



Completion Report

Project Number: SRI 31381
Loan Number: 1767-SRI (SF)
November 2010

Sri Lanka: Protected Area Management and Wildlife Conservation Project

CURRENCY EQUIVALENTS

Currency Unit – Sri Lanka Rupee (SLRe/SLRs)

		At Appraisal 15 August 2000	At Project Completion 22 June 2010
SLRe1.00	=	\$0.0128	\$0.0088
\$1.00	=	SLRs78.175	SLRs113.500

ABBREVIATIONS

ADB	–	Asian Development Bank
BBS	–	biodiversity baseline survey
BCAP	–	Biodiversity Conservation Action Plan
BDS	–	Biodiversity Secretariat
CBD	–	Convention on Biological Diversity
CBO	–	community-based organization
DWC	–	Department of Wildlife Conservation
EA	–	executing agency
EIRR	–	economic internal rate of return
FFPO	–	Fauna and Flora Protection Ordinance
GEF	–	Global Environment Facility
GIS	–	geographical information system
GPS	–	global positioning system
HEC	–	human-elephant conflict
IA	–	implementation agency
ICT	–	information and communication technology
IUCN	–	International Union for Conservation of Nature
MENR	–	Ministry of Environment and Natural Resources
MIS	–	management information system
MOE	–	Ministry of Environment
MOED	–	Ministry of Economic Development
MOFE	–	Ministry of Forest and Environment
NGO	–	nongovernmental organization
NWTC	–	National Wildlife Training Center
OED	–	Operations Evaluation Department
PA	–	protected area
PACF	–	Protected Area Conservation Fund
PACT	–	Protected Area Conservation Trust
PAM	–	project administration memorandum
PCR	–	project completion report
PMU	–	project management unit
PPA	–	pilot protected area
PRA	–	participatory rural appraisal
RRP	–	Report and Recommendation of the President
TA	–	technical assistance
UNDP	–	United Nations Development Programme

UNESCO	–	UN Educational, Scientific and Cultural Organization
VSE	–	visitor services and ecotourism
WPF	–	Wildlife Preservation Fund

GLOSSARY

Grama Niladhari division	–	Lowest level of government administration
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NOTES

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

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BASIC DATA

A. Loan Identification

1.	Country	Sri Lanka
2.	Loan Number	1767-SRI(SF)
3.	Project Title	Protected Area Management and Wildlife Conservation Project
4.	Borrower	Government of Sri Lanka
5.	Executing Agencies	Department of Wildlife Conservation and the Ministry of Environment and Natural Resources
6.	Amount of Loan – Original	SDR8,997,000.00
7.	Project Completion Report Number	PCR: SRI 1185

B. Loan Data

1.	Appraisal – Date Started – Date Completed	17 April 2000 3 May 2000
2.	Loan Negotiations – Date Started – Date Completed	19 June 2000 21 June 2000
3.	Date of Board Approval	19 October 2000
4.	Date of Loan Agreement	6 December 2000
5.	Date of Loan Effectiveness – In Loan Agreement – Actual – Number of Extensions	6 March 2001 17 September 2001 2
6.	Closing Date – In Loan Agreement – Actual – Number of Extensions	30 June 2007 31 December 2008 1
7.	Terms of Loan – Interest Rate – Maturity – Grace Period	1% 32 Years 8 Years
8.	Terms of Relending (if any) – Interest Rate – Maturity (number of years) – Grace Period (number of years) – Second-Step Borrower	

9. Disbursements

a. Dates

Initial Disbursement	Final Disbursement	Time Interval
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21 December 2001	8 April 2009	87.19 months
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Effective Date	Original Closing Date	Time Interval
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17 September 2001	30 June 2007	69.4 months
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b. Amounts in SDR and \$

Category	Original Allocation		Last Revised Allocation		Amount Disbursed		Undisbursed Balance	
	SDR	\$	SDR	\$	SDR	\$	SDR	\$
Civil works	2,679,000	3,573,191	4,089,000	6,141,000	3,905,897	5,846,975	183,103	294,025
Equipment and vehicles	2,242,000	2,990,330	2,465,000	3,672,000	2,332,522	3,463,164	132,478	208,836
Training and workshops	1,163,000	1,551,184	561,000	840,000	517,139	768,893	43,861	71,107
Consulting services	112,000	149,383	302,000	444,000	264,717	386,396	37,283	57,604
Consulting services- media/publications/IT/research/ NGO contracts	923,000	1,231,077	712,000	1,086,000	692,723	1,055,134	19,277	30,866
Incremental recurrent expenditures	227,000	302,768	322,000	489,000	283,202	424,804	38,798	64,196
Interest charge	319,000	425,475	319,000	489,000	209,777	320,155	109,223	168,845
Unallocated	1,332,000	1,776,592	227,000	351,000	-	-	227,000	351,000
Total	8,997,000	12,000,000	8,997,000	13,512,000	8,205,977	12,265,521	791,023	1,246,479

IT = information technology, NGO = non governmental organization

10. Local Costs (ADB-Financed)

- Amount (\$ million)	5.5
- Percent of Local Costs	39
- Percent of Total Cost	18

C. Project Data

1. Project Cost (\$ million)

Cost	Appraisal Estimate	Estimate at Loan Effectiveness	Actual
Foreign Exchange Cost	17.6	15.4	16.3
Local Currency Cost	17.1	18.1	14.0
Total	34.7	33.5	30.3

2. Financing Plan (\$ million)

Cost	Appraisal Estimate	Estimate at Loan Effectiveness	Actual
Implementation Costs			
Borrower Financed	7.7	7.6	4.6
Beneficiaries	0.9	0.9	2.0
ADB Financed	11.6	11.6	11.9
GEF Financed	10.1	9.0	7.9
Netherlands Government	4.0	4.0	3.6

Cost	Appraisal Estimate	Estimate at Loan Effectiveness	Actual
Total	34.3	33.1	30.0
IDC Costs			
Borrower Financed	0.0	0.0	0.0
ADB Financed	0.4	0.4	0.3
Other External Financing	0.0	0.0	0.0
Total	34.7	33.5	30.3

ADB = Asian Development Bank, IDC = interest during construction, GEF-Global Environment Facility
 Note: At loan appraisal, the Global Environment Facility (GEF) portion of costs was \$10.2 million and that of the government was \$8.6 million. On 6 September 2001, before loan effectiveness, these amounts were amended to \$9.0 million for the GEF and \$8.5 million for the government. The total appraisal estimate amount was \$33.5 million as of the effective date.

3. Cost Breakdown by Project Component (\$ million)

Component	Appraisal Estimate	Estimate at Loan Effectiveness	Actual
Enhancing Institutional Capacity for Protected Area Management	12.0	12.0	9.0
Participatory Adaptive Management of PAs	7.5	7.5	12.7
Collaborative Conservation Planning	1.2	2.2	0.7
Sustainable Financing for Community Partnership Building	9.8	7.2	7.6
Contingencies			
1. Physical Contingencies	2.3	2.7	
2. Price Contingencies	1.5	1.5	
Interest Charges	0.4	0.4	0.3
Total	34.7	33.5	30.3

PA = protected area.

Note: At loan appraisal, the Global Environment Facility (GEF) portion of costs was \$10.2 million and that of the government was \$8.6 million. On 6 September 2001, before loan effectiveness, these amounts were amended to \$9.0 million for the GEF and \$8.5 million for the government. The total appraisal estimate amount was \$33.5 million as of the effective date.

4. Project Schedule

Item	Appraisal Estimate	Actual
Main TA Consultancy Service	Q ₂ 2001- Q ₁ 2006	Q ₄ 2004- Q ₄ 2007
Habitat Mapping & Portfolio Gap Analysis Of Protected Areas In Sri Lanka	Q ₄ 2001- Q ₃ 2004	Q ₃ 2004- Q ₃ 2006
Biodiversity Base-Line Survey Of Seven Selected Sri Lankan Protected Areas (Phase I)	Q ₁ 2002- Q ₄ 2005	Q ₁ 2006- Q ₄ 2008
Biodiversity Survey(Extension)- Phase II	Q ₁ 2002- Q ₄ 2005	Q ₄ 2007- Q ₄ 2008
Civil Work	Q ₁ 2002- Q ₄ 2005	Q ₂ 2003- Q ₄ 2008
Procurement Machinery & Equipment	Q ₁ 2002- Q ₄ 2005	Q ₃ 2002- Q ₄ 2008
Vehicles	Q ₁ 2002- Q ₄ 2006	Q ₁ 2002- Q ₄ 2005

5. Project Performance Report Ratings

Implementation Period	Ratings ^a	
	Development Objectives	Implementation Progress
From 30 October to 30 December 2000	S	S
From 30 March 2001 to 30 May 2001	HS	S
From 29 June 2001 to 30m August 2001	HS	U
From 29 September 2001 to 29 November 2001	PS	S
From 30 December 2001 to 28 February 2004	S	S
From 30 March 2004 to 28 April 2004	PS	S
From 29 April 2004 to 30 December 2009	S	S

^a HS = highly satisfactory, S = satisfactory, PS = partly satisfactory, U = unsatisfactory

Source: Asian Development Bank records

D. Data on Asian Development Bank Missions

Name of Mission	Date	No. of Persons	No. of Person-Days	Specialization of Members ^a
Fact-finding	22 March-9 April 1999	3	45	a,b,c,
Appraisal	17 April- 3 May 2000	6	48	a,b,c,d,e,f
Special review	14-21 May 2001	2	16	c,g
Inception	18-27 March 2002	4	40	c,g,h
Review	30 November-9 December 2002	2	20	c,i
Review	24 June-17 July 2003	2	48	c,g
Review	15- 19 December 2003	3	15	c,h
Review	11-13 March 2004	1	03	c
Special review	17-21 May 2004	2	10	c,g
Midterm review	10-25 November 2004	2	32	c,g
Review	11-16 July 2005	2	12	c,j
Review	21-22 December 2005	2	04	c,k
Review	13-23 February 2006	2	22	c,k
Review	7-17 November 2006	3	33	c,f,g
Review	10-18 July 2007	3	27	c,g,k
Review	7 -14 January 2008	2	16	c,f
Review	2-13 June 2008	3	36	c,g,l
Project completion	12 July-5 August 2010	5	27	c,g,m,n

Note: Representatives of the Government of the Netherlands and World Bank (acting on behalf of the Global Environment Facility) participated in all missions except the fact-finding mission.

^a a = environment specialist, b = social development specialist, c = project implementation officer, d = senior programs officer, e = senior sector specialist, f = legal counsel, g = project analyst, h = country director, i = project economist, j = disbursement officer, k = head project administration unit, l = external relations officer, m = socioeconomist (consultant), n = natural resources specialist (consultant)

I. PROJECT DESCRIPTION

1. The Protected Area Management and Wildlife Conservation Project was formulated in 1998, modified in 1999 to incorporate Global Environment Facility (GEF) cofinancing, and appraised and approved by the Asian Development Bank (ADB) in 2000.¹ The loan of \$12 million equivalent from ADB's Special Funds resources became effective in September 2001 with an original target closing date of 30 June 2007, which was extended to 31 December 2008. The cost at appraisal was \$34.7 million, jointly funded by the Government of Sri Lanka, ADB, and beneficiaries, with grants from the GEF and the Government of the Netherlands. A major amendment prior to effectiveness reduced the cost to \$33.5 million.²

2. The classification in the report and recommendation to the president (RRP) was primarily environment and secondarily poverty reduction. The planned impact was to (i) enhance the management of protected areas and the conservation of wildlife resources and biodiversity, and (ii) reduce poverty in communities adjacent to seven pilot protected areas (PPAs).³

3. The project's four components are described in detail in Appendix 5. Component A aimed to upgrade the institutional capacity of the Department of Wildlife Conservation (DWC). Component B aimed to strengthen the management of seven PPAs through the adoption of participatory adaptive management techniques. Component C sought to develop collaborative intersectoral conservation planning and component D was to establish a sustainable financing mechanism for community conservation activities through a protected area conservation trust (PACT). Due to technical funding issues, the PACT became the Protected Area Conservation Fund (PACF) prior to loan effectiveness (footnote 2). A team of technical assistance (TA) consultants were appointed to provide implementation support.

4. At appraisal, an estimated 50% of the 180,000 people around the PPAs were living below the government's poverty line.⁴ The project's quantifiable direct benefits were expected to be (i) employment, livelihood investments, and reduced property damage and loss of human life due to human-elephant conflicts (HECs); and (ii) increased tourism income. The significant unquantifiable benefits were to be the conservation of biodiversity and indigenous and endangered species; carbon sequestration by conserved forest; microclimate and nutrient maintenance; and research and education. The appraisal estimate of economic internal rate of return (EIRR) was 18% (Appendix 9).

5. The executing agency for components A and B was the DWC, then within the Ministry of Public Administration and Home Affairs.⁵ Component C was under the Ministry of Forest and Environment⁶ (MOFE), implemented through the Biodiversity Secretariat (BDS). Component D was to be executed by consultants engaged by the project management unit (PMU) within the DWC.

¹ ADB. 2000. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Democratic Socialist Republic of Sri Lanka for the Protected Area Management and Wildlife Conservation Project*. Manila.

² ADB. 2001. *Loan No 1767-SRI (SF): Protected Area Management and Wildlife Conservation Project: Amendments*. Manila.

³ The PPAs were Bundala, Udawalawe, Horton Plains, Peak Wilderness, Ritigala, Minneriya, and Wasgamuwa.

⁴ All those eligible to receive SLRs500 or more per month under the government's poverty alleviation program.

⁵ Prior to loan effectiveness, this ministry was reorganized as the Ministry of Public Administration, Home Affairs, and Plantation Industries. The DWC was later moved first to the Presidential Secretariat, then to the Ministry of Environment and Natural Resources (MENR), and after the project was completed to the Ministry of Economic Development (MOED).

⁶ This later became the MENR.

6. Changes were made to the project in 2001 before loan effectiveness (footnote 2):
- (i) Under the RRP, the PMU was to be headed by the director general of the DWC to ensure the department's close involvement. A government request that the PMU be headed by a project director outside the DWC was approved.
 - (ii) The protected area conservation trust originally proposed under component D would have operated in perpetuity with endowment funding. Because the Government of the Netherlands could no longer contribute to such a trust, it was replaced by a fund, the PACF that would fulfill the same project objectives but offer financing only during the project's life.
 - (iii) Component C was expanded to strengthen the BDS with additional consultancy, equipment, and training.
7. The loan and financing agreements were revised and the budget reduced from \$34.7 million to \$33.5 million, with the share of the GEF reduced from \$10.2 to \$9.0 million and that of the government from \$8.6 to \$8.5 million.

II. EVALUATION OF DESIGN AND IMPLEMENTATION

A. Relevance of Design and Formulation

8. The project was designed to assist government in the conservation of natural resources and wildlife diversity by (i) addressing institutional and legal deficiencies in protected area management; (ii) testing participatory adaptive management strategies in priority PPAs; (iii) implementing small projects with communities in the buffer zones of PPAs to improve rapport and reduce encroachment; (iv) encouraging nature-based tourism; and (v) promoting collaborative research and planning to update the Biodiversity Conservation Action Plan (BCAP) and the management of threatened species nationally. The project was highly relevant at appraisal and at completion to the government's policies on environmental conservation and its commitments to international biodiversity conventions. The project conformed to the ADB's country operational strategy of 1998.⁷

9. The project was designed under ADB project preparatory technical assistance.⁸ The design included extensive stakeholder consultations, drew on previous experiences,⁹ and reflected government policy. In 1999, a second TA and a 15-member multisectoral special task force amended the design. The loan was approved by ADB in September 2000 and became effective in September 2001. A project administration memorandum (PAM) was finalized in 2002.

10. A revised project framework based on the RRP and modifications in the PAM is in Appendix 2.¹⁰ The project's goal was to enhance protected area and biodiversity conservation in Sri Lanka for the benefit of current and future generations. The intended outcome was to strengthen protected area management and develop operational partnerships with local communities and other stakeholders to reduce illegal use of PPA park resources. Improving management of protected areas was relevant to these objectives and improvements were likely

⁷ ADB.1998. *Country Operational Strategy for Sri Lanka*. Manila.

⁸ ADB. 1997. *Biodiversity Conservation Project*. Consultant's report. Manila (TA 2942-SRI)

⁹ The Wildlife Conservation and Protected Area Planning Project funded by the GEF and the United Nations Development Program (UNDP) in 1994–1999, with Food and Agriculture Organization support, focused on the DWC. ADB.1992. *Participatory Forestry Project*. Manila; ADB. 1982. *Community Forestry Project*. Manila.

¹⁰ The project framework in use by ADB at the design stage is now the design and monitoring framework.

to be more sustainable if they involved community partnerships. Although the RRP cited poverty reduction as a secondary classification, the project framework made no mention of it.

11. Among the many issues the project sought to address were institutional reform, protected area management, ecotourism, community outreach, research and biodiversity baseline surveys, and scientific outputs on national biodiversity. This complexity initially exceeded the relatively weak capacity of the DWC, which was understaffed.¹¹ Early changes in ministerial responsibilities, in the DWC staff, and in the government's project management arrangements contributed to a lack of ownership by the DWC and poor performance (para. 6). References to privatization in the RRP and the involvement of international NGOs were contentious for Sri Lankan wildlife activists and led to a protracted court case. The case was settled out of court in 2005 but the DWC was prohibited under the agreement from extending the project. In 2006, the government requested a project extension, which ADB could not approve until the prohibition ended in March 2007.¹² The intervening uncertainties, however, had impeded progress. Government approval of the TA contract was delayed 14 months and initial inputs by large numbers of consultants could not be absorbed by DWC. The project design had also set ambitious time targets for complex institutional and legal reforms, not recognizing that the bureaucratic procedures necessary would be lengthy. All this contributed to a slow start and required several design amendments. The timeline of events is summarized in Appendix 4.

12. Apart from the major changes approved before loan effectiveness, others were incorporated during implementation:

- (i) In December 2002, ADB agreed that in lieu of preparing the BCAP, addenda would be made to the existing BCAP.
- (ii) During 2003, TA consultant inputs were phased to match the DWC's limited absorption capacity.
- (iii) ADB approved additional project activities in 2003 and 2006 in the Kaudulla and Yala protected areas.¹³
- (iv) In 2004, the project management reverted to original design, with the director general of the DWC as project director. An Additional PD was also appointed.
- (v) The mode of procurement for the proposed head office building for the DWC was changed in 2004 June from international competitive bidding to local competitive bidding.
- (vi) Because the government did not favor recruiting international NGOs for the biodiversity surveys, in 2004, ADB, GEF, and the Government of the Netherlands agreed to a major change that allowed the TA consultants to undertake the surveys. The 3-yearly repeat survey was abandoned as the lapsed period would be too short to evaluate biodiversity changes.
- (vii) Despite two rounds of tendering, the DWC was unable to find suitable national NGOs to implement the PACF. Consultancy firms were recruited for three PPAs but outputs were unsatisfactory. In 2005, a DWC proposal to engage facilitators to work with PPA staff on the PACF outreach program was accepted by ADB, effectively internalizing the program.
- (viii) In 2007 June, recognizing that the project was making good progress, ADB extended it to 31 Dec 2008.

¹¹ The project included four components and 14 subcomponents,

¹² DWC field staff successfully lobbied the petitioners, who withdrew their opposition to the extension in March 2007.

¹³ In 2003 project activities were extended to Kaudulla, which was declared as a protected area in 2002. It forms a forest ecosystem contiguous with Minneriya. In 2006, minor funding was approved for Yala protected area for post-tsunami road repairs, assistance with management plans, and conflict resolution activities by outreach teams.

B. Project Outputs

13. Outputs achieved are reviewed against the performance targets in the project framework in Appendix 2. Biodiversity conservation measures are discussed in Appendix 10. Despite initial delays, the 18-month extension enabled most output targets to be met by project closure.

1. Component A: Enhancing Institutional Capacity

14. The component to build institutional capacity in the DWC was highly relevant but the restructuring and recruitment needed to achieve it met with strong internal resistance. Slow bureaucratic procedures delayed implementation. Moreover, when the project began, 40% of the DWC's positions were vacant. The changes in the DWC's host ministry and the posting of a project director from outside the department disrupted efforts in the early years and created a lack of ownership. Most elements of component A were implemented by the time the project ended.

15. **Management capacity enhancement.** A new organizational structure was initiated in 2002 to meet the long-term needs of the DWC (Appendix 3). Restructuring took 4 years and was approved by Cabinet in mid-2006, 5 years later than envisaged. Due to internal resistance to recruiting suitably qualified outside staff, the new posts were filled by in-house staff on a covering basis.¹⁴ Decentralizing management to the protected areas was effected from 2003 but new financial management procedures could not be implemented fully until after the DWC restructuring in 2005. Deputy Directors for the regional offices were not appointed until 2008 and 2009. Consolidating budgets at the regional level helped devolve planning, decision making, and management. PPA offices were refurbished but funding of a new head office was discontinued due to a court case.¹⁵

16. By 2007, the communication network for protected areas and DWC was fully operational and staff had been posted and trained. The global positioning system (GPS) and geographical information system (GIS) introduced by the project facilitated boundary delineation and the mapping and monitoring of resources. A new website¹⁶ improved the DWC's image and 25 research topics were outsourced. Some findings, particularly those produced by research on elephants, are being adopted in protected areas. The research program instilled a more collaborative attitude within the DWC. Although not designated an output in the project framework, amending the Fauna and Flora Protection Ordinance (FFPO), in line with the National Wildlife Policy (2000), was included in the loan covenants. Certified by Parliament in April 2009, the amendment incorporates a more relevant approach to wildlife conservation and was an important achievement.¹⁷

17. **Technical capacity enhancement.** All DWC units were strengthened by a wide range of training for all levels of staff. This included national and overseas events (Appendix 7). The in-country training included 280 awareness-raising programs. Around 8,000 persons benefited from training. The National Wildlife Training Center (NWTTC) was refurbished and the curriculum updated to include new concepts initiated through the project. This will benefit future trainees. The twinning with international NGOs and exchange visits envisaged by the project proved

¹⁴ The recruits would be considered to be filling the positions on a covering basis until they obtained the necessary qualifications and relevant years of experience to be accepted for permanent positions.

¹⁵ Work was curtailed due to a court case over a land dispute. Construction restarted with government funding in late 2008 after settlement of the dispute, using the design and contractor originally selected under the project. The building opened officially in August 2010.

¹⁶ www.dwc.gov.lk

¹⁷ Parliament of the Democratic Socialist Republic of Sri Lanka. 2009. *Fauna and Flora Protection Ordinance (Amendment) Act, No 22 of 2009*. Department of Government Printing, Colombo.

impractical due to public antipathy to international NGOs over suspicions of possible biopiracy. However, collaboration was established with the International Union for Conservation of Nature (IUCN) Sri Lanka and some 500 middle- and junior- rank staff established personal links with international NGOs and other agencies during their external study tours and training. Project monitoring was undertaken by the PMU but a comprehensive monitoring and evaluation system was not developed.

