife Preservation Fund and the national consolidated fund, providing opportunities for leakage along the way. There is a need for greater transparency and accountability in all aspects of financial management. In summary, DWLC needs to embrace a culture of quality public-sector management, which includes a commitment to promote a forward-looking professional ability to use transparent and effective managerial systems and modern technology, while developing public confidence in its operations and addressing complex multi-stakeholder issues using adaptive processes.

d. Poverty, Encroachment, and Community Relations

14. The underlying causes of unsustainable use of protected ecosystems include the poverty and deprivation common in many villages surrounding PAs although the majority of the households do not entirely depend on the PA resources for their main source of livelihood. People living near PAs, and others with their connivance, harvest timber, fuelwood, wild meat, and other forest products for subsistence use and sale. Gemstone mining and agricultural encroachment are widespread. An estimated total of 150,000 cattle and buffaloes graze within the PA system, competing with wild herbivores for food, trampling native ecosystems, and spreading alien and invasive weeds. Solutions are likely to include clear demarcation of PA boundaries, enhanced and coordinated enforcement, and the building of more cooperative relationships with surrounding villagers. However, relations between the local communities and PA managers often are tense as a result of conflicts of interest over encroachment and the illegal use of PA resources. Further conflicts arise because DWLC has a mandate to protect elephants, yet these animals often enter settled areas and cause serious damage to property and life,[12] for which current compensation arrangements are inappropriate. This situation makes it hard to base conservation on the understanding and support of local people, and there is a need for a fundamental change in how DWLC staff see their role and interact with local communities.

e. Private Sector Involvement

15. Private sector involvement is a national priority reflected most recently in the National Wildlife Policy of 2000, which commits the Government to encourage the private sector to join as a full partner in wildlife conservation. Private sector involvement in wildlife and PA management is largely inhibited, however, by public concern that it should not undermine the legitimate and necessary role of DWLC as the chief regulator of wildlife and PA use. This reflects an appreciation of the fragility of natural ecosystems and a suspicion that the short-term

[12] An estimated average of 50 people and 120 elephants die each year as a result of human-elephant conflict.

perspective of private enterprise might cause irreversible damage to natural systems. This resistance to change is based partly on a lack of public familiarity with the way in which numerous public-private partnerships already exist in Sri Lanka and contribute significantly to social progress. In the context of the wildlife sector, areas of current practice include the use of private contractors, contractual labor, and the charging of user fees, while imminent experimentation is foreseen in the development of private insurance for elephant damage and concessions for ecotourism services.

f. Ecotourism Development

16. Tourism is an important industry in Sri Lanka, but it is narrowly focused on inexpensive package tours of beach resorts and cultural attractions. This product mix has low profit margins per tourist and limited potential for future growth. In 1999, 15 percent of the 436,000 foreign visitors included PAs in their itineraries, a very low figure by international standards. The reasons for this low PA visitation rate include lack of publicity, security concerns, and a narrow range of tourism products and services. Legal constraints within the 1937 FFPO on private-sector involvement in tourism development in and around the PAs further compound these difficulties. Little attention has been paid to the ecotourism potential of the PA system in marketing the country's tourism products. As a result, opportunities to link biodiversity conservation with poverty reduction in some of the poorest areas of the country, and to make use of private-sector skills to enhance economic growth and diversification are being lost.

g. The Challenge of Implementation

17. A notable weakness in the sector is inadequate implementation of national policies or PA management plans, including the difficulty that underresourced agencies experience in enforcing related laws. For this reason, for example, the 1990 National Policy on Wildlife Conservation was never implemented, and neither were most of the numerous PA management plans prepared by various funding agencies in association with FD, Central Environmental Authority, or DWLC. This implies that written policies and plans should never be seen as ends in themselves, and that far more attention should be given to (i) embedding consensus-based policies within a network of committed institutions; (ii) introducing adaptive managerial systems, based on dialogue, forums, conflict-management processes, incentive structures, and transparent and accountable monitoring and evaluation procedures; and (iii) providing adequate resources for agencies to identify, intercept, process, prosecute, and sanction violators of the laws that are envisioned by policies and assumed by management plans. Such a change of emphasis, however, will require a willingness by the Government and its development partners to invest more design effort in institutionalizing new arrangements by which policies and management plans are created and used, and more resources in the agencies responsible for controlling and managing these resources.

B. Government Policies and Plans

18. Sri Lanka is a signatory to the 1971 Ramsar Convention on Wetlands of International Importance, the 1973 Washington Convention on International Trade in Endangered Species, the 1991 Bonn Convention on Migratory Species, and the 1992 Rio de Janeiro Convention on Biological Diversity (CBD). Anticipating the CBD in many ways, the 1990 National Policy on Wildlife Conservation envisioned reassessing the objectives of PA management according to the principles of protection, sustainable use, efficient management, and regulation based on scientific knowledge and the needs of multiple stakeholders.

19. The National Forestry Policy and Forestry Sector Master Plan of 1995-1996 recognized the rapid dwindling and increasing fragmentation of natural forests, especially in the wet zone. The 1997 National Conservation Review identified priority sites for inclusion in the PA system. These initiatives by MFE, which are in line with the CBD, refocused the FD on forest protection and the sustainable use of forest resources, including biodiversity. A national Coastal Zone Management Plan was prepared in 1990 and revised in 1996, and together with the 1994 report Coastal 2000, gave strategic direction to the CCD, identifying needs, and ways and means to protect the country's coastal resources. Consolidating these processes, the National Environmental Action Plan of 1991 was revised in 1994 and 1997, and policy dialogue continued among the main concerned institutions. This led to the 1998 analysis, Biodiversity Conservation in Sri Lanka: a Framework for Action.

20. These various analyses have made the Government aware of the extent to which its poverty-reduction efforts are linked to problems faced in the management of PAs, and have led to a recognition of the value of a more integrated and participatory approach to resource management. The Government is conscious that to operationalize its policies will require specific programs for skills upgrading, extension, credit, and savings mobilization, combined with targeted welfare schemes, and that environmental degradation should be addressed at the same time, by educating and involving the communities in all aspects of development decision making. These measures are consistent with the need to develop the capacity to formulate local plans, especially where resource availability are very limited and declining.

21. Early 2000 saw the development of a new National Wildlife Policy, led by a multisectoral Task Force with support provided by ADB. The policy articulates the Government's conclusions in relation to the sustainable and participatory management of wildlife resources in the context of the national poverty-eradication agenda. In so doing, it sets the scene for amending the FFPO to remove inconsistencies with policy, for the preparation of a BCAP, and ultimately for complete harmonization of biodiversity-related policy, law, and conservation action in Sri Lanka. This would allow all aspects of biodiversity to be developed consistently, fairly, and equitably, and thereby to contribute more effectively to the overriding aim of poverty elimination.

C. External Assistance to the Sector

22. Historically, ADB assistance in the natural resources and environment sectors focused on increasing production in agriculture, forestry, and fisheries; improving water supply and sanitation; and urban development. More recently, ADB assistance has shifted to address the resource conservation-poverty nexus more strategically by emphasizing the protection and sustainable use of natural resources and the environment as a means to reduce poverty and as a vehicle for sustainable development. The first ADB project with a strong focus on natural resource management was the Upper Watershed Management Project[13] approved in 1997. Three other ADB natural resource management projects have since been approved or are being processed: (i) Coastal Resource Management Project,[14] (ii) Forest Resource Management Sector Project,[15] and (iii) Water Resources Management Project. ADB has also supported policy formulation and institution building by providing advisory TA for Strengthening the Implementation of Environmental Impact Assessment,[16] and Institutional Strengthening for

[13] Loan 1545-SRI: *Upper Watershed Management Project,* for $16.6 million, approved on 24 September 1997.
[14] Loan 1716-SRI: *Coastal Resource Management*, for $40 million, approved on 3 December 1999.
[15] Loan 1744-SRI: *Forest Resources Management Sector*, for $20.6 million, approved on 28 June 2000.
[16] TA 2765-SRI: *Institutional Strengthening for Environmental Impact Assessment*, for $600,000, approved on 10 March 1997.

Comprehensive Water Resources Management.[17] ADB is also providing TA[18] for institutional capacity building, and a review of the policy and legal framework regarding the management of natural resources and the environment.

23. The Netherlands Government is supporting innovative management planning and implementation in wetlands through two projects at the Central Environmental Authority with close linkages to DWLC and other organizations. Management planning for 25 wetland areas, some of which belong to DWLC's PA system, was undertaken. Valuable lessons drawn from these activities have been incorporated in the project design. The Norwegian Government has supported mangrove protection, integrated coastal zone planning in Hambantota District, and management planning for two forest reserves. Two projects were recently approved by the GEF Medium Grants Program: one to conserve globally threatened species in the rain forests of the southwest, and the other, to be implemented by CCD, DWLC, and International Conservation Union (IUCN), with focus on coastal wetlands. The World Bank, Britain's Department for International Development, and the Finnish International Development Agency have supported FD in developing the Forestry Sector Master Plan and the National Forestry Policy. The Canadian International Development Agency has concentrated on working with NGOs at the community level in coastal and highland plantation environments. The ongoing Conservation and Sustainable Use of Medicinal Plants Project financed by GEF and implemented by the World Bank is another important undertaking in the sector, as close coordination of activities is envisaged at Ritigala Strict Nature Reserve, which has been included as a pilot PA under the proposed Project.

24. Efforts to strengthen DWLC in the last two decades involved two major externally-assisted projects: (i) through the Mahaweli Environment Project, the United States Agency for International Development provided assistance in the 1980s to develop basic institutional capacity for biodiversity conservation and PA management, especially in the Mahaweli development area; and (ii) through the Development of Wildlife Conservation and Protected Area Management Project, the United Nations Development Programme (UNDP) and GEF provided assistance during the 1990s, which, among others, built capacity through staff training; established a geographic information system (GIS) unit; and prepared management plans for 10 PAs. Details on external assistance in the sector are in Appendix 2.

D. Lessons Learned

1. Strengthening Institutions and Communities

25. Final evaluation of the UNDP/GEF Project[19] concluded that future GEF support should be conditional on DWLC being restructured and decentralized under new leadership, and the introduction of process mechanisms to allow better planning and budgeting. Other lessons from this project are that (i) training sources should be diversified to ensure the transfer of a variety of appropriate skills; (ii) institutional capacities to perform routine management and planning tasks, such as PA management planning, should be developed internally; (iii) measures should be taken to improve work effectiveness of all levels of the organization; (iv) intangible management constraints, such as staff morale, are highly influential in improving operational effectiveness;

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17 TA 2422-SRI: *Institutional Strengthening for Comprehensive Water Resources Management*, for $1.570 million, approved on 12 October 1995.

18 TA 3271-SRI: *Sustainable Natural Resource Management for Development,* for $800,000, approved on 10 October 1999.

19 UNDP and FAO. Final Evaluation, Development of Wildlife Conservation and Protected Area Management (SRL/92/G31). (August 1999).

and (v) all levels of staff should be consulted in the process of project design and implementation.

26. ADB's forestry projects[20] and the ongoing Upper Watershed Management Project (para. 23) hold lessons of more general relevance: (i) local authorities should be involved early in project design; (ii) local communities should be involved in project planning, implementation, and monitoring; (iii) trained facilitators are needed to promote involvement by local communities; and (iv) Government institutions must actively support participation. Lessons from the wetland conservation projects supported by the Netherlands include the following: (i) action plans must not be considered as rigid sets of measures; (ii) preparation and implementation of community action plans are unlikely to be successful without the involvement of local leaders and clearly visible benefits to the community; and (iii) interagency coordination in conservation management requires high-level support. From these experiences, the most important factors in achieving sustainability are (i) developing awareness in local communities of the need to protect resources for sustainable use by themselves and others, (ii) empowering them to act accordingly, and (iii) treating them as equal partners throughout the process. Such processes are inherently slow, but have yielded outcomes that are both equitable and sustainable.

27. Government attempts to promote local participation in the development process have had limited success due to (i) poorly defined methods and processes, (ii) inadequately trained staff, (iii) an inability to mobilize adequate technical and financial support, (iv) an unrealistic expectation of quick results, (v) suspicion by local people of Government efforts to influence events on private lands, and (vi) a perception of inequality between the community and the Government. This suggests that Government agencies may not be the most appropriate institutions to lead a process of community strengthening that necessarily involves trust and partnership building. Successes have been achieved, however, by strengthening communities directly. For example, at Rekawa, a local stakeholder committee was encouraged to prepare a plan for resource management and aided to accomplish its own institutionalization as a means to guide and finance the plan's implementation. An ADB evaluation[21] noted the positive role of NGOs and community based organizations (CBOs) in five projects in Sri Lanka, but observed that the organizations were most effective when they were involved early, were adequately funded, and in the case of small and local ones, were provided with capacity strengthening.

28. This experience suggests that NGOs are more effective in building local relationships and partnerships, and are far more likely to be perceived as allies and equals by local communities. The effectiveness of such a process comes from the way that participatory planning and environmental education empower the community, and generate capacity to mobilize technical and other resources from government agencies and elsewhere. The main constraint on the widespread adoption of this approach in Sri Lanka is limited funding. Funding is often available only through projects that are limited in duration and are therefore associated with abrupt endings and attempts to speed up the process of community strengthening and partnership building, with limited effectiveness as a consequence.

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[20] Loan 568-SRI: *Community Forestry Project,* for $10 million, approved on 25 March 1982; Loan 1183-SRI: *Participatory Forestry Project,* for $10.5 million, approved on 5 November 1992.

[21] SST 99027-REG: *Special Evaluation Study of the Role of Nongovernmental and Community-Based Organizations in Asian Development Bank Projects*.

2. Integrating Conservation and Community Development

29. Lessons drawn from ADB's integrated conservation-development projects (ICDPs)[22] are the following: (i) there is a complex and indirect relationship between the provision of income-earning alternatives for local communities and the achievement of conservation objectives; (ii) it is important to develop a local institutional capacity to implement stakeholder participation; and (iii) the project should develop an understanding within local communities regarding their roles, rights, and responsibilities with respect to natural resources and biodiversity conservation. These findings were supported by a recent review of 21 ICDPs in Indonesia,[23] which concluded that only a minority of the projects could claim that biodiversity conservation has been significantly enhanced by project activities. Those that had a significant impact shared high-level political and administrative support, strong but adaptive and flexible PA management, and close communication with the local government.

30. Many of the same lessons can be drawn from the GEF portfolio of stand-alone projects. A feature of the GEF, however, is its emphasis on establishing sustainable financing mechanisms of various kinds to conserve biodiversity of global significance and it has actively explored the use of trust funds and trust-like mechanisms in many countries. A review of 13 such trusts[24] concluded that there are four essential conditions: (i) the issue to be addressed requires a commitment of at least 10-15 years; (ii) there is active government support for a public-private sector mechanism outside direct government control; (iii) there is a critical mass of people from diverse sectors of society who can work together to achieve biodiversity conservation and sustainable development; and (iv) there is a basic fabric of legal and financial practices and supporting institutions (including banking, auditing, and contracting) in which people have confidence. Where these circumstances exist, as they do in Sri Lanka, formation of a trust-like sustainable financing mechanism will be an efficient way to achieve long-term aims that depend on slow processes, such as community strengthening and partnership-building with conservation agencies.

E. The ADB's Sector Strategy

31. According to ADB's Country Operational Strategy for Sri Lanka (1999), sustainable natural resources management is one of the key areas for ADB involvement to ensure long-term sustainability of economic growth and reduce poverty. A strong emphasis on forestry, natural resources, and environmental management as a key feature of ADB's country operations was derived from the recognition that some parts of the agriculture sector are experiencing a decline in productivity, while intersectoral competition for water and other natural resources is emerging as a serious issue. Indicators, such as the incidence of human encroachment on the PAs, decline in forest cover, and soil degradation indicate the growing and unsustainable imbalance between the supply of and demand for the use of natural resources. The criteria that guide ADB's interventions include (i) achieving a balance between the economic and ecological functions of the environment, (ii) addressing poverty-related causes of environmental degradation, and (iii) minimizing environmental damage. These are consistent with ADB's

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[22] Loan 1187-INO: *Biodiversity Conservation in Flores and Siberut,* for $24.5 million, approved on 12 November 1992; Loan 1605-INO: *Central Sulawesi Integrated Area Development and Conservation*, for $32 million, approved on 27 January 1998; and Loan 1351-INO: *Sulawesi Rainfed Agriculture Development*, for $30.36 million, approved on 31 January 1995

[23] Wells, M., S. Guggenheim; A. Khan; Wahjudi Wardojo and P. Jepson; 1999. *Investing in Biodiversity: a Review of Indonesia's Integrated Conservation and Development Projects*, Washington, DC: World Bank.

[24] Global Environment Facility 1998. Experience *with Conservation Trust Funds*. Washington, DC: GEF Secretariat.

Forestry Policy,[25] which is based on the key principles of protection, production, and participation; and stresses the need for stakeholder participation and capacity building to integrate conservation, development, and resource management.

F. Policy Dialogue

32. ADB is actively engaged in addressing policy issues that constrain sustainable development in the natural resources sector. Key areas of ongoing policy dialogue related to PA management and biodiversity conservation systematically encourage and enable the Government to resolve issues of good governance, accountability, transparency, decentralization, cooperation, and coordination among government and nongovernment public and private institutions, so as to rationalize the management of the PA system and maximize its contribution to the reduction of poverty in Sri Lanka.

1. Strengthening the Legislative Framework

33. The new National Wildlife Policy, prepared with support from ADB, commits the Government to amend legislation, as necessary, to support the implementation of this policy. Thus, the FFPO of 1937 will be amended to make specific provision for several policy priorities, including participatory PA management and benefit sharing, ecotourism development, involvement of the private sector, and ex situ conservation activities. The amended FFPO will be superseded by entirely new legislation before the end of project year 5, which will be collaboratively developed in the light of the Biodiversity Conservation Action Plan, which will be prepared according to best practices during the Project.

2. Strengthening the Institutional Framework

34. Biodiversity conservation and PA management are currently hampered by weak cooperation among the concerned institutions, and by unclear separation of responsibilities and jurisdictions between them. A number of coordinating bodies have been established, but they are of limited effectiveness and lack formal mechanisms to coordinate Government operations. Therefore, ADB is stressing the need to reform current arrangements, and the 2000 TA program, especially the ongoing TA on Sustainable Natural Resource Management, will support the Government doing so. The new National Wildlife Policy commits MFE, MPAHA, and the Biodiversity Conservation Secretariat to monitor events and take actions needed to maintain consistency between the National Wildlife Policy and other sector and intersector policies. It also commits the Government to promote cooperation among all stakeholders through joint decision making at all levels. These policy statements reflect a strong consensus among key institutions of the Government, as well as national NGOs, universities, and representatives of the private sector. This provides a strong basis for ADB, in dialogue with Government, to take the process of institutionalizing interagency cooperation to unprecedented levels, providing the basis that all the country's PAs may one day be consolidated under the management of one, effective Government agency.

3. Strengthening Institutional Capacity

35. The new National Wildlife Policy commits the Government to provide adequate support to wildlife resource management, and to reorient, strengthen, and decentralize their institutions. This mandate complements the Project's aim to strengthen DWLC's ability to collaborate with

[25] R232-94: *ADB Forestry Policy* (Revision 1) February 1995.

other institutional stakeholders. The implementation of the Project will (i) effect organizational changes within DWLC to address issues related to good governance such as greater integration and transparency; (ii) remove some of the key constraints on staff effectiveness and accountability, including disincentives that undermine morale; (iii) facilitate the decentralization of operational responsibilities to the regional and field unit level, including annual work planning, budgetary responsibility, and accountability for performance; and (iv) ensure DWLC's participation in partnership-building with local communities and the local government. These measures are consistent with the decentralizing thrust of other Government policies, and will relocate significant responsibilities away from the center to encourage PA managers to operate in a web of partnerships with surrounding society.

4. Improving Protected Area-Community Relations

36. The National Wildlife Policy commits the Government and DWLC to (i) conserve wildlife resources through protection, study, education, sustainable use, and participatory management; (ii) value the traditional knowledge of sustainable ecosystem use possessed by the people of Sri Lanka, and incorporate this within wildlife management systems; and (iii) ensure that local people are consulted in the process of decision making, actively participate in implementation, and receive direct benefits from the management of PAs. The clear intention is to relieve the often-adversarial relationship between PA managers and the communities around PAs. This intention has resulted in the acceptance of a revenue-sharing agreement in which DWLC will retain 50 percent of all revenue collected from PAs, to be used for specified purposes including community outreach that will be channeled through the existing Wildlife Preservation Fund. The Government and DWLC recognize that effective protection of wildlife will not be possible without community involvement in PA management, benefit sharing, and poverty reduction. ADB therefore aims to encourage and enable the Government to (i) improve the quality and integrity of public sector management in the wildlife sector; (ii) mobilize and empower user groups; (iii) encourage and enable communities to obtain new and incremental resources to meet their own development priorities; (iv) establish lines of communication and formal agreements to allow for the use of local resources to combat poverty and deprivation, and to promote the protection of wildlife habitats; and (v) promote community and local government cooperation in local development planning.

5. Strengthening Private Sector Involvement

37. Policy dialogue in this area aims to build systematically upon existing public-private relationships through active experimentation and learning, while removing obsolete legislative barriers and installing effective safeguards against abuse. The main areas of progress are expected to be in developing guidelines and rational structures for a greater range of user fees and concessions, especially in the area of ecotourism, in the contracting of a greater range of services, and in establishing more benefit-sharing arrangements with local communities. It is expected that steady, knowledge-based evolution of best practices, followed by their more widespread adoption, will be a feature of this field in the coming years. Until experience and good practices are sufficiently mature, the Government will continue to move cautiously in involving the private sector inside PAs.

6. Promoting Ecotourism Development

38. In this area of policy dialogue, ADB is emphasizing the need for (i) strategic planning; (ii) joint activities between the public and private sectors, including the community-based private sector; (iii) diversification and improvement of products and services offered within PAs; (iv)

broader distribution of the benefits obtained; and (v) development of a greater variety of niche offerings to satisfy a wider range of potential visitors. The Government meanwhile, with ADB encouragement, has agreed to end DWLC management of tourist bungalows. Their subsidized prices inhibit private investment, managing them distracts DWLC from its primary role as the regulator of PA use, and DWLC is subject to pressure to provide use of the bungalows at commercially nonviable rates to those with influence. Other policy alternatives such as community leasing of bungalows are being explored. ADB and the Project will promote ecotourism development through such measures as planning, training, concession agreements, and infrastructure investments within the PAs and outside in conjunction with local communities. The Project also allows for the sharing of PA revenues with cooperating communities through outreach grants from the Wildlife Preservation Fund.

G. The Global Environment Facility

39. The GEF provides grants to activities that resist global climate change, loss of biological diversity, pollution of international waters, and depletion of the ozone layer. It aims to meet the incremental costs of achieving global benefits, meaning the difference between the costs of a project achieving global environmental benefits over and above the costs of an alternative project that a country would have undertaken in its own interests. The GEF contribution to the Project is based on current understanding of the distribution of likely benefits relative to the priorities of the Government and its partners in development (Appendix 3). Hence, the GEF supports only those areas where global benefits are obtainable. The grant will be deployed especially to support the full participation of all stakeholders in the development of community action plans and agreements with DWLC relating to PA and wildlife management. It will also be directed to the building of international links as a contribution to the emergence of global best practice and the spread and improvement of replicable models worldwide, and on the independent monitoring of project impacts on wildlife survival and ecosystem integrity.

III. THE PROPOSED PROJECT

A. Rationale

40. Sri Lanka has globally significant biodiversity values that are currently threatened by deforestation, land degradation, and unregulated exploitation of natural resources. The PA system is central to conserving wildlife biodiversity. PAs also play a significant role in supporting rural economies through watershed protection, and add to the economic and cultural values of Sri Lanka through the provision of recreational, ecotourism, scientific, and educational opportunities. The PAs are currently unable to provide effective protection for these values due to several reasons, including the need for legislative and institutional reform; lack of resources, managerial skills, and technical capacity in DWLC, the government agency primarily charged with administering the PA system; and lack of cooperation among the conservation agencies. To address these deficiencies will require significant efforts, particularly in human resource development, improvement of managerial systems and technical skills, and the provision of infrastructure and equipment. The development of greater interagency cooperation is fundamental to this strengthening and the growth of a more strategic approach to addressing conservation priorities in Sri Lanka. Key tasks such as the preparation of a BCAP, achieving greater representation of native ecosystems within the PA system, preparing recovery plans for endangered species, and establishing national conservation priorities can only be achieved through collaborative and coordinated approaches.

41. To address the threats and opportunities the PA system faces demands a reorientation of conservation thinking that acknowledges the mutual dependence of conservation agencies and local communities on each other to achieve their respective goals. Effective PA management cannot take place in the long term without the involvement and support of the local communities. Similarly, rural livelihoods depend on a flow of natural resource benefits, many of which cannot be sustained without active protective measures. To build these partnerships requires greater capacity within conservation agencies to understand and work with local communities in designing programs to realize joint benefits. It also requires effective community empowerment to allow the communities to plan for their own future and interact with government agencies and the private sector as equal partners. Part of this vision will involve low-impact use of PAs and their buffer zones, and the capturing of benefits by communities and the private sector through ecotourism development. The key need is to strengthen the ability of DWLC to manage the largest part of the national system of PAs, in partnership with and in the interests of local stakeholders. Experience in many countries has shown that this is likely to be a long process, and the Project is therefore considered the first or pilot phase of a sequence of interventions that will provide the capacity and management experience to be extended throughout the PA system and the sector as a whole.

B. Pilot Project Areas

42. The Project's pilot PAs represent a comprehensive selection of threats to biodiversity and ecosystem integrity, and opportunities for more effective PA management. They were identified in close consultation with major stakeholders in wildlife conservation. The key selection criteria considered the areas' significance in terms of biodiversity, ecological values, degree of unsustainable and illegal exploitation, and potential for ecotourism development. The root cause of most threats the selected PAs face is poverty and associated deprivation among people living close to PA boundaries. The poorer households specifically pose the greatest direct threat to PA resources, either by acting on their own needs for subsistence and other livelihood resources, or else by being co-opted into illegal activity by outsiders. The pilot PAs can be grouped for descriptive purposes into wet-zone highland, dry-zone lowland, and arid-zone coastal wetland ecological regions. A detailed description of the threats and root causes in the pilot PAs is presented in Appendix 4.