18. **Ecotourism capacity enhancement.** Ecotourism officers were appointed by the DWC in 2005. The DWC convened a national forum of diverse stakeholders to develop a visitor services and ecotourism (VSE) policy. Visitor surveys were completed in 2005 and the findings included in the VSE plans. Four study tours for a total of 105 staff were conducted to the Philippines, Malaysia, and Nepal. Park entry fees were revised following a review of the pricing structure and entry fees and visitor centers and visitor information displays developed. Efforts to involve private enterprise met with little success. VSE instruction has been included in the NWTC curriculum.

19. **Project management unit established.** Establishing the PMU in 2001 under an external project director created dissent within the DWC and turnover in procurement and civil engineering officers was high. TA consultants were mobilized 14 months after loan effectiveness and the inception phase of their work lasted another 6 months. Making the changes requested by the executing agency to the TA team delayed progress further.

20. **Wildlife biodiversity monitoring and evaluation strengthened.** The TA consultants were assigned to undertake the biodiversity survey (BBS) task (para.12). An advisory committee was established, including the DWC, the MENR, academics, and IUCN members. Baseline surveys were undertaken from 2006-2008. The NWTC has included BBS in its curriculum and repeat and additional surveys are being implemented at 16 sites by DWC staff and NWTC students.

2. Component B: Participatory Adaptive Management of Pilot Protected Areas

21. Management plans for each PPA were prepared and activities funded to address strategic threats and opportunities. The new concepts have been incorporated into the NWTC curriculum.

22. **Protected area management plans revised.** The existing management plans for each PPA were revised after stakeholder consultation and published in 2005.¹⁸ This has reduced ad hoc planning and management plans are now being prepared for other protected areas. PPA staff took ownership during preparation of the management plans and 3-year rolling plans and is still using them although the follow-up necessary to update them has been uneven.

23. **Adaptive management systems implemented.** The results of adaptive management experiments have been reflected in management approaches.¹⁹ Invasive species were removed on more than 7,841 hectares (ha) in the PPAs, 315 kilometers (km) of electric fences were constructed, and 347 km of fire lines were opened. This work was done primarily by community-based organizations (CBOs). CBOs and the private sector continue to remove invasive species but habitat enrichment has not progressed as expected. Although a phased approach was envisaged due to the delays in starting the project, several adaptive measures had to be initiated simultaneously.

¹⁸ These plans were prepared under the Wildlife Conservation and Protected Area Management Project, 1992–1999, funded by the GEF and the UNDP.

¹⁹ These involved electric fencing, habitat enrichment, water sources development, and live fencing.

24. **Management of pilot protected areas facilitated.** Management was improved by providing offices, vehicles, communications systems,²⁰ improved roads, and water supplies. Boundary marking of 627 km was completed around all the PPAs, which has reduced conflicts with communities. The project's GPS devices made verification of boundaries easier. The 315 km of electric fencing has reduced human-elephant conflict. Some reduction in livestock incursion resulted from the PACF initiatives that encouraged stall feeding and provided fodder in individual properties. Poaching was reduced by improving (i) staff mobility with the vehicles, (ii) communications, and (iii) relationships with adjacent communities, who often report violations to DWC staff. The DWC believes that illegal activities were reduced through better awareness, community outreach, the PACF-supported projects, and boundary demarcation.²¹ However, precise figures and attribution are difficult to assess.²²

25. **Ecotourism products and services developed.** The VSE plans were finalized by 2004 and implemented. Each PPA had an officer dedicated to ecotourism but most were transferred after the project to other protected areas or duties. Imaginatively designed visitor centers with information displays were established at each PPA.²³ Regular awareness programs are conducted at the visitor centers. Visitor experiences were improved by new recreational facilities, brochures, and electronic and print media for sale.²⁴ More could be done to attract visitors, including the granting of concessions to private enterprise to manage the facilities in a more imaginative way, marketing through the Tourist Board and tour operators, and encouraging adjacent communities to host visitors (Appendix 10). Private involvement was limited and the visitor flow inadequate to attract private collaboration.²⁵ Repeat visitor surveys were not conducted because the VSE implementation activities continued until project closure and impacts were not likely to be measurable during the project period. The number of visitors varied during the project according to current security conditions in the country and showed no particular trend (Appendix 9).

3. Component C: Collaborative Conservation Planning

26. This component, led by the Biodiversity Secretariat (BDS), produced outputs that helped improve the scientific database for national biodiversity conservation planning and contributed to meeting Sri Lanka's obligations to the Convention of Biological Diversity (CBD). It also developed capacity within the BDS to continue these activities.

27. **National Biodiversity Conservation Action Plan.** The BDS formed a strong cross-sector team of mainly academic and NGO specialists to develop addenda to the existing Biodiversity Conservation Action Plan (BCAP).²⁶ Although not in the original design, provincial biodiversity profiles and action plans were developed in close liaison with provincial agencies. Outputs included books, field guides, posters, and newsletters for increasing biodiversity awareness and education.

28. **Protected area system reviewed and enhanced.** Based on desk reviews, consultants guided by a task force of Forest Department, DWC, and BDS staff evaluated conservation areas

²⁰ Radio systems were installed under the project but mobile phone networks have developed widely since it was designed and mobiles are preferred over radio except in more remote PPAs, where radio is still used.

²¹ Illegal activities include encroachment, illegal logging, firewood collection, and gem mining.

²² Factors such as the zeal of park wardens and police, political intervention, and changes in the economies of buffer zone villages can affect the detection and encroachment figures.

²³ The center at Ritigala, a strict nature reserve that does not admit visitors, serves as a research and training center and provides facilities for visitors to local archaeological sites.

²⁴ The recreational facilities include paddle boats, camping sites, and viewing towers.

²⁵ Limited private involvement included corporate social responsibility initiatives and links with private safari operators.

²⁶ The RRP envisaged preparing the BCAP but this was altered to preparing an addenda to the existing BCAP.

and ecosystems in the context of the 1996 National Conservation Review to identify the need to fill ecosystems gaps in the protected areas.²⁷ The Forestry Department used the findings to justify gazettement of 108 reserve forests and 11 conservation forests. Although the RRP proposed investigating the potential to use public and private lands to link fragmented habitats, private lands were not included.

29. **Endangered species recovery plans prepared.** The BDS formed the Species Conservation Advisory Group to monitor the endangered species studies. It still meets quarterly. Working with the IUCN, the national list of endangered species was updated.²⁸ The evaluation considered 2,022 species (677 vertebrates, 246 invertebrates, 1,099 plant species) and assessed 33% of the vertebrate species as threatened. The results were published in 2007. A national database of threatened species was developed and profiles prepared for 122 faunal and 270 floral species. Two species recovery plans were prepared for *Puntius bandula* (an endemic freshwater fish), and *Ravana politissima* (a snail). The recovery program for the fish is being implemented and the program for the snail is being processed.

4. Component D: Protected Area Community Partnership Building

30. The component successfully developed rapport and mutual respect between the DWC staff and communities in the Grama Niladhari divisions (GNDs) around the PPAs (Appendix 8). The GNDs are the lowest level of government administration, comprising two to three villages. This reduced poaching and encroachment on the PPAs.

31. **Financing for community mobilization and planning.** The PACF, which replaced PACT (para.6), operated successfully and funded microprojects through CBOs. Government efforts to find matching fund donors to convert the PACF into a trust, which was a requirement of the GEF, were unsuccessful. The PACF operated as a sinking fund until the project closed. Because no NGOs suited to the task could be found, the DWC implemented the activities through PPA staff and recruited facilitators. This direct interaction with communities strengthened social skills and helped the DWC develop a successful outreach program. The failed NGO recruitment attempts and the subsequent need to develop a team of facilitators delayed progress, however. Allocating 50% of park revenues to the Wildlife Preservation Fund, part of which can be used for outreach activities, have helped make outreach more sustainable.

32. **Communities empowered through resource and development projects.** The project mobilized and worked with 167 CBOs and cluster forums in 198 GNDs around the periphery of the PPAs and helped prepare 168 community microplans by 2007. Grant review bodies approved 224 microprojects, with close involvement by local and provincial government representatives. The grants financed community-wide civil works and electric fencing as well the establishment of revolving CBO funds to finance income-generating enterprises. By the end of the project, 192 projects had been implemented and 6 were ongoing. The CBOs implemented smaller civil works but larger contracts were outsourced, aided by CBO labor. CBOs were also contracted by the DWC for clearing fire breaks and removing invasive species in the PPAs. Infrastructure projects had a positive impact on communities and 86% of loan-funded enterprises were successful (Appendix 8).

²⁷ Government of Sri Lanka, MENR. 2006. *Portfolio of Strategic Conservation Sites/Protected Area Gap Analysis in Sri Lanka*. Colombo.

²⁸ IUCN Sri Lanka and Government of Sri Lanka, MENR. 2007. *The 2007 Red List of Threatened Fauna and Flora of Sri Lanka*. Colombo

C. Project Costs

33. The project cost was estimated at appraisal at \$34.7 million, comprising an SDR8.9 million loan from ADB's Asian Development Fund (ADF) (equivalent to \$12 million), grants of \$10.1 million from the GEF and \$4.0 million from the Government of the Netherlands, \$7.7 million from the Government of Sri Lanka, and \$0.9 million from beneficiaries. Following the major change effected in 2001 prior to loan effectiveness, the total cost was revised to \$33.5 million, with contributions from the GEF and the borrower decreased to \$9.0 million and \$7.6 million, respectively. Actual total expenditure at completion was \$30.3 million, comprising \$12.2 million from ADB, \$7.9 million from the GEF, \$3.6 million from the Government of the Netherlands, \$4.6 million from the Government of Sri Lanka, and \$2.0 million from beneficiaries (Appendix 12). The beneficiary contribution (in kind) increased by over 120% from effectiveness, while all other contributions declined. This was due to the large number of subprojects supported by the PACF, each of which included a 10% beneficiary contribution. At loan closure, the project savings of \$1.3 million from ADB, \$1 million from the GEF, and \$0.4 million from the Netherlands' grant were cancelled.

34. Costs were reallocated in 2005, 2007, and 2008 after loan effectiveness to accommodate (i) an increase in civil works and increases in boundaries surveyed and marked (627 km accomplished against the 340-km estimate);²⁹ (ii) an increase in allocation for consultancy;³⁰ and (iii) an increase in equipment and vehicles. Costs were reallocated from training and workshops; media, publication, and research;³¹ and unallocated funds. The PACF of \$5 million was decreased to \$4.5 million because the delayed start precluded spending all the funds during the project period. A new subcategory using these funds was created to cover costs of habitat enrichment activities.³² Table 1 shows the proportionate changes in cost allocations by category.

Table 1: Changes in Cost Allocations

Category at Effectiveness	Change Between Loan Effectiveness and Final Allocations (%)	Disbursements	
		Percent of Final Category Allocation (%)	Percent of Initial Category Allocation (%)
Civil works	+53	96%	140%
Vehicles and equipment	+10	95%	104%
Consulting and services ^a	+15	89%	102%
Training ^b	(53)	90%	43%
PACF ^c	(10)	96%	87%

PACF= Protected Area Conservation Fund

a Included sub-categories for (a) consulting services; and (b) media/publications/IT/Research/NGO contracts. Sub-category (a)-increased by 37%, while sub-category (b) decreased by 13%, resulting in 15% overall increase.

b Under-spending was due to slow progress in first two years and abandoning of twinning arrangements with international nongovernmental organizations.

c Only funded by the Government of Netherlands and Global Environment Facility

Source: ADB estimates

²⁹ This was due to additional civil works identified in the PA management plans and escalations in construction prices.

³⁰ The main TA consultancy contract was signed for \$4.5 million, exceeding the allocation.

³¹ This was a subcategory under the category of consulting and other services.

³² This was endorsed by the GEF and the Government of the Netherlands.

D. Disbursements

35. The RRP anticipated that almost 75% of the budget would be disbursed by 2003 (year 3) but only 6% was disbursed during this period due to initial delays. Annual disbursements of ADB financing rose sharply from 2004 and 75% was achieved only in 2007. Achieving a 75% disbursement by 2003 was unrealistic, given that new initiatives were being introduced to a department identified as weak in capacity. The design required two imprest accounts to be opened for (i) components managed by the DWC; and (ii) components managed by the MENR. This was changed in 2003 and separate imprest accounts were opened for each financier. The PMU managed all finances of the DWC and the BDS. Apart from the initial 2 years, the PMU maintained a very high standard of financial management. The project and PACF accounts were audited annually.

E. Project Schedule

36. Appendix 4 shows the project's original schedule, actual progress, and administrative timelines, including ADB missions. Many activities were delayed by up to 2 years (para. 11). Progress improved from 2004 and the 18-month extension made completion possible. Public interest in and the potential for controversy over wildlife policy and the activities of the DWC were underestimated at the design stage. Antipathy to participation by international NGOs and fears of biopiracy and park privatization generated intense media pressure at the start, encouraged by a minority of vocal wildlife activists. This led to the court case that nearly ruled out a project extension and caused great uncertainty and delay (para.11).

F. Implementation Arrangements

37. The RRP envisaged that the director general of the DWC would head the PMU and act as project director, supported by an additional technical director from the DWC. The PMU would be responsible for components A and B. In 2001, the government insisted that the project director should be recruited from outside the DWC. Once approved, this arrangement created internal discontent in the DWC and impeded progress. From 2004, the PMU reverted to the original proposed arrangement. The director general of the DWC acted as project director and an additional project director was appointed. Thereafter, the project progressed smoothly.

38. Component C was successfully implemented by the BDS under the MENR. By the time this component became fully active, the DWC was also under the MENR, which facilitated collaboration. As designed, component D was to be managed by a board of trustees of the proposed PACT and executed by consultants in the PMU but when the trust was replaced by the fund—the PACF—the component was managed by a separate unit in the PMU that effectively coordinated the outreach program through DWC staff and recruited facilitators rather than using local NGOs, as had been planned in the RRP.

G. Conditions and Covenants

39. Compliance with several covenants was delayed (Appendix 11). These compliance delays were mainly on covenants related to (i) recruitment of cadre, for which the design allowed 6 months from effectiveness but which was achieved only after 4 years; (ii) institutional reforms; and (iii) preparation of the Fauna and Flora Protection Ordinance amendments, which took 7 years rather than the 1 year envisaged in the project design. The late project start contributed to compliance delays but most were not within the DWC's control. The projected time frames were unrealistic and did not anticipate how long it might take to gain approvals at each stage and from each institution. The ordinance revisions entailed a lengthy, iterative

process and frequent changes to accommodate strong public interest and opinions. Each amendment had to be referred to the legal draftsman's office and took several months to be endorsed. Partial compliance of covenants in some cases is due to inconsistencies between government recruitment procedures and those expected by the covenant.³³

H. Consultant Recruitment and Procurement

40. At the government's request, the main TA consultant team was recruited by ADB, using ADB's Guidelines on the Use of Consultants, but it was fielded late because of government administrative delays. Three contract variations were negotiated in 2003, 2004 and 2006, to add new skills and to adjust inputs for the delayed start. A total of 335 person-months of services were allocated (up from 300 planned at appraisal), 115 of which were international (128 at appraisal) and 221 domestic (172 at appraisal).³⁴ The BBS survey was awarded to the main consultancy firm in 2006 and in 2007 ADB approved an associate of this firm to complete BBS work in the remaining PPAs. The DWC and the MENR recruited (i) consultancy firms to initiate outreach programs, undertake socioeconomic baseline surveys, and conduct habitat mapping and gap analysis studies; (ii) individual consultants to work on the BCAP addenda; and (iii) design and supervision architects for the civil works. All consultants were recruited according to ADB's guidelines and no major issues were faced in recruitment. Appendix 6 provides details of the consultancies.

41. ADB's procedures were adopted in the procurement of vehicles and equipment, although the DWC and the PMU initially had difficulty understanding them. ADB worked closely with the PMU to improve quality but high turnover of procurement officers and civil engineers negated the capacity building.

I. Performance of Consultants, Contractors, and Suppliers

42. The performance of the main TA consultants was disrupted by (i) a delay in government approval of their contract, (ii) the inability of the DWC to absorb the large numbers of inputs, and (iii) inadequate counterpart services. The DWC was dissatisfied with the consultants' performance at first and some inputs were postponed to ease pressure on counterpart staff (Appendix 6). Subsequently, the consultants performed well. Additional consultants performed well in completing the BBS work and conducting the gap analysis with the BDS and produced professional output. All civil works contracts required extensions. Supervision by the design and supervision consultants and PMU civil engineer was only partially satisfactory but improved after the DWC recruited an in-house engineer.

J. Performance of the Borrower and the Executing Agency

43. The performance of the DWC, the MENR, and the BDS improved as they took more ownership of the project and learned ADB's procedures. At closure, their performance could be rated satisfactory although it was partly satisfactory during the project's first 2 years. The DWC was short of staff at first, was subjected to three changes in its host ministry (para.5), and initially showed a lack of ownership (para.6), which hurt project performance. The DWC did not initially receive the support from its ministry, required by a small agency to launch a complex undertaking. From 2002, the DWC was under the MENR. This provided better coordination because the ministry was concerned with biodiversity but decision making and action remained so slow that in late 2003 ADB raised the possibility of a loan suspension. The project

³³ Schedule 6, para. 12 (a) required that all permanent wildlife guards be recruited from among people residing within 5 km of the boundaries of the PA. This is inconsistent with government recruitment procedures.

³⁴ The TA provided short and long-term consultants between October 2002 and March 2007.

management structure was changed as a result and progress improved dramatically from 2004 (para 12). The DWC field staff was committed. The PMU and the DWC ran the PACF and the outreach program smoothly after field staffing issues were resolved. Component C was implemented by the BDS. It performed well under the MENR but the ministry failed to appoint a deputy director.³⁵ From 2002, the MENR was the host ministry for all implementing agencies, facilitating collaboration between the DWC, the BDS, and the PACF. The post-project transfer of the DWC to the MOED may reduce emphasis on the department's primary role of wildlife conservation.

K. Performance of the Asian Development Bank

44. ADB's performance was satisfactory. The project was supervised throughout by the Sri Lanka Resident Mission, which liaised closely with the executing agency. Formal monitoring was carried out by 13 review missions (Appendix 4). ADB accommodated several implementation changes and received strong support from its cofinanciers.³⁶ Disbursement of funds was managed efficiently and there were no disagreements with the executing agency.

45. The borrower appreciated ADB's flexibility in permitting alternative strategies to overcome contentious differences over implementation that threatened project progress.³⁷ In assessing ADB's performance, the borrower (i) cited a need for more missions during the initial project stages and stronger technical inputs to help identify and resolve problems earlier, (ii) contended that tight monitoring during the project's last 6 months slowed implementation; and (iii) blamed initial adverse reaction to the project from the Sri Lanka NGO sector on what it said were major flaws in the project's design. Within the DWC, there was a feeling initially that the project was being donor-driven. Overall, the borrower rated ADB's role in supervision as partially satisfactory but this should be viewed in the context of the executing agency's very slow decision-making performance.

III. EVALUATION OF PERFORMANCE

41. The evaluation by the Operations Evaluation Department (OED) midway through the project rated it *partly successful, relevant, partly effective, less efficient*, and assessed sustainability as *less likely*.³⁸ The ratings of this project completion report differ from those of the midway OED evaluation because much was accomplished during the project's later years.

A. Relevance

42. The project is rated *relevant*. At appraisal and at completion, it was highly relevant to the government's policies on environmental conservation and commitments to international conventions. It continued to conform to national policies and ADB's country operational strategy for Sri Lanka (footnote 7). It is also consistent with ADB's Strategy 2020, which cites sustainable natural resource management and protection of the environment as key ways to ensure sustainable long-term economic growth and poverty reduction. Despite this high relevance to policy, the project is rated only relevant overall because of the many changes that were required to the design (paras.6 and 11).

³⁵ This was the Ministry of Forest and Environment (MOFE) at the design stage.

³⁶ The representatives of the Government of the Netherlands and the GEF, which was represented by World Bank, participated in all review missions.

³⁷ Government of Sri Lanka, MENR, PMU. 2009. *PAMWCP: Borrower's Completion Report*. Colombo.

³⁸ ADB. 2007. *Special Evaluation Study on Asian Development Bank–Global Environment Facility Co financed Projects: Performance and Process Evaluations*. Manila.

B. Effectiveness in Achieving Outcome

43. The project was *effective*. It achieved the target outcome of strengthening protected area management and developing operational partnerships with local communities and other stakeholders to reduce illegal use of park resources. It had a slow start but momentum built from 2004. Eventually, a stronger organizational structure within the DWC was established to manage protected areas across the country, although not all newly created posts had been adequately filled by closure. Delegation of management responsibility to protected areas improved decision making at the field level and contributed to a greater commitment by staff. Almost all proposed outcome targets were achieved by the closure. The exceptions were the minimal success in engaging the private sector and NGOs in VSE activities, poorly developed monitoring systems, and the DWC's reluctance to recruit staff from outside the department.

44. The RRP classified the project as primarily environment and secondarily poverty reduction. Monitoring the effectiveness of environmental outputs is difficult in the short term because habitat mapping and the BBSs were completed for all the PPAs only 8 years after the project began. Management of protected areas improved due to more scientifically based management plans, removal of invasive species, some habitat enrichment, reductions in fire damage, and a broader understanding by park staff of management methods. In the longer term, the updated curriculum at the NWTC, the awareness-raising programs for communities and schoolchildren, and the educational materials that resulted from the project favor greater support for wildlife protection in future by the public, academics, and decision makers. The Outcome in the RRP project framework made no reference to poverty reduction targets. The socioeconomic assessment in Appendix 8 identifies economic poverty but notes that project activities targeted mainly the 63% of communities that depend on a flow of natural resource benefits from the PPAs and whose support is needed for effective protected area management. Only 16% of the beneficiaries were targeted for poverty reduction.

45. Due to deficiencies in the project framework in the RRP, achievements are reviewed against performance targets that reflect the project framework targets and objectives listed in the RRP and the PAM (Appendix 2).

46. **Addressing institutional and legal management deficiencies.** New decentralized management plans, a corporate plan, and a manual of procedures for delegated functions were prepared and adopted by the DWC. The new structure was partly implemented by 2006 but posts were filled by in-house staff on a covering basis due to the DWC's reluctance to recruit qualified cadre from outside (para.15).³⁹ The FFPO was amended and published by Parliament in April 2009.

47. **Pilot participatory, adaptive management strategies in protected areas.** Revision of the planning processes resulted in more rational, scientifically-based planning strategies for protected areas and, after 2005, activities were based on these management plans. Lessons from research commissioned under the project were applied but the level of adoption and degree of rational plan updating varies between PPAs.⁴⁰ Likewise, the 3-year rolling plans are not being consistently prepared. The infrastructure and equipment provided, including buildings, vehicles, and (information communications technology) ICT equipment, helped staff operate more effectively. Staff training broadened skills. Support for the NWTC will ensure continued benefits.

³⁹ Of the seven regions, four are now headed by deputy directors. The DWC wanted to adopt a phased approach.

⁴⁰ The park warden at one PPA visited by the PCR team did not have a copy of the management plan.

48. **Encouraging nature tourism.** The visitor experience was improved by the construction of visitor centers and the creation of information material in the PPAs. Partnerships were developed between staff and adjacent communities, such as selling some of the CBO produce at visitor centers, but the project established few ecotourism links with the private sector or NGOs, partly because not enough people visited most PPAs to justify investment. More could have been achieved in ecotourism but it was perhaps unreasonable to expect government officers charged with wildlife protection to engage in commercial tourism activities, particularly at a time when civil war had depressed tourism (Appendix 10).

49. **Empowering buffer zone communities to reduce encroachment.** The outreach program successfully empowered villagers and implemented microprojects, using the PACF. This generated rapport between the PPA staff and buffer zone communities, which are now more willing to protect and conserve wildlife and reduce park violations. Targeting potential violators through the program appears to have been effective and the DWC reports reduced encroachment.⁴¹ Most CBOs created revolving funds, many of which are still functioning and serving as a sustainable source of funding, to further strengthen livelihood related enterprises. A 50 % share of protected area revenues is now credited to the WPF for the DWC's conservation activities, including outreach. This enhances sustainability.

50. **Reduced human-elephant conflict and better resolution processes.** Research commissioned by the project to supplement ongoing studies led to a clearer understanding of elephant habits and more appropriate management methods, some of which are being applied. Community-managed electric fencing has helped protect buffer zone village lands from elephants, as has the improvement of animal water sources in the PPAs. A government and community partnership⁴² improved conflict resolution between villagers and the protected areas and new compensation arrangements under government funding speeded up settlement of claims. Marking the PPA boundaries removed a common source of disagreement between the DWC and villagers.

51. **Promoting research, planning, and national management of biodiversity.** Although the project framework in the RRP did not list outcome indicators for this component, the project strengthened capacity at the BDS, which contributed significantly to building a better scientific base for protected areas by (i) developing a more rational protected area network through the gap studies, (ii) updating the national BCAP and action plans, and (iii) revising the threatened species list. Outputs exceeded expectations when the project involved provincial authorities in preparing provincial biodiversity action plans.

C. Efficiency in Achieving Outcome and Outputs

52. The project was *efficient*. Financial disbursements were 91% of those foreseen at loan effectiveness. Budgets benefited from exchange rate changes and higher-than-expected community contributions. In the financial analysis, the EIRR is calculated at 22.5%, compared with 18% at appraisal (Appendix 9). This is based on future visitor revenues accruing to the PPAs and does not attempt to include the numerous other positive but unquantifiable biodiversity conservation and other effects generated by the project (Appendix 10).⁴³ Although the high EIRR suggests that the project was highly efficient, the rating has been reduced because (i) the high revenue projections, almost wholly due to the improved outlook for tourism

⁴¹ No data was available.

⁴² *Gaja Mithuro* (Friends of Elephants), funded by government, operates at local level to resolve HEC issues. It was not initiated under the project but was established soon after project closure.

⁴³ Revenues at Yala national park too were included as some support was extended following the Tsunami.

after the end of a 30-year civil war in 2009, are external to project interventions; and (ii) the efficiency at the executing agency level was initially impaired for several reasons (para. 11).

D. Preliminary Assessment of Sustainability

53. The project's sustainability rating is *likely*. The project directly strengthened the capacity and resources of the DWC, the national agency responsible for wildlife resources. At closure, the DWC was better equipped and more open to implement best practices. Many of the project's interventions have been institutionalized within the department, including (i) structural reform, (ii) devolved management, (iii) improved protected area planning and management, (iv) regular biodiversity studies, and (v) enhanced visitor services. These have already impacted positively on other protected areas. The new DWC head office building envisaged under the project but cancelled because of legal objections was later constructed with government funding that demonstrated its commitment and support.⁴⁴ The government's approval for the deposit of 50% of protected area revenues in the WPF for conservation activities should further strengthen field activities. The training gave DWC staff a world view of protected area management. Incorporating the project's concepts into the curriculum of the NWTC will ensure that they are passed on to future DWC trainees.

54. The successful outreach program has also been internalized within the DWC and in the NWTC curriculum. Buffer zone community empowerment and partnership is still recognized as an important element of protected area management to reduce encroachment and potential conflicts (Appendix 8). In 2008, the DWC created positions for 48 facilitators but is still waiting for government approval to begin recruiting the urgently needed personnel. Since the project, the DWC has included a budget item for outreach activities to continue, albeit at a smaller scale, around the PPAs and other protected areas. The WPF provides a supplementary source of funding for buffer zone communities. Two years after the project closed, many CBOs were still operating, with revolving funds intact, and rapport with PPA staff remained good, indicating reasonable sustainability.

55. Visitor centers provided under the project are being used.⁴⁵ The low-maintenance designs have not unduly strained DWC funds. The centers provide adequate capacity for the expected increases in visitors. The Horton Plains PPA continued to improve visitor facilities and is collaborating with a local NGO.⁴⁶ More could be done to enhance visitor experience but the DWC faces a complex challenge to balance the requirements of conservation and potential effects of attracting more visitors.

56. Capacity strengthening within the BDS enabled the secretariat to prepare the 2011 list of threatened species independently and it plans updates every 5 years, guided by the Species Conservation Advisory Group, which continues to meet quarterly. Two of the red list species recovery plans prepared under the project are being implemented. The BDS has submitted the BCAP addendum to the *Haritha Lanka* program.⁴⁷ Declaration of new protected areas by the Forest Department, which resulted from the gap-filling studies, has strengthened the protected area network. This will be crucial as the impacts of climate change force species migrations. The BDS is maintaining the biodiversity database.

⁴⁴ The planning, design, and bidding processes were funded under the project.

⁴⁵ The adoption of similar open-plan designs for staff quarters has been rightly criticized by some staff, who feel that more enclosed buildings would have been more suitable and less prone to animal incursions.

⁴⁶ The Friends of Horton Plains NGO set up by local wildlife enthusiasts encourages conservation.

⁴⁷ This is the Green Lanka 2010-12, under the National Council for Sustainable Development.

E. Impact

57. The project outcome contributed directly to the goal of enhancing protected area and biodiversity conservation in Sri Lanka for the benefit of current and future generations. Institutional reform of the DWC provided a stronger future base for its national wildlife conservation responsibilities. The amended FFPO strengthened conservation nationally. Project-initiated research led to more scientifically based protected area management. The decentralized PA planning and management principles are being applied in other parks. The outreach program is internalized within the DWC and in the long term should improve partnerships with buffer zone communities to conserve protected areas. The enhanced curriculum at the NWTC will disseminate project concepts to future trainees. The National Conservation Review, habitat mapping, ecological gap-filling studies, Red List updating, and the addendum to the BCAP created a firmer base for future national biodiversity conservation. The BCAP enabled the MENR to comply with the international Convention on Biological Diversity. The BDS technical and educational publications further support wider public awareness and adoption of biodiversity.

IV. OVERALL ASSESSMENT AND RECOMMENDATIONS

A. Overall Assessment

58. Overall, this complex project is rated *successful* (Appendix 1). It was very slow to start, largely due to design failings (para. 11). The DWC could have made greater efforts to explain the project rationale and neutralize the objections of lobbyists who disrupted progress. Project management stabilized from 2004. The DWC undertook the PACF program with its own staff in the absence of suitable NGOs. Local and international consultants undertook the BBS and strengthened the DWC's skills. Dropping the proposed twinning with the international NGOs was a missed opportunity for wider experience sharing. An 18-month extension was approved and ultimately most target outputs were achieved.

59. The project framework contained several deficiencies, such as discrepancies between the RRP and the PAM versions, a lack of component C outputs in the outcome indicators, and no reference to poverty reduction. This framework was little used by the PMU as an implementation planning tool, except by the resident mission and the OED (footnote 38). The PACF regularly monitored the outreach program but overall project monitoring and evaluation systems were weak. Baseline socioeconomic and biodiversity surveys were completed only by project closure so impact assessments were not feasible. It was agreed that a time lapse of more than the prescribed 3 years is needed to detect biodiversity changes.

B. Lessons

60. The following lessons were learned:

- (i) Reference to international NGOs and public-private partnerships in the RRP provoked local wildlife activists and politicians, resulting in project delays. This could have been avoided by wider pre-project public relations efforts.
- (ii) Launching a complex project through the DWC, a small organization faced with structural reform, was overambitious. A two-phased approach (phase 1: capacity-building and restructuring; phase 2: implementation) would have been more appropriate.
- (iii) Loan covenant time frames underestimated the time required for the government procedures to amend the FFPO and for institutional reform.

- (iv) Heading the PMU with someone from outside the DWC was detrimental to engaging the department staff.
- (v) Introducing large numbers of TA consultants into the DWC that was understaffed resulted in inefficient use of consultancy expertise.
- (vi) Regular review and updating of the project framework would have aided monitoring and evaluation.
- (vii) The outreach program was made more sustainable by being implemented by the executing agency's own staff than it would have been by recruiting outside NGOs, who would have left when the project closed.
- (viii) Delegation of powers to the field enhanced PPA management but it also increased the importance of self-motivated PPA leadership.
- (ix) It was unreasonable to expect government officers to engage in commercial links and marketing initiatives with private enterprise in such a short time.
- (x) A formal monitoring system should have been established by the DWC at the start of the project.
- (xi) Training for all PPA ranks and public awareness-raising were positive factors in improving conservation.

C. Recommendations

1. Project Related

61. **Future monitoring.** The DWC should repeat the biodiversity studies in the PPAs every 10 years from 2016 on to assess changes. The BDS is repeating the threatened species Red List studies every 5 years.

62. **Covenants.** The covenant requiring staff to be recruited from within 5 km of the PPA should be waived because it is inconsistent with the government recruitment policy.

63. **Further action or follow-up.** The DWC should urgently fill the protected area management director post and the vacant facilitator positions to maintain the momentum of the community outreach program. Copies of relevant management plans should be retained in each PPA. The MOE should urgently fill the vacant deputy director post at BDS.

64. **Additional assistance.** Institutional strengthening needs further support. Although ADB is no longer active in this sector (Country Partnership Strategy 2009-2011),⁴⁸ World Bank's proposals to further strengthen wildlife conservation⁴⁹ will be beneficial.

65. **Timing of the project performance evaluation report.** The report should be prepared within the next 12 months.

2. General

66. The following recommendations apply to future projects more generally:

- (i) Executing agencies should use project frameworks to aid planning, monitoring, and evaluation.
- (ii) ADB should allow adequate time for adoption of institutional and legal changes.
- (iii) ADB should favor internalizing community activities, by working with the respective implementing agency, over using NGOs to ensure sustainability when projects end.

⁴⁸ ADB. 2008. *Country Partnership Strategy for Sri Lanka*. Manila.

⁴⁹ This is to be achieved under the World Bank's proposed ecosystem conservation and management project.

OVERALL ASSESSMENT

Table A1.1: Rating at Completion of Protected Area Management and Wildlife Conservation Project

Criterion	Weight (%)	Definition	Rating Range	Project Rating	Weighted Rating
Relevance	20	Relevance is the consistency of a project's impact and outcome with the government's development strategy, ADB's lending strategy for the country, and ADB's strategic objectives at the time of approval and evaluation and the adequacy of the design.	Highly relevant (3) Relevant (2) Partly relevant (1) Irrelevant (0)	<i>Relevant</i>	0.4
Effectiveness	30	Effectiveness describes the extent to which the outcome, as specified in the design and monitoring framework, either as agreed at approval or as subsequently modified, has been achieved.	Highly effective (3) Effective (2) Less effective (1) Ineffective (0)	<i>Effective</i>	0.6
Efficiency	30	Efficiency describes, ex-post, how economically resources have been converted to results, using the economic internal rate of return, or cost effectiveness, of the investment or other indicators as a measure and the resilience to risk of the net benefit flows over time.	Highly efficient (3) Efficient (2) Less efficient (1) Inefficient (0)	<i>Efficient</i>	0.6
Sustainability	20	Sustainability considers the likelihood that human, institutional, financial and other resources are sufficient to maintain the outcome over its economic life.	Most Likely (3) Likely (2) Less likely (1) Unlikely (0)	<i>Likely</i>	0.4
Overall Assessment	100	(Score of 1.6–2.7 = Successful)		<i>Successful</i>	2.0

Source: Project Completion Review Mission

Table A1.2: Assessment of the Project's Performance in 2007

Criterion	Weight %	Assessment	Rating Value	Weighted Rating
Relevance	20	Relevant	2	0.4
Effectiveness	30	Partly effective	2	0.6
Efficiency	30	Less efficient	1	0.3
Sustainability	20	Less likely	1	0.2
Overall rating		Partly Successful		1.5

Source: ADB. 2007. *Special Evaluation Study on Asian Development Bank–Global Environment Facility Cofinanced Projects: Performance and Process Evaluations*. Manila.

PROJECT FRAMEWORK

Design Summary	Performance Targets	Actual Achievements (as of December 2008)	Assumptions and Risks
1. Goal/ Impact			
Enhance protected area and biodiversity conservation in Sri Lanka for the benefit of current and future generations	See Note 3.	Institutional reform of the Department of Wildlife Conservation (DWC) should provide stronger base for its wildlife conservation responsibilities. Decentralized protected area (PA) planning, management, and outreach principles developed under the project being applied to other PAs.	<ul style="list-style-type: none"> • High level of commitment to protected areas • Effective coordination between World Bank and Asian Development Bank (ADB).
	<i>* Sound management achieved by Yr 3</i>	The amended Fauna and Flora Protection Ordinance (FFPO), revised under the project updates protection rules and contains new provisions that will contribute to improving PA management and strengthening conservation nationally.	
	<i>* Improved welfare in surrounding communities</i>	Results of improved PA management, research, biodiversity surveys, and outreach programs were incorporated in the National Wildlife Training Center (NWTTC) curriculum, enhancing the capacity of current and future DWC staff.	
	<i>* Reduced illegal activity</i>	Results of research conducted under the project are bringing about better scientifically based management approaches across the country's PAs.	
		International exposure of the DWC staff has enhanced their appreciation and understanding of wildlife conservation methods for application in Sri Lanka.	
		The National Conservation Review, habitat mapping, ecological gap-filling studies, Red List updating, and the addenda to the Biodiversity Conservation Action Plan (BCAP) should create a firmer base for future biodiversity conservation. The BCAP has enabled the Ministry of Environment (MOE) to comply with the Convention on Biological Diversity. The Biodiversity Secretariat (BDS) technical publications further support wider awareness and adoption of biodiversity conservation.	
		Lessons from the project are being applied by other agencies in the design of future projects—for example, World Bank's proposed Ecosystem Conservation and Management Project.	
2. Purpose/ Outcome			
Strengthen protected area management and develop operational partnerships with	<i>* New legislative and policy frameworks approved by end 2001^a.</i>	The FFPO was amended, in line with the National Wildlife Policy (2000). The draft was submitted to the Cabinet in March 2007, approved by Cabinet in March 2008, and approved by Parliament in	<ul style="list-style-type: none"> • DWC can be transformed into a high quality protected area management agency

Design Summary	Performance Targets	Actual Achievements (as of December 2008)	Assumptions and Risks
local communities and other stakeholders to reduce illegal use of park resources^b		January 2009.	<ul style="list-style-type: none"> • Legislative and policy framework is approved • A non-government fund can be established, maintained and locally effective • Stakeholders participate
	* Institutional reforms completed by Yr 1 ^a	New decentralized management plans were prepared by an MENR task force and approved by Cabinet June 2005 (year 5) but internal bureaucracy and strong reluctance from within the DWC to recruiting cadre from outside of the DWC delayed implementation. A corporate plan for DWC and a manual of procedures for delegated functions were completed by the TA consultants in early 2007 and adopted by the DWC. However, since internal candidates did not have the necessary years of experience and/or qualifications, posts were filled by in-house staff on a covering basis until they meet the requirements.	
	* Enhanced management of pilot sites by Yr 6	Enhanced management plans for pilot PAs were completed by year 5 and thereafter their activities were based on management plans. The amended FFPO makes it mandatory for all PAs to have management plans.	
	* Sustainable funding mechanism operating by Year 3	In a major change approved by ADB's Board of Directors, the protected area conservation trust (PACT) was redesigned as the protected area conservation fund (PACF) in September 2001, which converted the trust to a sinking fund that ceased operating at project end. Some community based organizations (CBO) revolving funds that evolved from the PACF still function. Small government fund allocations continue to support outreach programs and the wildlife preservation fund (WPF) can be used to supplement funds.	
	* Private sector, non-government organizations (NGOs) and community partnerships established by Yr 2	Community partnerships were established under the outreach program from year 4 onwards but only minimal private sector and NGO links were achieved.	
	* Conflict resolution process established	Clear marking of PA boundaries has reduced conflicts over encroachment, eliminated disagreements over interpretation, and increased conviction rates for illegal entries. The introduction of a government-backed compensation scheme for animal damage speeded the process up and raised compensation rates, reducing conflicts. The outreach program also resolves conflicts. By project closure, the DWC had set up <i>Gaja Mitro</i> , an organization aimed at resolving human elephant conflicts.	
	* Reduced human-elephant conflict (HEC) by Yr 6	Project interventions (community-managed electric fencing, provision of animal water sources in PAs) helped to address the HEC issue. Research commissioned by the project led to clearer understanding of elephant habits and more appropriate management, some of which is	

Design Summary	Performance Targets	Actual Achievements (as of December 2008)	Assumptions and Risks
		being applied. However, as the project was active in only seven pilot PAs, and because 70% of elephants live outside PAs, this could not reduce HEC significantly alone. Data provided by the DWC shows reduced human deaths but increased elephant deaths and greater compensation payments since 2006.	
	* Raised awareness of benefits of PAs by surrounding communities by Yr 6	The PACF outreach program generated mutual understanding and rapport with buffer zone communities and increased conservation awareness. Two years after project closure, many CBOs are still operating, rapport with the DWC staff has been sustained, and outreach programs have been extended to other PAs.	
3. Outputs			
3.1 Enhancing Department of Wildlife Conservation (DWC) Institutional Capacity (Component A)			
3.1.1 Management capacity enhanced	<ul style="list-style-type: none"> • Annual work plans formulated at PA level (Yr 1) • New accounting procedures established by Yr 1 Deputy Director Field Programs appointed (Yr1). • Headquarters and regional offices refurbished (Yr 1-4) • Communications network established (Yr 2) • Regional offices with consolidated budgets (Yr 3) • Management information system implemented (Yr 3). • Information technology and 	<p>Preparation of annual work plans were delegated to PAs from 2003 (year 3).</p> <p>The TA consultants prepared proposals for new financial management in 2003 but this could not be fully implemented until the DWC restructuring was completed in 2005.</p> <p>Deputy directors were appointed to regional offices in 2008 and 2009.</p> <p>Refurbishment of regional offices continued from year 3 to the end of the project. Funding of the head office construction was discontinued after mobilization of contractors due to a court case regarding allocation of land. The DWC finally resolved the land issue in late 2008 and initiated the construction with government funds but using designs funded by project. The building opened officially in August 2010.</p> <p>Information and communications technology equipment was installed, staff posted, and training provided during year 2 and 3. The communication network was fully operational by 2007. Subsequent expansion of mobile phone networks has made radios less important in most PAs.</p> <p>Budgets were consolidated at regional level, with greater delegation of financial authority to deputy directors at regional offices. This has helped devolve planning, decision making, and management.</p> <p>Management information system (MIS) was implemented by year 5.</p> <p>Global positioning system and geographical information system</p>	<ul style="list-style-type: none"> • Adequate leadership, funds, management, and human resources are available for institutional reform. • Government accepts functional reorientation of DWC

Design Summary	Performance Targets	Actual Achievements (as of December 2008)	Assumptions and Risks
	<p>website developed (Yr 2)</p> <ul style="list-style-type: none"> • Research priorities addressed by Yr 4. 	<p>technology was introduced to facilitate boundary marking, resource mapping, and monitoring. The DWC created its own website (www.dwc.gov.lk).</p> <p>Twenty-five research projects commissioned and outsourced (Universities; IUCN; research centers). Results and implications were presented in 2008. Some findings (particularly on elephant research) are being adopted in PAs.</p>	
3.1.2 Technical capacity enhanced	<ul style="list-style-type: none"> • Technical units strengthened • 383 training courses completed providing 55,000 person days of training by Yr 6^c • Twinning with international NGOs and international partnerships established with a conservation organization. • 75 Reciprocal visits with overseas partners undertaken • Project monitoring capacity established. * 286 Sector Workshops organized and attended by Yr 6 (Note 4) 	<p>Units were strengthened by long-term in-country and overseas formal technical training. Wide range of training was provided for all levels of staff through formal short training, overseas study tours, and workshops.</p> <p>Training needs were assessed by the technical assistance (TA) consultants and 500 in-house, in-country, and overseas training events were organized in all major technical disciplines and administration, involving over 8,000 persons. The NWTC equipment was upgraded and the curriculum updated.</p> <p>Twinning was not adopted due to the DWC's reluctance and public opposition to use of international NGOs but strong links were established with IUCN Sri Lanka (an international NGO). Almost 500 middle-rank staff and some rangers participated in 28 study tours and formal training events in Asia, South Africa, East Africa, North America and Europe, thereby establishing personal contacts with international NGOs and other agencies.</p> <p>No reciprocal visits were undertaken.</p> <p>Project monitoring was undertaken by the project management unit (PMU).</p> <p>280 training and awareness workshops were conducted.</p>	<ul style="list-style-type: none"> • 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 (Visitor Services & Ecotourism: VSE)	<ul style="list-style-type: none"> • 2 ecotourism staff added to VSE unit by Yr 2. • Strategic ecotourism plan prepared (Yr 2) • Four ecotourism courses delivered by Yr 4 	<p>Ecotourism officer and interpretation officer were appointed by year 5.</p> <p>The DWC convened a national forum of diverse stakeholders to develop policy in 2006. Visitor surveys were completed in 2005 and results incorporated in plans.</p> <p>Four study tours for 105 staff were conducted to the Philippines, Malaysia, and Nepal. VSE was included in the NWTC curriculum.</p>	<ul style="list-style-type: none"> • Appropriate staff are available and appointed. • Training is effective.