43. **Wet-Zone Highlands.** Peak Wilderness Sanctuary (224 km^2) is located in the Central Highlands and rises steeply from about 50 meters (m) to about 600 m from which Adam's Peak rises to 2,238 m. It is one of the most valuable conservation areas in Sri Lanka, with the highest number of endemics, notably birds, reptiles, and amphibians. Adam's Peak itself is sacred to four world religions and attracts about two million pilgrims each year. Encroachment, extraction of timber and nontimber forest products, and gemstone mining - promoted by the lack of clear boundaries in harsh terrain - are continuing problems, while pilgrim visitation has a strong local impact along the main access trails. Horton Plains National Park (32 km^2) includes two of Sri Lanka's three highest peaks, but is mostly a gently undulating highland plateau at about 2,100 m. Most of the park is covered by dense cloud forest, with 50 percent endemism among woody plants including wild relatives of cultivated pepper, guava, tobacco, and cardamom. Among the mammals are two monotypic kinds of endemic shrews, while the birds include numerous montane endemics and wintering migrants. Exotic plant species including gorse and black wattle are colonizing rapidly.

44. **Dry-Zone Lowlands**. Ritigala Strict Nature Reserve (15 km^2) is an isolated mountain (766 m) that supports over 400 plant species, 20 percent of them endemic. More than 100 plant species are used in Ayurvedic medicines, and there are elaborate ruins of an ancient hospital

and monastery complex. Mammals include endemic and endangered purple-faced leaf monkeys and three endemic species of birds. Logging and poaching are common, along with encroachment, and human-elephant conflict is increasing around the boundaries. Wasgamuwa National Park (394 km^2) contains one of the largest remaining native forests in Sri Lanka, with 150 known tree species, at least 10 of them endemic. About 70,000 cattle and buffalo graze the park, even encroaching on the southern boundary. Invading woody species have become widespread, and hunting, gemstone mining, and firewood collection are common. Minneriya National Park (89 km^2) comprises low-forested hills that feed the third-century Minnerya reservoir and the modern Giritale reservoir. The core of the park is one of the most biodiverse parts of the country outside the wet zone, with a unique concentration of intact ecosystem types. About 4,000 cattle and buffalo graze the park, and firewood collection and poaching are common. Human-elephant conflicts occur around at least five nearby villages. Uda Walawe National Park (308 km^2) contains diverse old growth forest in the northern part, within which riverine stands contain the endemic, endangered tree *Hopea cordifolia*. Among the rich mammal fauna are the endemic golden palm civet, herds of resident and migratory elephants, and a full suite of low-country birds. About 30,000 cattle graze the park, exotic plants have invaded many areas, and fishing and poaching are widespread.

45. **Arid-Zone Coastal Wetlands.** Bundala National Park (62 km^2) is Sri Lanka's only Wetland of International Importance under the Ramsar Convention. It contains key nesting sites for five species of marine turtle. Arid and semiarid terrestrial habitats shelter a wide range of species, including elephants and many other native mammals, star tortoise, and an endemic flying snake. The marshes and channels contain populations of an endemic toad, and both mugger and estuarine crocodiles. The biological productivity of the lagoons is being undermined by the intrusion of fresh (and polluted) irrigation water, while the park is being invaded by alien weeds such as prickly pear cactus, and is grazed by some 6,000 cattle and buffalo.

C. Objectives and Scope

46. The Project will support the Government to conserve the country's natural resources and biodiversity for the well-being of current and future generations and assist the Government in meeting the country's international commitments and other policy goals for conservation of biodiversity. By strengthening the institutional capacity of DWLC through the development of strategic management capacity and staff skills, provision of equipment and infrastructure, and development of adaptive field management, PA security will be enhanced. As part of securing the resource, the economic potential of PA-based ecotourism will be stimulated through increased technical capacity, formation of public-community and public-private linkages, and a program of ongoing product and service development that will contribute to raising the quality of visitor experiences. Durable improvement to the security of PA resources requires social support for conservation objectives. Buffer zone community empowerment along with revenue sharing between PAs and stakeholders will support a process of ongoing change (Appendix 5).

47. Ultimately, the potential value of Sri Lanka's biological resources will be achieved only if policies and operational strategies are coordinated across sectors. The Project will support a range of joint forums as well as the completion of a BCAP and a cross-sector review of the total conservation system including potential roles for the private sector to assist in filling conservation system gaps. The development and financial support of joint forums at the operational and national levels will provide a platform for the future growth of sector coordination. Sector coordination will also be promoted through the provision of a sustainable financing mechanism that will develop social mobilization and empowerment for buffer zone communities irrespective of sector authority (Appendix 6). The establishment of a Protected

Area Conservation Trust (PACT) outside of Government to empower communities in local development initiatives will ensure ongoing support to conserving PAs after project completion.

1. Project Components

a. Enhancing Institutional Capacity for Protected Area Management[26] (Component A)

48. DWLC's capacity will be enhanced through the provision of international and domestic consulting services, internal and external training courses and study tours, provision/upgrading of facilities such as the Wildlife Education and Training Center at Giritale and DWLC's headquarter in Colombo, as well as materials, vehicles, and equipment. DWLC will be provided resources to build international partnerships with institutions in other countries that have overcome similar challenges, including Costa Rica's National Biodiversity Institute, the South African National Parks Authority, and the Smithsonian Institution. Thus, it will have direct access to global best practices in ecotourism, decentralized and participatory PA management, and biodiversity and environmental inventories. Component A comprises four subcomponents.

49. **Enhancing Management Systems**. The Project will strengthen human resources, financial and administrative capacity and systems to permit transparent management of DWLC. Work plans will be developed and implemented at the park level, within a manager line control system reporting through regional managers directly to DWLC management. Procedures for monitoring work plan performance, increasing incentives and removing disincentives for staff performance, resolving conflicts of interest, as well as accounting and budgeting will be developed and training provided. The systems under this subcomponent will allow DWLC to (i) monitor planned inputs and outputs at all levels of the operation on a monthly basis; (ii) achieve accountability for expenditure and revenue flows; (iii) decentralize decisions about work objectives, resource needs, and work programs with agreed-upon decentralized budgets; (iv) provide access to a custom-built management and knowledge information system via an internet and radio-based communication system; (v) access quality information both in-house and from other sources including the Internet; and (vi) strengthen the skills of the management team through a program of change management, team building, and leadership training.

50. **Strengthening Technical Capacity.** The Project will (i) provide technical training within DWLC in areas such as ecology and habitat management, communications, enforcement, conflict resolution, GIS, remote sensing etc.; (ii) establish a strong monitoring and evaluation team that will focus on field operations and adaptive management of field programs; (iii) develop a participatory research agenda involving outsourcing of contracts with natural and social scientists working in tandem on wildlife biodiversity; and (iv) provide technical strengthening to the Wildlife Health and Management Unit through the use of an international partnership program. The Project will also establish and support a community outreach and extension technical team to address community and public interactions with DWLC to (i) establish at each of the field sites trained capacity to work with local communities; (ii) develop operational protocols for social assessment, participation, and local partnerships; (iii) develop public education and awareness programs; and (iv) supervise local plans as an integral component of adaptive field management.

[26] Component A builds on the institutional strengthening measures that were undertaken with assistance provided by UNDP/GEF.

51. **Establishing Ecotourism Capacity**. The Project will support capacity building in DWLC to assist in the future development of ecotourism in Sri Lanka. Additional capacity will be achieved through establishing incremental staff positions, training, intersectoral workshops, and technical assistance. The Project will support DWLC in (i) working with other Government agencies and the private sector to develop a coordinated strategy for ecotourism; (ii) coordinating the development of an ecotourism system plan and policies in support of such plan; (iii) providing technical and supervisory inputs to the management plans of individual PAs on all aspects of visitor management; (iv) developing nature interpretation facilities; (v) developing concession agreements with both the private sector and local communities for the provision of selective products and services within PAs; (vi) developing policies, procedures, and monitoring standards for assessing the performance of private sector and community-based concessions; (vii) arranging for visitor satisfaction surveys to be undertaken on individual facilities (e.g., visitor centers), PAs, and the PA system as a whole; and (viii) reviewing pricing structures for entry fees and services provided in PAs.

52. **Strengthening Wildlife Biodiversity Monitoring and Evaluation**. This subcomponent will strengthen DWLC's capacity to systematically monitor biodiversity in the PAs under its mandate. A management-driven impact monitoring program, established under the Project, is ultimately expected to track overall national trends in wildlife resources and their utilization through site-specific monitoring. Recognizing the complex interactions between human society, the economy, and the wildlife ecosystem, the monitoring program will concentrate on the generation of information that is directly applicable to the planning and management of PAs. Initially, the monitoring program will concentrate on developing appropriate monitoring and evaluation protocols in the pilot PAs and harmonizing these with the Project's management information system (MIS). Institutional development and DWLC staff training in the management of the wildlife monitoring and evaluation system are integral activities of this subcomponent. Assistance in implementing this subcomponent will be provided by a consortium of reputable international NGOs with expertise in conservation and community mobilization, and substantial field-based experience in Asia.

b. Participatory Adaptive Management of Pilot Protected Areas (Component B)

53. Component B will support participatory management programs that address strategic threats and opportunities at each of the seven pilot sites (Appendix 4). To achieve this, the Project will support the (i) consolidation and revision of existing management plans into operational work plans and implementation of an adaptive management program to mitigate strategic threats and develop opportunities; (ii) provision of new skills, infrastructure, equipment, and vehicles to support program implementation; and (iii) development of quality ecotourism products and services. The activities of this component are split into three subcomponents.

54. **Consolidation and Revision of Existing Management Plans and Implementation of Adaptive Management.** The Project will develop multistakeholder processes for reviewing the existing management plans to establish priorities and work programs. The plans developed will (i) specify the control of the management of PA resources; (ii) specify acceptable use of PAs and their resources through the application of management zoning; and (iii) outline a program of necessary facilities and infrastructure required to support management and ecotourism initiatives. Further, the plans will be used to create a rolling three-year work plan with budget approvals. The activities are designed to institutionalize the implementation of adaptive management approaches to strategic threats at each of the pilot sites. The Project will provide support to (i) prioritize threats to each PA with involvement of local staff and stakeholders; (ii)

undertake an option analysis to specify the need for change and the range of alternative options to achieve it; (iii) prepare an action plan that identifies the tasks, time lines, critical success factors and indicators, and reporting requirements; (iv) design a formal evaluation program; (v) reformulate the plan as outcomes and effects that need refocusing are identified; and (vi) develop a second full cycle to apply the technique to either reinforce the existing issues or alternately redirect toward the next set of priorities. Plan implementation in the selected pilot areas will be financed under the Project.

55. **Facilitating Management of Pilot Protected Areas.** Under this subcomponent, the Project will provide the necessary inputs for implementation of field programs. Unmarked PA boundaries will be delineated and demarcated using a participatory process. Enforcement capacity will be enhanced through (i) provision of training, (ii) developing techniques to increase the probability of violators being intercepted, (iii) increasing the success rate of prosecutions with appropriate sanctions, and (iv) integrating enforcement with community participation and the sharing of revenues to provide positive support for boundary integrity. Furthermore, the Project will (i) provide equipment, vehicles, and facilities; (ii) support necessary infrastructure including low-impact access roads, tracks, and park entry facilities such as gates and reception areas; and (iii) extend greater field staff support including warden offices, staff quarters and beat buildings. Improved community relations are central to maintaining the integrity of PAs and will be supported by (i) the development of social assessment and participatory community scoping skills among the field unit staff; (ii) the implementation of a field-based action research program based on community mobilization; (iii) the development of plans and strategies that have a community outreach and education component; and (iv) the provision of community outreach grants through DWLC staff for environmental activities, such as small-scale tree planting, local environment monitoring, and local awareness programs.

56. **Ecotourism Development.** Activities under this subcomponent are designed to (i) raise the capabilities of DWLC staff in visitor planning and management, (ii) enhance the quality of the visitor experience, (iii) increase the involvement and capabilities of other stakeholders in the provision of ecotourism opportunities, and (iv) increase local opportunities for benefit sharing without consumption of park resources. For each park, a visitor services and ecotourism plan will be developed specifying (i) infrastructure requirements including visitor centers, interpreted trails, observation platforms, wildlife watching hides; (ii) new recreational activities; and (iii) the potential for public-private and public–community operations. The plan will be developed in a participatory manner as part of the park management plan. Courses will be offered in each park for upgrading tracker and volunteer guide skills, and in local communities for developing business skills for ecotourism.

c. Collaborative Conservation Planning (Component C)

57. Component C will establish a platform on which to develop increased collaborative conservation planning among the involved institutions and other stakeholders. The Project will strengthen the Biodiversity Conservation Secretariat (BCS) to prepare a BCAP using a facilitated participatory process that develops a consensus on national priorities and a mechanism through which increasing numbers of joint operational programs and program overviews can be implemented. Specifically, the Project will undertake the following range of activities.

58. **National Biodiversity Conservation Action Plan.** The Project will strengthen the BCS within MFE to provide the focal point for completing the BCAP through provision of (i) office equipment, computers, and a vehicle; and (ii) access to support staff contracted for the purpose

of completing the BCAP. The Project will also support the BCS to develop a wide participation process using the following steps: (i) developing an implementation plan; (ii) organizing a committed professional team to lead and coordinate implementation; (iii) adapting international guidelines to Sri Lankan circumstances; (iv) selecting representative sites and stakeholder participants; (v) using innovative procedures to optimize public participation; (vi) fostering the sharing of scientific and other knowledge; (vii) promoting capacity building; (viii) developing effective communications to expand awareness; (ix) building linkages with other initiatives; (x) using local, national, and regional expertise; (xi) integrating the process with sustainable development initiatives; and (xii) facilitating the sharing of knowledge and experience with other institutions and countries.

59. **Conservation System Review.** The Project will support a process to identify lands that help fill critical gaps in the current PA system and link existing sites together. Planning teams at DWLC and FD will review existing materials and jointly identify important gaps in the PA system and potential links between PAs. The joint planning team will (i) formulate an action plan to provide conservation benefits in the target areas, (ii) identify and evaluate institutional constraints to private sector provision of conservation goods and services, (iii) undertake stakeholder workshops in the target areas to identify opportunities for public land to be introduced in the estate if such habitat fills one of the gaps, (iv) rationalize land out of the conservation system wherever the land is considered to have inadequate value for conservation purposes, and (v) develop the necessary legal documentation for private sector initiatives with promotional materials and a media awareness campaign. Further, the Project will investigate the potential to use public and private land to link fragmented habitats.

60. **Joint Priority Setting and Endangered Species Recovery.** Numerous agencies are undertaking development activities in the PA buffer zones without sufficient coordination. Thus, the Project will support the BCS to lead a process of joint priority setting across the major stakeholders involved in the biodiversity conservation sector with respect to buffer zone community support. This will involve (i) operational staff from DWLC, FD, CCD, in conjunction with local authorities and other stakeholders, reviewing the existing conservation programs; (ii) a sector workshop to establish appropriate criteria for identification of priority sites; and (iii) joint assessments of priorities. These priorities will be used for evaluating funding requests under component D. Under this subcomponent, the Project will also support a collaborative assessment of the current status of endangered species and the preparation of endangered species recovery plans. This will involve (i) a collaborative assessment by all interested parties of the relative endangerment of species based on the IUCN red book classification, (ii) identification of species at risk, (iii) preparation of species recovery plans for priority species, and (iv) dissemination of the plan for consultation and sponsorship by the private sector.

d. Sustainable Financing for Community Partnership Building (Component D)

61. The Project will establish a trust to finance community and participatory benefits from conservation and the PAs, with priority assigned to projects that support PA management by reinforcing the link between biodiversity conservation and the local communities. The trust aims to empower buffer zone communities to develop increased governance over local development processes through the establishment of participatory local community plans followed by integrated area-wide plans that assist in their implementation and thereby establish the basis for increased sustainability of natural resource management. These will lead to agreements with PA managers on local resource use. For purposes of this component, a Protected Area Conservation Trust (PACT) will be established outside of Government as a new entity with a

capital protected endowment of initially $8 million equivalent, the revenue from which will be used to finance the trust's objectives relating to conservation of biodiversity. The size of the endowment was determined from an extensive participatory needs analysis in conjunction with a financial sustainability analysis. The PACT will be endowed under the Project over a period of three years. The PACT will fund activities that will enhance the well-being of the communities in the buffer zone communities while respecting the conservation function of the PAs. Consultants contracted through the project management unit (PMU) will assist in establishing the PACT (Appendix 6). Once established, the PACT will be self-executing as a stand-alone entity.

62. The PACT will support the empowerment process in PA periphery communities by (i) funding training to NGOs and community-level institutions to enable them to compete successfully for funds from the PACT, (ii) managing a competitive grants process for contractors with proven abilities to facilitate the community strengthening process, (iii) providing grants with which to initiate community action plan implementation where a proposed investment is likely to contribute to resolving conflicts of interest with conservation priorities, and (iv) to undertake capital investments to deliver the objectives of the trust. Besides reinvestment of a portion of the PACT's income, the income will be used to finance administrative expenses, consulting services, training, workshops, civil works, equipment and materials.

2. The Role of the Global Environment Facility

63. The Project is consistent with the strategies and principles of the GEF with respect to (i) conservation of biodiversity and its sustainable use, (ii) conservation of tropical forests and their sustainable use, (iii) maintenance of genetic resources, (iv) empowerment of the principal groups and local participation in environmental management, (v) national capacity building related to the mainstreaming of biodiversity conservation, and (vi) international linkage for developing best practices and promoting their worldwide replication. The project components are, however, interlinked and mutually dependent, and all must be advanced simultaneously to achieve significant global, national, and local benefits. The GEF will contribute to the most significant global benefits, specifically, (i) certain consulting services provided to PMU and for the establishment of the PACT; (ii) a portion (50 percent) of the PACT endowment; (iii) regular impact assessments of the Project as a whole by international NGOs; (iv) partnering arrangements between the PACT and international NGOs; (v) twinning between DWLC and overseas institutions; (vi) biodiversity-related research contracts; (vii) collaborative sector planning including completion of a BCAP and plans for endangered species, pilot actions to expand and/or link the PA system; and (viii) development of adaptive management processes that address specific threats in pilot PAs. Details of the role of GEF and the incremental cost analysis are in Appendix 3.

D. Cost Estimates

64. The total cost of the Project, including taxes and duties, physical contingencies, price escalation, and interest charges, is estimated at $34.7 million equivalent, comprising about $17.6 million (51 percent) in foreign exchange and $17.1 million equivalent (49 percent) in local currency cost. Table 1 summarizes the cost estimates; details of the project costs are in Appendix 7.

Table 1: Cost Estimates
($ million)

Component		Foreign Exchange	Local Currency	Total Cost
A.	**Base Cost**			
	1. Enhancing Institutional Capacity for Protected Area Management	4.7	7.2	11.9
	2. Participatory Adaptive Management of Pilot Protected Areas	2.5	5.0	7.5
	3. Collaborative Conservation Planning	0.3	0.9	1.2
	4. Sustainable Financing for Community Partnership Building	8.2	1.6	9.8
	Subtotal (A)	**15.8**	**14.7**	**30.5**
B.	**Contingencies**			
	1. Physical Contingencies [a]	0.9	1.4	2.3
	2. Price Contingencies [b,c]	0.6	1.0	1.6
	Subtotal (B)	**1.5**	**2.4**	**3.9**
C.	**Interest Charge**	**0.4**	**-**	**0.4**
	Total Cost	**17.6**	**17.1[d]**	**34.7**

Note: Figures may not add up to totals due to rounding.
[a] Based generally on 10 percent of base cost.
[b] Based on an annual escalation factor of 2.4 percent (foreign) and 8 percent (local) over the project period.
[c] Based on the assumption that exchange rates would be maintained at purchasing power parity.
[d] Includes duties and taxes estimated at $5.1 million equivalent.

E. Financing Plan

65. Details of the financing plan are in Table 2. A loan from ADB's Special Funds resources in the amount of $12.0 million equivalent is proposed to finance approximately $6.6 million in foreign exchange costs (38 percent of total foreign exchange costs), and $5.4 million equivalent of local currency costs (32 percent of total local currency costs), with a term of 32 years, including a grace period of 8 years, with an interest charge of 1 percent per year during the grace period and 1.5 percent per year thereafter. The GEF will cofinance the Project through a grant that will be administered by ADB.[27] A memorandum of agreement will be drawn up between ADB and the World Bank (acting as Implementing Agency for the GEF grant). The GEF grant will be for $10.2 million equivalent: $7.0 million in foreign exchange (40 percent of total foreign exchange costs) and $3.2 million equivalent in local currency (19 percent of total local currency costs). GEF financing amounting to $4 million will be allocated to the PACT and the remaining $6.2 million will finance the protection of global benefits in each of the other components. The Government of the Netherlands has indicated interest in cofinancing the PACT in an amount of $4.0 million subject to successful bilateral negotiations with the Government. Board approval for administering the amount will be obtained as soon as the cofinancing arrangements are firmed up. The Government will finance 45 percent of the local currency costs by contributing the equivalent of $7.7 million (22 percent of total project costs). The remaining local currency costs amounting to $0.9 million will be financed in kind by the participating NGOs/CBOs and beneficiaries as part of their equity contribution for the income-generating activities.

[27] Cofinancing is subject to the final approval of the Project by the GEF.

Table 2: Financing Plan
($ million)

Source	Foreign Exchange	Local Currency	Total Cost	Percent
Asian Development Bank	6.6	5.4	12.0	35.0
Global Environment Facility[a]	7.0	3.2	10.2	28.0
Government of the Netherlands[b]	4.0	-	4.0	12.0
Beneficiaries	-	0.9	0.9	3.0
Government of Sri Lanka	-	7.7	7.7	22.0
Total	**17.6**	**17.1**	**34.7**	**100.0**

Note: Figures may not add up to totals due to rounding.
a Financing is subject to the final endorsement by the GEF.
b Subject to the final agreements reached between the Government of Sri Lanka and the Government of the Netherlands

66. The proposed level of local currency financing by ADB takes into account the uncertain medium-term economic prospects of the country and the Government's inability to self-finance a substantial proportion of the investment program required to enable Sri Lanka to undergo the economic and social transition to a higher level of development and reduce poverty. The Government has recognized that there are severe limits to the extent of public sector financing of the country's investment program and has taken a number of important actions: (i) implementing an ambitious privatization program; (ii) counter-guaranteed private sector borrowing on the international capital market under ADB's guarantee scheme; (iii) securing substantial private investment in capital-intensive industries such as power supply and ports; (iv) initiating an ambitious private sector development program in 2000, aiming to further privatize and restructure state-owned enterprises and address labor market rigidities. The proceeds from the privatization program are expected to amount to about 2 percent of the Gross Domestic Product (GDP) in 2000.

67. Despite these actions and achievements, the overall capacity of the Government to self-finance the public investment program in the coming years is expected to remain limited, as debt servicing and the costs related to the ongoing civil conflict continue to absorb about 50 percent of budget outlays. The 1999 budget deficit was 8.0 percent of GDP, an improvement on the 9.2 percent in 1998. This outcome was largely due to the lower than anticipated tax receipts in the initial years of operation of the goods and services tax that was introduced in 1998, and the larger than anticipated outlays on capital investment and defense. While the Government intends to reduce the budget deficit to 5 percent of GDP by 2002, in 2000, it has been projected at 7.6 percent of GDP, a slight improvement over 1999. Therefore, continued ADB support for local cost financing is considered justified in view of the prevailing difficult country circumstances and the need for a substantial program of rehabilitation and replacement and improvement of the country's capital stock for it to successfully undergo the transition to a higher growth path. The proposed level of local cost financing for the Project is considered justified especially in view of the positive environmental impact that the Project is expected to have and the associated sustainable reduction in the level of poverty in the areas adjacent to the PAs.

F. Implementation Arrangements

1. Coordination Arrangements

68. The Department of Wildlife Conservation (DWLC) will be the Executing Agency (EA) for components A and B. DWLC has enhanced its financial management capacity since it

introduced expenditure controls in end-1999. The Project will assist in the strengthening of organizational systems to enable work program and budget allocation decision making to be decentralized to the new regional offices and field units with on-site management (Appendix 8). A project management unit (PMU) will be established within DWLC. The PMU will be responsible for administering, implementing, monitoring, reporting, and coordinating all project activities under components A and B. It will be headed by the director of DWLC acting as project director; supported by the additional director, technical of DWLC acting as project coordinator; a full-time administration officer; and by clerical, financial, and other support staff on a full-time basis. A Protected Areas Management and Wildlife Conservation Advisory Committee will assist the minister responsible for DWLC on the development of policy and legislation, with the PMU acting as its secretariat. The Advisory Committee will comprise selected members of the existing Fauna and Flora Protection Advisory Committee, the existing Task Force on Wildlife Conservation, the PACT board of trustees, BCS, and others chosen to complete the representation of all key stakeholders. Within the national PA system, DWLC will establish seven regions, each led by a deputy director who will have the delegated authority to negotiate the work programs with the managers of each field unit along with the responsibility for negotiating an agreed-upon budget with each field unit in the region. In line with increased autonomy, the regional and field unit managers will be held responsible for both the work plan outputs and the budgetary performance. At the pilot PAs, a local coordinating committee will be established, jointly chaired by the divisional secretary and the deputy director of wildlife (regional) with representatives from the local government, other government agencies, local NGOs, tourist operators, women's groups, and other stakeholders. This committee will be progressively institutionalized into the PA stakeholders planning forum and will hold quarterly meetings to discuss planned activities and explore the potential for synergy with other local development and conservation initiatives.

69. MFE as the country's biodiversity focal point will be the EA for component C, the Biodiversity Conservation Secretariat (BCS) will be the Implementing Agency to undertake the cross- sector activities including development of the BCAP. The BCS will form a multisectoral BCAP Task Force comprising all major stakeholders including representatives from civil society, private sector, and academia. This task force will lead and coordinate the preparation of the BCAP, with assistance from the BCS and technical support from the Project through what is envisioned to be a 2-3 year process. The conservation system review will be under the supervision of the BCS and implemented by a task force led by DWLC, comprising the existing planning teams at DWLC and FD. The task force will (i) use all existing information to identify important gaps in the PA system and potential links between PAs, including those under the management of separate agencies, (ii) formulate an action plan to address the provision of conservation benefits in the target areas, and (iii) play an active role in analyzing the strengths and weaknesses of the PA system.