Design Summary	Performance Targets	Actual Achievements (as of December 2008)	Assumptions and Risks
	<ul style="list-style-type: none"> • Ecotourism policies prepared by Yr 2 	<p>Several workshops were conducted by the international ecotourism consultant.</p> <p>Policies were prepared in 2003–2004. New ticketing was reviewed and approved by the government. Visitor centers were designed and visitor information displays were developed. Success was limited in involving the private sector in VSE.</p>	
3.1.4 Project Management Unit Established	<ul style="list-style-type: none"> • Establishment of Project Support Office. • Recruitment of staff. • Recruitment of consultants • Work plans approved and implemented. 	<p>The PMU was established in 2001.</p> <p>Staff was recruited but turnover in procurement and civil engineering was high.</p> <p>Consultants were mobilized in November 2002 (14 months after loan effectiveness). Inception phase took 6 months and was not up to standard. Changes in the team were requested by the IA and EA and were effected.</p> <p>Annual work plans were prepared from 2002 (year 2) on.</p>	<ul style="list-style-type: none"> • Staff recruitment is based on merit. • Appropriate consultants selected.
3.1.5 Wildlife biodiversity monitoring and evaluation strengthened	<ul style="list-style-type: none"> • Nongovernment organization consortium contracted by end of Yr 1 • Monitoring system designed and implemented by Yr 2 • Monitoring reports produced in years 4 & 6 • 10 sector staff trained in biodiversity monitoring system by year 3 	<p>At the mid-term review (2004), it was agreed that the TA consultants would be contracted to undertake the surveys due to the government's reluctance to engage international NGOs for this activity due to lack of trust in international NGOs by the public.</p> <p>Biodiversity baseline surveys began in 2006 and were completed in 2008 (year 8). Advisory committee was established for biodiversity surveys and included the DWC, the MENR, academics, and the IUCN as members.</p> <p>The biodiversity survey and habitat maps were completed for all the pilot PAs by early 2008. The DWC and the Biodiversity Secretariat are using the results. Planned repeat biodiversity surveys every 3 years were dropped because project delays left too short a period to detect change.</p> <p>The DWC provided field staff to work with the BDS team to gain on-the-job experience. More than 10 staff members were trained by year 8, including six BDS employees who earned an MSC. The NWTC has also included aspects of BBS monitoring in its curriculum. BBS monitoring is still being implemented in 16 sites by park staff and NWTC students.</p>	<ul style="list-style-type: none"> • Sufficient change in biota can be identified by midterm review.
3.2 Participatory Adaptive Management of Pilot Protected Areas (Component B)			
3.2.1 Existing	<ul style="list-style-type: none"> • Plans agreed for 7 PAs with 	Management plan revision process was completed and plans	<ul style="list-style-type: none"> • Information exists to devise plans.

Design Summary	Performance Targets	Actual Achievements (as of December 2008)	Assumptions and Risks
protected area management plans revised and consolidated	full stakeholder participation (Yr 3)	published by 2005 (year 5). Guidelines were prepared to extend planning to other PAs.	<ul style="list-style-type: none"> • Stakeholders cooperate. • Plans address key issues. • Management is directed by plans.
	• 3-year work plans developed (Yr 3)	These were completed late 2005 (year 5).	
3.2.2 Adaptive management systems implemented	• Adaptive management experiments devised for key issues by Yr 3.	Activities carried out included electric fencing, habitat enrichment, water source development, maintenance of grassland, and live fencing.	<ul style="list-style-type: none"> • Technical and management capacities are adequate.
	• Management actions reflect adaptive learning by Yr 4	Several workshops were held to review results of adaptive management. Policy and procedural synopsis of conclusions were published in year 5 and reflected in management.	
	• Priority strategic threats at each site managed by Yr 5.	Invasive species were removed from over 7,841 ha. CBOs were contracted to assist in many areas. Electric fencing reduced HEC. Workers cleared 347 km of fire lines and reduced fire hazard. Removal of invasive is continuing in Horton Plains and Bundala PAs, with CBOs and private sector contractors.	
	• Second priority threat defined and management initiated by Yr 4.	Due to delays in project start-up, several adaptive measures were all initiated simultaneously.	
3.2.3 Management of pilot protected areas facilitated	• Boundaries marked and surveyed (340 km), Yr 2–4	Boundary surveys and marking were completed in all pilot PAs (627 km) by contractors.	<ul style="list-style-type: none"> • 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. • DWC develops outreach skills. • Communities will cooperate in joint activities.
	• Reduction of area of encroachment by 25% by Yr 6	Prior to the project, PA boundaries were not marked so it was difficult to assess encroachment. With all pilot PA boundaries now marked and awareness raised in buffer zone communities through the PACF outreach, encroachment incidents are clearer, conviction rates are higher, and communities collaborate in reporting infringements. Actual figures for encroachment are not available.	
	• Electric fencing of 253 km by Yr 6	Contractors installed 195 km and 120 km were erected by CBOs under PACF financing for a total of 315 km.	
	• Implementation of program to reduce Livestock numbers entering PAs illegally, by 50% by Yr 6	To prevent cattle from being sent to feed in pilot PAs, some PACF initiatives aimed to encourage improved livestock management and stall feeding through provision of livestock, cattle sheds, and fodder. However, this threat still remains.	
	• Implementation of a comprehensive program to reduce poaching in PAs, with measurable outcomes to indicate a reduction in poaching	This was improved through various measures introduced through project. They are (i) improved mobility through provision of vehicles; (ii) improved communications; and (iii) improved relationship with communities, which resulted in community members sometimes informing the park officials of possible violations by poachers.	

Design Summary	Performance Targets	Actual Achievements (as of December 2008)	Assumptions and Risks
	<ul style="list-style-type: none"> • Implementation of programs to reduce Illegal felling, firewood collection and illicit gem mining • Outreach teams and educational materials developed and distributed by year 6 • Outreach grants dispensed starting year 2 • Raised awareness of park benefits by year 6 	<p>Conviction numbers and rates have increased.</p> <p>Measures used to reduce this threat were mainly through awareness, community outreach activities, and projects supported by the PACF fund. Evidence from DWC shows an 80% reduction in fuel wood extraction due to provision of fuel-efficient stoves in some buffer zone villages.</p> <p>Intermediary organizations were fielded in 2005 but replaced by facilitators recruited and trained from late 2006. Outreach material was prepared (multimedia documentaries video, radio, educational materials) and displayed at visitor centers.</p> <p>Grants for 204 projects were successfully implemented by year 7.</p> <p>Communities and other stakeholders in buffer zones have better rapport with the DWC. Awareness-raising programs were undertaken for 2,700 school children and community members and 1,500 government officials and police. Visits to parks by CBOs were sponsored by the DWC and continued after the project.</p>	
3.2.4 Ecotourism products and services developed (VSE)	<ul style="list-style-type: none"> • Park ecotourism plans prepared and implemented by year 3. • Visitor services specialist appointed at each park by end –Yr 1. • Visitor centers (6), nature trails, towers, hides, campgrounds constructed or refurbished by Yr 4 • Recreation possibilities doubled by Year 5. • Four concessions developed by Yr 5 • Educational materials produced by Yr 2 	<p>Plans were finalized by 2004 and implemented through the project.</p> <p>By 2006, each park had an officer dedicated to ecotourism activities but much of work was done by TA consultants. Post-project, most of these officers have been transferred to other parks or other functions.</p> <p>Visitor centers were established at all pilot PAs. A research and training center was established at Ritigala because no visitors are allowed into this strict nature reserve but it also serves visitors to a local historical site.</p> <p>Paddle boats were introduced at one of the pilot PAs. Camping sites were developed in one PA and viewing towers constructed in most of the parks to improve visitor experiences.</p> <p>No concessions were implemented and only limited private involvement was achieved—via corporate social responsibility initiatives in some PAs, for example, and association with private jeep safari operators.</p> <p>Descriptive brochures and themes were prepared for Horton Plains, Minneriya, Wasgamuwa and Uda Walawe by 2006. Several awareness programs were conducted through electronic and print</p>	<ul style="list-style-type: none"> • Legislative and policy reforms implemented. • Carrying capacity limits are not violated. • No resistance to greater use of parks. • No resistance to private sector and community partnerships. • Security problems do not arise. • Increased visitation will lead to increased economic opportunities for locals. • Training improves capacities.

Design Summary	Performance Targets	Actual Achievements (as of December 2008)	Assumptions and Risks
		media. A DVD of such documentaries is available at the visitor center sales outlets.	
	• Visitors satisfaction levels rise by 25% by Yr 5	Repeat visitor surveys were not conducted, as most of the VSE implementation activities continued until project closure and impacts were not likely to be measurable.	
	• International park visitation doubled on 1999 by Yr 6.	Visitor numbers have fluctuated depending on current security situation in the country and show no detectable trend.	
3.3 Collaborative Conservation Planning (Component C)			
3.3.1 National Biodiversity Conservation Action Plan (BCAP) prepared^d	• Cross-sector team established (Yr 1)	The TA paper, <i>Functions of the Biodiversity Secretariat</i> , was prepared in 2005. The BDS formed a good cross-sector team. The project helped to establish the second national experts committee on biodiversity and funded its meetings and several workshops relevant to the BCAP addendum.	• Co-operation is forthcoming.
	• Plan approved (Yr 3)	Provincial biodiversity profiles and actions plans were received 2006. The BCAP addenda prepared, with a summary, by mid-2007 (year 7).	
	• Annual priority review process established	A review process was established in the BDS for subsequent updates.	
		The Biodiversity Conservation Action Plan was translated into Sinhala by the BDS. Numerous educational books, field guides, posters, and newsletters were published through the project to raise awareness of biodiversity among schoolchildren, policy makers, researchers, academics, and other stakeholders.	
3.3.2 Protected area system reviewed and enhanced	• Conservation estate assessed	Consultants and DWC and Forest Department (FD) teams jointly evaluated conservation areas and ecosystems in the context of the National Conservation Review (NCR, 1996) to form the basis for the ecosystem gap analysis study.	• Adequate inventory on which to base gap analysis. • Institutional cooperation. • Private sector co-operation.
	• Gaps identified (Yr 2)	Ecosystem gap surveys and maps completed for the whole country and published under the project in 2006 (year 6) as a valuable database, <i>Portfolio of Strategic Conservation Sites / Protected Area Gap Analysis in Sri Lanka</i> .	
	• Public and private provision strategies developed	The Forest Department used findings of the gap analysis study to gazette 108 reserve forests and 11 conservation forests identified as part of the NCR review. Private lands were not included.	
3.3.3 Endangered species recovery plans prepared	• Cross-sector team established (Yr 1)	The team was established from year 2. The BDS formed a species conservation advisory group to monitor endangered species studies. It still meets quarterly.	• Institutional cooperation forthcoming. • Sufficient data exists for priority

Design Summary	Performance Targets	Actual Achievements (as of December 2008)	Assumptions and Risks
	<ul style="list-style-type: none"> • Priority species identified by Yr 4. • Recovery plans produced by Yr 5 • Implementation commenced on at least 50% of the endangered species recovery plans. 	<p>With the IUCN, the national Red List was updated and 2,022 species evaluated (677 vertebrates, 246 invertebrates, and 1,099 plant species), with 33% of vertebrate species assessed as threatened. The results were published in 2007, a national database of threatened species was developed, and profiles were prepared for 122 faunal and 270 floral species.</p> <p>Two Red List species recovery plans prepared for <i>Puntius bandula</i> (an endemic freshwater fish), and <i>Ravana politissima</i> (a snail).</p> <p>The <i>Puntius bandula</i> recovery program is under way and the <i>Ravana politissima</i> program is to start in 2010.</p>	<p>identification.</p>
3.4 Protected Area-Community Partnership Building (Component D)			
3.4.1 Sustainable financing for participatory community mobilization and planning established	<ul style="list-style-type: none"> • Endowment fund spends less than 10% on administration (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 (Yr 4) • A system for conversion of the PACF into a endowment trust be developed (Yr 6) 	<p>The PACF spent 15% on administration, higher than expected because of three rounds of the selection process for field staff.</p> <p>Suitable NGOs or consultants did not come forward. The task was assigned to project staff and 39 social facilitators recruited by the DWC, whose skills were developed successfully.</p> <p>All the proposals were received from the CBOs.</p> <p>Efforts by the government in first 3 years to find suitable donors to contribute towards the matching fund, as required by the GEF, were unsuccessful.</p>	<ul style="list-style-type: none"> • That Government accepts endowment outside public sector. • Suitable NGOs participate.
3.4.2 Local communities empowered with increasing governance over local resources and development processes.	<ul style="list-style-type: none"> • More than 150 Impact zone villages mobilized before Yr 6 and 100 local community micro plans developed with local resources of at least equal the grant value. • Community-agency agreements specifying rights 	<p>The project mobilized and worked with 167 CBOs and 7 cluster level forums in 198 grama niladhari divisions (GNDs). By 2007, 168 community microplans were prepared, with 224 microprojects approved through review bodies for grant funding, 192 projects implemented, and 6 ongoing. CBOs implemented smaller civil works contracts. Larger contracts were outsourced. CBOs were also contracted for park work, including clearing fire breaks and removing invasive species.</p> <p>This was implemented where communities worked with other agencies, such as the irrigation department and the Ceylon Electricity</p>	<ul style="list-style-type: none"> • NGOs have sufficient capacity. • Absorptive capacity of local communities. • Willingness to participate of local communities. • Local resources can be mobilized.

Design Summary	Performance Targets		Actual Achievements (as of December 2008)	Assumptions and Risks
	and responsibilities. • Area wide plans developed with local and provincial government active involvement.		Board. Local and provincial governments were represented on the regional grant review committee, the first tier of approval prior to submission to the national grant review committee.	
4. Activities^e	Inputs (\$ million)			
4.1 Institutional capacity.	Loan Effective	Actual		
Training	11.97	8.96	Formal training (MSC & diploma): In-country—7 persons; overseas—7 persons. Overseas study tours, short course & conferences, 483 persons: in-country short course—1,071 persons; technical workshops—2,085 persons; awareness training—1,500 government officers, 2,700 schoolchildren & community members	<ul style="list-style-type: none"> • Enhanced capacity will lead to better management. • New staff are available. • MIS works.
New units/ appointments			Developing new structure for the DWC and new deputy director category, seeking approvals and appointments	
Strengthen units.			Staff training in new areas of expertise introduced through project (e.g., outreach activities, visitor services, and ecotourism, use of GIS, methods and procedures for biodiversity surveys).	
Infrastructure improved.			Constructed improved infrastructure (e.g., visitor service centers, improved park offices and quarters, improved roads, water tanks) in all pilot PAs	
Telecommunications improved.			Procured and installed radio communications network.	
Project management unit established			Sought to establish the PMU within the DWC building but ultimately put in separate accommodation	
4.2 Adaptive Management	Loan Effective	Actual		
Boundaries surveyed.	7.49	12.77	627 km completed	<ul style="list-style-type: none"> • Better infrastructure and equipment leads to better management. • Management addresses key issues in adaptive manner. • Planning is needed to guide management.
Management plans revised.			Revised and published plans for all pilot PAs	
Training.			Training activities consolidated in 4.1 above	
Park infrastructure, services and information improved.			Designed, constructed, equipped, and opened park visitor centers in each Pilot PA	

Design Summary	Performance Targets		Actual Achievements (as of December 2008)	Assumptions and Risks
Relations with local communities improved.			Intermediary organizations not used. DWC staff trained and recruited 39 facilitators to undertake outreach program in 198 GNDs around pilot PAs	<ul style="list-style-type: none"> • Training is appropriate.
Adaptive management implemented.			Revised PA management plans and facilitated management (electric fencing/ HEC, bio-fencing, habitat enrichment, fire lines, controlled burning, etc.)	
Ecotourism developed.			Developed awareness programs, prepared publicity materials, designed and constructed park visitor centers, interacted with tour operators	
4.3 Collaborative conservation Planning.	Loan Effective	Actual		<ul style="list-style-type: none"> • Co-operation is forthcoming.
BCAP produced.	2.24	0.69	Established links with BDS, set up collaborators, undertook BCAP addenda; publishing and disseminating Addenda.	
System plan developed.			Undertook ecological gap analysis, reviewed National Conservation Review with FD, identified gaps in the PA network, proposed means to fill gaps, published results	
Endangered species recovery plans produced.			Updated the IUCN Red List of endangered species, developed recovery plans, published results	
4.4 Protected Area-Community Partnership Building.	Loan Effective	Actual		<ul style="list-style-type: none"> • Capacity exists for effective program delivery.
PACF established.	7.23	7.60	Established PACF mechanisms (trust was dropped in favor of a sinking fund in September 2001)	
NGO strengthening.			NGOs were dropped. Trained DWC staff and recruited facilitators	
Delivery systems established.			Motivated CBOs, developed financial procedures with provincial councils and CBOs	
Grants dispensed.			Reviewed microproject proposals with grants review committees and grants dispensed to CBOs	
PACF twinning			Did not materialize.	

Design Summary	Performance Targets	Actual Achievements (as of December 2008)	Assumptions and Risks
Base Cost (Loan effectiveness)	\$28.92 million	\$30.02 million	Actual Base Cost ^f
Contingencies & Interest Charges	\$4.58 million	\$0.32 million	Actual Interest Charges
Total	\$33.50 million	\$30.34 million	Actual Total

GEF = Global Environment Facility, IUCN = International Union for the Conservation of Nature, MENR = Ministry of Environment and Natural Resources, MSC = Master of Science, PAM = Project Administration Memorandum, RRP = Report and Recommendation of the President

Notes:

1. There are inconsistencies between the project framework in the RRP and subsequent versions. The RRP version is used as a basis for measuring achievements but this framework includes updates and modifications from the 2002 PAM:

- (i) 3.4 *Protected Area-Community Partnership Building (Component D)* has new wording to account for the change from the PACT to the PACF.
- (ii) 3.1.4 *Project Management Unit Established* was not in the RRP version and has been inserted.
- (iii) *Wildlife biodiversity monitoring and evaluation strengthened* renumbered 3.1.5.
- (iv) In 3.2.3 *Management of pilot protected areas facilitated*, revised performance targets have been taken from the PAM.
- (v) 3.4.2 *Local communities empowered with increasing governance over local resources and development processes* is a new item, not in the RRP.

2. Dates for achieving Performance Targets are taken from RRP; they were not included in the PAM (2002).

3. The performance targets given under *Goal* in the RRP and PAM frameworks related only to the project. They should have reflected the wider national goal. Thus they are not relevant in this context.

^a The new legal frameworks (especially the FFPO) and the DWC institutional reforms are included under *Purpose* but are not listed under *Outputs*. The latter is included under *Activities*. Logically they belong under *Output 3.1.1 Management capacity enhanced*.

^b Reducing illegal use of the parks resources conveys a policing role, at odds with a participatory approach. This should be one of the outputs resulting from the many envisaged activities. Moreover, the *Purpose/ Outcome* does not adequately recognize the contribution from 3.3 *Collaborative Conservation Planning (Component C)*.

^c To be accurate, training events are *Activities*; persons trained are the *Outputs*.

^d Agreed at the Review Mission, December 2002 that the project would prepare 'Addenda' to the existing BCAP.

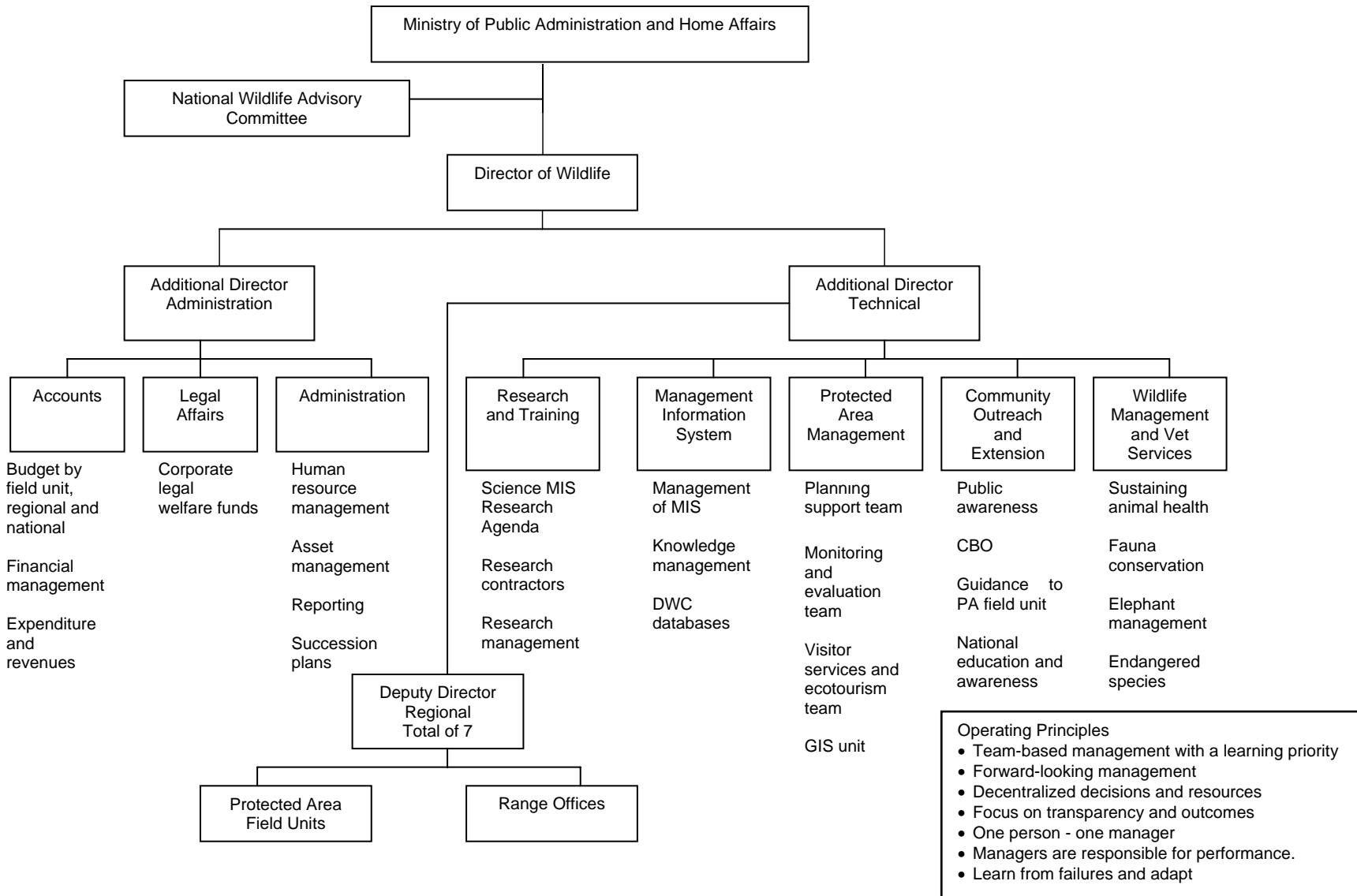
^e *Activities* should be presented in the active voice, e.g., 'develop ecotourism', not 'ecotourism developed', which is an *Output*.

^f Actual base cost expenditure includes \$2.0 million beneficiary contribution (\$0.90 million in RRP).