70. The PACT will be operated by an independent board of trustees and its assets will be managed by a commercial fund manager. The board will comprise six independent eminent persons and three Government members representing DWLC, FD, CCD, respectively. The board will establish a secretariat, headed by a chief executive officer with qualifications in advanced financial management, who will be responsible for administering, implementing, monitoring, reporting, and coordinating all PACT activities. An overseas commercial fund manager or management company will be contracted by the board to invest and to manage PACT's endowment and investment portfolio according to standards agreed upon by the board and acceptable to ADB. The PACT secretariat will prepare detailed operational protocols to govern contracts between the PACT and NGOs/CBOs. The NGOs/CBOs will facilitate preparation of community action plans that will be used to mobilize resources. The PACT will

provide technical support to the NGO/CBO community along with funds for completing a comprehensive community-and area-wide planning process. The PACT will also provide grants for implementing the local planning proposals selectively. The focus of the grants made under the PACT will be on the achievement of biodiversity outcomes through the contracting process, and contractors will be assessed according to the achievement of key performance indicators (KPIs). The KPIs are (i) poverty analysis, including participation by and empowerment of the poorest members of each community; (ii) environmental education leading to a consensus within the target community that environmental integrity and biodiversity are vital resources for its own development; (iii) analysis of conflicts of interest, facilitated negotiation of a settlement, and formulation of an agreement between the community and PA managers concerning their roles, rights, and responsibilities in wildlife and PA management; and (iv) identification of investments that address the threats to the individual PA. A more detailed description of the operating and implementing procedures of component D is in Appendix 6.

71. An interagency project coordinating committee will be established within six months of loan effectiveness, to be chaired by the secretary of MPAHA for cooperation and liaison with other agencies relevant to implementation. The committee will have representatives from the Ministry of Finance, National Planning and Development, Ministry of Local Government and Provincial Councils, Ministry of Tourism, Ministry of Agriculture and Lands, MFE, and Ministry of Fisheries and Aquatic Resources Development.

2. Implementation Schedule

72. The Project will be implemented over six years. During the first year, project activities will concentrate on (i) planning all measures to strengthen DWLC, including the preparation of a detailed work plan; (ii) recruiting consultants to work with the PMU, including partner NGOs to undertake baseline surveys, and consultants to establish the PACT; (iii) beginning the training programs; (iv) screening and identifying all potential suppliers of goods and services; and (v) screening NGOs for training funded by the PACT. Most of the procurement of civil works and other goods and services will be undertaken in the second and third years of the Project. The PACT will train NGOs in the second and third years. The first NGO contracts will be awarded at the end of the second year. Upon successful pilot testing of the PACT activities in the selected pilot PAs, its operations will be extended to cover communities adjacent to other priority conservation areas as identified under the BCAP. A project implementation schedule is given in Appendix 9.

3. Project Review

73. The project design will be subject to a constant review throughout implementation, and mechanisms have been incorporated to ensure that the design is sufficiently flexible to adapt to a changing environment and to incorporate lessons that are being learned. The Project will be reviewed twice annually. These reviews will be undertaken jointly by the Government and ADB to (i) determine whether expected implementation is on track; (ii) determine whether the design is still appropriate; (iii) see whether outputs, effects, impacts, and benefits are being or will be realized; (iv) assess the outputs and results achieved and consolidate lessons to improve their realization during the remaining project period; (v) provide analytic feedback to the EAs and the PACT, where necessary, to justify modifications in policies, immediate objectives, institutional arrangements, areas of special emphasis and resource flows during the remaining implementation period; and (vi) examine whether the assumptions made in the project framework remain valid or whether adjustments are required to ensure achievement of the overall objectives.

4. Procurement of Goods and Services

a. Civil Works, Materials, and Equipment

74. All procurement of civil works, materials, and equipment will be in accordance with ADB's *Guidelines for Procurement*. Given that the value of each civil works contract will be less than $1 million and in view of the competitive nature of the construction sector in Sri Lanka, civil works contracts are not expected to be of interest to international bidders. Thus, all civil works contracts will be awarded to prequalified private sector contractors under local competitive bidding procedures acceptable to ADB. All contracts for supply of materials, vehicles, and equipment costing $100,000 or more will be awarded through international shopping procedures acceptable to ADB, whereas those that cost below $100,000 will be procured on the basis of direct purchase.

b. Consulting Services, NGO Services, and Training

75. The Project will require 138 person-months of domestic and 128 person-months of international consulting services. The GEF grant will fund 54 person-months of domestic and 85 person-months of international consulting services. To simplify project start-up, all consultants will be recruited by the Government through a single contracting process in accordance with ADB's *Guidelines on the Use of Consultants* and other arrangements for the use of domestic consultants satisfactory to ADB. Consultants will be used to strengthen the technical and managerial capacity of DWLC working mostly through the technical units in the head office, especially the Protected Area Management Unit within which the monitoring and evaluation team and the visitor services and ecotourism team receive considerable strengthening. The Community Outreach Unit will also receive significant technical backstopping, reflecting the paucity of current skills and lack of experience of the field staff in this area. The consortium of international NGOs for the monitoring and evaluation subcomponent will be selected by the Government from a shortlist agreed upon between DWLC and ADB, on the basis of proposals submitted by the shortlisted organizations. A similar arrangement will be adopted in recruiting the international NGO with experience in conservation trust funds for the twinning arrangement with the PACT. Training will be provided by the Giritale Training Center with specialist training procured both locally and internationally (Details in Appendix 10).

5. Accounts, Audits, and Reports

a. Accounts and Audits

76. All agencies involved in implementation will prepare and maintain separate accounts for project-related disbursements. The PMU will consolidate the accounts from all sources and then submit them to DWLC, which will review and then submit them to the Ministry of Finance and ADB. All project accounts will be independently audited on an annual basis. The audit report will include, among others, a statement verifying that funds disbursed by ADB against the statement of expenditures (SOE) have been used as claimed. Project accounts, together with disbursement documentation, will be audited annually with all reports forwarded to ADB and the Government within 12 months of the end of each financial year. Imprest accounts will be established by both DWLC and MFE, which will take direct responsibility for all administrative and accounting requirements relating to the operation and use of such funds. The SOE procedures will be used to reimburse eligible expenditures with a total contract value not exceeding the equivalent of $100,000 and to liquidate advances covered in the imprest account.

DWLC and MFE will establish an imprest account with the Central Bank of Sri Lanka. The initial advance for each imprest account will be based on the estimated expenditures for six months. The imprest account and SOE procedure will be established, operated, and maintained in accordance with ADB procedures. Both will be audited as part of the regular audit of the Project's account, with financial statements and audit opinion set out separately within 12 months from the end of the fiscal year. The PACT, once formed, will maintain separate financial accounts that will be audited annually by independent auditors. The audited PACT financial statements and annual report will be submitted to ADB and the Government within six months of the end of each financial year.

b. Reports

77. The PMU will furnish ADB and the Government with quarterly and annual progress reports, and a publicly available project completion report within three months of the end of the Project. The PACT secretariat will furnish the board with quarterly progress reports on PACT activities, and will prepare and publish for sale to the public, at cost, an annual report that outlines the achievements of the previous year and proposed future activities. Complimentary copies of the annual report will go to ADB, the Government, and all members of the board of trustees. The PACT and DWLC will furnish ADB with annual reports on the progress of the partnership with NGOs, the effectiveness of such partnerships, and problems faced including recommendations regarding such problems. GEF grant reporting will comply with GEF requirements and will be undertaken by ADB as agreed upon by ADB and the World Bank and detailed in the memorandum of agreement signed by the respective parties.

6. Benefit Monitoring and Evaluation

78. Monitoring systems are integral to the MIS, reporting arrangements, lines of accountability, and incentive mechanisms to be established by the Project within DWLC. They will generate a database of organized knowledge on the performance of all aspects of DWLC. Monitoring and reporting arrangements will be complemented by impact assessments every two years of the Project as a whole, with assistance from a consortium of two NGOs, one oriented to conservation and one to community development. Impact assessment will assess the status and trends applicable to all major resources of the pilot PAs, the suitability and sustainability of PA management and community strengthening and partnership-building arrangements, the integrity of PA managers and the degree of stakeholder participation in resource management decisions. A publicly available report will be prepared within two months of the end of each assessment.

G. Environmental and Social Measures

1. Environment

79. The Project is classified as environment category B. An initial environmental assessment (IEE) undertaken during project preparation concluded that the Project would be overwhelmingly beneficial from both an environmental and a social perspective. The benefits would come primarily from DWLC's improved capacity to plan and manage activities in and adjacent to PAs, in response to international and national biodiversity protection imperatives as well as to local development needs. Few potentially adverse environmental impacts were identified. Most are localized and of minor significance, for which mitigation measures are readily available. No project components are expected to result in major adverse environmental impacts. Adverse impacts due to the development and implementation of ecotourism

concession agreements were considered of potentially moderate significance. The concessions will be of a modest scale, and with the envisaged broad-based participatory planning, strong enforcement, and regular monitoring, the actual impacts during implementation are expected to be insignificant. The Project actively supports regular site evaluations involving both DWLC and wider stakeholders, which will provide an audit of local impacts. The preparation of plans to expand the PA system to incorporate important new sites will follow ADB and Government policies on compensation. Support for local development proposals in buffer zones will be contingent on the proposals demonstrating that conservation is a primary or secondary objective, and that they meet the Government's environmental assessment requirements. Reliance on the "precautionary principle" and on adaptive management practices with close stakeholder participation is expected to help ensure that all project activities are environmentally sound.

2. Social Assessment[28]

80. An estimated 1.5 million people live adjacent to the PAs. Project pilot sites are associated with some 192 villages with 40,000 households and an estimated 180,000 people. Many of these communities developed from in-migration, resulting in heterogeneous social structures in terms of ethnicity and religious affiliations, while many have limited historical intrafamilial links. Poverty based on the Samurdhi poverty line for the pilot sites falls within the 40-70 percent range: 22-32 percent in eastern Ude Walawe, 48-100 percent in Western Ude Walawe, 75 percent in Wasgamuwa, 65 percent in Ritigala, 58-90 percent in Southern Peak Wilderness, 70 percent in Bundala, and 36-52 percent at Minneriya. These are much higher than the national average of 21 percent. Villagers identified poverty as the root cause of illegal and unsustainable exploitation of resources in the PAs.

81. The underlying cause of PA-community interaction is poverty in both direct and indirect terms. Through participatory rapid appraisals, the following issues were identified: (i) limited access to land with secure use rights; (ii) continued fragmentation of land resources; (iii) reduced access to resources including nontimber forest products, irrigation water, and drinking water; (iv) limited access to markets and formal credit; (v) limited access to social infrastructure and services; (vi) lack of employment opportunities, which remain highly seasonal with the result that many join the armed forces; (vii) increased dependence on Government welfare, resulting in greater opportunity for political interference; and (viii) reduced choices, leading to increased illegal activities. The Project addresses these issues through the development of microplans, area plans, and the financing of seed grants with a strong emphasis on developing lasting participatory processes that establish collaborative decisions both within and between the PA communities. The provision of ongoing financing of this activity through the PACT and the development of local NGO capacity are inputs that previous projects were unable to establish.

82. Poverty is also strongly linked to the insecure resource basis and unstable/casual employment, leading the poor to work as casual laborers. They are vulnerable to co-optation in support of illicit activities such as livestock grazing, logging, poaching, and gemstone mining within the PAs, acting for low wages on behalf of organized gangs and businessmen from elsewhere. Through PRA exercises, villagers, especially the youth, were convinced that unity and cohesion among the community members to be vigilant against such illicit jobs are crucial to their sustainable livelihoods.

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[28] A two-phased social analysis was completed during project preparation. Phase one involved consultations with 30 communities to identify socioeconomic characteristics and their development aspirations. This was followed by a series of detailed participatory rapid appraisal processes involving nine villages from the pilot PAs.

83. The social assessment also found that, while there are no significant gender gaps in terms of either social indicators or child labor issues, women still bear the burden of poverty due to their multiple roles as economic producers and family caretakers. Depletion of natural resources, especially fuelwoods, significantly affects their workload. In several villages, women observed that the amount of time needed to collect one bundle of fuelwood has doubled over the last 10 years. Although the number of female-headed households in the studied villages was, on average, marginal, it was high among Muslim communities as husbands abandon wives due to polygamy. Female-headed households were identified as among the most disadvantaged groups, as they are sole income earners and have very limited access to resources and information. Further, liquor addiction, mainly of men, leads to family conflict and, in some cases, domestic violence. While women represent more than 90 percent of the savings group members, their participation in community decision-making bodies is still limited. A detailed social analysis is presented in Appendix 5.

IV. PROJECT JUSTIFICATION

A. Financial Analysis and Sustainability

84. Project sustainability is determined in part by the Government's ability to support the recurrent costs of the project-related activities. The Project will increase the operating cost of DWLC by $235,000 per annum simply as a result of the increased provision for staff, and operation and maintenance for vehicles and other equipment. This cost is offset by the increase in Government revenues from tourism visitation derived from entrance fees, service charges, and vehicle fees and the payment of the goods and services tax. Of all income-generating opportunities offered by the Project, the most significant are those related to ecotourism, which is a strong theme in components A, B, and D. Revenue from ecotourism is expected to have a significant impact on the Government treasury and potentially on incomes of local communities. The financial analysis of the ecotourism-related components assumes that the Government's projections of foreign visitor arrivals will be achieved and maintained throughout the project period. However, this component is financially viable even with a more conservative projection of foreign visitor arrivals. The incremental benefits of the Project are derived from an increase in the number of foreign visitors to PAs (beginning with a 1 percent increase in year 6 of the Project, to a maximum of 5 percent by year 10 and thereafter), and in entrance and service charges (10 percent increase beginning in year 6). National visitors to PAs and the corresponding entrance and service charges are also expected to increase from year 6 of the Project. In addition to the direct revenue from incremental visitors and charges of PAs, the Government will earn revenue from taxes and levies on the sale of incremental goods and services developed by communities in the support zones that benefit from the Project interventions. Overall, it is anticipated that the direct incremental revenue just from ecotourism alone could be between $1.0 and $2.3 million each year as a result of the Project.

85. The sustainability of project interventions financed by the PACT will depend on the extent to which communities adopt alternative income-generating activities. Examples of activities that will benefit local communities are fenced cattle grazing, community fuelwood production, production of buffalo curd, and operation of rice storehouses. Individual financial models of several such typical activities illustrate their financial viability. For example, the community fuelwood model suggests a financial rate of return of 60 percent; the cattle grazing model has a 35 percent rate of return, and the community-operated rice storehouse model would have a return of 16 percent.

86. The Government has agreed to a revenue-sharing policy that allows DWLC to retain 50 percent revenue derived from PAs. Based on the expected increase in tourism numbers and the associated revenue, the recurrent costs will be covered by the end of year 6. As such, the additional recurrent costs of the Project are significantly less than the DWLC share of the revenues. From the perspective of the Government's fiscal position, the Project will have a positive impact based on conservative tourism growth data.

B. Economic Analysis

87. The Project will generate significant economic benefits (Appendix 11). Above all, the protection provided to Sri Lanka's rich and largely endemic biodiversity provides benefits to society at local, national, and global levels. At the local level, communities will benefit from employment and improvement in living standards generated by the demand for ecotourism and related services. Benefits at the national level include (i) the ability to cater to the ecotourism niche market and generate significant forward linkages within the national economy; (ii) the ability to attract foreign direct investment in ecotourism and biodiversity-related areas; (iii) the ability to comply with international commitments on protection of biodiversity; (iv) the option value of preserving biological resources for future exploitation, particularly for bio-prospecting and research; and (v) the opportunity to demonstrate effective and decentralized governance through a strengthened and better trained DWLC. Global society will benefit from (i) enhanced carbon sequestration potential of the PAs; (ii) protection of endemic species; (iii) maintenance of habitats used by internationally mobile species, especially turtles and waterfowl; and (iv) less tangibly, from the existence value of better managed PAs in Sri Lanka.

88. The community partnerships developed with assistance provided by the PACT will generate substantial economic benefits to initially about 180,000 people living in the vicinity of the PAs, more than 50 percent of whom are poor. The project interventions will benefit them in several ways, giving them (i) the ability to undertake collective planning and decision making, (ii) the ability to exercise empowerment by obtaining financing for community development initiatives, and (iii) new employment opportunities through the income-generating activities. The overall impact will be an improvement in the standard of living of these people and mutually reinforcing and sustainable interactions with the PAs and buffer zones adjacent to their communities.

89. The preceding benefits are largely nonquantifiable. A partial economic analysis was conducted focusing on the project interventions associated with ecotourism development - mainly the activities covered in components A and B of the Project. All costs were broken into their traded, nontraded, labor, and tax factors and converted to import parity prices. For nontradables, a standard conversion factor of 0.9 was applied to derive economic prices. A shadow wage rate factor of 0.81 was used to derive the economic cost of labor. Only the direct revenues from ecotourism and Government taxes accruing from the sale of goods and services developed by support zone communities were considered in the analysis. The benefit stream from national tourists was calculated on the basis of the willingness to pay for wildlife-based recreational opportunities, derived from a study conducted in Sri Lanka[29] in 1997. The data gave an economic internal rate of return estimated at 18 percent.

[29] Silva, K.A.D.I., and H. B. Kotagama. 1997. An Optimal Fee for Entrance to Udawalawe National Park: An Assessment. *Tropical Agric. Res.* 9:317-329.

C. Social Dimensions

90. The Project will positively affect the lives of, initially, 40,000 households or 180,000 people living in 192 villages near the seven selected pilot PAs.[30] The people living in rural areas around PAs have, on average, the least secure livelihoods in Sri Lanka. They also have the least influence on public investment, and the fewest opportunities to participate fairly in rewards flowing from private investment. The Project will establish mechanisms that will systematically assist these people. Its strategy for social progress is both participatory and flexible, based on an approach that is process oriented and will be developed adaptively during the Project. The Project will strengthen the target communities, and by so doing encourage and enable them to become agents of their own development and equal partners in benefit-sharing arrangements.

91. Benefits will flow from the capture of incremental resources by communities that are better able to articulate their development priorities to potential funding agencies and investors. About 200 communities in the pilot areas will undergo the PACT action-planning process during the Project, with a steady increase in scope and impact thereafter due to the permanent nature of the PACT and the irreversible effects of environmental education, partnership building, and community empowerment. Other local benefits will arise from project activities that promote ecotourism, attract additional visitors, and increase the demand for accommodation, guides, and other goods and services. The resulting, cumulative social benefits in the areas around PAs will be widespread, and targeted to the most needy. While the Project does not include a component specifically targeting women, the facilitating NGOs/CBOs will be trained in such a way as to ensure equal benefits and participation for men and women. Female-headed households will be targeted as part of the most needy groups.

92. The interests of broader society will be served by the Project in several more general ways. First, the Project will promote the grassroots skills and relationships that are needed to make decentralized systems of governance work for people, thus reinforcing and improving the effect of a wide range of Government policies. Second, nature-based recreational opportunities will multiply and directly benefit the hundreds of thousands of Sri Lankans who currently crowd the tiny number of available facilities each year. Third, better-run and better-equipped PAs will provide many new opportunities for educational visits by schoolchildren and university students. Finally, improved arrangements for ecological and biodiversity research will allow more of the nation's biological wealth to be documented and used sustainably to diversify the Sri Lankan economy and further enrich its culture.

D. Impact on Poverty

93. The Project is not intended directly, quickly, and on its own to lift large numbers of people out of poverty. Instead, it will complement direct transfers to the poor by strengthening the ability of their communities to mobilize and use new resources from a wide range of government and nongovernment grant, credit and public investment programs, and those from other funding agencies. By promoting the cohesion and articulacy of target communities, providing them with a powerful governmental ally through partnership with DWLC, and forums for making their case to divisional secretaries and other powerful decision makers, it is expected that both their overall economic efficiency and ability to capture investments will increase markedly. This will be added to the effect of some direct employment, but more significantly to the impact of extra opportunities for employment and self-employment associated with

[30] The surveys undertaken in the pilot PAs during project processing did not detect any communities living within the PAs. Therefore, no resettlement is envisaged under the Project. Should, however, resettlement become necessary during project implementation, ADB safeguard policies in this regard will apply.

increased visitor flows, and investment by the Project and the private sector in ecotourism development.

94. The Project's beneficial impacts on poverty and deprivation among local people are expected to flow mainly from (i) 25,000 person-days of direct employment at DWLC as laborers; (ii) increased employment from private-sector investment in ecotourism operations in and around PAs; (iii) increased opportunities for self-employment by local people in providing ecotourism services; (iv) increased income from the sale of handicrafts and other goods and services to visitors; (v) implementation of environmentally sound community activities funded by outreach grants from PA managers and grants from the PACT; (vi) relief of the human-elephant conflict, including reduced incidence of damage to life and property and speedier settlement of compensation claims; and especially (vii) increased social cohesion and communal ability to mobilize resources that are available from the Government and other sources to meet newly articulated community development needs. The overall effect of the Project is expected to be profoundly enriching for the poorest and least powerful members of local society.

E. Risks

95. The Project risks are (i) prolonged implementation delay due to inadequate availability of a counterpart budget and the limited capacity of the EAs, (ii) inadequately addressed beneficiary involvement, (iii) inadequate law enforcement within PAs, and (vi) lack of political and bureaucratic support. To minimize these risks, the project design (i) takes into account the fact that DWLC has already been strengthened by UNDP/GEF; (ii) promotes benefit-sharing, direct and indirect employment, and capacity building in and partnerships with local society; (iii) contains a pilot investment process; (iv) promotes interagency cooperation to reduce planning failure, and will address underlying ecological and social problems whatever their origin; (v) promotes strong, adaptive, and flexible PA management and stronger enforcement capabilities; (vi) promotes consistent national support by DWLC and other agencies, including policy and legislative development; (vii) allows for exposure to international experience among selected government and nongovernment institutions; and (viii) mandates regular, independent, comprehensive, and public impact assessments.

V. ASSURANCES

A. Specific Assurances

96. The Government has given the following assurances, in addition to the standard assurances, which have been incorporated in the legal documents:

(i) Within one year of loan effectiveness, the Government will have prepared and submitted to Parliament a bill for wildlife conservation, amending the Fauna and Flora Protection Ordinance in accordance with the National Wildlife Policy of 2000.

(ii) The BCS within MFE will form a multisectoral task force comprising expert members to develop a BCAP, consistent with the National Wildlife Policy of 2000 and reflecting the concerns of all relevant government and nongovernment stakeholders. The Government will ensure that the BCAP will have been prepared and published within three years of loan effectiveness.

(iii) No disbursements for component D of the Project will be made until (a) arrangements satisfactory to ADB have been made with one or more cofinanciers, in addition to GEF, for the contribution of an amount equivalent to at least $4.0 million to the Protected Area Conservation Trust (PACT), and (b) the PACT will have been established in a form satisfactory to ADB and the Government and a board of trustees and/or board of directors, as the case may be, acceptable to ADB will have been appointed.

(iv) The Government will refrain from any action that may interfere with the independence of the PACT.

(v) The Government will ensure that, to the extent allowed under the laws of Sri Lanka, relief from any taxes and levies will be granted in respect of the funds of the PACT, including income earned on such funds, and any assets of the PACT. In the event of a change in the law that would adversely affect the tax regime applicable to the PACT, the Government will make its best efforts to assist in restructuring the PACT in such a way that its holdings and income earned therefrom will not be subject to any taxes and levies.

(vi) The Government will cause at least 50 percent of the revenues generated by DWLC's PAs to be transferred to the Wildlife Preservation Fund for the purpose of (a) capital expenditures of DWLC, (b) community awards and outreach programs of those communities that reside in the PAs impact zone; (c) DWLC staff incentives and awards; (d) casual wages and field staff allowances; and (e) financing the elephant damage compensation program, until it has been replaced by an appropriate insurance scheme.

(vii) DWLC will maintain one separate, interest-bearing account for the Wildlife Preservation Fund and will channel all revenues for and expenditures from the Wildlife Preservation Fund exclusively through this account. The Government will have this account audited annually by independent auditors.

(viii) Within one year of loan effectiveness, DWLC will establish and commence implementation of a system to delegate the authority and responsibility for the preparation and management of annual work plans and related budgets for the field programs to the regional offices and protected area field units, under the supervision of the additional director, technical. Within three years of loan effectiveness, the heads of regional offices will have the level of deputy director.

(ix) The Government will appoint all new permanent wildlife guards and temporary laborers to be stationed in a pilot PA from among people residing within five kilometers of the boundaries of the same area.

(x) The Government will ensure that annually, DWLC prepares a report on national wildlife status and trends and that this report will be publicly available.

(xi) Within six months of loan effectiveness, the Government will have engaged a consortium of international NGOs acceptable to ADB to undertake baseline surveys in the first year and independent impact assessments in the third and sixth years of the Project.

(xii) Within two years of loan effectiveness, DWLC will have commenced the implementation of contracts with local communities/private sector for their environmentally low-impact operation of all DWLC tourist bungalows retained for tourist purposes. Such contracts will be on an arm's-length basis and on terms and conditions satisfactory to the Government and ADB.

(xiii) DWLC will prepare, through a fully participatory process involving the local communities - both men and women - an operational plan to survey, delineate, demarcate, and map the boundaries of the pilot PAs. The boundaries will be established in such a way that no existing villages would lie within the PA boundaries. To the extent that there would be a need to relocate people living within the boundaries of a pilot PA, DWLC will prepare and implement a resettlement plan in accordance with the ADB Handbook on Resettlement and satisfactory to ADB.

B. Conditions for Loan Effectiveness

97. Prior to loan effectiveness, the following will be completed:

(i) The Government will have established the PMU with the director of DWLC as project director, and the additional director, technical as project coordinator; and appointed administrative, financial, clerical, and other support staff required to operate the PMU.

(ii) The Government will have established a separate, interest-bearing account for the operation of the Wildlife Preservation Fund and will have transferred all monies belonging to the Wildlife Preservation Fund into that account.

(iii) The GEF grant will have been approved by the GEF.

APPENDIXES

SUPPLEMENTARY APPENDIXES

(available on request)

PROJECT FRAMEWORK

Design Summary	Performance Targets	Monitoring Mechanisms	Assumptions and Risks
1. Goal Enhance protected area and biodiversity conservation in Sri Lanka for the benefit of current and future generations	• Sound management achieved by Yr 3 • Improved welfare in surrounding communities • Reduced illegal activity	• Project impact assessment • National statistics	• High level of political commitment to protected areas • Effective coordination between World Bank and the Asian Development Bank
2. Purpose Strengthen protected area management and develop operational partnerships with local communities and other stakeholders to reduce illegal use of park resources	• New legislative and policy frameworks approved by end - 2001 • Institutional reforms implemented by Yr 1 • Enhanced management of pilot sites by Yr 6 • Sustainable funding mechanism operating by Yr 3 • Private sector, nongovernment organization (NGO) and community partnerships established by Yr 4 • Conflict resolution process established by Yr 3 • Reduced human-elephant conflict by Yr 6 • Raised awareness of benefits of PAs in surrounding communities by Yr 6	• Government gazette notices • Project reports • Sustainable funding mechanism audits • Project impact assessment • Socioeconomic indicators in buffer zone communities • Partnership agreements • Villager interviews • Area-wide plans • Project progress reports • ADB review missions • Project completion report	• Department of Wildlife Conservation (DWLC) can be transformed into a high-quality protected area management agency • Legislative and policy framework is approved • A nongovernment trust for communities can be established, maintained, and locally effective • Stakeholders participate
3. Outputs **3.1 Enhancing DWLC Institutional capacity** 3.1.1 Management capacity enhanced	• Annual work plans formulated by Yr 1 • New accounting procedures established by Yr 1 • Headquarters and regional offices refurbished by Yr 4 • Communications network established by Yr 2 • 7 regional offices with consolidated budgets by Yr 3 • Information Technology and web site developed by Yr 2 • Research priorities established and addressed by Yr 4	• Project progress reports and ADB review missions • Financial records • Project impacts and trends assessment. • Meeting records	• Adequate leadership, funds, management, and human resources are available for institutional reform • Government accepts functional reorientation of DWLC
3.1.2 Technical capacity enhanced	• Technical units strengthened • 383 training courses completed, providing 55,000 person-days of training by Yr 6 • Twinning with international NGO • 75 reciprocal visits with overseas partners • Project monitoring capacity established • 286 sector workshops organized and attended by Yr 6	• Government records • Project impact assessment • Progress reports • Travel records • Training curricula	• Qualified staff are available and can be retained • Government resources reformed technical units • Training is available • Agencies cooperate in workshops • Suitable international NGOs are contracted for impact assessment
3.1.3 Ecotourism capacity enhanced	• 2 ecotourism staff added to VSE unit by Yr 2 • Strategic ecotourism plan prepared by Yr 2 • 4 ecotourism courses delivered by Yr 4 • Ecotourism policies prepared by Yr 2	• Project impact assessment • Progress reports • Training curricula	• Appropriate staff are available and appointed • Training is effective
3.1.4 Strengthen wildlife biodiversity monitoring and evaluation	• NGO consortium contracted by end of Yr 1 • Monitoring system designed and implemented by Yr 2 • Monitoring reports produced in Yr 4 and 6	• Monitoring reports • Project progress reports and ADB review missions	• Sufficient change in biota can be identified by midterm review

Design Summary	Performance Targets	Monitoring Mechanisms	Assumptions and Risks
	• 10 sector staff trained in biodiversity monitoring system by Yr 3		
3.2 Participatory Adaptive Management of Pilot Protected Areas 3.2.1 Existing PA management plans revised and consolidated	• Plans agreed upon for 7 pilot sites with full stakeholder participation by Yr 3 • 3-year work plans developed by Yr 3	• Project progress reports and ADB review missions • Biodiversity project monitoring and evaluation reports	• Information exists to devise plans • Stakeholders cooperate • Plans address key issues • Management is directed by plans
3.2.2 Adaptive management systems implemented	• Adaptive management experiments devised for key issues by Yr 3 • Management actions reflect adaptive learning by Yr 4 • Priority strategic threats at each site managed by Yr 5 • Second priority threat defined and management initiated by Yr 4	• Project impact assessment • Project progress reports and ADB review missions	• Technical and management capacities are adequate
3.2.3 Management of pilot protected areas facilitated	• Boundaries marked and surveyed (340 kilometers, Yr 2-4) • Reduction in area of encroachment by 25% by Yr 6 • Electric fencing of 253 km by Yr 6 • Livestock numbers reduced by 50% by Yr 6 • Poaching prosecutions increased 25% by Yr 5 • Illegal felling reduced by 20% by Yr 6 • Firewood collection reduced to zoned areas by Yr 5 • Gemming reduced 50% by Yr 6 • Outreach teams and educational materials developed and distributed by Yr 6 • Outreach grants dispensed starting Yr 2 • Raised awareness of park benefits by Yr 6	• Legal documents • Project impact assessment • Remote images • Court records • Villager interviews • Project progress reports and ADB review missions.	• Boundaries are agreed upon • Boundary demarcation leads to reduced encroachment • Survey Department capacity • Better enforcement leads to resource conservation • Political and judicial support is available • Guard incentive system is effective • DWLC develops outreach skills • Communities will cooperate in joint activities
3.2.4 Ecotourism products and services developed	• Park ecotourism plans prepared and implemented by Yr 3 • Visitor services specialist appointed at each park by end -Yr 1 • Visitor centers (6), nature trails, towers, hides, camp grounds constructed or refurbished by Yr 4 • Recreation possibilities doubled by Yr 5 • 4 concessions developed and implemented by Yr 5 • Educational materials produced by Yr 2 • Visitor satisfaction levels rise by 25% by Yr 5 • International park visitation doubled that in 1999 by Yr 6	• Review of completed plans • Park records • Visitor feedback surveys • Concessions agreements • Project progress reports and ADB review missions	• Legislative and policy reforms are implemented • Carrying capacity limits are not violated • No resistance to greater use of parks is met • No resistance to private sector and community partnerships exists • Security problems do not arise • Increased visitation will lead to increased economic opportunities for locals • Training improves capacities
3.3 Collaborative Conservation Planning 3.3.1 National Biodiversity Conservation Action Plan prepared	• Cross-sectoral team established by Yr 1 • Plan approved by Yr 3 • Annual priority review process established	• Project impact assessment • Project progress reports and ADB review missions	• Cooperation is forthcoming
3.3.2 Protected area system reviewed and enhanced	• Conservation estate assessed • Gaps identified by Yr 2 • Public and private provision strategies developed	• Gazette notices • Legal documents • Project reports	• Adequate inventory on which to base gap analysis exists • Institutional cooperation exists • Private sector cooperation exists
3.3.3 Endangered species / recovery plans prepared	• Crosssectoral team established by Yr 1 • Priority species identified by Yr 4 • Recovery plans produced by Yr 5	• Project reports	• Institutional cooperation is forthcoming • Sufficient data exists for priority identification

Design Summary	Performance Targets	Monitoring Mechanisms	Assumptions and Risks
3.4 Protected Area-Community Partnership Building 3.4.1 Sustainable financing for participatory community mobilization and planning established	• Endowment trust spends less than 20% on administration and a maximum of 25% reinvestment by Yr 6. • Contractor institutional strengthening completed (5 regional programs delivered in Yr 3-4) • Proposals received from at least 30% of institutions participating in institutional strengthening program by Yr 4 • Protected Area Conservation Trust (PACT) twinned with other trust • More than 150 Impact zone villages mobilized before Yr 6 and 100 local community microplans developed with local resources of at least equal the grant value • Community-agency agreements specifying rights and responsibilities • Area-wide plans developed with local and provincial government active involvement	• Trust deed • Trust operational manual • Trust records • Trust accounts	• Suitable NGOs participate • NGOs have sufficient capacity • Local communities show absorptive capacity • Local communities are willing to participate • Local resources can be mobilized • Matching cofinancing can be mobilized
4. Activities 4.1 Institutional capacity • Training • New units/appointments • Strengthen units • Infrastructure improved • Telecommunications improved • Project management unit established	**Inputs** • Total base costs $13.9 million. • Civil Works $1.3 million • Vehicles $0.4 million • Equipment $2.8 million • Training and Workshops $2.0 million • Land acquisition $1.7 million • Media, Publications, IT, Research $0.6 million • NGO Contracts $0.9 million • Consultants $3.6 million • Incremental Recurrent $0.6 million	• Progress reports and review missions • Project impact assessment	• Enhanced capacity will lead to better management • New staff are available • Management information system works
4.2 Adaptive Management • Boundaries surveyed • Management plans revised • Training • Park infrastructure, services, and information improved • Relations with local communities improved • Adaptive management implemented • Ecotourism developed	• Total Costs $8.9 million • Civil Works $3.7 million • Vehicles $0.5 million • Equipment $1.4 million • Training and Workshops $1.4 million • NGO Contracts $0.5 million • Media, Publications, IT, Research $0.3 million • Recurrent $0.5 million	• Progress reports and review missions • Project impact assessment	• Better infrastructure and equipment lead to better management • Management addresses key issues in adaptive manner • Planning is needed to guide management • Training is appropriate
4.3 Collaborative Conservation Planning • Biodiversity Conservation Action Plan produced • System plan developed • Endangered species recovery plans produced	• Total Costs $1.5 million. • Vehicles $0.05 million • Equipment $0.03 million • Training and Workshops $1.1 million • Media, Publications, IT, Research $0.3 million • Recurrent $0.04 million	• Project impact assessment • Progress reports and review missions	• Cooperation is forthcoming
4.4 Protected Area-Community Partnership Building • Trust established • NGO strengthening • Delivery systems established • Grants dispensed • PACT twinning	• Total Costs $10.1 million • Vehicles $0.14 million • Equipment $0.07million • Endowment $8.0 million • Training and Workshops $0.1 million • NGO Contracts $0.2 million • Media, Publications, IT, Research $0.01 million • Labor, Beneficiaries $1.1 million • Recurrent Costs $0.4 million • Interest Charges $0.4 million • Total Project Cost $34.7 million	• Project impact assessment • Progress reports and review missions	• Capacity exists for effective program delivery

EXTERNAL ASSISTANCE TO THE NATURAL RESOURCES AND ENVIRONMENT SECTORS

Project Title	Duration	Country/ Source	Amount (million)	Project Objectives	Area of Operation
Environment and Natural Resources					
Reforestation Watershed Management Project	1980 – 1988	USAID	$16.2	To conserve soil and water values in the upper Mahaweli by reforestation of 8,500 hectares	Upper Mahaweli including Kandy, Nuwara Eliya and Matale
Community Forestry Project	1982-1991	ADB	$10.0	To supply fuelwood and timber through reforestation, and for protection and production	Badulla, Kandy, Matale, Nuwara Eliya, and Batticaloa
Forest Resources Development Project	1983-1986	World Bank FINNIDA	$11.4	To prepare a Forestry Master Plan, to conduct a forest inventory and establish a database	National
Wetland Conservation Project	1991- 1997	Netherlands	$3.5	To assist in conservation and management of Sri Lanka's wetlands to safeguard biological diversity	National, 25 selected wetland areas
Integrated Resources Management Program	1998-2002	Netherlands	$2.8	To implement a model for conservation-cum-development with stakeholder participation	Muthurajawela marsh and Negombo lagoon
Forestry Sector Development Project	1991-1996	IDA ODA FINNIDA UNDP	$46.4	To prepare a revised Forestry Sector Master Plan and National Forest Policy, to apply intensive management of plantations and natural forests	National
Wildlife Conservation and Protected Area Management	1994-1999	GEF-UNDP	$4.0	To build institutional capacity in protected area management, and prepare management plans	National protected area system
Estate Forest & Water Resources Development	1998-2000	GTZ	$2.0	To develop the potential for wood resources in the plantation sector, and to assist plantation estates	Kandy, Matale, Nuwara Eliya and Ratnapura districts
Upper Watershed Management Project	1998-2004	ADB	$16.6	To rehabilitate, sustainably manage, and protect critical watersheds to improve incomes of project beneficiaries	Critical watersheds including Uma Oya in Nuwara Eliya, Badulla and Ratnapura districts.
Coastal Resource Management Project	1999-2005	ADB	$40.0	To enhance environmental protection of coastal areas and contribute to poverty reduction	Puttalam, Gampaha, Colombo, Kalutara, Galle, Hambantota
ADTA. Sustainable Natural Resource Management for Development	2000-2001	ADB	$1.0	To develop appropriate institutional arrangements to integrate natural resource management into development programs	National
Conservation of Threatened Species in the Rain Forest	1999-2004	GEF-UNDP	$0.8	To strengthen community-based organizations involved in enterprise development	Sinharaja and Kanneliya
Conservation & Sustainable Use of Medicinal Plants	1998-2002	GEF-World Bank	$4.9	To conserve globally and nationally significant medicinal plants, their habitats, and sustainable use.	National, with specific interventions at Bibile, Ritigala, Naula, Rajawewa and Kanneliya
Rural Development to Enhance Environment					
Kurunegala North-West Dry Zone Integrated Rural Development Project	1993-2000	GTZ/IFAD	$12.2	To conduct integrated rural development to address district-level problems according to diverse objectives	Kurunegala District
Southern Province Rural Development Project	1991-1999	ADB	$38.0	To conduct IRDP in districts of Southern Province to reduce poverty and enhance environmental conditions	Galle, Matara and Hambantota districts
North Central Province Rural Development Project	1996-2004	ADB	$20.0	To conduct IRDP in districts of North Central Province to reduce poverty and enhance environmental conditions	Anuradhapura and Polonnaruwa districts

ADB = Asian Development Bank FINNIDA = Department for International Development Cooperation, GEF = Global Environment Facility,
GTZ = German Agency for Technical Cooperation, IDA = International Development Association, IFAD = International Fund for Agricultural Development,
ODA = official development assistance, UNDP = United Nations Development Programme, USAID = United States Agency for International Development

THE ROLE OF THE GLOBAL ENVIRONMENT FACILITY (GEF) IN THE PROJECT

A. Broad Development Objective

1. Sri Lanka is a small (65,610 square kilometers [km^2]) but biologically rich tropical island, the ecosystems of which sustain important irrigation and hydropower facilities against floods, landslides, soil erosion, and siltation, and contain abundant biodiversity resources that provide numerous use values (e.g., in tourism and traditional medicine) as well as option, bequest and existence values. The protected area (PA) system comprises 143 units totaling 9,700 km,^{2} or 15 percent of land area, of which 73 units (85 percent by area) are managed by the Department of Wildlife Conservation (DWLC). The Project's development objective is to conserve wildlife biodiversity and to help protect the key elements of Sri Lanka's environmental infrastructure, and thus avert national economic losses and improve local livelihoods. Key performance indicators (KPIs) include (i) reduced rates of ecosystem exploitation, depletion and loss of biodiversity; and (ii) establishment of strong and adaptive systems to reduce poverty, strengthen communities near PA boundaries, manage PAs, and build and maintain interinstitutional partnerships.

B. Rationale for GEF Involvement

2. Sri Lanka is considered to be the most biodiverse country in Asia per unit area, and is part of a global biodiversity hot spot. About half of all its native species are endemic, including all freshwater crabs, 90 percent of amphibians, 25-75 percent of reptiles and invertebrates depending on taxon, around 50 percent of freshwater fishes, 26 percent of flowering plants, 14 percent of mammals, and at least as many nonmigrant birds. Species richness is extreme, and the island also provides critical habitat for many internationally mobile species, including 5 species of endangered marine turtle, about 100 species of waterfowl, and many other migratory birds. This wild biodiversity is complemented by genetic resources of cultivated and other useful plants, with hundreds of distinct varieties of rice, pepper, cardamom, betel, grain legumes, root and tuber crops, vegetables of the Cucurbitaceae and Solanaceae, and fruit crops including banana, mango, and citrus.

3. The Project's global biodiversity objective is to protect ecosystems with high levels of species richness and endemicity by relieving the threats to them and associated root causes of poverty, planning failure, alien weed invasions, and institutional weakness, and hence to avert significant erosion of global biodiversity. Relevant KPIs include (i) establishment of an effective process to encourage and enable rural communities close to PA boundaries to seek environmentally sustainable development; (ii) enhancement of DWLC's institutional capacity to manage PAs; and (iii) institutionalization of new processes for dialogue, partnership-building, and benefit sharing among PA communities, PA managers, and natural resource management institutions.

4. Global benefits from the Project will flow from (i) survival of endemic lineages, species, and higher taxa that would otherwise go extinct; (ii) survival of ecosystems that are under threat elsewhere; (iii) maintenance of populations of internationally mobile species, including migrant birds throughout Eurasia and marine turtles; (iv) development and testing of replicable conservation process models[1] of direct relevance to other GEF-supported initiatives throughout the world; and (v) enhanced international linkage and shared learning among conservation agencies and nongovernment organizations (NGOs).

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[1] Sri Lanka is the most densely populated country among the biodiversity hot spots.

5. These global benefits are mostly unquantifiable, but are highly significant owing to (i) the high prevailing levels of species richness and endemicity within Sri Lankan ecosystems; (ii) the diversity of these ecosystems and the relatively soluble nature of threats to them; (iii) the large numbers of migrating birds and nesting turtles observed routinely in Sri Lanka; (iv) the innovative and holistic nature of the project design, and its integration with emerging policy and law; and (v) the eagerness of Sri Lankan conservationists to interact with selected foreign institutions and the mutual relevance of their experience.

6. The Project is compliant with the GEF Operational Strategy in the focal area of biodiversity, and will contribute positively to all relevant operational programs, specifically those on arid and semiarid ecosystems (OP1), coastal, marine and freshwater ecosystems (OP2), forest ecosystems (OP3), and mountain ecosystems (OP4). The Project fully agrees with the GEF aims of (i) conserving biodiversity and tropical forests, (ii) reducing net greenhouse gas emissions, (iii) maintaining genetic resources, (iv) empowering the principal groups and promoting local participation in environmental management, (v) building national capacity to mainstream biodiversity conservation, and (vi) developing international best practices and promoting their worldwide replication. The various components of the Project are, however, interlinked and mutually dependent, and need to be advanced simultaneously to achieve significant global, national, and local benefits. The GEF will therefore contribute to all project components, but GEF resources will be allocated to investments linked directly to the most significant global benefits and where intergenerational equity is expected to be derived.

7. The GEF grant will finance (i) consulting services to the Project Management Unit and the Protected Area Conservation Trust (PACT); (ii) 50 percent of the trust endowment; (iii) partnering arrangements for capacity building and performance monitoring between the PACT, DWLC, international NGOs, and overseas institutions; (iv) biodiversity-related research contracts; (v) pilot actions to expand and de-fragment the PA system; and (vi) pilot actions to establish adaptive management as the norm to address specific threats. The Project addresses serious threats to globally important ecosystems and biodiversity resources. Although committed to conserving these resources, the main priority of the Government is economic development to fund a fiscal deficit and generate additional employment opportunities. In addition, it is in the national interest to attain sustainable levels of natural resource use within PAs and benefit sharing with local populations to reduce the incidence of poverty. The GEF will support activities that are incremental to these objectives. In particular, it will contribute to strengthening DWLC to the point where protected ecosystems can be managed effectively and consistently with global biodiversity objectives in mind, thus enabling the Government to strengthen its long-term capacity for biodiversity management. Within the seven pilot PAs, GEF support will help ensure the consolidation and protection of ecosystems that include areas with the highest possible priority from a global biodiversity perspective. The pilot sites will also be used, with GEF support, to validate and field-test new management, partnership building, and benefit-sharing arrangements for replication throughout the PA system, including a strategically vital, long-term process of environmental education, community strengthening, and conflict resolution that is required to address the root causes of biodiversity loss in Sri Lanka.

8. Outside the pilot sites, GEF support will help ensure that global biodiversity considerations are incorporated within a range of strategic activities, including innovative efforts to expand and de-fragment the PA system in the highly biodiverse wet zone, to prepare and implement plans for the recovery of endangered species and to undertake an inclusive process to prepare a Biodiversity Conservation Action Plan. These will be the first processes, agreed to by both sides, to build operational partnerships between DWLC and the Forest Department. Thus, GEF support will allow full participation of all stakeholders in finding the best ways to

conserve biodiversity while maximizing sustainable resource use. Finally, GEF will support a monitoring and evaluation system that operates at the two independent levels of project specificity and PA specificity. Most global benefits of the Project are consequences of the national and local benefits being achieved, but by themselves the latter do not necessarily justify a loan for a project of the scale, priority and duration that is needed. This dilemma can be resolved through partnership, in which the Asian Development Bank's (ADB's) involvement will unlock global environmental benefits that would not otherwise be available to the GEF project portfolio of national and local benefits, and vice versa. Despite the commitment of the Government to biodiversity conservation, it is unlikely that complementarity of national and global concerns and investments can be mobilized against current threats without a direct GEF grant.

C. Quantification of GEF Contribution

9. **Business as Usual (BAU) Baseline**. The BAU baseline assumes continued investment at approximately current levels by Government and aid agencies in DWLC and ecosystem protection. It assumes continued institutional weakness and isolation by DWLC, so there is no reason to expect that, without the Project, the Fauna and Flora Protection Ordinance of 1937 will be amended or replaced, that the National Wildlife Policy of 2000 will be implemented, or that DWLC will decentralize genuinely or begin to cooperate with other government agencies, communities, NGOs, or with private enterprise. Under these circumstances, there would be continuing erosion of ecosystem resources within PAs, and continuing erosion of support for PAs among the people living around them. DWLC would continue in a demoralized, reactive mode. Meanwhile, irreversible damage would be done to the ecosystem and biodiversity resources. Implementation of the BAU baseline over the six years of the Project is expected to cost approximately $46 million.

10. **Sustainable Development (SD) Baseline**. The SD baseline adds to the BAU baseline continued investment by Government and aid agencies in environmental education and community development around protected areas, and sustainable development initiatives in support of this. The level of such additional investment is assumed to include the relevant ADB loan component of the Project, since this is justified by the national interest and would be expected to attract Government financing. Under the circumstances, there would be only weak capture of global benefits owing to the failure to interlink local, national, and global concerns, and priorities and interests, with a consequent loss of complementarity, synergy, and international relevance. Implementation of the SD baseline over the six years of the Project is expected to cost approximately $64 million

11. **GEF Alternative**. The GEF alternative scenario adds to the BAU and SD baselines those activities that are designed to achieve the Project's global biodiversity objectives, and that are expected to generate global benefits. Implementation of the GEF alternative scenario over the six years of the Project is expected to cost approximately $80 million.

12. **Incremental Cost of GEF Alternative**. The estimated cost of the BAU baseline is $46.31 million, that of the SD baseline is $64.19 million, and that of the GEF alternative is $79.96 million, resulting in an incremental cost of $15.77 million (Table A3). The GEF is asked to fund $10.2 million of the project cost.

Table A3: Incremental Cost Matrix

Area Relevant to the Project	Cost Category	Cost ($ million)	Domestic Benefit	Global Benefit
Component 1: Enhancing Institutional Capacity for Protected Area Management				
A. Institutional maintenance	Business as usual (BAU) baseline	0.65	Conservation activities yield some national social and economic benefits.	Losses of endemic species and decline in internationally mobile populations are at lower rates than otherwise.
B. Addition of institutional development in the national interest	Sustainable development (SD) baseline	10.65	Enhanced conservation activities yield greater national social and economic benefits.	No change
C. Addition of institutional development in the global interest	GEF Alternative	13.84	No change	Rate of loss of endemic species and decline of migrant populations are greatly reduced.
(C-B)	**Increment**	**3.19**		
Component 2. Participatory Adaptive Management of Pilot Protected Areas				
A. Management of seven pilot protected areas (PAs) (70% of PA system costs now)	BAU baseline	3.15	Conservation activities yield some national social and economic benefits.	Losses of endemic species and decline in internationally mobile populations are at lower rates than otherwise.
B. Addition of enhanced pilot PA management in the national interest	SD baseline	10.77	Enhanced conservation activities yield greater national social and economic benefits.	No change
C. Addition of enhanced pilot PA management in the global interest	GEF Alternative	12.06	No change	Rate of loss of endemic species and decline of migrant populations are greatly reduced.
(C-B)	**Increment**	**1.29**		
Component 3: Collaborative Conservation Planning				
A. Interagency collaboration (IAC) in environment sector	BAU baseline	11.56	Some national benefits come from IAC in the environment sector.	Some global benefits come from IAC in the environment sector.
B. Addition of IAC in the national interest	SD baseline	11.82	Enhanced national benefits come from IAC in the environment sector.	No change
C. Addition of enhanced IAC in the global interest	GEF Alternative	13.01	No change	Greatly enhanced global benefits from IAC in the environment sector.
(C-B)	**Increment**	**1.19**		

Area Relevant to the Project	Cost Category	Cost ($ million)	Domestic Benefit	Global Benefit
Component 4: Sustainable Financing for Community Partnership Building				
A. Community development around PAs	BAU baseline	29.70	Reduced poverty and increased local wealth creation generate social and economic benefits.	Some reduction occurs in the rate of loss of endemic species and decline of migrant populations.
B. Addition of PA community development in the national interest	SD baseline	29.70	National social and economic benefits are enhanced.	No change
C. Addition of PA community development in the global interest	GEF Alternative	39.80	No change	Rate of loss of endemic species and decline of migrant populations are greatly reduced. Replicable models for community-strengthening and partnership-building to promote conservation are available.
(C-B)	Increment	**10.10**		
Not covered by the Project				
A. Management of PAs not included in the Project (30% of PA system costs now)	BAU baseline (A)	1.25	Conservation activities yield some national social and economic benefits.	Losses of endemic species and decline in internationally mobile populations are at lower rates than otherwise.
B. Addition of PA management in the national interest	SD baseline	1.25	No change	No change
C. Addition of PA management in the global interest	GEF Alternative	1.25	No change	No change
(C-B)	**Increment**	**Nil**		
	Total		Notes	
	BAU baseline	46.31		
	SD baseline	64.19	Excludes $0.4 million interest charge on ADB loan	
	GEF Alternative	79.96		
	Increment	**15.77**	Excludes $0.33 million Project Development Fund Block B grant for project preparation. Includes $4.0 million from cofinancing, $0.7 million from ADB, and $0.9 million from beneficiaries	

PILOT PROTECTED AREAS, ANALYSIS OF THREATS AND ROOT CAUSES, AND THE ADAPTIVE THREAT MANAGEMENT PROCESS

A. Introduction

1. The following paragraphs summarize the nature of the pilot protected areas (PAs), which are listed in descending order of global biodiversity value. The analysis of PA threats follows with a description of root causes, and the project response to them. The flow chart describes the adaptive threat management process that will be applied by the Project.

B. Pilot Protected Areas

2. **Peak Wilderness Sanctuary (22,380 hectares [ha])**. Located in the Central Highlands, Peak Wilderness rises steeply from about 50 meters (m) in the southern lowlands, to 600 m from which Adam's Peak rises to 2,238 m. It is one of the most valuable conservation areas in Sri Lanka, with the high numbers of endemics, notably birds, reptiles, and amphibians. Adam's Peak is sacred to four world religions and attracts about 2 million pilgrims each year. Management priorities include marking the remaining boundary and defending against encroachment, and establishing infrastructure in response to the long shape and divided access of the PA. Access paths and the summit of Adam's Peak need interpretation materials and supervision by DWLC staff. Biodiversity inventories are needed to support education, monitoring, and bioprospecting.

3. **Horton Plains National Park (3,160 ha)**. The park has two of Sri Lanka's three highest peaks, but is mostly a gently undulating plateau at about 2,100 m. Most of the park is covered by dense cloud forest, with 50 percent endemism among woody plants, and including wild relatives of cultivated pepper, guava, tobacco, and cardamom. Among the mammals are two monotypic genera of endemic shrews. The birds include numerous montane endemics and wintering migrants. The park is a popular destination for visitors, and represents a major opportunity for public education. Exotic plant species including gorse and black wattle are colonizing the park. Management priorities include managing visitors to reduce their impacts and increase the value of their presence to the park and themselves. Equipping the park's visitor center is a high priority, and interpretation facilities will be provided along the paths to World's End and Baker's Fall, and on new, signed nature trails.