Sources: ADB. 2007. *Special Evaluation Study on Asian Development Bank-Global Environment Facility Cofinanced Projects: Performance and Process Evaluations*. Manila; ADB Review Mission Aide Memoires; ARD. 2007. *Consulting Services Final Report*; DWC. 2009. *Final Progress Report*; DWC. 2009. *Borrower's Project Completion Report*; N Pallewatta, 2008. *Impact Assessment of PAMWCP*; PCR team's investigations.

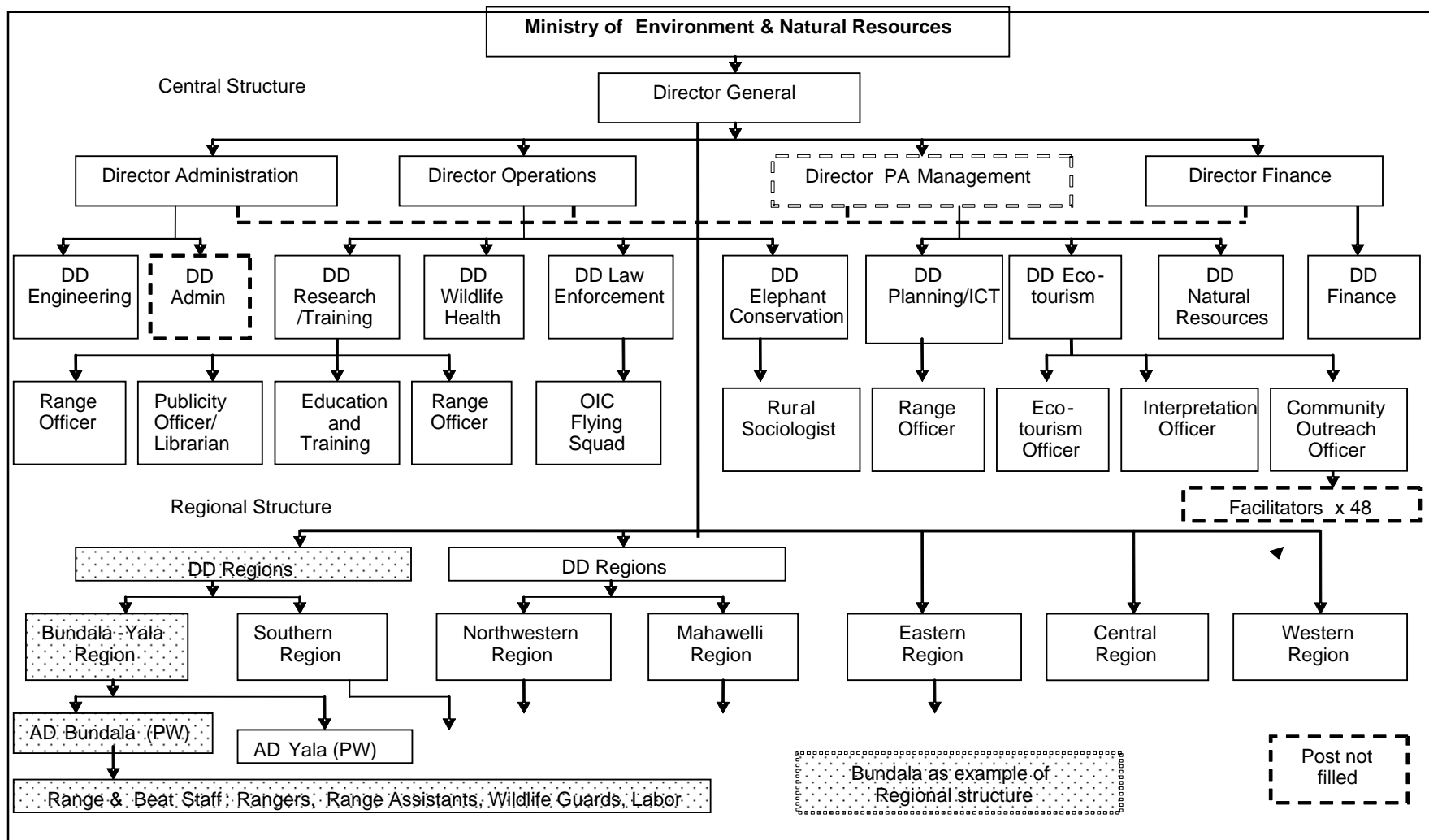
ORGANIZATIONAL STRUCTURE

Figure A3.1: Department of Wildlife Conservation at Appraisal (2000)



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

Figure A3.2: Department of Wildlife Conservation at Project Closure (2008)



AD =Assistant Director, DD = Deputy Director, ICT = information communication technology, PW = Park Warden

Note: At the time of the PCR (August 2010), the DWC was under the Ministry of Economic Development; references to unfilled posts relate to the time of the PCR.

Source: Project Completion Review Mission

PROJECT IMPLEMENTATION TIMELINE AND SCHEDULE

Table A4.1: Timeline of Project Administrative Milestone

Administrative Milestones/ Events	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
				'Year' 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
ADB milestones											
PPTA project report submitted		○									
Additional TA (GEF) & task force amended project design		○									
Report and Recommendations of the President			○								
Financial agreement signed			○	○							
Loan Agreement signed ^a			○	○							
Major amendments agreed (PACF, management etc)				○							
Loan effective				○	○						
Loan and Financing Agreements amended					○						
Revised PAM					○						
ADB missions (see key)				II	+	●	● ● ●	II	● * ●	●	● ●
Milestones set by ADB for continuation of project							II				
Loan extension to Dec 2008 agreed										*	
Government Agencies & Staffing											
Line ministry	MOPAHA/MOPAHAPI			Pres Secret	Ministry of Environment & Natural Resources						
Executing agency (Components A, B & D)				Department of Wildlife Conservation							
Additional executing agency (Component C)				Biodiversity Secretariat							
Director General (DG)				→	→	→	→	→	→	→	→
Project Director (PD)				→	→	→	→	→	→	→	→
Additional Project Director				→	→	→	→	→	→	→	→
PMU established & operating				→	→	→	→	→	→	→	→
Project duration				→	→	→	→	→	→	→	→
											Extension
Major TA Consultancy Contracts											
Project TA consultants											
Additional TA consultants for BBS											
Project Milestones											
Contracts for DWC office and PA visitor centers											
Court Case 1 'Project harmful to wildlife'; settled ^b											
Institutional reform process & agreed by Cabinet											
Wildlife insurance scheme paid by Government approved											
Research projects awarded											
Court Case 2 concerning DWC Office land; closed											
DWC Office construction suspended, then cancelled											
3 new court cases filed concerning office & contractor											
DD for North Central and Mahaweli Regions posted											
Project closure (Borrower's PCR March 2009)											II

ADB = Asian Development Bank, BBS = biodiversity baseline survey, DD = deputy director, DWC = Department of Wildlife Conservation, GEF = Global Environment Facility, MOPAHA = Ministry of Public Administration and Home Affairs, MOPAHAPI = Ministry of Public Administration, Home Affairs and Plantation Industries, MTR = mid-term review, OED = Operations Evaluation Department, PA = protected area, PACF = protected area conservation fund, PAM = project administration memorandum, PCR = project completion review, PMU = project management unit, PPTA = project preparatory technical assistance, TA = technical assistance

^a Year 1 commenced with Loan signed in September 2001

^b In the original out-of-court settlement, the DWC was restrained from taking a Project extension. In Nov 2006 ADB agreed to consider GOSL's request for an extension, subject to DWC reaching an agreement with the petitioners on removal of the clauses in the out-court settlement that precluded an extension. Meantime, this created uncertainty and impeded progress because initial date of project closure was June 2007. DWC field staff lobbied the petitioners and successfully lifted the extension ban in March 2007 so that an extension could be granted.


Source: Asian Development Bank-Project completion review mission

Table A4.2: Proposed and Actual Implementation Schedule


Components and Activities	2000	2001	2002	2003	2004	2005	2006	2007	2008
		'Year' 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
Component A: Enhancing Institutional Capacity for PA Management									
Enhancing Department of Wildlife Conservation's (DWC) management systems									
(i) Head Office									
(ii) Giritale National Wildlife Training Center									
(iii) Regional offices									
(iv) Communication systems									
Technical units strengthened									
Impact monitoring (<i>socioeconomic and biodiversity baseline</i>)									
Establishing ecotourism capacity in DWC									
Strengthening wildlife monitoring and evaluation									
Project management office									
Consulting services									
Component B: Participatory Adaptive Management of Pilot Protected Areas									
Consolidation and revision of management plans									
Facilitating management of pilot protected areas									
Ecotourism development									
Adaptive management systems									
Component C: Collaborative Conservation Planning									
Preparation of Biodiversity Conservation Action Plan ^a									
Enhancing protected area links and system coverage									
Joint priority setting and endangered species									
Component D: Sustainable Financing for Community Partnership Building									
Protected area conservation fund (PACF) ^b									
Contractor program									

PCR = project completion review

Note:

Original diagram prepared by DWC, with proposed schedule according to draft Project Administration Memorandum (ADB, 2000), modified by PCR team to match actual start date Sept 2001, shown as: 

Loan Effectiveness, Sept 2001 to June 2007; extended to Dec 2008.

Actual schedule prepared by DWC from project management unit records (Feb 2009) shown by: 

^a Later changed to "Addenda to existing BCAP"

^b Protected area conservation trust' changed to 'PACF' in amendment to Loan Agreement, Jan 2002, but not reflected in DWC schedule. In fact, Technical Support for PACF Outreach program extended to project closure
 Source: Interpreted and expanded from 'Borrower's Completion Report', PMU March 2009; 'Consulting Services Contract Final Report', ARD March 2007

PROJECT ADMINISTRATION MEMORANDUM DESCRIPTION OF PROJECT COMPONENTS

In view of the complexity of the Protected Area Management and Wildlife Conservation Project, the project components, as described in the project administration memorandum,¹ are reproduced below for reference:

A. Objectives and Scope

1. 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.

B. Project Components

1. Enhancing Institutional Capacity for Protected Area Management (Component A)

2. DWC'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 DWC's headquarter in Colombo, as well as materials, vehicles, and equipment. The technical assistance consultants will serve as counterparts to the thematic teams established within DWC, providing value addition to DWC's work plans and programs. In addition, DWC 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.

(i) Enhancing Management Systems

3. The Project will strengthen human resources, financial and administrative capacity and systems to permit transparent management of DWC. Work plans will be developed and implemented at the park level, within a manager line control system reporting through regional managers directly to DWC 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

¹ ADB. 2002. *Project Administration Memorandum: Protected Area Management and Wildlife Conservation Project: Sri Lanka Loan No 1767-SRI(SF)*. SLRM, Colombo.

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.

(ii) Strengthening Technical Capacity

4. The Project will (i) provide technical training within DWC 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.

(iii) Establishing Ecotourism Capacity

5. The Project will support capacity building in DWC to assist in the future development of ecotourism in Sri Lanka (Appendix 5). Additional capacity will be achieved through establishing incremental staff positions, training, intersectoral workshops, and technical assistance. The Project will support DWC 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.

(iv) Strengthening Wildlife Biodiversity Monitoring and Evaluation

6. This subcomponent will strengthen DWC'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.

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

7. Component B will support participatory management programs that address strategic threats and opportunities at each of the seven pilot sites (Appendix 2). 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.

(i) Consolidation and Revision of Existing Management Plans and Implementation of Adaptive Management

8. 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.

(ii) Facilitating Management of Pilot Protected Areas

9. 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.

(iii) Ecotourism Development

10. 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 (Appendix 5). 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.

3. Collaborative Conservation Planning (Component C)

11. Component C will establish a platform on which to develop increased collaborative conservation planning among the involved institutions and other stakeholders (Appendix 6). With the assistance of international and domestic consultants, the Biodiversity Conservation Secretariat (BCS) will define its mandate and responsibilities under the Convention of Biological Diversity. The Project will strengthen the Biodiversity Conservation Secretariat (BCS) to achieve the mandate and responsibilities identified above and primarily finalize 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.

(i) National Biodiversity Conservation Action Plan

12. The Project will strengthen the BCS within ME&NR 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.

(ii) Conservation System Review

13. 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.

(iii) Joint Priority Setting and Endangered Species Recovery

14. 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.

4. Sustainable Financing for Community Partnership Building (Component D)²

15. The Project will establish a Fund 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 Fund aims to empower buffer zone communities to develop increased governance over local development processes through the establishment of participatory local community micro-plans followed by integrated area-wide plans that assist in their implementation and thereby establish the basis for increased sustainability of natural resource management. Micro-plan development will be based on a participatory process, led by the PA manager and his staff supported by a NGO, with full participation of the buffer zone communities. Only activities identified in the micro-plans will be eligible for funding. These will lead to agreements with PA managers on local resource use. For purposes of this component, a Protected Area Conservation Fund (PACF) will be established outside of Government and will be governed by a Board comprising nine Directors: six eminent people acceptable to ADB and three ex-officio representatives, one each from the Department of Wildlife Conservation, the Forest Department and the Coast Conservation Department. The PACF will be financed through contributions from GEF and the Government of the Netherlands. The total cost of the PACF including establishment costs is estimated at US\$ 7.8 million. The PACF will fund activities that will enhance the well-being of the communities in the buffer zones of the seven pilot protected areas. Consultants contracted through the project management office (PMO) will assist in establishing the PACF, including developing eligibility and sub-project selection criteria (Appendix 4). Once established, the PACF will be self-executing as a stand-alone entity.

² Amendments approved by ADB's Board of Directors on 6 September 2001 replaced the establishment of a Protected Area Conservation Trust (PACT) fund with a Protected Area Conservation Fund (PACF).

16. The PACF 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 PACF, (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. In addition to providing grant funding for community and NGO based initiatives, a small portion of the fund will be used to finance administrative expenses, consulting services, training, workshops, civil works, equipment and materials.

TECHNICAL ASSISTANCE CONSULTANTS

A. Consultancy Contracts

1. Several consultancy contracts were awarded to support implementation of the Protected Area Management and Wildlife Conservation Project in Sri Lanka. These included a main technical assistance (TA) contract and contracts with local consultancy firms and individuals to assist in specific tasks (Table A6.1). Consultants were recruited according to the Guidelines on the Use of Consultants of the Asian Development Bank (ADB). No major issues were faced in recruitment.

Table A6.1: Consultancy Contracts

Category and Task	Source	Input Period
Multidiscipline TA support	Main TA contract: team of international & local consultants	2002–2007
Biodiversity baseline surveys (phase 1)	Main TA firm, additional contract	2006–2007
Biodiversity baseline (phase 2)	Associate firm of main contractor	2007–2008
Outreach program (IOs)	Two local consultancy firms as IOs for DWC outreach program	2004–2006
Habitat mapping and gap analysis	Local consultancy firm, working with BDS	2004–2006
BCAP Addenda	Individual consultants assisting BDS	2003–2007
Socioeconomic baseline surveys	3 local consultancy firms for DWC outreach program	2005–2006
Design and supervision architects	Local consultants to DWC	2003–2008

BCAP = Biodiversity conservation action plan, BDS = Biodiversity Secretariat, DWC = Department of Wildlife Conservation, IO = implementing organizations, TA = technical assistance
Source: Asian Development Bank estimates

1. Main Technical Assistance Contract

2. The main TA contract was a major component of the project, involving over 40 separate international and domestic consultants to fill some 25 posts in the wide range of disciplines essential to implementation (Table A6.2).

2. Addition to Main Technical Assistance Contract

3. At design, the biodiversity baseline studies (BBS) were to be undertaken by a consortium of international nongovernment organizations (NGOs) but the Government of Sri Lanka opposed this. In 2004, ADB approved a government request to award responsibility for the BBS to the main TA consultancy firm. The government approved the contract award only in March 2006. By this time, an out-of-court settlement was effectively blocking an extension of the project and, to allow completion by the then scheduled project closure date of June 2007, the BBS survey work had to be reduced to 12 months from the two years originally planned and was concentrated on four pilot protected areas (PPAs) instead of the seven PPAs. By the time a project extension was permitted, the main TA consultancy contract had expired and the lead

firm did not wish to extend. A separate contract was awarded to an associate firm of the main TA contractor to complete the BBS.

3. Department of Wildlife Conservation Consultancy Contracts

4. The Department of Wildlife Conservation (DWC) also recruited consultants through the project management unit (PMU) for specific tasks:

- (i) **Outreach programs.** The DWC was unable to find the suitable NGOs envisaged at design to do this work and so recruited consultancy firms, starting in three PPAs. Their performance was not acceptable, however, and DWC staff completed the work using facilitators (Appendix 8).
- (ii) **Socioeconomic baseline studies.** This work in the outreach areas was assigned to three local consultancy firms but they could not complete the surveys until 2006 because of the project delays so the results were not truly baseline.
- (iii) **Design and supervision.** Architects were recruited for the civil works, mainly for the visitor centers, offices, and accommodation in the PPAs.

4. Biodiversity Secretariat Consultancy Contracts

5. Local consultancy firms and individual consultants were recruited through the Ministry of Environment and Natural Resources (MENR):

- (i) The habitat mapping and gap analysis studies related to the National Conservation Review were undertaken by a local consultancy firm.
- (ii) Individual consultants were recruited to work on the Biodiversity Conservation Action Plan (BCAP) addenda.

B. Main Technical Assistance Consultancy

6. The main TA consultant team was engaged under the loan. On the request of the Government, consultant recruitment was undertaken by ADB. The contract was not approved by the Government until 14 months after loan effectiveness. The delay in fielding staff impeded initial project progress and resulted in bunching of large numbers of consultants. The DWC was understaffed and subject to institutional restructuring and did not have the capacity to absorb the consultants or provide adequate counterpart services. Moreover, most of the disciplines were outside the immediate experience of DWC staff.

7. Initially, the DWC was dissatisfied with performance and some inputs were postponed to ease pressure on counterpart staff. Subsequently, the consultants performed well, contributing new technologies to the DWC and the BDS and in assisting in strategic planning.

8. Under components A and B of the project, the team assisted the DWC in structural reform, corporate planning, pursuing an amendment to the Fauna and Flora Protection Ordinance, training, information and communications technology, and scientific research programs. At field level, the TA assisted in protected area management planning, community outreach, visitor services and ecotourism, the PPA boundary survey and demarcation, biodiversity monitoring, and curriculum development for the National Wildlife Training Center. In component C, consultants supported the BDS in preparing the BCAP, gap analysis, threatened species identification, and species recovery plans. They also supported activities of the

Protected Area Conservation Fund under component D. A wide range of skills was deployed (Tables A6.2 and A6.3)¹.

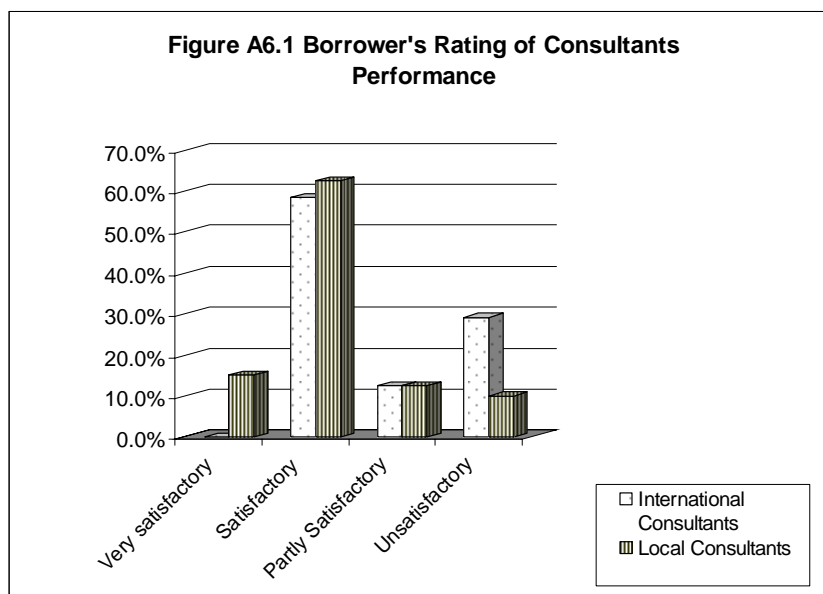
9. Three contract variations were negotiated to add new skills needed by the PMU and to adjust inputs for the delayed start.² A total of 335 person-months of services were allocated (compared with 300 envisaged at appraisal), 115 of which were international (128 at appraisal) and 221 domestic (172 at appraisal). The TA provided short- and long-term consultants between October 2002 and March 2007.

C. Lessons from Main TA Consultancy

1. Borrower's Perspective

10. The services of the main contractor and consultants were evaluated by the DWC.³ They were rated unsatisfactory at the early stages of the project, with the DWC assessing the performance by the team leader as poor. Later, after terms of reference (TOR) were revised and new consultants appointed, the DWC considered their services generally satisfactory and sufficiently flexible to accommodate requests for changes in project scope. Part of the problem of securing good services from the consultants was attributed by the DWC to poor TOR but the DWC recognized that its capacity to influence the TOR preparation during project design stage was low.

11. The performances of individual consultant team members were ranked according to the quality of work and relations with the DWC. The averaged results in Figure A6.1 show that the DWC considered 60% of team members to be satisfactory. Two of the international consultants considered by the DWC to be unsatisfactory were replaced. The evaluations relate to services provided to the DWC under components A, B, and D.



Source: MENR. 2009. *PAMWCP. Borrower's Completion Report*, PMU, Colombo

¹ ARD Inc, in association with Infotechs IDEAS & Greentech Cons. 2007. *Protected Areas Management and Wildlife Conservation Project ADB Loan 1767-SRI (SF) Consulting Services Contract Final Report*. Prepared for Ministry of Environment and Natural Resources, Sri Lanka.

² Dated 2003, 2004 and 2006.

³ MENR. 2009. *PAMWCP: Borrower's Completion Report*, PMU, Colombo

2. Main Technical Assistance Consultants' Perspective

12. The lessons learned listed by the consultants are summarized below:⁴
- (i) Frontloading TA in an institutional reform and development project with a well-established but conservative organization was unwise. A more efficient approach would have begun with a small core team of four to five consultants to assess need changes since the project design and to plan future TA inputs.
 - (ii) Consultants were frequently used for routine procedural tasks to support procurement and other administrative tasks to keep the project implementation moving. This was an inefficient use of expensive consultant time.
 - (iii) Government bureaucratic cultures and limitations should be recognized in setting up project implementation and monitoring mechanisms. Government institutional cultures are often not attuned to project needs. More emphasis could have been given to the staffing of the PMU, perhaps by including more individuals from outside government and, importantly, a monitoring and evaluation specialist.

⁴ ARD Inc, in association with Infotechs IDEAS & Greentech Cons. 2007. *Protected Areas Management and Wildlife Conservation Project ADB Loan 1767-SRI (SF) Consulting Services Contract Final Report*. Prepared for Ministry of Environment and Natural Resources, Sri Lanka.

Table A6.2 TA Consultancy Allocation and and Inputs

Consultant Title	Allocation		Months Worked each Year (see Notes below)						Inputs	
	Original Contract (2002)	Final Variation (2006)	2002	2003	2004	2005	2006	2007	Original projection	Actual
International Consultants										
Team leader/PA management institutional	39.0		8.0	12.0	12.0	6.0	6.0		44.0	
		40.2	1.6	12.0	12.0	12.0	3.3	1.3		42.2
Training	6.0		4.0			2.0			6.0	
		6.0	1.1			4.9				6.0
Biodiversity inventory/conservation systems	12.0		8.0			4.0			12.0	
		12.0	2.9	6.2	2.9					12.0
Adaptive management	16.0		8.0	6.0			2.0		16.0	
		17.7	1.4	5.7		4.2	6.2	0.2		17.7
Ecotourism	16.5		4.0	6.0	6.0				16.0	
		17.0	4.8	5.8	2.7	3.0				16.3
PA information display design interpretation	8.0		4.0	4.0					8.0	
		12.0	5.3	2.7	3.2	0.6	0.2			12.0
Communications	3.0		3.0						3.0	
		3.0	1.5	0.3						1.8
Ecologist	6.0		6.0						6.0	
Revised, Variation 1		2.4	2.4							2.4
Fund establishment	4.0		4.0						4.0	
Discontinued, Variation 3		1.8	1.8							1.8
Strategic planning ^a		2.6		0.8			0.6		1.4	1.4
Subtotal	110.5	114.7							116.4	113.6
National Consultants										
Dep team leader/PA management	44.0		8.0	12.0	12.0	6.0	6.0		44.0	
		44.0	1.0	9.6	8.5	9.2	9.2			37.5
Participatory community outreach	24.0		6.0	6.0	6.0	6.0			24.0	
		37.5	0.2	7.3		6.7	5.4			19.6
Staff needs assessment	7.0		4.0		3.0				7.0	
		11.0	0.2	4.1		1.5	2.1			7.9
Public private partnerships	12.0		4.0	4.0	4.0				12.0	
Discontinued, Variation 3		6.5		6.5						6.5
Small business development	12.0		4.0	4.0	2.0	2.0			12.0	
Discontinued, Variation 3		2.3	0.3	2.1						2.4
Wildlife insurance	5.0		3.0	2.0					5.0	
		5.0	0.1	3.7						3.8
Legal	9.0		3.0	3.0	3.0				9.0	
		11.3		4.1	3.7	0.6				8.4
MIS Design	24.0		12.0	12.0					24.0	
		24.0	0.1	8.6						8.7
Financial organizational systems	15.0		6.0	6.0		3.0			15.0	
		15.0	0.4	9.0			0.9			10.3
GIS/Boundary survey and demarcation	8.0		4.0	2.0	2.0				8.0	
Boundary work added, Variation 2		21.5	0.1	2.3	3.2	6.2	4.1			15.9
Training	12.0		3.0	3.0	3.0	3.0			12.0	
		12.0	0.3	4.4			5.0	0.1		9.8
Public relations and education	12.0		4.0	4.0	4.0				12.0	
		12.0	0.3	7.7						8.0
Communications	4.0		4.0						4.0	
		4.0	0.2	2.9						3.1
Ecologist	12.0		0.1	6.0	6.0				12.1	
		12.0		2.7	2.1	3.7	1.2	0.1		9.8
Operational aspects of APAC ^c		0.5			0.5					0.5
Workshop facilitator (Midterm Review) ^a		0.2			0.2					0.2
DWC building IEE team – Team Leader ^a		0.8				0.7				0.7
DWC building IEE team – Sociologist ^a		0.7				0.7				0.7
DWC building IEE team – Urban Planner ^a		0.3				0.7				0.7
Subtotal	200.0	220.6							200.1	154.5
TOTALS	310.5	335.3							316.5	268.1

IEE = Initial Environmental Examination

Notes:

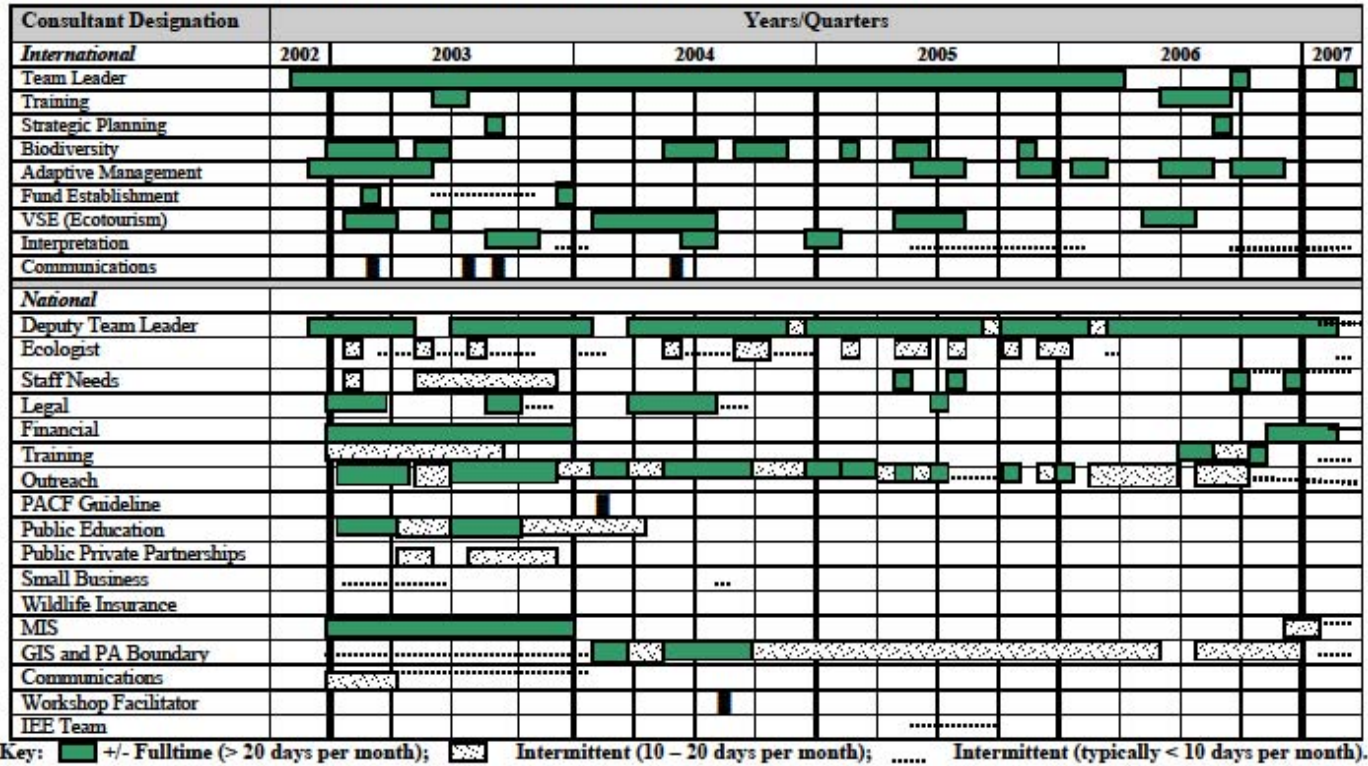
1. Allocation refers to months allowed in contract, not months worked (which may be fewer). Allocated time of team leader reduced for annual leave

2. Original projection (unshaded); inputs (shaded) as agreed Variation 3 (2006).

^a consultant positions added, not in original contract.Source: ARD Inc, in association with Infotechs IDEAS & Greentech Cons. 2007. *Protected Areas Management and Wildlife Conservation Project ADB Loan 1767-SRI (SF) Consulting Services Contract Final Report.*

Table A6.3: Main Technical Assistance Consultancy Input Schedule

Figure 1: Indicative* period and intensity of work of each consultant throughout contract period.



*Note this figure is not precise. For some periods days worked in successive months are averaged for clearer presentation.

TRAINING PROGRAM

A. Formal Training Plans

1. Formal training was a key element in building capacity in several new disciplines at the Department of Wildlife Conservation (DWC) under the Protected Area Management and Wildlife Conservation Project. The National Wildlife Training Center (NWTC) provided an excellent facility and location for training but the curriculum for its diploma and certificate courses needed upgrading to reflect new concepts the project introduced.

2. The technical assistance (TA) consultants helped prepare training plans and methods during 2003 but these could not be completed until 2006, after the structural reforms at the DWC had been agreed in principle.¹

3. A workshop reviewed issues and actions for training during 2003 and a provisional training plan was prepared for 2003–2004. Formats were prepared for (i) justifying training events, (ii) evaluating training events immediately after completion, (iii) a post-training action plan by trainees on implementing training lessons, (iv) trainee performance evaluation for completion 6 months after training, (v) a procedure for selection of candidates for training. The training plan and formats were not implemented in a systematic way.

4. The TA assessed training needs in 2006, which led to a comprehensive training strategy, a planning system and procedural guidelines, proposals for development of the NWTC, and a training prospectus for 2007. These documents, which drew on material from participatory workshops and subsequent consultations with a training development task force, addressed several elements of training:

- (i) **Training needs analysis.** This was based on focus group interviews, and a workshop.
- (ii) **Training strategy.** The strategy incorporated the vision of the DWC and proposed the formation of a board of studies from the NWTC. It reflects the career development needs of the DWC staff.
- (iii) **Annual training plans.** A plan was formulated for 2007.
- (iv) **International training.** This program involved study tours, seminars, short courses, and post-graduate opportunities, most tailored to the DWC's needs. It was set for 2007 and 2008, and covered different staff levels and a range of disciplines.
- (v) **Prospectus for national center training.** More than 30 skill areas were identified for training at the NWTC, many going beyond traditional wildlife management. New course outlines were proposed for diploma, senior certificate, and short courses, the latter emphasizing institutionalization of the DWC initiatives developed under the project. Recommendations were made for personnel and institutional development at the NWTC, the upgrading of current courses, and development of a long-term action plan. This plan included distance learning, exchange programs within Asia, and development of substantive links with national training institutions and universities, with a view to course development and ultimate accreditation for the upgraded diploma and certificate courses.

¹ ARD Inc, in association with Infotechs IDEAS & Greentech Cons. 2007. *Protected Areas Management and Wildlife Conservation Project ADB Loan 1767-SRI (SF) Consulting Services Contract Final Report.*

B. Non-formal Training

5. The project conducted extensive workshops, study tours, and awareness-raising programs for project staff of all ranks, government officers, provincial representatives, and communities. It put special emphasis on awareness training for schoolchildren.

6. About 7,600 people were trained in-country and 540 overseas. More details of formal and non-formal training programs are given in the DWC's project completion report² and final progress report,³ and are summarized in Tables A7.1 and A7.2.

Table A7.1: Summary of In-Country Training Programs

Training Type	No. of Events	No. of Participants	Location	Participant Category & Content
In-Country				
Formal post-graduate Master of Science	3	7	Colombo	Department of Wildlife Conservation (DWC) and Biodiversity Secretariat staff
Short-term training		1,071	Various	DWC officers, guides, jeep drivers, technicians, etc.
Field awareness	8	312	Various	Schoolchildren
Workshops	60	2,085	Various	DWC staff, government officers, academics, provincial representatives
Awareness programs	161	4,117	Various	1,437 government officers & 2,680 community members, schoolchildren
Total	477	7,592		

Source: DWC. 2009. *Protected Area Management & Wildlife Conservation Project: Borrower's Project Completion Report*. Ministry of Environment & Natural Resources

Table A7.2: Overseas Training Programs

Type	Units	No.	Participants	Country
Post Graduate Degree / Diploma				
Master of Science in Wildlife Management	1	1	Deputy Director (DD) (Research and Development)	United Kingdom
Master of Science in Wildlife Management	1	1	Acting DD (North Western Region)	United Kingdom
Diploma in Wildlife Management	1	5	Ranger	India
Total	3	7		
Short -Term Training				
Wildlife veterinary training	1	3	Veterinary Surgeons	Tanzania
Geographic information system and remote sensing	1	2	Draftsman	Thailand

² DWC. 2009. *Protected Area Management & Wildlife Conservation Project: Borrower's Project Completion Report*. Ministry of Environment & Natural Resources

³ DWC. 2009. *Protected Area Management & Wildlife Conservation Project: Final Progress Report*. Ministry of Environment & Natural Resources.

Type	Units	No.	Participants	Country
Extension and education	1	1	Education officer DD/Assistant Director	Thailand
Electric fencing / Conflict Management	1	12	(AD)/Ranger	South Africa
Effective training, implementation, and management	1	1	Rangers	Thailand
Procurement of works	1	1	DD (Engineer)	Malaysia
Wildlife health management	1	16	Rangers	India
Wildlife and ecosystem health	1	3	Vet Surgeons	USA
Radio communication (Part I)	1	7	Technicians	Malaysia
Total	9	46		
Study Tours				
			Director General, Conservator General	
Wildlife policy	1	4	Forests, two others	Costa Rica
Wildlife management	1	21	Rangers ADs /Park wardens	India
Electric fencing and conflict management	1	16	(PW)	Tanzania
Wildlife management	1	21	Rangers	India
Electric fencing and conflict management	1	15	ADs,PWs	Tanzania
Ecotourism and wildlife management	1	18	ADs , PWs, Rangers	Nepal
Community outreach and participatory management	1	20	ADs, PWs,Rangers	Philippines
Wildlife management	1	21	Rangers	India
Ecotourism and wildlife management	1	24	ADs,PWs,Rangers	Philippine
Community outreach and participatory management	1	24	ADs,PWs,Rangers	Nepal
Electric fencing and conflict management	1	11	ADs,PWs	South Africa
Ecotourism and wildlife management	1	14	ADs,PWs,Rangers	Nepal
Community outreach	1	18	ADs,PWs,Rangers	Philippines
Effective management for protected areas	1	14	ADs, PWs	India
Ecotourism and visitor services	2	49	ADs, PWs	Malaysia
Protected area management training for senior officers	1	14	PWs, Rangers	India
Wildlife health management and captive breeding	1	14	ADs, Rangers	South India
Community outreach and participatory park management	5	70	ADs, PWs, vets	Nepal
Diploma in wildlife management (field training)	1	27	Rangers	India
Protected area management for Senior officers	1	16	ADs, DDs, PWs	Thailand
Landscape functions and strategic planning	1	10	DDs, ADs	Thailand
Eco development and human elephant conflict management	1	16	ADs, Rangers Rangers, Range	India
Human elephant conflict management	1	16	Assistants	India
Wildlife management (diploma training) field program	1	17	Rangers	India
Total	29	490		

Source: DWC. 2009. *Protected Area Management & Wildlife Conservation Project: Borrower's Project Completion Report*. Ministry of Environment & Natural Resources.

SOCIOECONOMIC ASSESSMENT

I. BACKGROUND AND METHODOLOGY

A. Project Description

1. This appendix provides an assessment of the social and economic impact of the Protected Area Management and Wildlife Conservation Project. This project was designed to address institutional and legal deficiencies in the management of protected areas in Sri Lanka and to test participatory adaptive management practices in priority pilot protected areas (PPAs). The project also included a community outreach component that was to establish Protected Area Conservation Fund (PACF) as a financing mechanism for community–conservation linkages.¹

2. The primary instrument for involving the communities in the government's conservation objectives was partnership building through the PACF, which would fund microprojects in the communities to reduce their exploitative activities in the protected areas while improving the typically adversarial relationship between them and the officials of the Department of Wildlife Conservation (DWC).

B. Methodology of Assessment

3. The Asian Development Bank (ADB) project completion report (PCR) mission undertook field visits to four of the seven PPAs and met a wide cross section of stakeholders.² These included field officers of the DWC, office-bearers of 18 community based organizations (CBOs) and around 40 beneficiaries of project interventions. The mission also interviewed DWC staff at the head office and former members of the project management office who had been directly involved in implementing the community outreach activities.

4. Several studies conducted on the impact of the project activities at different stages of implementation were reviewed by the mission. On returning from the field visits, the observations made during the visits were reviewed again with DWC officials and clarifications were obtained where necessary.

II. PRE-PROJECT SOCIOECONOMIC STATUS

A. Baseline Studies and Impact Assessment

5. The initial design required the recruitment of nongovernmental organizations (NGOs) to implement the social outreach programs. However, the costs indicated by the NGOs that expressed interest were too high and the services of local consulting firms were sought for the purpose. Due to this and the other factors that delayed the start of project activities, two firms were engaged only in 2004 for three pilot PPAs. Their performance was unsatisfactory and the DWC took over outreach operations using their own staff and recruited facilitators. This proved a more successful approach.

6. The project also engaged consultants to prepare seven socioeconomic baseline surveys, which were all presented in December 2006. Due to the late engagement of these survey

¹ The originally proposed PAC Trust (PACT) endowment fund that would operate in perpetuity was changed to a sinking fund (PACF) prior to Project start. PACF operated as intended for PACT but ceased functioning on project closure. 'PACF' is used in this report.

² The parks visited were, Bundala, Horton Plains, Ritigala, Minneriya and Kaudulla (the latter being a contiguous ecosystem with Minneriya)

consultants, however, their reports cannot be treated as presenting baseline data for the project. They are instead a description of the situation at the beginning of the implementation of community development activities. Furthermore, these studies were conducted by several organizations with different methodologies, which seriously limits effective comparison between PPA communities.

7. The project management unit (PMU) also conducted two review studies by individual consultants of the impact of the community outreach activities.³ These two studies comprise the ex-post evaluation efforts of the community outreach activities. The former study has component D (community outreach) as its main focus, while the latter is a review of all the project components, with primary focus on implementation issues rather than the impact of project activities. A more effective monitoring and impact assessment plan would have included a baseline study at the beginning of the project, a midterm survey, and a final comprehensive impact assessment survey on a similar or the same sample used for the earlier two surveys. Since this model has not been implemented, largely due to delayed commencement, the assessment of social activities cannot accurately capture statistical results and has to depend more on observation.

B. Findings on Pre-Project Situation

8. The socioeconomic studies conducted by the consulting firms prior to the implementation of the community outreach programs indicate many common features across the PPA communities surveyed. Farming, mostly paddy, is the main occupation. Unemployment is very high in the southern PPA communities, compared with elsewhere. The number of persons living in abject poverty, defined as those earning less than \$1.0 per day in purchasing power parity terms, is between 3% and 8%, except in Wasgamuwa where 15% of the population falls into this category. A very high percentage of the population depends on the adjacent PPA for firewood, while the more serious offences such as illegal logging and poaching are resorted to by a small minority of 5%–10% of the residents. The residents also view the less serious forest extraction activities as a traditional right rather than an offence. All PPA communities reported a high incidence of conflict with animals, mostly elephants but also including wild boars. Depending on the PPA, the trend of this conflict was constant or increasing. Most residents in the buffer zones of the PPAs also reported an average to poor relationship with the field officers of the DWC. Key indicators are given in Table A8.1.

³ *Review of Community Outreach Activities Carried Out by the PACF in Buffer Zone Villages of Seven Pilot Protected Areas*- Dr. Gamini Hitinayaka, December 2008, and *Impact Assessment, Protected Area Management and Wildlife Conservation*- Dr. Ms. Nirmalie Pallewatta (MENR Consultant), December 2008.

Table A8.1: Key Indicators of Pre-Project Socioeconomic Status in Pilot Protected Areas

Item	Peak Wilderness	Ritigala	Bundala	Wasgamuwa	Minneriya	Uda Walawe	Kaudulla
Population	54,073	9,590	30,952	19,624	8,196	51,903	7,616
Main occupations	Salaried workers	Farming	Farming and salaried work	Farming	Farming, casual labor	Farming	Farming
Unemployment	N/A	11.5%	50%	12%	10%	43%	7%
Percent in abject poverty (less than 1\$ a day on PPP basis)	5%	5%	7.5%	15%	3%	N/A	4%
Per cent depending on Forest reserve	45%	65%	30%	64%	65%	100%	60%
Main forest extraction	Firewood, 87%	Firewood, 72%	Firewood , 70%	Firewood , 85%	Firewood, 80%	Firewood, 100%	Firewood, 76%
Other forest extraction	Timber 3.7%,	Timber 6%, poaching 3%	Negligible	Timber 4%, poaching 3%	Timber 4%, grazing 8%	N/A	Timber 5%, grazing 8%
Threat from wildlife	Wild boar, very high, constant trend	Elephants, high, constant trend	Elephants, high, constant to increasing trend	Elephants, wild boar, increasing trend	Elephants, wild boar, decreasing trend	Elephants, wild boar, high	Elephants, high, constant trend
Relationship with DWC	N/A	Average to poor	N/A	Average to poor	Average to poor	Average to poor	Average to poor

DWC = Department of Wildlife Conservation, N/A = not available, PPP = purchasing power parity

Sources: Socioeconomic Surveys of Pilot Protected Areas: TEAMS, EML, BMB Lanka- December 2006

C. Status of Communities at the Project Preparation Stage

9. The feasibility study and appraisal stages of the project provided a comprehensive social assessment that was the basis of the design of the social outreach component. This included a detailed stakeholder consultation program involving participatory rural appraisal (PRA) techniques in nine villages around seven PPAs. An understanding of these findings is important in the assessment of the social and economic impact of the project activities.

10. The population of the areas surrounding the PPAs was 180,000, distributed among an estimated 40,000 households. The population was diverse ethnically and religiously, with a Buddhist majority and Tamil Hindu and Muslim minorities. The finding on the prevalence of poverty in the communities was significant. The de facto poverty line in Sri Lanka is eligibility to receive benefits under the government's poverty alleviation program. The PRA participants were asked to indicate perceived poverty by means of other criteria, such as asset ownership, livelihood, and family dynamics. These exercises showed that the incidence of poverty was much wider than inferred by the government poverty program figures, which are based on income criteria. Due to the importance in this social assessment, these findings are summarized in the Table A8.2.

Table A8.2: Official Definition and Community Perception of Poverty in the Project Area

Pilot PA Area-Village	Percent Of Population Living in Poverty as Defined by Government Poverty Program	Percent of Population Living in Poverty as Perceived by Individuals in PRA Exercises
Peak Wilderness-Mapalana	44%	51%
Peak Wilderness-Seetha G.	58%	98%
Horton Plains-Pattipola	87%	25%
Minneriya-Minirigama	50%	26%
Wasgamuwa-Palupitiya	75%	97%
Ritigala-Hinukkiriya	10%	65%
Bundala-Pallemalala	13%	55%

PA = protected area, PRA = participatory rural appraisal

Source: ADB 2000. *Report and Recommendation of the President to the Board of Directors. Proposed Loan to the Democratic Socialist Republic of Sri Lanka for the Protected Area Management and Wildlife Conservation Project.* Manila.