4. **Ritigala Strict Natural Reserve (1,528 ha)**. Ritigala is an isolated mountain that rises from the north-central lowlands to 766 m. Varied growing conditions support over 400 plant species, 20 percent of them endemic, 3 known only from this site, and at least another 8 being extinct elsewhere. More than 100 plant species are used in Ayurvedic medicines, and there are elaborate ruins of an ancient hospital and monastery complex. Mammals include endemic and endangered purple-faced leaf monkeys, while the birds include three endemic species. The combination of ecosystem diversity, species richness and endemism, ethnobiological and archaeological interests, and location within the Cultural Triangle all make Ritigala SNR a unique resource for education and ecotourism, with good potential for developing village-based ecotourism. Logging and poaching are common, and there are areas of encroachment. Human-elephant conflict is increasing near the boundaries, and the large numbers of visitors create littering and other problems as well as opportunities for more productive management. Management priorities include providing better services for visitors, and facilities and equipment for DWLC staff.

5. **Bundala National Park (6,216 ha)**. The park is Sri Lanka's only site designated Wetland of International Importance under the Ramsar Convention. It contains key nesting sites for five species of marine turtle. Arid and semiarid terrestrial habitats shelter a wide range of species, including elephants, many other native mammals, star tortoise, and an endemic flying snake. The marshes and channels host populations of an endemic toad, and both mugger and estuarine

crocodiles. Given its concentration of waterbirds and turtle nesting activities, there is considerable scope for ecotourism at the park. Waterbirds depend on the biological productivity of the lagoons, but that, however, is being undermined by the intrusion of freshwater. The park is also being invaded by exotic species, and is subject to grazing by 6,000 cattle and buffalo. Management priorities include solving the underlying ecological problem of freshwater intrusion, eradicating invasive weeds, excluding livestock, and protecting turtle nesting beaches. Ecotourism interventions include improving visitor infrastructure and further development of local nongovernment organization and villager interest in turtle conservation.

6. **Wasgamuwa National Park (39,385 ha)**. The park lies in the central lowlands, and contains one of the largest remaining native forests in Sri Lanka, with 150 known tree species, at least 10 of them endemic and 3 of these being economically important. The known fauna comprises 23 species of large mammals, 163 birds (8 endemic), 35 reptiles (7 endemic), 15 amphibians, 17 freshwater fishes, and 52 butterflies (9 endemic). The park probably contains more wildlife, in terms of species richness, than any part of the Mahaweli region, and offers major opportunities for tourism use. Gem fields left numerous deep pits. An estimated 60,000 domestic cattle and 7,500 buffalo graze in the park. Encroachment of the southern boundary is heavy, and about 2,400 ha of natural habitat has been lost as a result. Invading woody species have become widespread. Local incomes are supplemented by fishing, livestock, and sale of firewood, and all parts of the park are under pressure from about 30 villages that settled near the park in 1980 . Gemstone mining and encroachment create enforcement issues. Other priorities include eliminating livestock grazing, eradicating invasive plants, and resolving human-elephant conflicts.

7. **Minneriya National Park (8,889 ha)**. The park lies in the dry northern plain, and comprises low forested hills that feed the third-century Minnerya reservoir and the modern Giritale reservoir. The core of the park is one of the most biodiverse parts of the country outside the wet zone. It contains a unique concentration of intact ecosystem types that support populations of most dry-zone mammals, including elephants and leopards, while the lakes support a wide variety of waterfowl and at least 31 species of native fish. There is considerable potential for tourism as the park is located along a high visitor flow route in the cultural triangle. The park has an elephant population and scenic landscape around the reservoirs. It is grazed by an estimated 4,000 cattle and buffalo (owned by 15-20 families). Some firewood collection and poaching take place in the park, and human-elephant conflicts occur around at least five villages. Management priorities include a process to eliminate livestock grazing that takes the park's history of legal grazing into account, and development of tourism facilities.

8. **Uda Walawe National Park (30,821 ha)**. Located in the southern lowlands, much of the original semideciduous monsoon forest was cleared by shifting cultivation. Diverse old growth forest is restricted to the northern part of the park, within which riverine stands contain the endemic, endangered tree *Hopea cordifolia*. Among a rich mammal fauna are the endemic golden palm civet, herds of resident and migratory elephants, and a full suite of low-country birds. Some 30,000 cattle graze in the park, thus complicating the resolution of the human-elephant conflict and impacting the park's ecosystems and tourism potential. Exotic plants have invaded many areas, and fishing and poaching are widespread. A priority is to fence an elephant corridor to allow secure migration between Uda Walawe and Lunugamvehera National Park. The Project will also support the development of ecotourism facilities at the existing elephant rehabilitation and reintroduction facility at Uda Walawe.

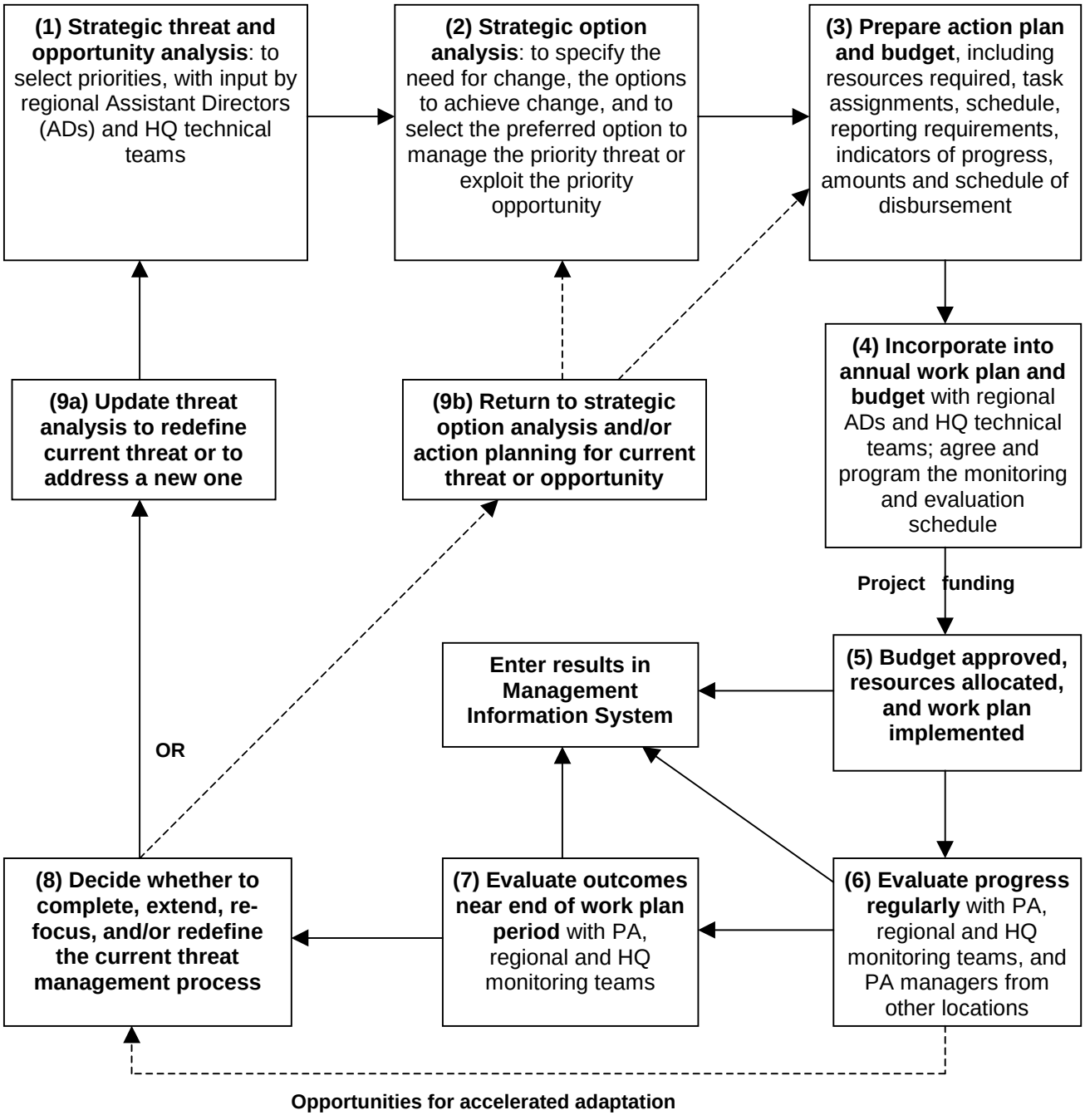
C. Indicative Threat Analysis and Project Response Matrix

Area Characteristics	Threats/Constraints	Root Causes	Project Response
National (6,561,000 ha, rainfall 600-4,000 mm)		**Global value: extreme (*ca* 50% endemicity)**	
(1) Relatively small island with high landscape diversity, distinctive agro-ecological zones: wet, intermediate, dry, arid. (2) Global biodiversity hot spot: Provides critical habitat for migratory species, most biologically rich country in Asia per unit area. (3) Low population growth but high density. Samurdhi recipients (poverty line): national: 22%; rural: 24%. National unemployment: 11%. Rural underemployment: 58%.	Widespread poverty, limited fiscal resources, overexploitation of ecosystems, ecosystem damage, loss of biodiversity and genetic resources, overlapping institutional mandates, lack of planning and management capacity, centralized institutions, weak DWLC at central and field levels.	High population density, obstruction of investment and economic growth, civil unrest and terrorism, archaic legislation, lack of or inadequate policies, inconsistent DWLC leadership, fragile island ecosystems vulnerable to weed invasion.	(1) Strengthening DWLC in operational planning, accounting, monitoring of PA management. (2) Correcting gaps and fragmentation of the PA system in collaboration with other public institutions and the private sector. (3) Creation of a sustainable financing mechanism to promote community strengthening, partnership building, and poverty relief around PAs.
Pilot protected areas (112,371 ha, rainfall 600-4,000 mm)			
(1) Wet-zone highlands (2 sites), dry-zone lowlands (4 sites), arid-zone coastal wetlands (1 site). (2) Pilot sites chosen to reflect biodiversity values, range of management challenges, available knowledge, ecotourism potential, and utility for validating and developing project systems. (3) Poverty levels more than double national rural average (median 52%, range 22-97%).	Encroachment (4 sites), logging (2 sites), mining (2 sites), visitor impacts (3 sites), alien weeds (4 sites), poaching (3 sites), elephant conflict (4 sites), freshwater intrusion (1 site), grazing (4 sites), firewood collection (2 sites), inadequate DWLC capacity (7 sites).	Structural poverty, unreliable livelihoods, external co-optation, community weakness; (7 sites); planning failure (4 sites); self-perpetuating ecological disturbance (4 sites).	(1) **Resourcing the Community Action Planning (CAP) process**: participatory analysis of structural poverty, resources, constraints, and opportunities; community action planning to enhance cohesion and articulacy, and attract incremental public and private investment. (2) **Resourcing the Partnership process**: conflict resolution, community outreach, development of ecotourism opportunities, PA employment, benefit sharing. (3) **Resourcing the Adaptive Management (AM) process**: threat analysis, work planning, regular and final evaluation, adaptive response to lessons learned in overcoming grazing, alien weed invasions, encroachment, poaching, logging, etc.
Peak Wilderness Sanctuary (22,380 ha, rainfall 4,000 mm)			
(1) Wet-zone highland, including sacred Adam's Peak (2,238 m), origin of major rivers supporting irrigation and hydropower schemes. (2) Nation's most valuable conservation area, extreme species richness and endemicity; continuous tracts of altitudinally graded forests.	Encroachment, timber extraction, nontimber forest produce harvesting, gem mining, pilgrim impact (about a million annually), difficult access, problematic supervision.	Poverty (51-94%), lack of environmental awareness, inadequate DWLC capacity.	(1) Zoning, peak summit, (2) boundary marking, (3) management infrastructure, equipment, (4) visitor facilities, (5) anti-littering campaigns, (6) replacing shops with permanent buildings, (7) biodiversity inventory, (8) CAP process, (9) partnership process, (10) AM process.
Horton Plains National Park (3,160 ha, rainfall 4,000 mm)			
(1) Highland plateau with escarpments and two of the nation's three highest peaks, origins for rivers	Forest canopy dieback, invasive alien weeds, litter and waste disposal, crow	Lack of environmental awareness, inadequate	(1) Linkage with other PAs, (2) boundary marking, (3) research and visitor centers, (4)

supporting large irrigation schemes. (2) Montane cloud forest with wet and dry grasslands; high montane endemicity. (3) No settlement, popular tourist attraction, especially World's End drop, and waterfalls.	menace, parking problems, bushfires lit by tourists, illegal camping, inappropriate visitor facilities.	DWLC capacity.	anti-littering campaign, (5) nature trails, footbridges, (6) control of invasive weeds, (7) research on canopy dieback causes, (8) CAP process, (9) partnership process, (10) AM process.
Ritigala Strict Natural Reserve (1,528 ha, rainfall 1,800 mm)			
(1) Isolated mountain in the dry north-central lowland with peak at 766 m. (2) Great variety of growing conditions resulting in high biodiversity and endemicity.	Encroachment, logging, poaching, elephant conflict, visitor impacts.	Poverty (65%), lack of environmental awareness, inadequate DWLC capacity.	(1) Boundary marking, (2) management infrastructure, fencing, equipment, (3) visitor facilities, (4) CAP process, (5) partnership process, (6) AM process.
Bundala National Park (6,216 ha, rainfall 600 mm)			
(1) Complex of shallow brackish water lagoons in the southern arid coastal zone, 0-10 m. (2) Grass flats, scrub and forest stands. High biodiversity values, especially for migratory waterbirds and marine turtles. The nation's only Ramsar Site. (3) Fishing, commercial salt production, other economic activities.	Grazing, invasion by exotic scrub and cactus spp., commercial salt production, freshwater intrusion and declining biological productivity, shell mining, human predation on turtle eggs, poaching.	Poverty (55%), planning failure with regard to disposal of irrigation water, lack of inter-agency coordination, inadequate DWLC capacity and planning.	(1) Park planning, zoning, (2) boundary re-gazetting and demarcation, (3) weed eradication, (4) management infrastructure, equipment, (5) ecotourism development, (6) DWLC-NGO cooperation for turtle conservation, (7) negotiated rearrangement of drainage system, (8) CAP process, (9) partnership process, (10) AM process.
Wasgamuwa National Park (39,385 ha, rainfall 2,000 mm)			
(1) Central dry zone lowlands and hilly ridges, at 76-535 m, along Mahaweli Ganga and amidst large irrigation schemes. (2) Dry mixed evergreen forest and grasslands. High biodiversity values for habitat. (3) Farming, fishing, forest produce collection.	Encroachment, settlement programs in surrounding areas, grazing, invading woody species, gem mining, firewood collection, elephant conflict.	Poverty (97%), poorly planned government resettlements, inadequate DWLC capacity.	(1) Boundary marking, (2) habitat restoration, (3) management infrastructure, fencing, equipment, (4) visitor facilities, nature trails, (5) CAP process, (6) partnership process, (7) AM process.
Minneriya National Park (8,889 ha, rainfall 1,200 mm)			
(1) Spectacular landscape in dry northern plain, at 100-200 m with hills up to 885 m, with ancient irrigation reservoir (2,255 ha), and national DWLC training center. (2) Dry mixed evergreen forest, bamboo, grasslands. Moderate biodiversity values. (3) Farming, fishing, North-West Frontier Province	Encroachment, grazing, poaching, firewood collection, elephant conflict, overfishing, rice husk dumping, bushfires, inappropriate settlement.	Poverty (26-52%), lack of environmental awareness, poorly-planned government resettlements, lack of inter-agency coordination, inadequate DWLC capacity.	(1) Park planning, (2) boundary marking, (3) management infrastructure, fencing, equipment (4) visitor facilities, (5) regulation of fisheries, (6) CAP process, (7) partnership process, (8) AM process.
Uda Walawe National Park (30,821 ha, rainfall 1,500 mm)			
(1) Open plains and foothills in southern dry zone, at 60-120 (373) m, with large reservoir (hydropower). (2) Thorn-scrub, grasslands, and semideciduous monsoon forest remnants. Moderate biodiversity values. (3) Fishing, farming, livestock.	Grazing, poaching, timber extraction, gem mining, land and resource disputes, elephant conflict, alien weed invasion.	Population pressure, poverty (22-32%), shifting cultivation, poorly planned government resettlements, inadequate DWLC capacity.	(1) Park planning, zoning, (2) boundary marking, (3) management infrastructure, fencing, equipment, (4) visitor facilities, (5) CAP process, (6) partnership process, (7) AM process.

AM = Adaptive Management, CAP = community action planning, DWLC = Department of Wildlife Conservation, mm = millimeter, NGO = nongovernment organization, PA = protected area.

D. The Adaptive Threat Management Process



SOCIAL ASSESSMENT AND STRATEGY

A. Methodology

1. Social assessment of the Project comprised two phases: (i) an initial social assessment as part of the feasibility study covering 30 villages, and (ii) detailed community and stakeholder consultations using participatory rural appraisal (PRA) techniques in nine villages[1] in seven project pilot protected areas (PAs) and one PA outside the Project (40-100 participants per village). The objectives were to (i) identify the socioeconomic characteristics of the villages near the PAs; (ii) understand the nature of the relationship between the villages and the PAs; (iii) identify the vulnerable groups within the villages who are either dependent or have an impact on the PAs; (iv) identify the development priorities of the villagers in relation to wildlife management within and outside the PAs; and (v) identify stakes and perceptions of key stakeholders regarding PA management (e.g., Department of Wildlife Conservation (DWLC) officers, administrative officers at Divisional Secretariat*, Pradeshiya Sabha* or a political body at divisional level, and nongovernment organizations [NGOs]) including perceptions of the conflicts of interest between the villagers and the PA managers (DWLC). A series of consultative workshops were held with DWLC staff at headquarters and the regional offices.

B. Socioeconomic Profiles of the Communities Near the Project PAs

1. Demographic Profiles

2. The communities surrounding (i.e., within 5 kilometers of PA boundaries) the seven pilot PAs under the Project include 192 villages (Grama Nilahari Divisions) in 17 divisions, eight districts covering five provinces, inhabited by about 40,000 households or 180,000 people. This covers more than 10 percent of a 1.5 million population living near the PAs nationwide. For each PA, more than one division, district and sometimes province are involved; hence close coordination is required across different administrative boundaries.

3. The average households in the villages have 4.0-4.6 members. Sociocultural characteristics vary across villages. District-level data shows that ethnic and religious compositions are diverse. The eight project PA districts comprise six Buddhists majority districts, one Hindu majority district, and one Muslim majority district. The male/female composition of the population is near equal. The female-headed households are few, except for the Muslim village (Palupitiya) in Wasgamuwa where 15 percent of households are headed by women mainly because of polygamous relationships. The educational levels of males and females are generally equal, with relatively high enrollment rates. Child labor does not appear to be a crucial issue in the areas.

2. Poverty and Livelihood

4. Socioeconomic characteristics vary significantly between villages. However, the incidence of poverty in villages near PAs is higher than the national average. The 1996/97 Consumer Finance Survey shows poverty incidence as 19 percent at the national level and 20 percent rural, 18 percent estate and 11 percent urban. Most villages near PAs are rural, with a few in the estate sector. From the number of recipients of the Government's poverty alleviation assistance in the form of Samurdhi, often used as a de facto poverty line, poverty incidence is

[1] The nine villages are Mapalana (Peak Wilderness), Seethagangula (Peak Wilderness), Pattipola (Horton Plains), Minihrigama (Minneriya), Palupitiya (Wasgamuwa), Hinukkiriyawa (Ritigala), Panahaduwa (Uda Walawe), and Pallemalala (Bundala) included in the seven pilot PA sites and Gallella (Flood Plains) outside the pilot sites.

much higher: 22-32 percent in eastern Uda Walawe, 48-100 percent in western Uda Walawe, 75 percent in Wasgamuwa, 65 percent in Ritigala, 58-90 percent in southern Peak Wilderness, 70 percent in Bundala, and 36-52 percent in Minneriya.

5. The PRA exercises showed, however, that community perceptions of poor/very poor households differ from those of official Samurdhi recipients, which are purely based on income levels. Communities assessed poverty on a wider set of criteria including ownership of assets, livelihoods, and family dynamics and report figures that differ significantly from Samurdhi-based data. The respective figures for community assessment and Samurdhi are 51 and 44 percent in Mapalana (Peak Wilderness), 94 and 58 percent in Seethagangula (Peak Wilderness), 25 and 87 percent in Pattipola (Horton Plains), 26 and 50 percent in Minihirigama (Minneriya), 97and 75 percent in Palupitiya (Wasgamuwa), 65 and 10 percent in Hinukkiriyawa (Ritigala), and 55 and 13 percent in Pallemalala (Bundala).[2] These discrepancies indicate a major targeting implication for the village-level microplanning during project implementation.

6. Resource endowments and livelihood sources are site specific. Most villagers living near the PAs engage in subsistence rain-fed agriculture often involving shifting cultivation (*chena*) in the dry zone. Other income sources are inland fishing (Bundala, Uda Walawe, Minneriya), cattle grazing (Uda Walawe, Bundala, Wasgamuwa, Minneriya), and smallholder tea near Peak Wilderness. Cash incomes from horticultural crops are mostly limited to farmers around Wasgamuwa, while elsewhere, crops are generally grown for subsistence purposes only. At some sites, distilling and selling of illicit liquor is the most lucrative source of income on which 43 percent of villagers in Hinukkiriyawa (Ritigala) depend.

7. The land tenure situation is complex. There are three types of land according to ownership: temple land, private land (Nindagam) inherited by descendents of the old rulers, and Government land. Most of the population around the PAs fall under the categories of those under private lease, permit holders allowed to use Government land, sharecroppers, and those without permits. Many do not possess any legal title or claim to land they use - which had been encroached upon - and as such are not eligible for formal bank lending for lack of collateral. The number of illegal encroachers on Government land, without titles, varied between 18 percent (Hiinukkiriyawa-Ritigala) and 78 percent (Minihirigama-Minneriya). Small landholdings and land fragmentation were identified as contributing to encroachment by paddy farmers whose average paddy size is about 0.2 ha compared with the national average of 0.5 ha.

8. Causes of poverty identified by the communities through the PRAs include (i) landlessness, lack of legal land titles, and poor-quality marginal lands leading to encroachment; (ii) fragmentation of land, reducing the viability of production; (iii) inadequate irrigation facilities; (iv) dependence on seasonal agricultural production and labor, resulting in insecure incomes; (v) dependence of low-income fishers working inside PA boundaries on licensed boat owners for their livelihood; (vi) declining availability of forest products for collection; (vii) human-elephant conflict leading to loss of life and damage to crops and properties; (viii) lack of employment opportunities, especially among the educated youth, hence dependence on casual and seasonal labor, out-migration, or the armed forces; (ix) dependence on moneylenders for credit needs at high interest rates and being trapped by continued indebtedness; (x) poor access to market for agricultural produce and exploitation by middlemen; (xi) abuse of illicit liquor (PAs are used for hiding it) and consequent domestic violence and expenditure drain on family income;

[2] A full-scale PRA was not conducted in Panahaduwa (Uda Walawe).

(xii) poor access to drinking water; and (xiii) limited access to social and communication infrastructure.

9. Poverty and deprivation are exacerbated by dependence on those who have access to assets, such as landowners, moneylenders, middlemen, traders, boat and fishing gear owners, and owners of large herds of cattle. Such asset owners come not only from the better-off groups in local communities but also from cities such as Hambantota (Uda Walawe), Polonnaruwa, Kandy (Flood Plains), Anuradhapura (Ritigala), and even Colombo. Lack of employment opportunities leads the poor into casual labor offered by these asset owners and outsiders. The poor of the community members are, therefore, vulnerable to being co-opted in support of livestock grazing, logging, poaching and gemstone mining within the PAs, often acting for low wages on behalf of organized gangs and business people from elsewhere.

3. Community Dependence on PAs

10. About 90 percent of the communities near the PAs depend to varying degrees on the PAs' natural resources and spaces. The activities engaged in include (i) poaching; (ii) timber felling; (iii) fuelwood collection; (iv) fishing; (v) brewing of illicit liquor and using the PAs as hiding places; (vi) cattle grazing; (vii) collection of nontimber products (honey, medicinal herbs, fruits, and berries); and (viii) land encroachments. They are common to all pilot PAs, although the degree of occurrence may vary.

11. Despite extensive use of PA resources and the acute resource depletion in many buffer zones, the earlier surveys under the social assessment found that the majority of households near the PAs have diversified sources of income and do not entirely depend on the PAs for their main source of livelihood. This can be attributed to, first, overexploitation in some PAs, leading to declining dependence on PAs. Second, middle- and upper-income households with more assets control the use of resources. This points to the importance of raising awareness among the community members, especially the poor, on the necessity for resisting the pressure to be co-opted for illegal exploitation of PA resources. The empowerment of the poor to gain access to resources and manage these is a critical step in overcoming some of the strategic threats.

4. Gender

12. The social assessment found no significant gender gaps in social indicators nor gender discrimination. Within Muslim communities, the situation was less equal, with the women's orbit restricted to household activities and home-based industries. A clear gender division of labor was observed elsewhere. Fuelwood, water collection, and extraction of nontimber products (berries, fruits, yams) are usually associated with females while in the Muslim community (Gallella-Flood Plains, though outside the scope of the Project), those are man's jobs. Fishing is considered a male occupation. Agriculture activities are shared. Activities requiring heavy physical labor are reserved for men, while women and children engage in activities such as weeding, transplanting, harvesting, and winnowing and dehusking of grain, which require continuous application.

13. Women at large bear the burden of poverty due to their multiple roles as economic producers and family caretakers. Many of them seek casual employment or emigrate to other countries or districts for employment. Depletion of natural resources, especially fuelwood, significantly affects their workload. In several villages, women observed that the amount of time needed to collect one bundle of fuelwood has doubled over the last 10 years. Female-headed households are among the most disadvantaged groups, as they are sole income earners with

very poor access to resources and information. Further, liquor addiction, mainly of men, leads to family conflict and, in some cases, domestic violence where women suffer. While women's representation in the Samurdhi program implementation and the group savings schemes is high, their participation in community decision-making bodies is still limited. Under the Project, NGOs/community based organizations (CBOs) will receive training to make sure that gender issues are addressed through the process of village microplanning.

C. Needs, Perceptions, and Capacity of Stakeholders

1. Community Perceptions of PAs and the PA Management

14. Through the PRAs, the communities' knowledge of resource use and availability, perceptions of problems regarding PAs and PA management, and potential solutions to them were elicited. The social mapping and wealth ranking exercises identified the spatial relationships between the communities and the nearby PAs (e.g., how elephants enter the field, where cattle grazing inside the PA occurs) and the geographical location of the poor households. A Venn diagram was prepared to identify the local stakeholders and their importance to village life. Through the preparation of problem trees, the communities also identified the causes and effects of resource depletion and the potential solutions to them. After the PRAs, many villagers, especially the youth, became aware of the importance of organizing themselves to take strong actions against the temptation to engage in illegal wildlife exploitation in the PAs.

15. Communities near the PAs are aware of the negative ecological impact of deforestation, encroachment on PA land, shifting cultivation, uncontrolled grazing, and erosion caused by cultivation along slopes. They are also aware of the importance of PAs, conservation of wildlife and its sustainable use. Further, they agreed that resource depletion is to a large extent driven by poverty (para. 8). In addition to poverty and lack of alternative livelihood, the following were highlighted as major issues leading to wildlife-related conflicts and problems: (i) lack of clear PA boundaries; (ii) inadequate law enforcement in PA management and poorly equipped and manned beat stations; (iii) political influence on law enforcement activities, creating a sense of social injustice; (iv) inadequate compensation schemes for crop damages caused by elephants; and (v) lack of communication between the communities and PA managers. At some sites, tense relations are observed between the communities and PA managers as a result of a history of conflict, including the past wrong handling of villagers by the PA managers which has led to loss of human lives.

16. The suggested solutions include (i) development of alternative livelihood sources (e.g., ecotourism) for the economically marginalized groups and for the educated youth who see no future in traditional livelihood patterns; (ii) clear delineation of PA boundaries, based on the agreement between the villagers and the PA administrators; (iii) electrified fence to prevent elephant encroachments; (iv) creation of buffer zones or zoning of the PAs to allow space for human-wildlife interaction and minimize the negative impact of human-wildlife conflicts; (v) stronger and fairer enforcement of park rules, particularly against resource extractors from the better-off inside and outside the communities; (vi) more community participation in PA management; and (vii) raising public awareness on wildlife conservation.

2. Perceptions of Field Staff and Local Administrative Officers

17. DWLC field staff (including the park officers and beat officers) generally shared the communities' perceptions of the problems and solutions. They also identified inadequate

infrastructure and equipment and lack of personnel as major constraints to functioning effectively. Some showed frustration with not being able to take action against illegal poachers and loggers from outside the communities due to political and other pressures. There were also some cases of self-reflection on the policing approach of the DWLC that ignores the needs of the people. Some also expressed fear of dealing with local communities that show hostility against PA managers.

18. The perceptions of the local administrative officers including those from Divisional Secretariat, Grama Niladharis, and Pradeshiya Sabha were in general patronizing and highlighted a lack of awareness and knowledge of the communities near PAs and the traditional livelihood problems. The interesting similarity, however, was the helplessness and incapacity to deal with illegal wildlife exploitation by organized groups and politicians. Difficulties and hence needs in coordination among relevant departments/authorities in conservation and law enforcement were also identified.

3. Absorptive Capacity of Stakeholders

19. Evidence from the Project's PRAs clearly shows that communities are fully capable of committing themselves to sustainable wildlife management both within and outside the PAs if they are empowered and have strong leadership. But with the low community acceptance of Government officers and the limited capacity of the local administrative officers and the wildlife officers, it is crucial to engage capable NGOs/CBOs in facilitating (i) social assessment and community mobilization; (ii) village-level microplanning; and (iii) coordination between the communities, the field unit of DWLC, and local public administrations.

20. Village-level institutional assessment documented an inventory of existing NGOs/CBOs and their capacity. The types of CBOs are location specific, but the Funeral Aid Society appears to be the best functioning one in all villages. In general, CBOs have limited functions and are not usually capable of comprehensive planning or stakeholder coordination. A small number of domestic NGOs with strength in community mobilization for specific activities operate in the communities near the project PAs, but they have limited capacity in facilitating comprehensive planning and coordination. There is potential, however, that locally based NGOs/CBOs could be strengthened by capable and reputable international NGOs or institutes with experience in PRAs, community planning, and stakeholder coordination.

21. In the longer term, the field unit staff from DWLC should also have better communication and management skills in working directly with the communities and understanding their needs through training provided by the international/domestic NGOs/institutes, so that such skills are sustained at the local level of DWLC.

D. Project Strategy and Mechanism for Beneficiary Participation

1. Project Strategy

22. The findings of the social assessment have been translated into the following project social strategy:

(i) facilitate community access to technical know-how, new knowledge, skills training, credit facilities, and alternative means of livelihood that will build its absorptive capacity to participate effectively in PA management;

(ii) improve community-PA managers (i.e., DWLC staff) relationships, which would result in commitment to a common objective of PA management and wildlife conservation;

(iii) facilitate, through the services of capable NGOs/CBOs, the creation of an enabling environment for the community members, both men and women, to engage in information generation, problem analysis, and microplanning for which the community takes ownership in implementing, monitoring, and evaluation;

(iv) allow the community and PA managers to jointly develop sustainable livelihood and wildlife management using an adaptive learning process on a case-by-case basis;

(v) sustain the capacity of the community to access productive resources and contribute to PA management and wildlife conservation beyond the project time frame.

23. The above social strategy has been incorporated into the design of component D of the Project, in which community participation is promoted under the sustainable financing mechanism of the Protected Area Conservation Trust (PACT) (Appendix 6). The following process for community empowerment will take place:

(i) social mobilization within a forum that represents the target community;

(ii) problem analysis where community members, through a range of participatory techniques, identify and prioritize the problems and opportunities that members of each community face;

(iii) community-based resource assessments that identify and describe the demand for and supply of resources, the holders of ownership or use rights, season of use, and the community users of these resources; the assessment will also evaluate necessary changes;

(iv) formulating community microplans, where all community members agree on the development objectives and construct strategies with technical inputs from a range of government sectors including irrigation, agricultural services, livestock, forestry, wildlife, education, tourism, and health;

(v) developing community (or subcommunity) resource agreements with the DWLC based on the community microplans, including the delineation of PA boundaries;

(vi) implementing microplans using local resources, local government resources, NGO input, Government programs, seed grants from the PACT, community outreach grants, and technical assistance from component B of the Project, as necessary;

(vii) developing areawide planning processes in which plans from contiguous communities are integrated;

(viii) establishing a joint decision-making mechanism for involving community representatives from the areawide planning process that would include local DWLC staff and other relevant agencies; and

(ix) monitoring and evaluating the implementation and impact of microplans by the communities, local DWLC staff, and relevant local authorities, using key performance

indicators (KPIs) on which the performance of the contracted NGOs/CBOs will be assessed. The KPIs are (a) the level of poverty impact and the participation of the poor, (b) increased community knowledge of environmental issues, and (c) the level of conflict resolution achieved.

2. Risks and Safeguards

24. Major social risks include the following. First, political interference in the movement against illegal wildlife exploitation and the PACT is expected. Minimizing this risk is difficult; however, community empowerment and DWLC field staff capacity building will foster vigilance against such interference, while the PACT will have transparent and accountable structures and procedures that sit outside of Government. Second, there is concern about the overall NGO/CBO capacity on which the long-term success of community empowerment depends. Extensive training will be conducted by far more capable NGOs under the Project to minimize the risks. To ensure that women's needs (e.g., measures against domestic violence, better access to drinking water) and participation are incorporated into the microplanning, gender training will be included as part of capacity building.

25. The overall principle of the Project is to avoid relocation of households. Therefore, it does not envisage significant resettlement or land acquisition. The Project will make every effort to avoid social relocation through boundary alignment and, if necessary, zoning inside the PA to allow inhabitation. Decisions on the boundaries will be made in a fully participatory manner involving all key stakeholders. If relocation is unavoidable, a resettlement plan will be prepared for each PA after a detailed census, social assessment, and PRA, according to ADB's *Handbook on Resettlement* and will be agreed upon by ADB and the Government before boundaries are set and any other actions are taken.

PROTECTED AREA CONSERVATION TRUST

A. Introduction

1. Conservation of Sri Lanka's protected areas (PAs) will only succeed if support of the communities in the vicinity of the PAs can be mobilized for maintaining the integrity of the PA boundaries and the resources the PAs contain. Without such support, the outcome of protection efforts and management inputs into PAs are more than offset by the continued impact of expanding human activity. Several approaches have been initiated, starting from public awareness and extension activities to direct income support. Most of these attempts have had only mixed success and limited impact. From international experience and as a result of the consultation,[1] the consensus was that there is need for a process that allows buffer zone communities to become an integral part of PA conservation through a program of empowerment that leads toward a set of agreed-upon goals, rights, and responsibilities in relation to PAs. The consultations confirmed that this process would require a wider landscape planning and management approach supported by investments and benefit-sharing arrangements that directly address the root causes and threats to the PA system. It was universally felt that such empowerment requires a financing vehicle and support mechanism that can sustain it over the long term. The proposed Protected Area Conservation Trust (PACT) is designed to be such a vehicle. The PACT's design, size, and operating mechanisms are based on an extensive consultation process, and are consistent with best practices and experiences learned internationally with conservation trust funds. Detailed financial analysis, based on a needs assessment, indicates that the PACT is ex ante financially sustainable. Furthermore, (i) the Government has expressed its support for a public-private sector mechanism outside direct government control to support a buffer zone community empowerment process; (ii) the country's basic fabric of legal and financial practices including supporting institutions such as banking, auditing, and contracting are sufficiently developed to provide the services needed for the PACT to operate effectively; and (iii) there is a critical mass of stakeholders from diverse sectors of society that can work in partnership to conserve biodiversity sustainably.

B. Deed

2. The deed of the PACT will be prepared under a Sri Lankan ordinance for establishing a charitable trust. The liability of the trustees will be limited. It is axiomatic that the trust does not pay tax on its income or on any of its investments. The deed will describe the principles under which the trust will operate and its bylaws. The trustees will ensure that they seek the best possible return on their endowment and any gifts through a professional asset manager.

C. Objectives

3. The objectives of the PACT are as follows:

(i) Facilitate professional management of a capital endowment to finance community and participatory benefits from conservation and protected areas in Sri Lanka. The settlor will assign the capital endowment or investment structure, and the trust will adopt an appropriate investment portfolio consonant with the objectives of the trust. An experienced trust manager of excellent track record

[1] An extensive stakeholder consultation process that lasted over 2.5 years involved over 30 workshops at the local, provincial, and national levels. The consultation was complemented by detailed social assessments in each of the pilot PAs using rapid rural appraisal techniques.

will professionally manage the trust portfolio. The trust manager will be appointed by board of trustees in consultation with the Asian Development Bank (ADB).

(ii) Finance any appropriate entity that will best meet the objectives of the trust to undertake any of the following: (a) social mobilization, (b) community resource assessments, (c) community natural resource management, (d) community/micro level planning, (e) areawide planning frameworks, (f) community-based conservation agreements, and (g) capital investments to deliver the objectives of the trust.

(iii) Provide investment capital for implementation of community initiatives with direct links to conservation benefits (e.g. community woodlots establishment, community fodder production, etc.), the capital to be provided as grants to communities (or their stated contractor), with in-kind contributions from the beneficiaries.

(iv) Strengthen the capacity of community groups and associations. Once strengthened, these groups will be able to prove their implementation capability and thereby compete successfully for proceeds of the PACT.

(v) Manage annual trust revenues according to the following: (a) adopting a growth strategy for the endowment through reinvestment of 25 percent of the annual revenue; (b) using a maximum of 20 percent of annual revenues for administrative costs; (c) applying the remaining funds to the objectives of the trust, using a competitive grant-making process on an annual basis.

D. Endowment and Trust Management

4. A total initial endowment of $8 million is targeted. This would provide approximately $0.5–0.6 million per annum to invest in local community initiatives. It is expected that the endowment will be funded with a GEF grant of $4 million and another $4 million from bilateral grant sources. The endowment will not receive any Government funds and will be operated independently from the Government. Trust programs will be developed to raise funds from other bilateral sources and the corporate sector. This will be the responsibility of the chief executive and the trustees. The endowment will be entrusted to a commercial trust manager for investment with a conservative risk profile determined by the board of trustees, and which is environmentally benign. The endowment fund will be invested offshore to capture the benefits of global markets and to protect against any possible devaluation of the domestic currency.

E. Trustees

5. The trustees will be limited to nine: six eminent people acceptable to ADB and three ex officio representatives, one each from the Department of Wildlife Conservation, Forest Department, and Coast Conservation Department. A search committee comprising a wide representation of stakeholders will identify the trustees in a transparent and participatory process. No decision of the board of trustees can be executed unless the board meeting has a quorum of six. Every three years, one trustee will step down and a new trustee will be appointed. The board of trustees, excluding ex officio trustees, will decide the appointment of all new trustees. A trustee is limited to serve no more than nine years. The board chairman will be elected by the board of trustees. The chairmanship will be open for election every year and the sitting chairperson can be reelected.

F. Executive and Operational Procedures

6. The trust will establish an appropriately staffed secretariat under the trustees for management including the appointment of a chief executive officer. Trust establishment and the operational expenses of the PACT for the first two years will be borne by the Project. The secretariat, under the guidance of the board and with assistance provided by an international nongovernment organization with experience in conservation trust funds as well as domestic and international consulting services, will be charged with the preparation of a detailed operations/procedures manual, and monitoring mechanisms in addition to the principles set out in the trust's bylaws and deed. The funding priority of the trust is to support projects that reinforce the linkage between PA management and biodiversity conservation and the project concerned. The project pilot PAs will receive priority during the project implementation phase. The application procedures will be published on an annual basis in the form of guidelines as a public document, and the trustees will determine these. Project eligibility will be founded on the principle that the direct or indirect effect or objectives will enhance the connection between biodiversity conservation and community benefit. Project eligibility is dependent on sustainability at the end of the project period. The trustees will be expected to apply at least 50 percent of annual revenues to sustainable projects for the support of communities in biodiversity conservation. The board of trustees is expected to meet monthly during the first two years of PACT establishment and thereafter as required. The board will review all proposals prepared by the applicants and management officers, and decide on project acceptability and the level of funding offered (or any other conditionalities applied).

G. Reporting and Auditing

7. The trust has a number of reporting responsibilities. The board of trustees will be responsible for publishing annual and audited accounts for publication. The board will appoint trust accountants and auditors from a reputable accounting firm.

Table A7.1: Summary of Costs

($'000)

Item	DWLC Institutional Strengthening	Participatory Adaptive Management of Protected Areas	Collaborative Conservation Planning	Sustainable Financing for Community Partnership Building	Total
Investment Costs					
A. Civil Works					
1. Buildings					
Head Office	1,026	-	-	-	1,026
Regional Office	64	1,293	-	-	1,358
Visitor Centers	-	365	-	-	365
Refurbishment	98	39	-	-	137
Design and Supervision	113	-	-	-	113
Subtotal Buildings	**1,300**	**1,697**	**-**	**-**	**2,997**
2. Civil Works					
Park infrastructure	-	2,049	-	-	2,049
Subtotal Civil Works	**1,300**	**3,746**	**-**	**-**	**5,046**
B. Land Acquisition	1,703	-	-	-	1,703
C. Vehicles					
1. Four-Wheel Drives					
Twin Cabs	301	405	47	138	890
Jeeps	68	-	-	-	68
Subtotal Four-Wheel Drives	**369**	**405**	**47**	**138**	**958**
2. Motorbikes					
Motorbikes	24	62	-	-	86
3. Other Vehicles	-	8	-	-	8
Subtotal Vehicles	**393**	**474**	**47**	**138**	**1,052**
D. Equipment and Materials					
Other Equipment	2,278	1,311	19	42	3,651
Computers	485	67	10	27	589
Subtotal Equipment and Materials	**2,763**	**1,378**	**29**	**70**	**4,240**
E. Training and Workshops					
Courses	632	255	-	60	947
Workshop, Training and Participation	463	1,667	1,071	41	3,242
Overseas Training	427	-	-	-	427
Study Tours and Exchange Visits	510	-	-	-	510
Subtotal Training and Workshops	**2,032**	**1,922**	**1,071**	**101**	**5,126**
F. Labor	-	-	-	1,124	1,124
G. NGO Contracts	901	519	-	217	1,637
H. Trust Endowment	-	-	-	8,000	8,000
I. Media, Publications, IT & Research Contracts					
Research Contracts	259	98	31	-	388
Media, Publications, and IT Contracts	362	232	238	9	841
Subtotal Media, Publications, IT & Research Contracts	**621**	**329**	**270**	**9**	**1,229**
J. Consulting Services					
Domestic Consulting Services	567	-	-	-	568
International Consulting Services	2,998	-	-	-	2,998
Subtotal Consulting Services	**3,565**	**-**	**-**	**-**	**3,566**
Total Investment Costs	13,280	8,367	1,416	9,659	32,723
Total Recurrent Costs	569	546	35	423	1,573
Total Project Costs	**13,849**	**8,913**	**1,451**	**10,082**	**34,295**
Interest Charges	-	-	-	-	426
Total Costs to be Financed	**13,849**	**8,913**	**1,451**	**10,082**	**34,721**

IT = information technology, NGO = nongovernment organization.

Table A7.2: Summary of Costs, by Component
($'000)

Item	Foreign Exchange	Local Currency	Total	% Foreign Exchange	% Total Base Costs
A. Base Cost					
1. DWLC Institutional Strengthening	4,723	7,244	11,967	39	39
2. Participatory Adaptive Management of PAs	2,501	4,984	7,486	33	25
3. Collaborative Conservation Planning	307	929	1,236	25	4
4. Sustainable Financing for Community Partnership Building	8,234	1,559	9,793	84	32
Subtotal (A)	**15,765**	**14,716**	**30,480**	**52**	**100**
B. Contingencies					
1. Physical Contingencies	860	1,439	2,299	37	8
2. Price Contingencies	554	962	1,516	37	5
Subtotal (B)	**1,414**	**2,401**	**3,815**	**74**	**13**
C. Interest Charges	426	-	426	100	1
Total Cost	**17,605**	**17,117**	**34,721**	**52**	**114**

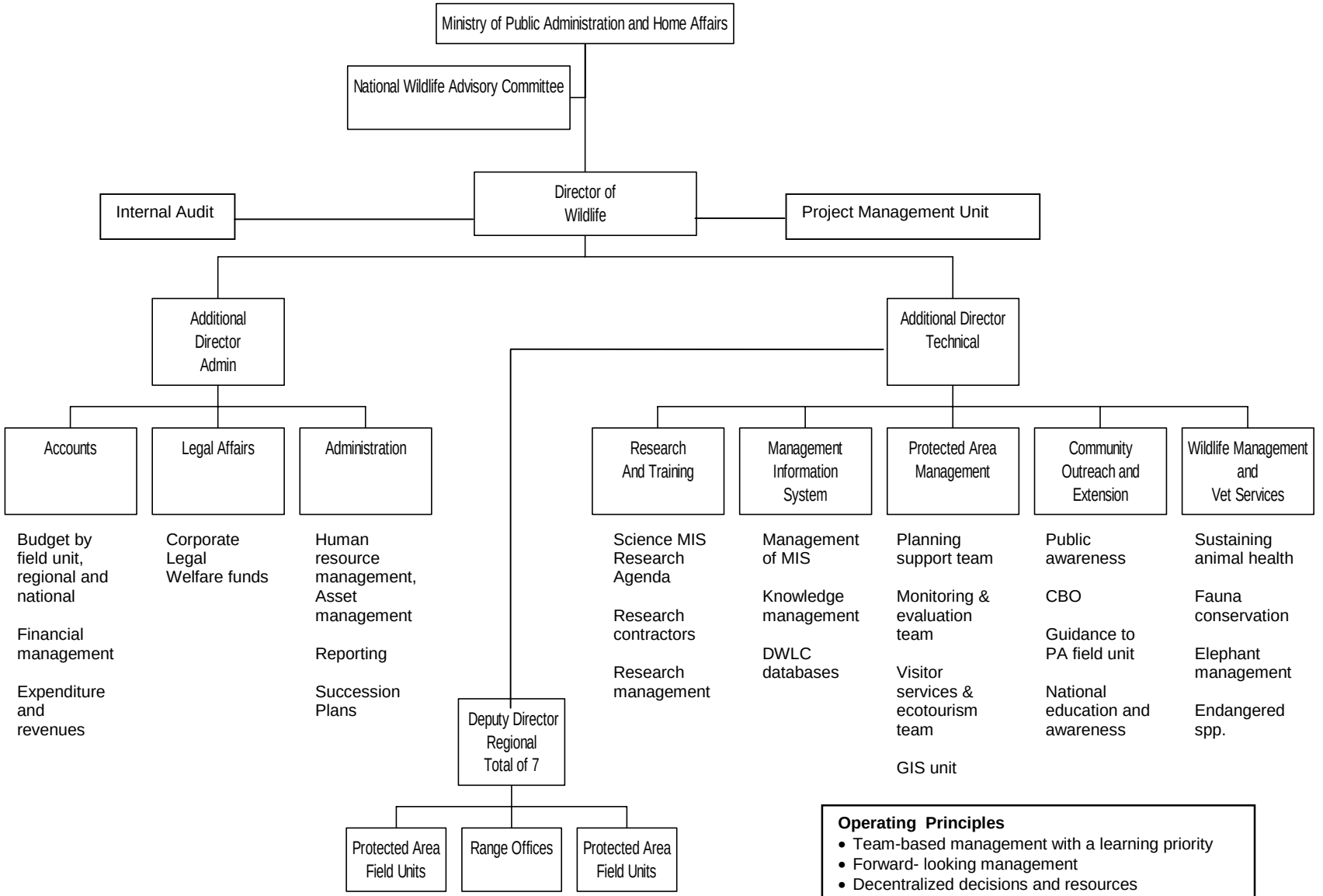
DWLC = Department of Wildlife Conservation, PA = protected area.

Table A7.3: Summary of Financing, by Component
($'000)

Component	Gov't	ADB	Govt. of Netherlands	GEF	Beneficiaries	Total
1. DWLC Institutional Strengthening	4,467	6,188	-	3,194	-	13,849
2. Participatory Adaptive Management of PAs	2,397	5,227	-	1,288	-	8,913
3. Collaborative Conservation Planning	221	43	-	1,187	-	1,451
4. Sustainable Financing for Community Partnership Building	578	117	4,000	4,477	910	10,082
5. Interest Charges	-	426	-	-	-	426
Total Disbursement	**7,663**	**12,001**	**4,000**	**10,146**	**910**	**34,721**

ADB = Asian Development Bank, DWLC = Department of Wildlife Conservation, GEF = Global Environment Facility, PA = protected area.

Organization Chart for Department of Wildlife Conservation



CBO = community-based organization, DWLC = Department of Wildlife Conservation, GIS = geographic information system, MIS = management information system, PA = protected area.

Implementation Schedule

	2001				2002				2003				2004				2005				2006			
A. Component A: Enhancing Institutional Capacity for PA Management																								
1: Enhancing DWLC's Management Systems																								
a. Head Office																								
b. Giritale																								
c. Regional Offices																								
d. Communication Systems																								
2 Technical Units Strengthened																								
a Impact Monitoring																								
3. Establishing Ecotourism Capacity in DWLC																								
4 Strengthening Wildlife Monitoring and Evaluation																								
5 Project Management Office																								
6 Consulting Services																								
B. Component B: Participatory Adaptive Management of Pilot-Protected Areas																								
1. Consolidation and Revision of Management Plans																								
2. Facilitating Management of Pilot Protected Areas																								
3. Ecotourism Development																								
4. Adaptive Management Systems																								
C. Component C: Collaborative Conservation Planning																								
1. Preparation of BCAP																								
2. Enhancing PA Links and System Coverage																								
3. Joint Priority Setting and Endangered Species																								
D. Component D: Sustainable Financing for Community Partnership Building																								
1. Trust Establishment																								
2. Trust Endowment																								
3. Technical Support																								
4 Contractor Program																								

BCAP = Biodiversity Conservation Action Plan, DWLC = Department of Wildlife Conservation, PA = protected area.

SUMMARY CONSULTING SERVICES, PARTNERSHIPS, PROJECT IMPACT MONITORING AND CAPACITY BUILDING

A. General

1. Project implementation will be supported by consulting services comprising 138 person-months domestic (84 loan/54 Global Environment Facility [GEF]) and 128 person-months international (43 loan/85 GEF). Consultants will be selected in accordance with Asian Development Bank's *Guidelines on the Use of Consultants*. Contracts are included for partnerships (one on wildlife, one on the proposed trust) with international nongovernment organizations (NGOs), and for periodic project monitoring. Table A10.1 provides a summary of consultant inputs and international partnerships. Capacity building is central to strengthening sector capacities and it will be addressed by the proposed range of activities including workshops, courses, study tours, short courses local and international, and graduate fellowships at national, regional, and international institutions. Table A10.2 provides a summary of capacity-building activities.

B. Terms of Reference for Consulting Services

1. International Consultants

2. **Protected Area Management Specialist/Team Leader**. The specialist will (i) provide technical advice to inform the review and rationalization of the protected area (PA) system, (ii) lead the development of the PA planning process including the participatory revision and implementation of existing plans, (iii) lead the joint evaluations of conservation projects, (iv) advise on development and amendment of policy and legislative frameworks, (v) supervise consultants, (vi) assist the project director and coordinator to complete their reporting responsibilities in a timely and effective manner, (vii) provide technical input on all matters as requested, (viii) provide training inputs as required, and (ix) review the project design periodically to ensure that it is consistent with a changing environment and that experiences gained during implementation are being incorporated.

3. **Adaptive Management Specialist.** The specialist will (i) deliver training in the principles and operation of adaptive management for PAs; (ii) visit all pilot sites and design adaptive management processes for selected issues, including threat and option analysis, management intervention specification, and indicator monitoring; and (iii) advise on input modifications to meet the desired management outputs for each issue.

4. **Biodiversity Inventory Systems Specialist**. The specialist will (i) design and test procedures for biodiversity and ecosystem inventories to be undertaken in PAs, (ii) advise on the management of inventory data within the management information system (MIS), (iii) help define and prioritize a research agenda for inventory purposes, paying due attention to endangered species; (iv) design an outsourcing program for inventory priorities; and (v) and provide training inputs as required.

5. **Public-Private Sector Partnership Specialist**. The specialist will (i) review potential areas of public-private partnerships in conservation management, including ecotourism, and in conservation land provision, using covenants, easements, and other binding agreements; (ii) identify and advise on developing specific opportunities; (iii) review the ongoing implementation of these approaches; and (iv) provide training inputs as necessary.