1. Factors Contributing to Poverty

11. The studies conducted during the feasibility study stage also identified factors that contributed to poverty in the PPA communities. These factors, which are important in evaluating the project's impact, were :

- (i) dependence on seasonal agricultural production and labor, resulting in insecure incomes;
- (ii) dependence of low-income fishers working inside PPA boundaries on licensed boat owners;
- (iii) declining availability of forest products for collection;
- (iv) human-elephant conflict leading to loss of life and damage to crops and properties;
- (v) lack of employment opportunities, especially among the educated youth;
- (vi) dependence on moneylenders for credit needs at high interest rates and entrapment in perpetual indebtedness;
- (vii) poor access to market for agricultural produce and exploitation by middlemen;
- (viii) abuse of illicit liquor, accompanied by domestic violence and strain on earnings;
- (ix) poor access to drinking water;

- (x) limited access to social and communication infrastructure;
- (xi) landlessness, poor-quality marginal lands, and encroachment;
- (xii) fragmentation of land, reducing the viability of production; and
- (xiii) inadequate irrigation facilities.

2. Role of Women

12. The social assessment conducted at project preparation found little gender discrimination among the target communities. This feature is normal in Sri Lanka, except in Muslim communities where women's role is more restricted to household work. Women, however, are required to play dual roles of family caretaker and supplementary income earner. They are also expected to undertake the less strenuous aspects of daily life, such as collection of firewood and helping in some agricultural activities.

3. Relationship with the Protected Area

13. The perception in the communities about the exploitation of the forest resources was studied in detail at the feasibility study stage. It is clear that all communities were well aware of the implications of the extraction of forest resources. The major wildlife conservation issues in the protected areas from the point of view of community members during the PRA exercises were (i) lack of clear PPA boundaries; (ii) inadequate law enforcement by PPA management; (iii) political influence on law enforcement activities, creating a sense of social injustice; (iv) inadequate compensation schemes for crop damage caused by elephants; and (v) lack of communication between the communities and PPA managers.

14. The solutions proposed by community members included (i) development of alternative livelihood sources for the marginalized groups and for the educated youth who wish to move away from traditional occupations; (ii) clear delineation of PPA boundaries, based on agreement between the villagers and PPA administrators; (iii) electrified fences to prevent elephant encroachments; (iv) creation of buffer zones or zoning of the PPAs 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 members of society inside and outside the communities; (vi) more community participation in PPA management; and (vii) increased public awareness on wildlife conservation.

III. PROJECT SOCIOECONOMIC STRATEGY AND IMPLEMENTATION

15. The pre-project situation and the findings of the social assessment were applied in the design of the community outreach component of the project. The strategy called for extensive use of PRA techniques in project implementation and the maximum possible involvement of the communities. An understanding of the elements of the strategy is useful prior to evaluating the impact of the project activities.

A. Proposed Strategy for Community Outreach

16. The project's community outreach activities were to include:
- (i) social mobilization through community groups where members would use participatory techniques to identify and prioritize problems and opportunities;
 - (ii) assessing resources, using community inputs to identify and describe the demand for and supply of resources and ownership;
 - (iii) developing community microplans, where community members would agree on issues and develop strategies, with technical inputs from government sectors,

- including irrigation, agricultural services, livestock, forestry, wildlife, education, tourism, and health;
- (iv) developing community resource agreements with the DWC based on the community microplans, including the delineation of PA boundaries;
 - (v) implementing microplans using local resources, local government resources, input by nongovernment organizations (NGOs), government programs, seed grants from the proposed PACF, community outreach grants, and technical assistance from component B;
 - (vi) developing area-wide planning processes in which plans from contiguous communities would be integrated and establishing a joint decision-making mechanism for involving community representatives from the area-wide planning process that would include local DWC staff and other relevant agencies; and
 - (vii) monitoring and evaluating the implementation and impact of microplans by the communities, local DWC staff, and relevant local authorities, using key performance indicators by which the performance of the contracted NGOs and CBOs would be assessed. The indicators were to be the level of poverty impact and the participation of the poor, the increase in community knowledge of environmental issues, and the level of conflict resolution achieved.

B. Implementation Experience

17. The implementation was delayed by issues relating to the formation of the Protected Area Conservation Trust (PACT), which was conceived as an endowment fund. The income earned from PACT was expected to fund community outreach activities in perpetuity. The PACT concept was changed to the PACF.

18. The community outreach activities met several delays due to procedural issues and can be divided into two distinct phases. Phase 1 envisaged implementation by NGOs. However, due to lack of adequate qualified response, local consulting firms were engaged. Phase 1 of the implementation of outreach activities covered the Wasgamuwa, Udawalawe, and Peak Wilderness PPAs. The ADB's midterm review mission in 2004 considered the performance of the selected firms unsatisfactory, a view shared by the DWC. The problems related to lack of commitment in mobilizing and retaining staff in the field. During phase 2, these consultants were abandoned and the DWC implemented the program with their own staff and recruited social facilitators. Despite some delays in recruitment, the facilitators were active in the field from late 2006 onwards.

19. Under the social facilitator approach, both project and beneficiary selection methods were modified. The project completion report mission's interviews with beneficiaries revealed the effectiveness of the use of facilitators, a few of whom had continued their association with the CBOs even after project closure. The mission noted that the CBO at Ohiya village, near Horton Plains, had contracted the former facilitator to be the auditor of the CBO during monthly visits for a small fee.

20. The actual implementation of the PACF scheme had the following elements:

- (i) **Formation of village organizations.** Project facilitators introduced participatory rural appraisal (PRA) techniques to the community members. They prioritized their projects according to community needs. The PCR mission found that this approach to orienting the CBOs was successful. All beneficiaries met by the mission had a thorough understanding of the objectives of the project and had used this understanding to prioritize project interventions, such as giving loans to those who had a higher dependence on the PPA.

- (ii) **Regional level processing.** Once the microplans were prepared, the park warden approved the plans and these were presented to the regional grant review committee, which comprised a government representative (such as the divisional secretary), the regional deputy director of DWC, the park warden, and four CBO members. This mechanism offered an opportunity for involvement by the regional government administration in the CBO activities, a relationship that has since been used to advantage in resolving loan default issues, for example in Kaudulla.
- (iii) **National level processing.** Once the approvals were received by the PACF manager and recommended, the national grant review committee, comprising the secretary to the MENR, the director of the DWC, academics, and NGO representatives, provided the final approval. This representation was similar to that envisaged for the board of directors of PACT. Funds were then released in installments.

21. The view of the mission is that the approval process had been implemented well. In addition to providing accountability, the process also helped to build relationships, especially at the regional level. At the time of the mission's visit, almost 2 years after project closure, the involvement of the DWC and other officials in the CBO approval process had diminished in some areas. In these areas, the concurrence of the park warden was no longer required for transactions of the CBO with the banks. In other areas such concurrence was still mandatory. Beyond its accountability benefits, this continued association between the CBOs and DWC field officials will help sustain the current project-derived goodwill between the two groups. It is also the view of officers of DWC and former officers of the PMU that this association should continue to ensure sustainability.

IV. EFFECTIVENESS OF TARGETING OF BENEFICIARIES

A. Defining the Target Group

22. Prior to evaluating the project's impact on communities, the role of communities in the objectives and scope of the project and the target of the project's socioeconomic interventions should be examined. The project had a complex set of objectives and four components. Component D comprised the establishment of the PACF as the financing mechanism for community-conservation linkages. This component had the most social and economic impacts because it was designed to directly empower the communities in the buffer zones of the PPAs. The incidence of poverty in the project area was assessed in depth as part of the appraisal process and the RRP cites poverty reduction as the secondary classification.

23. There is no direct reference to the communities in the project objectives. However, the project rationale includes the following observations in relation to the communities associated with the PPAs:

- (i) Effective protected area management cannot take place in the long term without the support of the local communities.
- (ii) Rural livelihoods are dependent on a flow of natural resource benefits, many of which cannot be sustained without adequate protective measures.
- (iii) Effective community empowerment is necessary to allow communities to plan for their own future and interact with the government agencies and the private sector.

24. Although poverty reduction was cited as the secondary classification in the RRP and received much attention during appraisal, there is no emphasis on poverty reduction in the RRP project framework (Appendix 2). This has implications for the identification of the social and

economic groups that the project was intended to benefit. For the purpose of this socioeconomic assessment, and deriving from the project rationale, the intended target group of Component D and the PACF activities can be identified as local communities living adjacent to the PPAs areas who depend on a flow of natural resource benefits from the PPAs and whose support is needed for effective PPA management.

B. Success of Targeting

25. An assessment of the targeting of PACF activities was made during the review of outreach activities carried out by the PACF unit in a report prepared by Dr. Gamini Hitinayaka in December 2008. This report was prepared on the basis of a questionnaire-based field survey conducted in a total of 103 Grama Niladhari divisions, small administrative areas often including a number of villages. The report shows that an average of 63% of the beneficiaries of the PACF activities were community members whose participation would reduce any potential negative impact they may have posed to the PPA prior to the project (Table A8.3). Only 16% of the beneficiaries were targeted for poverty reduction. This finding is supported by interviews conducted by the PCR mission with beneficiaries, even though most of those interviewed would likely have been reluctant to admit to any PPA-related offences. A female beneficiary at Bundala admitted that she had earlier had several convictions for illegal coral mining and with the aid of PACF loans had established a successful retail business in garments. Several CBO office-bearers met by the mission said that the loans had been targeted at persons who had been involved in illegal extraction from forests.

Table A8.3: Basis of Beneficiary Selection

Community	Income Generation	Poverty Alleviation	Reduce PA Impact	Total
Wasgamuwa	23%	18%	59%	100%
Kaudulla	20%	21%	59%	100%
Peak Wilderness	11%	7%	83%	100%
Ritigala	28%	29%	43%	100%
Udawalawa	14%	14%	73%	100%
Minneriya	40%	16%	44%	100%
Bundala	33%	25%	42%	100%
Horton Plains	0%	0%	100%	100%
Average	21%	16%	63%	100%

Source: Review of Community Outreach Activities for the PACF in December 2008 by G. Hitinayaka.

26. The rationale of the project on which the targeting of beneficiaries is also based mentions the degree of dependence on a flow of natural resource benefits from the project areas. The dependence of the beneficiaries on their respective adjacent PPAs differed widely but the majority (70%) reported some form of dependence. The mission was also informed that the village groups voluntarily gave priority in the initial granting of loans to those dependent on the PPAs. It is therefore the view of the mission that the targeting of beneficiaries had been effective.

C. Involvement of Traders

27. The mission observed that most CBO office-bearers and some individuals who had obtained several loans from the same CBO were involved in trading activities. Some of the traders stated that the loans from the PACF were more attractive than those offered by the commercial banks for the same purpose, both in terms of interest charged and ease of access. The interest of 1% per month charged by the majority of the CBOs was especially attractive for purchase of goods for trading. Similarly, traders were the group most enthusiastic about sustaining the CBOs and will likely show the most commitment to future CBO activities.

V. SOCIOECONOMIC IMPACT OF PROJECT ACTIVITIES

28. The activities funded by the PACF can be classified into two categories: (i) Infrastructure development for community welfare, and (ii) subprojects implemented by beneficiaries using loans obtained from the PACF financed via a revolving fund. This section provides an assessment of the implementation and impact of these activities.

A. Application of Funds

29. When the PACF activities began, PRA methods were used to guide beneficiaries in the selection of subprojects. As an output of these exercises, the beneficiaries prepared microplans for their village. Table A8.4 shows how the funds were divided between infrastructure-based common projects whose benefits were shared by the village and loans that benefitted only the individual borrower. Overall, 55% of the funds went into individual loans and 45% to common infrastructure projects.

Table A8.4: Application of Protected Area Conservation Fund Financing in Pilot Protected Areas

Community	Infrastructure (SLRs'000)	Individual Loans (SLRs'000)	Infrastructure (%)	Individual Loans (%)
Wasgamuwa	24,974	80,175	24	76
Kaudulla	21,638	10,496	67	33
Peak Wilderness	23,566	11,469	67	33
Ritigala	22,422	33,609	40	60
Udawalawa	26,266	13,361	66	34
Minneriya	21,089	7,125	75	25
Bundala	14,285	27,809	34	66
Horton Plains	0	799	0	100
	154,240	184,843	45	55

Source: Estimated from data provided by DWC.

30. The distribution between common projects and individual loans varied widely across the PPAs. At Horton Plains, where only one CBO was established (at Ohiya), all allocated funds were used for loans to members for subprojects. At Minneriya, 75% of the funds were used for infrastructure projects, mainly to build community halls. The mission also visited a CBO at Kaudulla where the entire allocation was used for two infrastructure projects, one of which had failed due to an alleged lack of cooperation from a government line agency.

B. Infrastructure Development for Community Welfare

1. Choice of Infrastructure

31. Table A8.5 indicates the categories of infrastructure projects selected for implementation by the communities' planning exercises. The most popular involved the supply of electricity, potable water, and irrigation. Access to power has always been an issue for PPA communities. Sri Lanka has a very high rate of rural electrification and rural communities can greatly benefit from connection to the grid. The PCR mission noted that the choice of electricity supply as a project was in places where all other efforts to obtain this power had failed. The rehabilitation of irrigation tanks was also a popular choice and the mission noted several successful examples that had widely benefitted the population. At Bundala, the rehabilitated tank at Koholankala serves to irrigate farmland and is also a site for fresh water fishing. Another highly successful project was the rehabilitation of Mutthage Wewa irrigation tank, where the newly repaired bund also serves as a road for villagers and schoolchildren.

Table A8.5: Types of Infrastructure Projects Selected (%)

Category	Ritigala	Peak W'ness	Kaudulla	Minneriya	Bundala	Horton Plains	Uda Walawe	Wasgamuwa
Irrigation	41	7	23	17	0	0	11	9
Potable water	12	13	31	0	0	0	21	0
Power	24	27	15	17	0	0	11	73
Community hall	6	0	8	33	0	0	0	0
Electric fence	6	7	15	17	0	0	47	9
Roads	0	0	0	0	0	0	5	0
Bridge	0	20	0	8	0	0	0	0
Other infrastructure	12	27	8	8	100	0	5	9
	100	100	100	100	100	0	100	100

Source: Estimated from data provided by DWC

32. Electric fence projects to deter elephants from invading human habitations and farmland were often chosen in communities affected by HEC. Communities around the Uda Walawe PPA allocated around half of their infrastructure funds for this purpose. The mission visited some of the fences at Kaudulla and was impressed by the effectiveness of this investment and the sense of security the fences gave local communities. The fence was powered by solar energy. The mission observed that, while earlier fences were built around protected area boundaries, the fences built under the project were mainly around affected habitations and farmland.

33. The mission also observed instances where infrastructure projects had failed due to issues with the line implementation agencies within provincial and local governments. One failure involved two minor irrigation projects at Rotawewa in Kaudulla. The chairman of the CBO indicated that one of the projects could not be completed because the irrigation authorities had not implemented tasks that were their responsibility. However, such instances were the exception rather than the rule.

2. Socioeconomic Impact of Infrastructure Projects

34. The types of infrastructure selected by the beneficiaries have had a significant impact on their socioeconomic conditions. Investment in the rehabilitation of irrigation schemes have

expanded the land under cultivation and in some instances provided a source of drinking water and opportunities for freshwater fishing. Road rehabilitation and bridges have reduced commuting time for schoolchildren and improved access to markets. Access to power has improved overall quality of life and also enabled the establishment of micro enterprises requiring electricity.

C. Loan Scheme for Community-Based Organization Members

1. Performance of Loan Repayment

35. About 55% of PACF funds had been provided to members of the CBOs for microfinance loans to members. The loan scheme eventually became a revolving fund and had varied success with different CBOs. The mission interviewed around 40 beneficiaries. A comprehensive field level survey of the outreach program was conducted under the supervision of Dr. G Hitinayaka in December 2008. A summary of the findings on the success rate of the loans given is shown in the Table A8.6.

Table A8.6: Assessment of Success Rate of Subprojects Funded by Protected Area Conservation Fund

Community	Project Success Rate (%)	Loans Repaid Regularly (%)
Wasgamuwa	96	78
Kaudulla	97	97
Peak Wilderness	97	33
Ritigala	81	74
Udawalawa	59	30
Minneriya	62	61
Bundala	86	68
Horton Plains	100	100
Average	86	68

Source: G Hitinayaka.2008. *Review of Community Outreach Activities by PACF.*

36. The average 68% regular repayment of loans cannot be termed satisfactory since microfinance programs usually show better performance. No data is available to indicate whether the situation has improved since the project ended. The PCR mission interviewed representatives of 18 CBOs and determined that all CBOs had some defaults, including some serious enough to close down CBO activities. In most cases, legal action has been initiated for recovery. It is therefore reasonable to conclude that the situation at project closure, as seen in the survey findings, is quite similar to the current situation. One example of a zero default CBO was encountered by the mission at Kaudulla. The Gemunupura Wanajeewee CBO had a chairman who was also the president of the local Mediation Society and headed a number of village committees. This background, together with a strong personality, had enabled tough punitive action against defaulters and resulted in the stability of the CBO.

37. The mission identified several reasons for loan defaults during its field visits:

- (i) Borrowers saw loans as grant money from the government that need not be repaid. This notion was often reinforced by political interests and was an idea that spread

- quickly among members. The Ritigala Bilal Society, with a 50% default rate, also reported an organized attempt at loan default.
- (ii) Loans were not repaid when the business activity funded failed. This was sometimes due to crop failure or the death of a farm animal or poultry purchased with the loan.
 - (iii) Reduced motivation after the departure of the facilitators at the end of the project led to loan defaults in some cases.

38. Leaders of some CBOs have shown a firm determination to revive their organizations, usually by excluding defaulting members from future borrowing. Those borrowers who repay promptly find the terms of the loan scheme very attractive. These are mostly traders who cannot obtain similar loans from the commercial banks. This category of membership will eventually be the key to sustainability of the loan schemes.

2. Reasons for Failure of Subprojects

39. The review of community outreach activity by the PACF attempted to capture the reasons for failed PACF subprojects. The issues identified are typical microenterprise problems such as poor product quality and packaging, marketing difficulties, low margins, and the effect of uncertain weather on agriculture. The mission observed that many animal husbandry and poultry projects failed when the animals died.

3. Socioeconomic Impact of Loan Scheme

40. Around 86% of the loan beneficiaries surveyed under the review reported success in their subprojects.¹ Reasons included proper guidance and training. Active participation of women was also frequently cited. Socioeconomic indicators such as increases in incomes and employment had not been captured in the review of community outreach activity.

41. The 40 beneficiaries interviewed by the PCR mission were sufficiently diverse to provide an accurate picture of the socioeconomic impact that the subloans provided. The mission's observations are summarized below.

42. **Impact on Incomes.** Very few new enterprises were formed under the outreach program, with loans mostly used to expand an existing enterprise in some way and, in most cases, successfully. Examples included the purchasing an additional milk cow or a second sewing machine. Some borrowers improved technology—for example, by an investment in new yoghurt-making machine and modern milling equipment at Ritigala. The loan scheme raised the incomes of these existing enterprises. The same conclusion is valid for all the traders who obtained loans. The more successful beneficiaries who handled their affairs well and repaid their loans have taken bigger loans in the second and third rounds of the revolving loan process.

43. There is a striking absence of youth, the poor, and new entrepreneurs among the beneficiaries, with the possible exception of Ohiya, where the office-bearers were in their thirties. Most of the beneficiaries were older and already entrepreneurs who did not, by any definition, live in poverty. Some borrowers were relatively well-to-do members of the village who availed themselves of a convenient and easy source of loans to increase their incomes.

44. **Impact on Employment.** Since the loans were small, ranging from SLRs5,000 to SLRs50,000, and most beneficiaries carried on in their existing occupations, the impact on employment was not significant. The mission did encounter some instances where the loans had increased employment. A manufacturer of garments in Joolgamuwa (Bundala) was able to employ two others. Some beneficiaries who borrowed for cultivation provided seasonal employment to other villagers.

¹ G Hitinayaka.2008. *Review of Community Outreach Activities by PACF.*

45. The development of ecotourism, defined as tourism intended to minimize damage to the ecology in the places visited, was a key focus at the appraisal stage. The project was expected to generate nature-based tourism, which falls under the wider definition of ecotourism, and thereby generate employment opportunities in the PPA buffer zones. Unfortunately, civil conflict in the country throughout the project period reduced tourism and the opportunities could not be captured by the project activities (Appendix 10). After the conflict ended in 2009, tourism grew by 50% over the preceding year and the positive impact of this change was apparent to the mission during field visits. Opportunities for ecotourism exist in communities around all the PPAs and ecotourism is expected to help expand employment in the future. However, this may require organized awareness campaigns, providing the possibility for closer community-DWC-private sector links.

46. **Impact on Technology.** Some beneficiaries received technical training with project assistance. Several farmers learned how to cultivate strawberries and engaged successfully in this enterprise. Most beneficiaries, however, were already trained in their vocations when they received their loans.

47. **Other Socioeconomic Impacts.** Implementation of the loan scheme with the assistance of the field staff of the DWC built strong relationships through which the DWC provided improved market access for the beneficiaries' products. The producers at the PPAs had their wares exhibited at a trade fair in Colombo with sponsorship by the DWC, while at Horton Plains the products of Ohiya are displayed for sale at the visitor center with the DWC officials assisting in marketing.

D. Impact on Women

48. The mission is of the view that, among the 18 CBOs visited during field visits, the more successful CBOs, were those where women held leadership positions. Table A8.7 shows the role of women in the key positions of the CBOs. Among those who held the post of secretary, 26% were women. There is likely to be a higher percentage of women holding the position of treasurer, although figures are not available. In general, around half of the membership of a typical CBO appear to have been women. An exception was a CBO with a predominantly Muslim membership that was visited by the mission at Ritigala, where only 5% of the membership was women.

**Table A8.7: Representation by Gender among Office-Bearers
In Community-Based Organizations**

Community	Chairperson		Secretary		Total
	Male	Female	Male	Female	
Wasgamuwa	34	4	23	15	38
Kaudulla	10	1	6	5	11
Peak Wilderness	27	2	24	5	29
Ritigala	14	2	14	2	16
Udawalawa	28	5	26	7	33
Minneriya	12	0	10	2	12
Bundala	8	4	8	4	12
Horton Plains	1	0	1	0	1
Total	134	18	112	40	152
Percentages	88%	12%	74%	26%	100%

Source: Estimates in data provided by the DWC.

49. The mission findings are in line with the findings at appraisal, which noted that there were neither gender gaps nor gender discrimination in the target population. However, the emphasis at appraisal was on the poorest segments of the population as the possible target group, whereas in practice the beneficiaries represented the lower-middle and middle-income categories. Among the poorest income groups, women face the physical strain of firewood collection and the carrying of water, as well as sharing in agricultural activities. This group has very little representation in the beneficiary groups. Among the loan beneficiaries, who were mostly better-off, women were often seen to take the lead in the family enterprise.

50. The review of community outreach activities notes that “the high involvement of women has contributed to the success of the project as they take comparatively more care to repay installments promptly and also contribute to savings” but makes no detailed assessment of gender impact.