Table A10.1: **Summary of Consulting Services**

Item			Person-months						
			2001	2002	2003	2004	2005	2006	Total
A. Consulting Services									
1. Domestic Consulting Services									
1	Participatory Outreach	GEF	10	12	12	6	-	-	40
2	PRA Action Research	Loan	-	6	6	6	-	-	18
3	Staff Needs Assessment	Loan	-	-	-	-	3	-	3
4	Ecotourism Training	Loan	8	6	6	2	-	-	22
5	Ecotourism Concession	Loan	-	4	-	-	-	-	4
6	Small Business	Loan	4	2	2	2	2	2	14
7	Wildlife Insurance	Loan	-	-	3	2	-	-	5
8	Legal Expert Domestic	GEF	3	3	3	-	-	-	9
9	Fund Management	GEF	2	3	-	-	-	-	5
10	MIS Technical Module	Loan	10	12	12	-	-	-	34
11	Finance Organizational Process	Loan	6	12	-	-	-	-	18
Subtotal Domestic			**43**	**60**	**44**	**18**	**5**	**2**	**172**
2. International Consulting Services									
1	Protected Area (Team Leader)	GEF	12	12	12	3	3	1	43
2	MIS Knowledge	Loan	3	-	-	-	-	-	3
3	Training (teaching materials)	Loan	3	3	3	-	-	-	9
4	Public-Private Sector Partnership	GEF	2	6	3	-	-	-	11
5	Public Relations and Education	GEF	3	6	3	-	-	-	12
6	Biodiversity Inventory	GEF	3	3	-	-	-	-	6
7	Adaptive Management Adviser	GEF	3	4	2	4	-	-	13
8	Ecotourism Planner	Loan	3	3	3	2	2	1	14
9	Ecotourism Trainer	Loan	3	3	2	1	-	-	9
10	Visitor Center Design	Loan	3	3	1	1	-	-	8
Subtotal International			**38**	**43**	**29**	**11**	**5**	**2**	**128**
3. Total Consulting Services			**71**	**91**	**61**	**29**	**10**	**4**	**300**
B. Partnerships									
1	DWLC-NGO (Consortium)	GEF	Contract over 5 years						
2	PACT-NGO/Trust	GEF	Contract over 5 years						

DWLC = Department of Wildlife Conservation, GEF = Global Environment Facility, MIS = management information system NGO = nongovernment organization, PRA = participatory rural appraisal.

6. **Public Relations and Education Specialist.** The specialist will (i) develop a communications, media, and education strategy for the Department of Wildlife Conservation (DWLC); (ii) establish communication channels with appropriate outlets; (iii) develop materials for dissemination; and (iv) provide training inputs as necessary.

7. **Training Specialist.** The specialist will (i) evaluate the current course structure, delivery arrangements, curricula, and effectiveness of the DWLC training programs; (ii) evaluate other conservation-oriented training programs in Sri Lanka; (iii) prepare a report recommending improvements and possible synergies between training programs based on the review; and (iv) provide training inputs as necessary.

8. **Management Information System Specialist**. The specialist will (i) assess the information needs of DWLC; (ii) design appropriate hardware and software components of a MIS; (iii) supervise the installation of the MIS; (iv) test and modify the operation of the MIS as necessary; and (v) design and provide training inputs for system operation including providing access to global and national knowledge resources on conservation, biodiversity, and related issues.

9. **Ecotourism Planning Specialist.** The specialist will (i) provide support and direction to the new Visitor Services and Ecotourism Unit; (ii) lead in the preparation of ecotourism plans at the national, regional, and pilot site levels; (iii) identify a research agenda for ecotourism, establish procedures to address priority issues and apply them to management questions; (iv)

prepare background materials, design and lead an overseas ecotourism study tour; and (v) help develop ecotourism monitoring programs for PAs.

10. **Ecotourism Training Specialist**. The specialist will (i) prepare materials for and deliver the core ecotourism training course; (ii) train domestic staff to deliver this and other ecotourism-related courses; (iii) assist in the design of the Business Skills for Ecotourism course; and (iv) help design, deliver, and monitor interpretation programs in pilot sites.

11. **Visitor Center Design Specialist**. The specialist will (i) design and help deliver international-standard display materials for visitor centers and other tourism sites (e.g. nature trail signage) as requested; and (ii) provide training inputs as required.

2. Domestic Consultants

12. **Participatory Outreach Specialist**. The specialist will (i) provide ongoing leadership, advice, and support to all project outreach activities; (ii) coordinate all project work involving social dimensions; (iii) ensure that guidelines for gender-sensitive social mobilization will be followed; (iv) act as the project deputy team leader; (v) assist in the design and implementation of social monitoring systems; and (vi) provide training inputs as necessary.

13. **Legal Specialist**. The specialist will (i) advise on the formulation of legislative amendments, as appropriate; (ii) prepare and finalize the Trust Deed for the Protected Area Conservation Trust (PACT); (iii) advise on the application and interpretation of policy; and (iv) provide training inputs as required.

14. **Fund Management Specialist.** The specialist will (i) assist the board of directors and the chief executive officer of the PACT in designing an acceptable investment strategy for PACT assets, (ii) assist in the establishment of financial management systems for managing all PACT income and expenditure, and (iii) provide training inputs as required.

15. **Finance Organizational Process Specialist.** The specialist will (i) review the revenue stream and auditing systems within DWLC, including identification of possible leakage; (ii) design and implement improved systems; (iii) ensure that the MIS design and operation is suitable for these improved procedures; and (iv) provide training inputs throughout the system.

16. **Ecotourism Training Specialist**. The specialist will (i) assist in the preparation of ecotourism course materials, (ii) take responsibility for the delivery of the core ecotourism course from the international consultant, (iii) help design and deliver the business skills course in regional centers, and (iv) design and deliver thematic ecotourism courses as necessary.

17. **Ecotourism Concessions Specialist.** The specialist will (i) assist in the development and drafting of a private-sector and community concession's policy for DWLC, (ii) specify procedures for the management and monitoring of concessions, and (iii) provide training inputs as required.

18. **Small Business Specialist.** The specialist will (i) assist in the design and delivery at regional sites of a course on developing business skills for ecotourism, (ii) undertake a feasibility study on the potential for the community ecolodge development at Bundala, and (iii) provide other training inputs as required.

19. **Staff Needs Assessment Specialist.** The specialist will (i) visit each of the pilot sites and complete a workload assessment, (ii) check the workload against job descriptions, (iii) identify positions with surplus or deficit workloads, (iv) check current cadre positions per

location, and (v) recommend adjustments to job descriptions or staffing levels to maximize the use of casual labor sourced from local communities.

20. **Wildlife Insurance Feasibility Specialist**. The specialist will (i) evaluate the potential for establishing a wildlife insurance scheme, (ii) prepare a detailed business plan and investment manifesto for such a scheme directed to the private sector, (iii) run a workshop on the findings for private sector and DWLC personnel, and (iv) provide other training inputs as required.

21. **Participatory Rural Appraisal Action Research Team.** These specialists (2) will (i) liaise with the social NGO partner described in para. 27, particularly in the design and delivery of field programs; and (ii) provide ongoing field support for PA outreach units as part of in-job training for departmental staff.

3. Terms of Reference for NGO Partnership

22. The Project will contract for a six-year period a consortium of NGOs from a preselected list to provide strategic direction, technical support, research advice, and ongoing capacity building and field support within the wildlife and social domains of the Project. The same consortium will also develop and provide project impact assessments.

23. The wildlife partner, an international NGO, will have skills in scientific research oriented to wildlife conservation and management, monitoring, field training, and translocation and have extensive field experience in these areas in Asia. Specifically, the NGO will (i) review ecological inventory, research, and monitoring procedures of DWLC; (ii) develop, document, and implement improved procedures; (iii) help develop the wildlife and habitat research agenda with DWLC; and (iv) assist in setting research priorities and the specification of terms of reference and monitoring of research studies.

24. The social NGO partner will be an international or domestic NGO that has skills in community development, gender and development, outreach, social analysis, and monitoring. The NGO will (i) provide field support and technical training to the outreach units of DWLC (both centralized and local); (ii) provide field support and technical training to the NGO contractors of the PACT; (iii) provide detailed specifications of key performance indicators related to structural poverty analysis, community empowerment, environmental education, conflict management and resolution, partnership building and community action plan preparation; (iv) assist in the design of programs to monitor these indicators; and (v) provide training inputs as required.

25. To meet the needs of global accountability, best-practice replicability, and international learning, and as an input to adaptive management, the impacts of the Project will be assessed. Baseline studies and key performance indicators will be established in year 1, processes and performance reviewed early in year 3 to inform the midterm review, and again in year 6 to inform the final evaluation. The impact monitoring team will (i) define indicators and assess the status and trends applicable to major resources of the pilot PAs, (ii) assess the suitability and sustainability of PA management and community strengthening and partnership-building arrangements, and (iii) evaluate the degree of stakeholder participation in resource management decisions. The team will have the right to inspect any aspect of the Project, and will produce a publicly available report within two months of the end of each assessment.

C. Trust Fund Technical Support

26. The PACT will be partnered with an appropriate technical agency with similar objectives and experience in managing conservation trust funds. The partner will assist the board of trustees and the chief executive officer of the PACT in (i) legal issues, financial management, information management, tracking systems during start-up; (ii) liaison with major funding agencies and providing assistance in securing additional financial contributions; (iii) supporting the establishment and building the capacity of the executive; (iv) identifying and resolving problems; and (v) providing other appropriate forms of support to both the board of directors and the executive in carrying out their responsibilities.

D. Research Studies

27. Effective management requires good information. In many cases, data does not exist for management problems confronting DWLC. Good research skills exist in several universities and allowance has been made to provide for seven research grants to address key research topics annually. The DWLC Research Advisory Committee in association with the wildlife NGO will prioritize and coordinate this research agenda. The research will be undertaken mainly by graduate-level students, thereby adding to future domestic capacity building.

E. Study Tours and Exchanges

28. A wealth of global experience relating to many of the challenges currently faced by DWLC exists and provides excellent opportunities for learning. Costa Rica, for example, has had over 20 years of growth with ecotourism developments and offers a wide range of private and public models for examination. Similarly, the PA system in South Africa has a lot of experience in wildlife habitat management, control of alien species, and environmental inventories. New Zealand pioneered the development of electric fences and has continued to be an innovator in this field. Allowance has been made for visits to such locations for small numbers of DWLC staff and, in some cases, other personnel annually.

F. Information Technology Contracts

29. A local company will be contracted to provide the technical inputs to the design and development of the DWLC information technology requirements. This will include web page development, local area networks for Giritale and the head office, systems installation, training in the use of the operational systems, design and development of MIS modules and reporting systems from these, and software assessment and purchase.

G. Capacity Building

30. Human resource development - from administrative and managerial through to technical and field-based skills - is central to updating sector capacities. A range of activities has been proposed, including workshops, courses, study tours, local and international short courses, and graduate fellowships at national, regional, and international institutions. Within DWLC, training at headquarters will be directed at the technical units and the outreach section, and at upgrading financial and accounting offices, and raising general managerial and computer literacy skills. Substantial training inputs will also be devoted to training at the regional and site levels of operation. Overall, DWLC accounts for 51 percent of the training beneficiaries. The remainder will include other conservation agencies and/or the private sector, communities, and NGOs.

Table A10.2: Summary of Capacity Building

Item	Unit	2001	2002	2003	2004	2005	2006	Total
1. Central Headquarters								
Computer Training	course	4	9	7	7	2	-	29
DWLC Application Software	course	-	8	8	8	8	-	32
Change Management Course	course	2	4	4	-	-	-	10
Leadership Courses	course	-	-	3	5	5	-	13
Conflict Resolution	course	-	5	5	2	2	-	14
Work Planning	course	20	10	10	2	-	-	42
Financial Management Budgeting, Accountability	course	10	10	8	2	-	-	30
Enforcement Courses	course	-	2	4	4	-	-	10
Database Software Courses	course	3	5	5	-	-	-	13
Team Building	workshop	2	7	7	-	-	-	16
Conflict Resolution Workshop	workshop	-	2	1	1	1	1	6
Sector Workshops	workshop	3	8	8	8	8	8	43
Subtotal Central Headquarters		**44**	**70**	**70**	**39**	**26**	**9**	**258**
2:Technical Units								
Short course RECOFTC	course	-	2	2	2	2	-	8
Remote Sensing Training	course	-	2	-	-	-	-	2
Ecotourism	course	-	1	1	1	1	-	4
Advanced Thematics	course	-	1	1	1	1	1	5
PA Planning	course	-	1	1	1	1	1	5
Legal Training	course	6	6	6	6	-	-	24
EcoTourism Forum	workshop	1	1	1	1	1	1	6
Multisectoral Workshops	workshop	-	5	5	5	5	5	25
Subtotal Technical Units		**7**	**19**	**17**	**17**	**11**	**8**	**79**
3: Giritale Staff Training								
Trainer Short Courses	l/s	-	-	1	1	1	-	3
4: Project Management Unit								
Inception Workshops	workshop	1	1	1	-	-	-	3
Staff Training	course	1	1	1	-	-	-	3
Subtotal Project Management Unit		**2**	**2**	**2**	-	-	-	**6**
5: **Site Training Courses**								
Community Participation Course	course	-	12	12	-	-	-	24
Patrolling and Data Collection	course	-	6	6	6	-	-	18
Planning Course	course	-	7	-	-	-	-	7
Business Planning	course	8	8	8	8	8	8	48
Tracker Certificate Class 1	course	7	7	7	-	-	-	21
Advanced Tracker	course	5	5	5	5	5	-	25
Patrolling Task Shops	workshop	-	14	7	7	7	-	35
Protection Workshop	workshop	-	7	7	-	-	-	14
Stakeholder Workshop	workshop	-	7	7	7	-	-	21
Stakeholder Workshops	workshop	-	14	14	14	14	14	70
Stakeholders Issues Workshop	workshop	-	7	7	7	1	1	23
Tracker and Beat Officers	workshop	-	13	1	13	-	-	27
Subtotal Site Training Courses		**20**	**107**	**81**	**67**	**35**	**23**	**333**
6: Fellowships								
International MSc	each	1	3	-	-	-	-	4
Domestic Research Support	each	7	7	7	7	7	-	35
7: Study Tours and Exchanges								
Ecotourism Study Tour	each	-	1	-	-	-	-	-
Electric Fencing Visits	each	-	2	-	-	-	-	-
DWLC Exchange Visits	each	-	9	9	9	9	9	45
DWLC Reciprocal Visits	each	6	12	12	-	-	-	30

DWLC = Department of Wildlife Conservation, MSc = Masters of Science, PA = protected area
RECOFTC = Regional Community Forestry Training Center.

FINANCIAL, SUSTAINABILITY, AND ECONOMIC ANALYSES

1. The Project will generate significant local, national, and global returns, many of which are indirect or nonuse benefits that in all likelihood exceed the direct benefits. Methods to quantify and value such benefits do exist and could be adopted to illustrate the full impact of the Project. In the context of this analysis, however, where the objective is to assess the rationale for investment in interventions ranging from institutional strengthening to community empowerment, quantification and valuation of indirect or nonuse benefits are less meaningful. Furthermore, given the resource constraints of project preparation, the verification and modification of existing information to be adapted to the project sites were considered impractical. Hence, the following economic and financial analyses are partial and relate only to specific activities of the Project. A qualitative description of the indirect and nonuse benefits is included to illustrate their significance. Typically, global impacts generated by the Project would not be included; however, they are mentioned here to highlight their significance, and hence the justification for cofinancing by the Global Environment Facility.

2. The financial and economic analyses are limited to the Project activities that relate specifically to direct revenue-generating outcomes. From a national perspective, the activities related to ecotourism development are the primary focus of the analysis. From a local perspective of support zone communities, the focus is on typical income-generating activities that could be undertaken with the assistance of the Protected Area Conservation Trust (PACT) or other sources of funding. The viability of several such activities is discussed to indicate the likelihood of participation by beneficiaries.

A. Financial and Sustainability Analyses

1. Fiscal Impact

3. A financial analysis was undertaken to ascertain the impact of the project interventions on the Government's fiscal position and to assess their financial sustainability. The analysis includes with- and without-Project scenarios, with the incremental effects being attributed to the Project. The interventions related to ecotourism development are mainly in components A and B. The cost of the interventions accounts for about 10 percent of the total investment cost, or about $3.1 million.

4. The revenue stream is derived mainly from entrance fees and service charges at protected areas (PAs). In addition, the Government will generate revenue from taxes on incremental goods and services (GST) developed by the support zone communities as a result of project interventions. The stream of revenue is estimated on the basis of several key assumptions:

(i) Foreign visitor arrivals to the country are projected under three scenarios: high-, medium- and low-growth. From historical trends (1995-1999), it is assumed that 11 percent of foreign tourists will visit PAs. With the Project, it is assumed that visitors to the PAs will increase by 1 percent in year 6, increasing up to 5 percent by year 10 and thereafter. Accordingly, the number of foreign visitors to PAs by year 2010 will be about 110,000, or about 15 percent of total visitors. The Project is likely to have a bearing on the overall foreign visitor arrivals in Sri Lanka as well (as the country earns a reputation for ecotourism); however, this is not taken into account in the analysis.

(ii) National visitors to PAs are expected to increase according to historic trends (1995-1999). With the Project, the rate of increase is assumed to be higher. Three scenarios of growth (high, medium, and low) are considered. Accordingly, in year 2010, about 604,000 nationals will visit PAs.

(iii) Expenditure on park entrance and services applicable to foreign tourists will increase by 10 percent with effect from year 6 of the Project. The corresponding increase applicable to national tourists will be 15 percent. These are incremental effects, not counting the average increase in expenditure by both categories on the basis of historical trends.

(iv) Incremental revenue from GST is calculated on the assumption that average daily expenditure by foreign tourists (other than expenditure on park entrance and services) will increase by 5 percent beginning in year 6 of the Project. Correspondingly, expenditure by national visitors will increase by 15 percent. Expenditure by both categories will increase, according to historic trends, in the without-Project case as well.

5. Based on the assumptions, the analysis suggests that direct revenue to the Government from the Project will be in the range of $400,000 to $1.1 million by year 2010. By year 2020, the revenue is expected to be $1-$2.3 million. From the point of view of the Government's fiscal balance, therefore, revenues will more than cover the Project's operating and maintenance costs, which are estimated to be approximately $233,000 per year.

2. Financial Sustainability

6. The Project extends the range of the Department of Wildlife Conservation (DWLC) field activities, which will require additional resources if they are to be sustained. Primary among these are the community outreach and adaptive management programs. Whereas community partnerships are financed through the PACT, which, due to the nature of endowment trusts, represents a self-sustaining input, the DWLC community outreach program is reliant on project funding. To address this, the Government has agreed to introduce a revenue-sharing policy involving the transfer of a minimum of 50 percent of PA revenues to DWLC for capital works and operating costs. This program is forecast to add more than SLRs100 million per annum to the DWLC budget within a 6 year timeframe, which is earmarked for the DWLC capital budget currently costing SLRs40-50 million per annum and for the community outreach and adaptive management operating programs. Therefore, resources will be available on an ongoing basis for maintaining these programs beyond the life of the Project

7. Financial analyses were conducted of typical income-generating projects that are likely to be financed either through seed grants from the PACT or by communities accessing other government and nongovernment sources of funding. Typical projects include (i) woodlots owned or managed by local community members, (ii) fenced grazing of cattle, (iii) operating a rice storehouse, and (iv) production of buffalo curd or honey. The models proved financially viable, confirming the positive beneficiary participation in the activities to be undertaken by the PACT. However, the results are not extrapolated into a broader analysis of the Project due to the process orientation of the interventions - resulting in a potentially wide-ranging set of investments - and dispersed set of beneficiaries with benefits diffused over time and space.

B. Economic Analysis

8. The economic analysis covers only the ecotourism-related activities of the Project and is a direct extension of the financial analysis described above. It represents a conventional

economic analysis, which does not include the significant positive environmental and social effects that will be generated by the Project. Many of these externalities cannot be meaningfully included in quantitative terms in the economic analysis and are therefore illustrated in qualitative terms in the following section.

9. Economic border prices (world price) are used in the economic analysis. Costs are broken into traded, nontraded, labor and tax factors and converted to world prices. For nontradables, a standard conversion factor (SCF) of 0.9 was applied to derive economic prices consistent with recent SCFs applied in Asian Development Bank and World Bank projects. A shadow wage rate factor of 0.81 and the SCF were used to adjust the labor component to economic prices. The costs of local materials (nontradables) were based on prevailing market prices, which were assumed to remain unchanged in real terms (in constant 2000 prices).

10. Tourism revenues are first adjusted down to represent foreign exchange leakages (considered to be approximately 35 percent) and then adjusted up (by a factor of 1.35) to reflect the economic effects of forward linkages from tourism within the national economy. Revenue from national tourism is stated in terms of willingness to pay for wildlife recreational facilities.[1] Project interventions will be ongoing over six years beginning in year 2001, and the effects will be realized over a period of 20 years.

C. Economic Rates of Return and Sensitivity Analysis

11. Using the assumptions on costs and benefits, the base case economic internal rate of return was calculated. The sensitivity analysis includes three variations to the base case: (i) a reduction in benefit stream by 10 percent, which is indicative of lower mean annual incremental tourism revenue; (ii) a 10 percent increase in costs reflecting increased costs due to site factors and cost overruns; and (iii) a combination of (i) and (ii). The cash flows and the rates of return for the medium-growth scenarios are shown in Table A12.

D. Nonquantifiable and Indirect Benefits

12. While the focus of the economic analysis is on the direct and quantifiable benefits resulting from ecotourism and related services, the Project has other significant economic benefits that are either indirect or nonquantifiable.

13. Above all, the protection provided to Sri Lanka's rich and largely endemic biodiversity provides benefits to local, national, and global levels of society. At the local level, communities will benefit from employment and improvement in living standards generated by the demand for ecotourism-related services. Benefits at the national level include the ability to cater to the ecotourism niche market and generate significant forward linkages within the national economy; ability to attract external assistance and foreign direct investment in ecotourism and biodiversity-related areas; ability to comply with international commitments on protection of biodiversity; the option value of preserving biological resources for future exploitation, particularly for bio-prospecting and research; and the opportunity to demonstrate effective and decentralized governance through a strengthened and better trained DWLC. Global society will benefit from (i) the enhanced carbon sequestration potential of the PAs; (ii) protection of endemic species; (iii) maintenance of habitat used by internationally mobile species, especially turtles and waterfowl; and (iv) less tangibly, from the existence value of better managed PAs in Sri Lanka.

[1] Silva, K.A.D.I. and H. B. Kotagama. 1997. An Optimal Fee for Entrance to Uda Walawe National Park: An Assessment. *Tropical Agric. Res.* 9:317-329.

14. The community partnerships developed under component D will generate substantial economic benefits to civil society, particularly in the support zones of the PAs: 192 communities representing 180,000 people, 50 percent of whom are recipients of Samurdhi welfare payments. The project interventions will benefit them in several ways, enabling them to undertake collective planning and decision making, and to exercise empowerment by obtaining financing for community development initiatives and new employment opportunities through the income-generating activities. The overall impact will be an improvement in the standard of living of these people, and mutually reinforcing and sustainable interactions with the PAs and buffer zones adjacent to their communities.

15. Several project interventions will serve to reduce the prevailing human-elephant conflict. Reaching an exact figure on the cost of this conflict avoided by the Project is difficult. However, an approximate figure can be calculated from the fact that from 1996 to 1999, DWLC paid out an average of SLRs2.5 million per year in compensation fund. Assuming that the amount covers only 5 percent of the true cost of the human-elephant conflict, given the low payment levels and low claims, the cost can be estimated at about SLRs50 million per year. The Project is expected to reduce damages related to human-elephant conflict by 75 percent, leading to an annual estimated benefit of SLRs37.5 million or about $0.5 million. This figure is conservative, since it does not include the costs to farmers of constant night guarding and purchasing torch batteries and thunder flashes during the crop season. Nor does this figure include the impact on the quality of life from constant stress, anxiety, and fear. In the most affected villages, human-elephant conflict is listed as the most pressing problem facing the community.

16. PAs cover a substantial portion of the upper catchments of several major rivers and reservoirs, particularly Peak Wilderness Sanctuary and Horton Plains National Park since four major rivers (Mahaweli, Kelani, Walawe and Kalu) originate in these wet-zone highlands. It is estimated that encroachment on the PAs is currently at a rate of over 1 percent per year; this is assumed to reduce to zero with the project interventions. Encroachment typically implies a conversion of land from its current state of degraded forest and scrub to degraded grassland, a transformation that is estimated to increase soil losses by 5 tons per hectare per year.[2] Apart from the cost of replacing topsoil, erosion has a significant bearing on the hydropower potential of downstream reservoirs, which provide over 80 percent of the nation's total electricity supply. The cost of one cubic meter of siltation in terms of lost hydropower potential has been estimated at $180.[3] Accordingly, the cost of siltation avoided through project interventions in Peak Wilderness and Horton Plains is estimated at SLRs6.2 million per year.[4]

17. Finally, least tangible are the in situ ecosystem benefits such as the value of protecting species for future generations and the value of habitat for migratory species. One study estimated that the total economic value of biodiversity conservation achieved by Sri Lanka is about SLRs660 per ha/yr (1994 prices).[5] Similarly, the value of biodiversity conservation from an international perspective has been estimated in many studies.[6] No attempt is made to assign an economic value to the incremental benefits of biodiversity conservation that will arise from this Project; however, it is noted as significant.

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2 Forestry Sector Master Plan, July 1995.

3 Loan 1545-SRI: *Upper Watershed Management Project* , for 16.6 million, approved on 24 September 1997.

4 Horton Plains and Peak Wilderness cover a total area of 25,500 hectares, and 2.7 tons of silt is required to fill 1 m^3.

5 Ekanayake, E.R.M. and P. Abeygunawardena. 1994. Valuation of Conservation Commodity of the Sinharaja Forest: Towards Total Economic Value. *Sri Lanka Journal of Agricultural Economics.* 1(2).

6 McNeely, J.A. 1988. *Economics and Biodiversity: Developing and Using Economic Incentives to Conserve Biological Resources*. Gland, Switzerland: International Conservation Union. 236 p.

Table A12: Summary Economic Cash Flows ($'000)

Year	Capital Costs	Recurrent Costs	Incremental Benefits	Net Benefits
2001	123		0	-123
2002	347		0	-347
2003	2,119		0	-2,119
2004	100		0	-100
2005	85		0	-85
2006	73		269	196
2007		43	392	349
2008		43	538	495
2009		43	711	668
2010		43	914	871
2011		43	1,099	1,056
2012		43	1,155	1,111
2013		43	1,214	1,170
2014		43	1,277	1,233
2015		43	1,344	1,300
2016		43	1,415	1,372
2017		43	1,492	1,448
2018		43	1,573	1,530
2019		43	1,661	1,617
2020		43	1,754	1,711
			EIRR	18%
			NPV	1,316.90

Sensitivity Analysis		
Cost overrun by 10 percent	EIRR	17%
Revenue decrease of 10 percent	EIRR	17%
Cost overrun of 10 percent and Revenue decrease of 10 percent	EIRR	15%

EIRR = economic internal rate of return, NPV = net present value.

STAP REVIEW AND RESPONSE

STAP Review

Project Name:	Protected Areas Management and Wildlife Conservation Project, Sri Lanka
STAP Reviewer:	Jeffrey A. McNeely, Chief Scientist, IUCN
Conclusion:	This project, within the GEF Biodiversity focal area, complies with all criteria of the GEF. It is well designed and will deliver global benefits that justify the proposed level of investment. The project is supported by the government of Sri Lanka, the national executing agencies, and local and international NGOS; cofinancing is expected from the Asian Development Bank and the government of the Netherlands, indicating broad support. Therefore, the project should be approved. The challenge will come in implementation.
Process of Review:	The STAP Reviewer has read the project brief, the full project document, and the twelve appendices. Based on this review, and on involvement in Sri Lanka since 1982, he focused on issues of project design, economics, and implementation. The review required approximately two working days.
General Overview:	With its high levels of endimism and dense human population, Sri Lanka is a global biodiversity hot spot, deserving of international support for its conservation efforts. The protected area system of Sri Lanka is already extensive, but some modifications of the system may be advisable, including some modification of boundaries. Greater attention to issues of habitat management of buffer zones may be advisable, particularly in view of elephant management problems. Where protected areas are isolated, means need to be found to establish linkages with other areas of wildlife habitat. Remarkably, given the civil war that has plagued Sri Lanka over the past two decades, tourism continues to be significant, with numerous new hotels having been constructed since the beginning of the conflict. Historically, the Department of Wildlife Conservation has not been particularly interested in tourism, but this is beginning to change especially under the new policy of tourism revenues being returned to DWLC. Sri Lanka has developed an excellent Biodiversity Action Plan, but this was prepared rather quickly and did not go through the long process of policy discussion with all relevant agencies; therefore, a national biodiversity strategy and action plan is well justified. These issues, and others, are discussed in more detail below.

The Role of Civil Conflict:

Despite the civil conflict, the economy of Sri Lanka has continued to expand and the country has been able to maintain strong social indicators (high life expectancy, low infant mortality, high adult literacy, and high primary school enrolment). But the civil conflict undoubtedly has reduced tourism into some of the areas that are likely to be most interesting from a conservation perspective. If the conflict escalates in the future, the impact on tourism is likely to be highly negative; conversely, if the conflict declines, tourism growth rates could accelerate because of the excellent hotel infrastructure that already exists. The tourism infrastructure in the protected areas, however, still is relatively poor. But the private sector is already investing in environmentally-sensitive hotels in the rural areas, and these are likely to put additional pressure on DWLC to improve their tourism performance.

Poverty:

The proposal discusses poverty issues in some detail and indicates that the project will have a strongly positive effect on the 1.5 million people living close to protected area boundaries. The proposal makes a strong case for this, and the social assessment and strategy (appendix 5) is convincing. One danger that is not addressed is the so-called "magnet effect" where rural poor are attracted to the areas where investment is increasing in the rural areas, thus potentially causing new problems.

Biodiversity Conservation Action Plan (BCAP):

While Sri Lanka already has an excellent Biodiversity Action Plan, a longer and more comprehensive process of policy review is advisable. The more comprehensive approach needs to involve all relevant sectors. While the biodiversity focal point within government is the Ministry of Forestry and Environment, many other sectors have a significant interest in biodiversity, including tourism, agriculture, fisheries, transport, trade, and even the military. The more comprehensive BCAP needs to ensure that all sectors are enabled to participate and have their interests reflected in the more comprehensive plan.

Project Components:

Component A, enhancing institutional capacity for protected area management, is essential for the project to deliver its promised global benefits. DWLC still needs further capacity, particularly in tourism management; the historical legacy of strict protection, even against tourists, is only slowly being corrected. Component B, the participatory adaptive management of pilot protected areas, can go a long way toward improving the way protected areas are managed in the country. Under Component C, collaborative conservation planning, a protected area system plan should be prepared, with a clear assignment of different kinds of protected areas to different major management categories. It is highly appropriate for different kinds of protected areas to be managed for different objectives, and the process outlined in Component B may contribute to identifying the most appropriate objectives of

management. Component D, sustainable financing for building community partnership, is an excellent idea, but it will require considerable attention. The project document is relatively weak on how the PACT funds will be actually spent on the ground, instead (and quite properly) focusing on process questions. The challenge with such a fund is to ensure that expenditures are useful and contribute to conservation objectives of the protected areas. Taken together, these four project components provide for a very strong and potentially effective project.

Implementation and Coordination Arrangements: The implementation and coordination arrangements are fairly complicated, but perhaps this will help to build a broader base of support for project objectives. The historical conflicts between MFE and DWLC appear to be lessening, and perhaps this project will help to promote more effective collaboration between these two critically important agencies. The project does not discuss the relationship between the Wildlife Preservation Fund and the PACT. This relationship may need to be clarified in due course.

Specific Assurances: The list of specific assurances is excellent, and if these assurances are met, the effectiveness of the project will undoubtedly be greatly enhanced.

Sustainability: If the specific assurances are met, the project is likely to be sustainable in the long term. This depends on the protected areas developing an appropriate tourism infrastructure and maintaining a high quality experience for visitors. This sustainability is also linked with private sector investments in hotels, as is already happening in some areas. But the government of Sri Lanka should also be aware that the protected area system will undoubtedly still require a certain level of government funding to ensure that all elements of Sri Lanka's biodiversity are protected in the long term. The combination of the Wildlife Preservation Fund and the PACT should enable financial resources to continue to flow. Some of the process mechanisms, notably implementation and coordination arrangements, may last only as long as the project, but it is likely that appropriate implementation and coordination arrangements will evolve during the course of the project, adapting to the realities of local constraints.

Project Framework: The project framework, with performance targets, monitoring mechanisms, assumptions and risks, is very clear and objective, and will provide an excellent basis for ensuring that the project proceeds at an appropriate pace.

Pilot Protected Areas: The protected areas selected are a reasonable representation of the various habitat types that need to be included in the protected area system. Some thought will need to be given to how the lessons learned from the pilot protected areas are expanded to the other areas within the Sri Lankan conservation system. One

potential hazard to be addressed is to ensure that government investment, as well as private sector investment, continue in the other protected areas in the system, and that the pilot protected areas do not drain resources from other sites. It is critically important that the pilot protected areas are managed in ways that are feasible to be implemented in other sites within the system.

Replicability: The pilot protected areas are clearly intended to show the way for other elements in the Sri Lankan protected area system. Some of these additional sites such as Wilpattu, Ruhuna, Maduru Oya, and Yala, may be well adapted to the kinds of approaches being developed in this project. The forest reserve system on the other hand, may not be appropriate for tourism development, being managed for other objectives. The replicability of the project more globally will depend especially on communicating the lessons learned and adapting these lessons to local conditions elsewhere. An excellent opportunity for promoting such replicability will be the fifth World Congress on Protected Areas, to be held in September 2002 in Durban, South Africa. The Project Leader might consider preparing a presentation on the more interesting elements of the project for presentation at the Parks Congress in Durban. Elements likely to be of particular interest to the wider audience will be PACT, the involvement of the private sector, and the systems planning elements; all of these take place in a densely-populated country, which makes the lessons learned all the more relevant.

Consulting Services: The terms of reference for consulting services are appropriate, although the specific terms of reference will need some further development by the team leader as the project proceeds. As indicated above, the challenge for this project will be in its implementation, and the project leader needs to be given appropriate flexibility to modify the project in light of changing conditions. Consideration should be given to ensuring that the necessary flexibility is built into the terms of reference and working conditions of the project leader, not waiting until the midterm review to make necessary changes. In fact, it might be advisable for a reasonably detailed review to be conducted at the end of the first year, in order to identify challenges that have arisen in the course of implementation.

Conclusion: This is an excellent project that is well adapted to the needs and constraints of today's Sri Lanka.

Signed on 6 June 2000
in Gland, Switzerland

Response to the STAP Review

1. The strong endorsement of the Project by the STAP review is appreciated. All issues raised in the STAP are relevant and meaningful and a response to each of the key issues raised is provided below.

2. The STAP review raised the issue of the "magnet effect" whereby people are attracted into ecologically-sensitive areas such as buffer zones by opportunities associated with development activities. The process of engagement with protected area (PA) communities to be employed in this Project, however, contains an integrated solution to the "magnet effect". This is because it is designed to create stronger, more cohesive communities, their members more fully aware of their own interests and the consequences of competitive in-migration, and their property rights more clearly established. Under these circumstances, there is expected to be increasing resistance to in-migration over time in the areas affected by Project investments. Social assessment during project design clearly identified poverty as the key root cause endangering PAs. The Project response to this root cause is mostly through stimulating community-based low-impact ecotourism and providing assistance to induce a community empowerment process. Participatory land-use zoning and concession agreements are two of the tools that will be used to minimize negative impacts from ecotourism development. The Protected Area Community Trust (PACT) has been designed explicitly to link the empowerment process to conservation of PA and, besides the empowerment process, will only finance investments that directly address the mitigation of an identified threat to the ecosystem concerned. Through benefit sharing, environmental education and a process of learning, the Project will empower local communities to maintain the integrity of the ecosystems concerned for their own benefit. Thus, the Project is expected to generate environmental and social benefits that will far outweigh any residual problems that may arise from the "magnet effect".

3. The STAP review states that Sri Lanka already has an excellent Biodiversity Conservation Action Plan (BCAP) but points out that a more comprehensive process of policy review is advisable and that a national biodiversity strategy and action plan is well justified. The BCAP that will be prepared under the Project will build on the "Framework for Action" prepared with the support of IUCN in 1998. Although useful, this first attempt at a BCAP was prepared very quickly and without the benefit of comprehensive consultation and does not adequately cover PAs under DWLC management. Due to the intensely interactive and consultative process that will be adopted, the preparation of the comprehensive BCAP is expected to take about 2 – 3 years.

4. The STAP review notes that the project document focuses quite rightly on PACT processes, rather than on how the funds will actually be spent. The detailed mechanisms that are envisaged for the operation of the PACT are described in Supplementary Appendix B "Partnership Building Processes". More specifically, the PACT will screen, select, train and contract NGOs and CBOs to provide facilitation and guidance services to PA communities. The focus of the PACT will be on the achievement of particular outcomes through a contracting process, and contractors will be assessed according to the achievement of key performance indicators (KPIs). Thus, eligibility for training will be determined by the likely capacity of potential contractors to achieve the KPIs, and training will focus upon providing the skills needed to achieve them unambiguously for every community-strengthening contract. The first KPI is that structural poverty must be fully analyzed, and participation by the poorest members of each community assured, so that Community Action Plans (CAPs) address their needs

explicitly rather than only those of the richer and more articulate. The reason for this is that it is specifically the poorer households among the people living close to PA boundaries who pose the greatest direct threat to PA resources, either by acting on their own needs for livelihood resources, or else by being co-opted into illegal activity by outsiders. The second KPI is that 'green' environmental education must be fully internalized within the CAP process, leading to a consensus within the target community that environmental integrity and biodiversity are vital resources for its own development. The reason for this is that neglect of attention to ecology and biodiversity issues in participatory resource assessment can lead to the community missing the perception of important opportunities, and disregarding important risks. The final KPI is that an agreement is reached between the community and PA managers on their respective roles, rights and responsibilities concerning wildlife and PA management. This agreement will need to be recorded within the CAP, but will require a separate process to achieve, involving analysis of conflicts of interest, facilitated negotiation of a settlement, and formulation of an agreement.

5. The STAP review called for a clarification of the relationship between the Wildlife Preservation Fund (WPF) and the PACT. The WPF is a mechanism that allows the Department of Wildlife Conservation (DWLC) to finance and support specific activities under their jurisdiction for which financing under normal budgetary procedures would be cumbersome to obtain. The WPF is presently being used to finance an indemnity scheme to compensate those who fall victim to elephant damage and to pay field allowances for DWLC officers. By gradually replacing the capital budget outlays to the DWLC with revenues obtained from the PA system directly transferred to the WPF, the Project will establish a relationship between DWLC's performance in maintaining the integrity of the PA system including the development of ecotourism and the level of resources at its disposal. The PACT, on the other hand, is a mechanism for financing a community empowerment process linked to conservation. In contrast to WPF, the PACT will be outside the control of Government since government agencies are ill-equipped to handle community mobilization and empowerment.

6. The Review highlights the need to consider how lessons learned from the PAs would be transferred to other parts of the PA system, and the need to ensure that pilot PAs do not drain resources from other sites. The Project will not have a detrimental impact on those PAs under the DWLC that have not been included as pilot PAs. The Project will build capacity throughout the PA system and by providing resources to the pilot PAs, the Project will free DWLC resources to be meaningfully invested in those PAs that are not explicitly covered under the Project. Pilot PAs have been selected to be representative of a broader universe of PAs, and this will ensure that management systems introduced and lessons learned are relevant to other sites within the system. Exchange programs for DWLC staff for pilot PAs and those others, including joint impact assessment workshops will ensure that the lessons learned in the pilot PAs are replicated within those PAs not covered under the Project.

7. The Review's recommendations to maintain a Project design that is flexible and process oriented, including the explicit incorporation of such necessary flexibility in the consultants' terms of reference have been noted and the consultants' detailed terms of references have been altered accordingly. The twinning of DWLC with a consortium of international NGOs that have experience in conservation as well as community mobilization, the exchange programs between DWLC and reputable conservation agencies elsewhere, capacity building of DWLC staff, including frequent review missions by ADB are all measures that have been adopted under the Project to ensure that its design is constantly being reviewed and adapted to a changing environment.

PROJECT COMPLIANCE WITH THE REVIEW CRITERIA OF THE GLOBAL ENVIRONMENTAL FACILITY

Review Criteria	Project Response
1. Country Ownership	
A. Country Eligibility	Sri Lanka ratified the Convention on Biodiversity in 1994.
B. Country Drivenness	Sri Lanka's national development plans and sector programs call for the protection of wildlife biodiversity along with the non-consumptive use of protected areas, with an emphasis on developing ecotourism and local community participation. During Project preparation, this was further advanced within a new Wildlife Policy and is supported by the following documentation (i) National Environment Action Plans; (ii) Biodiversity Conservation in Sri Lanka: A framework for Action; (iii) National Conservation Review; (iv) Forest Policy and Master Plan; and (v) National Coastal Zone Management Plan. (pp.6-7, paras.18-21). Additional Government commitment was demonstrated by establishing a National Task Force, comprising 15 eminent multi-sector representatives, to guide the project design (p.1, para.1). This commitment extended to the functional realignment of the DWLC (p.11, paras.34-35) and the support for using the Biodiversity Conservation Secretariat as one of the Project Implementing Agencies (p.23, para.69) to increase cross sector coordination.
C. Endorsement	The National Operational Focal Point for GEF in Sri Lanka is the Ministry of Forestry and Environment, which endorsed the proposed Project.
2. Program and Policy Conformity	
A. Program Designation and Conformity	The GEF Focal Area of the Project is Biodiversity with Project objectives addressing all GEF Operational Programs including: (i) Arid and Semi Arid Ecosystems (Bundala and Wilapattu National Parks); (ii) Coastal, Marine and Freshwater (Bundala National Park); (iii) Forest Ecosystems (all pilot Project areas); and (iv) Mountain Ecosystems (Peak Wilderness and Horton Plains National Parks). The Project conforms to the Operational Program Objectives (Appendix 3, para.7) concerning in-situ conservation through support for adaptive management at 7 priority pilot protected areas, which contain biodiversity of global significance (see Appendix 4).
B. Project Design	The Project design was developed based on a participatory stakeholder analysis of sector issues (pp.4-12, paras.11-38) along with their assessment of threats to global, national, and local biodiversity values and the root causes for these threats (Appendix 4). The Project framework (Appendix 1) provides a summary of the project design, including the activities, processes, and inputs considered necessary to achieve the overall Project goal of conserving wildlife biodiversity of global value for the benefit of present and future generations. Project components (pp.16-20, paras.48-62) and their subcomponents are developed from the underlying rationale (pp. 13-14, paras.40-41), pilot Project areas (pp.14-15, paras.42-45), Project scope (p.15, paras.46-47) and threats and opportunities. Global environmental benefits are discussed in terms of consistency with the GEF goals and objectives (p.20, para.63) and also in Appendix 3 (paras. 2-8), which is presented with key performance indicators and a statement of the expected global benefits. The incremental cost analysis is provided in Appendix 3. The analysis builds a business as usual baseline (Appendix 3, para.9) a sustainable development baseline (Appendix 3, para.10) and a GEF alternative. Further details on the business as usual baseline can be found in the indicative threat analysis and Project response matrix on page 3 of Appendix 4.
C. Sustainability	The Project design incorporates the lessons learned from past sector experience (pp.8-10, paras.25-30). Of these, the inability of projects to institutionalize social processes to ensure a sustained impact was identified as a critical design requirement. Linked is the lesson that without social support for protected areas, protection of conservation resources

	can not be accomplished. The Project design therefore includes a sustainable financing mechanism for public-community partnerships. Component D (pp.19-20, paras.61-62) and Appendix 6 present the proposed Protected Area Conservation Trust (PACT) which is an endowment that will continue to resource the social processes and partnership program into the foreseeable future. The Project is creating a range of new or expanded functions for the DWLC (pp.16-17, paras.48-49) all which have resource requirements. Human resources are to be trained from within the cadre, wherever possible, or otherwise recruited from outside DWLC (7 positions). Financial budgetary requirements will also increase. The Government, as part of the policy dialogue under the Project, has agreed to let the DWLC retain 50 percent of the PA revenues for such purposes, enabling new functions to be maintained and eventually grown (pp.12, paras.36–38). The financial sustainability plan undertaken indicates that with the incremental financing DWLC will receive from retaining a portion of PA revenues and the establishment of the PACT will ensure that all Project activities are financially sustainable.
D. Replicability	The underlying design for the Project is process based, with a heavy emphasis on team-based responsibility and accountability (p.16, para.49). This involves active learning processes and adaptive management procedures (Appendix 4, page 5). The lessons learned from instituting a process approach for protected area management in seven pilot areas will allow DWLC to replicate these approaches in all other PAs under its control. Furthermore, the coordination arrangements instituted under the Project will ensure that these lessons will be shared with other conservation agencies. Through a twinning arrangements with international NGOs and partnerships with other international conservation agencies (p.16, para.48) DWLC will benefit from exposure to international best practice in conserving biodiversity and at the same time these twinning arrangements will allow the international conservation community to learn from the experiences and processes established in Sri Lanka. The development of organization wide systems and capacity (p.16, paras.48-50) and the development of experience with adaptive management at 7 pilot sites (pp.14-15, paras.42-45) therefore provides an excellent platform on which to replicate the successes and learn from failures.
E. Stakeholder Involvement	The Project was designed in a participatory and consultative process (see para. 1). This participation also extended through to the drafting of the new Wildlife Policy, which involved stakeholders from all levels of society. The extent of participation in the Project design initially involved a major social assessment of local communities and a series of 3 stakeholder workshops and NGO/CBO workshops (Appendix 5). In the final design process, the degree of participation was increased (p.1, para.1) and through the utilization of rapid assessment techniques and facilitated workshops. Project implementation will also rely heavy on stakeholder involvement. The process of community based planning has a strongly inclusive element within it (Appendix 5, paras. 22 and 23). This is further supported by the PACT contracting process and the contractor development program (pp.19-20, paras.61-62). Cross sector participation, previously a major constraint in the sector (p.4, para.12) is being addressed directly through the strengthening of the Biodiversity Secretariat and the provision of resources for specific tasks for joint conservation planning of all agencies concerned (p.18, para.57). Independent Project impact monitoring, including the preparation of publicly available annual reports, will assure wide dissemination of Project information (see p. 16, para.49). Modern information technology will be used to disseminate information on biodiversity conservation, Project performance and progress to all those interested.
F. Monitoring and Evaluation	The Project design is built on the experiences made under previous assistance to DWLC in particular the UNDP/GEF project (p.8, para.25) and lessons learned from other conservation projects in the region (pp.8-10, paras.26–30). The Project's monitoring program design focuses on institutionalizing the process and systems within DWLC and the wider

	sector. The system will be developed in conjunction with the user, for the users (para. 48; para. 50; para. 51). The monitoring inputs will be supported through an international partnership program (Appendix 10, p.4 paras.22-25) involving NGOs with skills in Biodiversity and Wildlife Management and Participatory Community Mobilization experience. Further monitoring is to be undertaken as part of the cross-sector participation, which will be used to evaluate a number of the public conservation projects or programs. This will include DWLC, Forest Department, Coast Conservation Department and NGOs undertaking joint field evaluations and dissemination of the findings to the public (page 17).
3. Financing	
A. Financing Plan	The total Project costs has been estimated at about $35 million (p.20, para. 64). These will be shared between the Government, Project beneficiaries, ADB, GEF and the Government of the Netherlands. A summary of the cost estimates and financing plan is provided on pp.21-22, paras.64-65. A more detailed cost summary is attached as Appendix 7.
B. Implementing Agency	The World Bank will be the GEF Implementing Agency for the Project with ADB assuming the main responsibility for Project execution.
C. Cost Effectiveness	Alternatives to the proposed Project design have been developed, assessed and rejected. An alternative design was for the Project to be oriented to clusters of PAs. This design was not considered to be fully consistent with the emergence of a holistic managerial vision within DWLC. Another alternative Project design was for DWLC to control funds with which to initiate development interventions at the community level around PAs. It was concluded on the basis of lessons learned that DWLC would not have the capacity and skills to effectively enable participatory community planning and empowerment. The use of the existing Wildlife Trust was considered instead of establishing the PACT. This alternative was rejected because the Wildlife Trust, although effective in many ways and particularly in schools-based environmental awareness-raising, is not independent of government control and under law cannot be re-focussed on the necessary terms of reference without being wound up and a new Deed of Trust established. A private-sector led PA management approach was also considered and rejected as increased private-sector involvement in wildlife conservation is a sensitive area of public debate, and a learning and trust-building process is required before consensus can be achieved, starting with an increased role for the private sector in ecotourism development. Meanwhile, the alternatives of wholesale privatization of individual PAs or the semi-privatization of the whole PA system were considered but could not be sustained politically and over concerns related to regulating private sector activities inside PAs, and were therefore rejected. Finally, a Project design focusing exclusively on institution building in DWLC was considered for reasons of simplicity of institutional arrangements, but rejected because it would not have been able to address the root causes of the most important and widespread threats to biodiversity, namely rural poverty and community weakness.
4. Institutional Coordination and Support	
A. Core Commitments and Linkages	The ADB Country Operational Strategy considers sustainable resource management as one of the critical success factors in achieving long term economic growth and achieving sustainable reductions in the incidence of poverty (p.10, para.31). The ADB natural resources project portfolio is strongly representative of the green side of resource management. The following projects having links to the proposed Project:(i) Coastal Resource Management Project, which includes special area management plans for a number of coastal PA's;(ii) Forest Resource Management Project, which provides for integrated resource management planning for all forests under FD management including conservation forests;(iii) Upper Watershed Management Project that involves the development and protection of appropriate land use on steep lands in critical watershed catchments (p.7, para.22). Further technical assistance is being provided to develop frameworks and analysis of critical outstanding issues such as

	strengthening Environmental Impact Assessments, Water Resources Management and Land Use Policy and Legislation. The Netherlands have a long history of involvement in natural resources in Sri Lanka including Biodiversity Conservation (page 7). The current GEF portfolio in Sri Lanka related to Biodiversity is based on 2 recently approved small and medium sized projects, one on the southern coastal strip, the other in the South West Forests of KDN and Sinharaja. These areas were not included in this proposal and are not under the jurisdiction of the DWLC (page 8). Different Executing Agents will undertake implementation of the Project. To achieve a coordinated input, a national coordinating committee will be established (p.24, para.71). Components A and B of the Project are implemented by the DWLC, where a Project Management Unit will be established and staffed (pp.22-23, para.68). Component C will be executed by the MFE and implemented through the BCS (see p.23, para.69). Component D is being implemented outside of the Government system and as such represents a major change on previous approaches in Sri Lanka (pp.23-24, paras.70-71) – see also Appendix 6. Other GEF influences on the Project design are not expected as where potential overlap or influence was predicted these activities or areas were excluded.
B. Consultation, Collaboration between IA's and EA's	The Project design has specifically incorporated this aspect as Component C (p.18, para.57) in an attempt to develop integration across the Project. A full description of the integration of the PMU and the IA's can be found on pp. 22-26, paras.68-78 and includes details of reporting and auditing. This includes reporting of the Project to the public and to the donors. The implementation of the adaptive management and community outreach activities in Component B require a work planning exercise to be completed and then be approved by the Project Director after notifying the ADB.

Appendix 14

08 June 2000

MR. NESSIM J. AHMAD
Policy Coordinator & GEF Facilitator
Office of Environment and Social Development
Asian Development Bank,
P.O. Box 789,
Manila, Philippines

Dear Mr. Ahmad:

Subject: **Sri Lanka - Protected Area Management and Wildlife Conservation Project**

In my capacity as the GEF Operational Focal Point of the Government of Sri Lanka, I would like to reiterate my Government's endorsement of the proposed *Protected Area Management and Wildlife Conservation Project* and express our satisfaction with the content of the Project Brief, to which this letter is attached. The proposed project is a national priority consistent with the country's framework for action on biodiversity conservation, and will substantially support Sri Lanka's biodiversity management and poverty reduction objectives.

On behalf of the Government of Sri Lanka, I would also like to express our appreciation to the Asian Development Bank (ADB) for the successful implementation of the Global Environment Facility (GEF) PDF Block B grant approved by the GEF in September 1999. The project's preparatory process has been truly participatory and has brought together all stakeholders from Government, civil society, the private sector and the local communities surrounding protected areas. It has also been instrumental in supporting the Government's increasing policy commitments on biodiversity conservation, including the new National Wildlife Policy. Also important has been the effort to build on accomplishments and lessons from the UNDP/GEF *Development of Wildlife Conservation and Protected Area Management Project* that ended in 1999.

By way of this letter, I request the ADB to undertake all necessary steps to submit the project proposal to the GEF and obtain GEF approval for its funding as soon as possible. It is our understanding that the World Bank has agreed to act as GEF Implementing Agency for this ADB/GEF project, and we have no objection to this arrangement.

Yours sincerely,

K.A.S. Gunasekera
Secretary
Ministry of Forestry & Environment
GEF Operational Focal Point for Sri Lanka