VI. EFFECTIVENESS OF PARTICIPATORY APPROACH

A. Background to the Implementation of Social Mobilization Programs

51. The strategy for community empowerment in component D was expected to focus on social mobilization after establishing CBOs that would effectively represent the target population. In the original project design, as reflected in the project administration memorandum (PAM), the strategy was for the DWC field staff, led by the park warden, to lead the mobilization process supported by an NGO. Due to the practical difficulty of assigning NGO's to this task, so-called intermediary organizations, which were consultancy firms, were contracted for the purpose. The outreach specialist in the TA consultancy team provided assistance in the procurement process.

52. After procedural delays, including a second round of bidding, contracts were signed with consultancy firms for Uda Walawe and Wasgamuwa in March 2005 and Peak Wilderness in mid-2006. The performance of the intermediary organizations was found to be unsatisfactory and an alternative strategy was proposed in which facilitators were directly engaged by the project management office, working closely with the park warden of the PPA. The outreach specialist of the TA consultants' team provided training and technical support to the facilitators.

B. Effectiveness of the Alternative Approaches to Social Mobilization

53. The TA consultants' final report indicated that the procedural delays in appointing consulting firms as intermediary organizations led to the decision to engage facilitators directly. However, stakeholders agree that the performance of the intermediary organizations was not satisfactory. As the borrower's project completion report has noted, no records exist of this phase from which to draw conclusions. The initial cost proposals submitted by potential intermediary organizations were too high and required a second round of bidding. This is an indication that they had undertaken the assignment without an adequate assessment between the cost proposal and actual costs to be incurred, which would have led to inadequate delivery. The difficulty in attracting and retaining competent staff to work in isolated locations for long periods of time may have also been a contributing factor.

54. It must be noted that the consulting firms that undertook this work were not specialized in social mobilization. An ADB review mission in November 2006 noted the manner in which the intermediary organization in one PPA area had focused only on roads as subprojects and commented on the lack of innovation in guiding the communities in the selection of subprojects. NGOs with suitable experience are operational in Sri Lanka but had apparently shown no interest in the project.

55. The DWC and the project management office must be commended for their initiative in suggesting and effectively implementing the alternative strategy by directly engaging facilitators through the project, which eventually resulted in the community outreach activities achieving considerable success, if only in the final 2 years of the project.

C. Management of CBOs

1. Office-Bearers and CBO Administration

56. The mission visited the offices of several of the CBOs established under the project. In most instances, these were in the home of one of the key office-bearers. In one case, (near the Bundala PPA) the CBO office is located in a community building shared with the Grama Niladhari's office. This indicates that at least some CBOs have received a degree of recognition as a community organization. Most of the offices had posters indicating the membership and the status of revolving fund loans. There was an overall sense of pride and achievement in the CBO, irrespective of its financial success. In all instances, the CBO is named after the village with the description Wildlife Conservation Society, thus serving to describe the CBO's overall mission.

57. The office-bearers of the CBOs had themselves received loans from the fund and, in some cases, more than one. It was clear that the commitment by the office-bearers to the success of the CBO was partly driven by personal interest in accessing future loans. Women were among the more vocal and enthusiastic of the CBO leadership. In some CBOs, the chairman was also the leader of other community organizations in the village. CBOs headed by such leaders were seen to be more successful, especially due to their particular ability to coerce repayment by loan defaulters. The CBOs pay the key office-bearers a small monthly allowance for the discharge of their duties.

58. Although periodic elections are held for the appointment of office-bearers, the CBOs prefer the reappointment of existing persons who had proved capable. In most instances, especially where the CBOs are successful, meetings of both the committee and the general membership are held monthly or at least bimonthly. A representative of the DWC attends these meetings. The agenda of the general assembly includes an initial review of loan applications. The applications are then submitted to a credit committee for final approval. After the project ended, some CBOs have required the concurrence of the DWC field officers before disbursement but this is not required in others. The CBOs were also required to prepare effective microplans. The expectation at appraisal was that these plans would be amalgamated to area-wide plans. However, this was done only for relevant activities and was presented to the respective divisional secretaries.

2. Financial Management

59. Proper books of account were found in all the CBOs visited by the mission, including in the failed CBOs. Most were of good quality, with loan registers providing details of loan amounts outstanding as well as those repaid. Some CBOs also used payment vouchers. The overall quality of the procedures adopted showed that proper training had been received by the office-bearers.

3. Assessment of Community-Based Organizations at Bundala

60. The mission visited several CBOs at Bundala, a typical PPA community, and obtained a summary of performance of all the CBOs of the area. It provides an illustration of the

performance of a typical group of CBOs (Table A8.8). Bundala is an example of park officials following up on CBO activities.

**Table A8.8: Summary of Performance (2009) by
Community-Based Organizations around Bundala Protected Area**

Community-Based Organization	Initial Funds (SLRs)	Balance (SLRs)	Loans (No.)	Meetings held for year (No.)	Balance held of Initial Fund (%)
Bundala	590,765	4,510	28	6	1
Gonagamuwa	3,545,317	694,044	118	7	20
Joolgamuwa	3,928,335	35,595	83	7	1
Koholankala	4,718,360	360,700	10	6	8
Koonwelena	4,000,187	42,000	163	7	1
Magama	3,415,767	300	8	7	0
Nedigamwila	2,965,180	734,345	94	6	25
Saliyapura	4,473,605	265,680	135	10	6
Siriyagama	3,806,045	412,839	40	8	11
Weligatta	2,374,122	245,068	18	8	10
Vijayapura	4,023,143	681,728	99	8	17
Yahangala East	4,257,947	847,090	53	7	20

Source: Park warden's office, Bundala National Park.

61. With the exception of the Bundala CBO, all other 11 CBOs (Table A8.8) received initial capital of SLRs2 million–SLRs5 million. The balance held in the account of the CBO as a ratio of the initial capital provided an indicator of financial stability. If the ratio was too low, the CBO would be close to insolvency when no funds were forthcoming from loan repayment. The mission observed this situation at the Gonagamuwa CBO, where loans were frozen due to defaults. If too high, the ratio would indicate a slowdown of the operation of the revolving fund. The average of 10% shown by the group appeared satisfactory. Three CBOs showed a ratio of 1%, while the CBO at Magama had a balance near zero. This might have been due to investment in community projects because only eight loans had been given at Magama and was thus not a cause for concern. In practice, the mission observed a freeze imposed by the CBO committee on loans until the reserves reach a comfortable level.

62. The activities undertaken by the CBOs around the Bundala PPA illustrated the range of activities undertaken by project CBOs overall. They included providing assistance in clearing invasive species from the PPA, arranging meetings between loan defaulters and the divisional secretary, involvement in commemorating International Wetlands Day, participating in a women's empowerment program, and involvement in numerous environmental clean-up campaigns. At Bundala, as at other PPAs, the park management facilitated tours of parks by the buffer zone communities. It is encouraging to see the CBOs at an active level of operation nearly 2 years after project closure.

4. Effectiveness of Beneficiary Training Programs

63. Beneficiaries at all the visited CBOs showed good understanding of the project objectives, the need to protect the PPAs, to work with the DWC, and of the requirement and ways to manage their organizations well. This showed that the training they received had been consistent and effective. The beneficiaries also responded positively to direct questions on the quality of training received.

D. Performance of Project Management Unit and Department of Wildlife Conservation

64. The project management unit (PMU) and the community outreach division of the DWC performed effectively during implementation. The PACF unit of the PMU monitored the project activities continuously and submitted monthly and annual progress reports, which made use of inputs from the field facilitators. The PACF accounts were audited annually. These provide a good indication of the status of each subproject. The regional grants review committees and the national grants review committee met regularly to process requests for grants. The process also strengthened the relationships between the divisional secretaries, project officials, and the CBOs. The mission was also pleased to note the initiative taken at Bundala for the CBO members to visit the PPA and to arrange a visit to Yala National Park.

VII. RELATIONSHIP BETWEEN PROTECTED AREAS AND COMMUNITIES

65. The PPAs are near areas that have been inhabited from early history and to communities that have had a close relationship with the forests for millennia. For this reason, most of the project interventions raised sensitive issues because they and the key socioeconomic focus of the PACF activities were aimed at gradually reducing this dependence.

66. The review of community outreach activities shows how the beneficiaries perceived their dependence on the protected areas (Table A8.9). The surveys were undertaken by the field facilitators and covered 127 small divisions near the protected areas. This final impact assessment shows that, even after the project, only 30% of the population in the buffer zones had no dependence on the protected area. It should also be noted, however, that only 37% reported high to medium dependency. Those who reported low dependency are most likely to still collect firewood from the forests as part of their traditional way of life.

Table A8.9: Dependence on Protected Areas as Perceived by Beneficiaries at End of Project (%)

Community	High Dependence	Medium Dependence	Low Dependence	No Dependence	Total
Wasgamuwa	25	18	21	36	100
Kaudulla	10	22	35	33	100
Peak Wilderness	20	32	31	17	100
Ritigala	33	18	22	27	100
Udawalawa	22	11	24	43	100
Minneriya	8	11	9	71	100
Bundala	15	34	41	9	100
Horton Plains	0	11	89	0	100
Average	17	20	34	30	100

Source: G. Hitinayaka. 2008. *Review of community outreach activities for the Protected Area Conservation Fund*.

67. The absence of a baseline survey at project commencement makes a pre-project comparison difficult. The surveys considered as baseline were dated December 2006 and show that around 60% of the people in the buffer zones were dependent on the forest. Quantitatively, when comparing the data between 2006 and 2008, it is difficult to conclude that there has been a marked reduction in the dependence on forests by buffer zone communities. Two years is too short a duration for the impacts of project initiatives to be detected. Moreover, the two datasets are not comparable due to wide differences in methodology and sampling. Mission interviews with the buffer zone villagers point to a reduction in the extraction of forest products, attributed to the marking of PPA boundaries under the project.

68. PCR mission interviews in communities in the PPA buffer zones produced the following impressions:

- (i) Communities are much more aware of the damage caused to the PPAs by residents more conscious of the need to minimize or eliminate any action that would harm the PPAs.
- (ii) This has led to the community volunteering information to DWC officials that has often resulted in the conviction of offenders.
- (iii) The availability of opportunities through the revolving fund credit scheme has reduced the need to depend on the PPAs for livelihood.
- (iv) The lack of dignity associated with the illegal extraction of forest produce and the threat of punishment if arrested have made most alternative legitimate vocations more attractive, if there is ready access.
- (v) The younger generation mostly see no appeal in illegal forest extraction and prefer more acceptable vocations that offer respectability.

69. The review of community outreach activities also obtained information on the types of extraction at the PPAs (Table A8.10). The type of illegal forest activity varies across the PPAs. The most prevalent activity is the collection of firewood, while the illegal felling of timber and poaching are widely prevalent activities.

Table A8.9: Types of Dependence by Community on Protected Areas (%)

Activity	Wasgam-uwa	Kaudulla	Peak Wilderness	Ritigala	Uda-walawa	Minneriya	Bundala	Horton Plains
Chena cultivation	2	0	0	3	6	0	22	0
Tree felling	27	8	17	16	18	10	20	15
Hunting	12	8	3	18	16	12	5	0
Sand mining	29	3	3	13	9	15	1	0
Gem mining	1	1	1	0	5	0	7	0
Forest fires	1	0	0	0	5	2	2	0
Collecting honey	3	4	0	5	0	13	26	0
Firewood	17	50	51	44	17	28	15	85
Fishing	2	24	0	0	11	4	2	0
Grazing	3	3	0	0	10	0	0	0
Collecting plants	1	0	6	1	4	3	0	0
Planting tea	0	0	5	0	0	0	0	0

Activity	Wasgam- uwa	Kaudulla	Peak Wilderness	Ritigala	Uda- walawa	Minneriya	Bundala	Horton Plains
Adding pollutants	0	0	13	0	0	13	0	0
Deforestation	0	0	0	0	0	0	0	0
	100	100	100	100	100	100	100	100

Source: G. Hitinayaka.2008. *Review of community outreach activities for the Protected Area Conservation Fund*

VIII. FACTORS SUSTAINABILITY

70. The activities conducted under component D picked up momentum only during the last 3 years of the project. This occurred after the facilitators were recruited and without this initiative by DWC impacts would have been minimal. Of the several issues related to sustainability, the most important is the continued availability of CBO revolving funds.

71. Termination of the facilitators who formed and nurtured the CBOs had a negative impact on sustainability. The strong bond created between the facilitators and CBOs is illustrated by the Ohiya CBO (Horton Plains), which still retains the facilitator for a fee to do monthly audits. The experience of other projects is that many CBOs, although formed using PRA methods, collapse on withdrawal of project facilitators. DWC field officers at each of the PPAs the mission visited had taken over the facilitator role but with varying degrees of efficiency, given that they also have other duties. At Ritigala, the mission saw that the CBOs were supervised by one of the three dedicated community outreach officers still engaged by the DWC and attached to the regional offices. This officer was effective in monitoring the activities of the CBOs.

72. The PCR mission made special note of the following in respect of the sustainability of the project interventions under component D:

- (i) Most CBOs were managing their finances well and with some degree of accountability almost 2 years after the project closed. This was encouraging and an indication of the possible sustainability of the CBOs. The CBOs were also innovative and some had introduced quick emergency loans of around SLRs2,000 to meet urgent family contingencies.
- (ii) In some CBOs, viability was assured by having a strong leader as either chairman or secretary. The membership of the CBO appeared to be efficient in this respect and an effective leader once elected has often been re-elected by the community.
- (iii) In the outreach areas of all the PPAs visited by the mission, some form of legal action had been initiated by the CBO against defaulters. The government representative of the area, notably the district secretary, was seen to be participating in this process. The strengthening of the relationship between the CBOs, DWC officials, and government administration is essential for sustainability.
- (iv) Restructuring some CBOs may be necessary in the interest of sustainability. This may involve re-registering the CBO after excluding defaulting members. Some CBOs proposed this idea to the mission.
- (v) Creation of a nation-wide federation of the protected area-based CBOs would enable more effective cooperation with government, NGOs, and other bodies involved in wildlife conservation and also create a more clearly defined identity for the CBO membership.

73. The mission was impressed by the good rapport developed between the DWC and the communities after the implementation of PACF activities and the formation of the CBOs. The most important intervention to ensure sustainability would be strengthening the community

outreach division of the DWC by the appointment of an adequate number of outreach officers and facilitators. This may well be the single most important step to meet the overall project objectives of reducing the dependence of the communities on the PPAs. The mission understands that the DWC has approved 48 facilitator posts but the newly created cadre requires the approval of the Public Service Commission. The mission strongly recommends the quick approval and appointment of these officers to ensure the sustainability of the CBOs and to expand the activities to other protected areas.

74. It is encouraging to note that the DWC has included a budgetary provision since 2007 for community outreach activities in anticipation of the continuation of such activities even after project closure. The DWC could also access funds from the wildlife preservation fund (which receives 50% share of protected area revenues) for community outreach activities.

IX. CONCLUSIONS

75. Despite a delayed start, the community outreach activities were implemented effectively and at least 90% of the CBOs formed under the project were active at project closure. There were marked improvements in the relationship between the PPA communities and DWC officials due to the community outreach program, which by itself is strong justification for the continuation of the program. The withdrawal of the facilitators at the end of the project was a setback for the program and continuation of activities depended on the strength of the community leaders at each CBO and the commitment of the DWC field officials.

76. After the lapse of almost 2 years, most CBOs are keenly committed to continue their activities. Adequate support from the DWC will be a crucial factor in achieving this but the DWC is currently hampered by a lack of field staff and adequate funds. Early deployment of facilitators would help in restoring the CBOs to their earlier effectiveness and would greatly contribute towards improving the management and conservation of the PAs.

FINANCIAL & ECONOMIC ANALYSIS

A. Background

1. The Protected Area Management and Wildlife Conservation Project was expected to generate important benefits not only in local and national terms but also internationally due to the importance of Sri Lanka to global biodiversity. The project components emphasized improving the institutional capacity of the Department of Wildlife Conservation (DWC), improving biodiversity conservation, and reducing the dependence of peripheral communities on the pilot protected areas (PPAs). None of these interventions could have been expected to generate direct benefits in the form of revenues. However, each project component was intended to improve biodiversity management in Sri Lanka and thereby protect and enhance the protected areas and their unique features and thus help attract more visitors from within the country and abroad.

2. The Report and Recommendation of the President (RRP) also anticipated significant unquantifiable benefits in terms of (i) improved protected area management to conserve endemic and endangered species and ecosystems; (ii) carbon sequestration value of conserved forest; (iii) conservation of biodiversity; (iv) microclimate amelioration; (v) microclimate maintenance; (vi) nutrient recycling; and (vii) research and education.

3. The economic analysis carried out at appraisal was described as partial, in that the analysis related only to specific activities of the project. In that analysis, the project's costs relate mainly to the costs of components A and B, whereas the benefits are captured as revenues earned from visitors to the parks. The objective of the current analysis is to compare the actual performance of the project with the expectations at appraisal. Therefore, the methodology used follows the same principles used at appraisal. However, due to the long-term impact of all project components on the outcome, the actual costs of all four components are used in the analysis. The project also generates a number of qualitative, non-quantifiable benefits. These are described in this appendix.

B. Financial Analysis

4. The financial analysis is undertaken to assess the impact of the project on the revenues arising to the government as a result of the project interventions. The analysis is conducted using incremental benefits derived from with- and without-project scenarios. Presented below is a brief summary of the assumptions used.

1. Projected Revenues

5. The revenues arising from the project interventions are from the entrance fees at protected areas from both international and domestic visitors. Revenues from gate collection for the period 2001 to 2009 are based on actual visitor numbers obtained from the DWC. The revenues are projected for the period 2010 to 2020. The projections are made using the latest trends in both international and domestic tourism. With the end of the civil conflict in 2009, international tourist arrivals increased by 50% between mid-2009 and mid-2010. The projections assume that this increase will prevail for another year and reduce gradually to a rate of 5% per year towards the end of the project period.

6. Though not a PPA under the project, the Yala National Park is included in the analysis because (i) the park received project funds for the rehabilitation of roads affected by the tsunami (ii) project funds were used in conflict resolution in human-elephant conflict (iii) project-initiated

management plans were prepared for the park, and (iv) the park management gained from the overall strengthening of the capacity of the DWC.

7. The revenues from visitors' fees from domestic tourists used in the analysis are derived from historical data for the period 2001–2009 provided by the DWC. The projections assume an annual increase of domestic visitors of 23% per year for the period up to 2010. An average annual rate of growth of revenues from visitors of 23% was experienced during the ceasefire period (2002–2003) and a similar trend can be expected due to the current peaceful environment in the country. However, this trend is also expected to diminish gradually to an increase of 5% per annum at the end of the project period. Both the international and domestic visitor projections are conservative. The DWC is also expected to employ some mechanism to limit the entry of visitors in the future because the parks will not be able to absorb more than an optimum number of visitors. Pricing can be such an instrument and the revenue forecasts assume an annual increase of 5% in entry charges from 2012 onwards in real terms. In practice, the DWC could impose variable pricing, with lower entry fees during the low season at each park.

2. Project Costs

8. The project costs used are the actual costs incurred during project implementation and obtained from project records, and have been expressed in US dollars. Investment costs have been incurred during the period 2002 to 2009, while recurrent costs have been shown from 2001, a year during which there was some recurrent expenditure from the government contribution. Recurrent costs shown in the projections from 2010 relate to the maintenance cost of some of the key project-funded investments.

3. Financial Sustainability

9. Based on the results of financial analysis, the projected revenues to the government will exceed \$10 million by 2018. The actual performance to 2010 is comparable with appraisal expectations, which foresaw a revenue surplus of between \$400,000 and \$1 million by 2010. The projections to 2020 show a surplus of more than \$10 million per year, far in excess of original expectations.

10. The most important effect on the financial sustainability of the project has come from the end of the country's civil conflict. The government has initiated several ambitious programs to increase the number of visitor arrivals. Several areas in the northwest and east of the island have been declared tourist zones. New resorts are planned and most will be near the protected areas and will supply visitors to the parks. Around 11% of all international tourists visit the national parks at present.

C. Economic Analysis

11. The economic analysis is based on the parameters and projections used in the financial analysis described above. The analysis is based only on the measurable benefits that would arise from the PPAs and does not attempt to include the numerous other positive but unquantifiable effects that would be generated by the project interventions.

12. The economic analysis uses economic border prices. The actual costs incurred during project implementation are divided into traded, non-traded, and labor components. A standard conversion factor of 0.9 is used to derive economic prices. The labor prices are converted to economic prices by the use of a shadow wage factor of 0.8 and the standard conversion factor. The revenues arising from international tourists are adjusted to reflect both foreign exchange

leakages, due to the import content of consumption, and external benefits to the economy by favorable forward linkages. For the foreign exchange leakage effect, revenues are adjusted down by using a factor 0.65 and the latter linkage effect is captured by increasing the revenues by 35%.

13. Based on the methodology described above, the economic internal rate of return (EIRR) is calculated. The cash flows and rates of return are shown in Table A9.1. The cash flows yield an EIRR of 22.5%, compared with 18.0% obtained at appraisal. Sensitivity tests were conducted in the analysis. The results of the sensitivity test are shown in Table A9.1. The test is based on a revenue shortfall of 10%. The EIRR reduces from 22.5% to 20.5%, which still retains the viability of the project.

14. The robustness of the EIRR obtained is almost wholly due to the positive outlook for tourism, both international and domestic, that results from the end of the 30-year civil war. Most of the interventions made under the project were expected to have a long-term impact beyond the project period. The strengthening of the DWC, the improvements in biodiversity monitoring and research, and community outreach activities will now have even more relevance than anticipated at the time of project preparation and appraisal.

D. Unquantifiable and Indirect Benefits

15. In addition to the direct economic benefits quantified in the estimate of the EIRR, the project also generated many unquantifiable and indirect benefits. These benefits are identified below.

1. Investments under Protected Area Conservation Fund

16. The investments made through the Protected Area Conservation Fund (PACF) resulted in significant economic benefits that are too numerous and too diverse to be included in a quantitative economic analysis. A total of 204 subprojects had been implemented successfully at loan closure. Around 45% of the funds were invested in infrastructure projects, selected by the buffer zone communities. Indirect economic benefits derived by the communities are from the investment made in roads, bridges, irrigation rehabilitation, and power distribution. The subloans provided to community members were used mainly to expand existing activities. These were agriculture, small enterprises (such as sewing and grain milling) and general retail trade.

2. Adaptive Management of Protected Areas

17. Under component B involving the participatory adaptive management of protected areas, several activities had an indirect impact on the local economy. Under the habitat enrichment subcomponent, a total of 8,166 hectares (ha) were cleared of invasive species using local labor, which enhanced the incomes of the local community. Other activities under this component included grassland rehabilitation at Minneriya National Park, fire management, and tank rehabilitation, which provided employment for communities.

18. Considerable investments have been made under the project in park infrastructure such as visitor centers. The economic impact of these facilities will be realized in the long term. The rapid increase in tourism experienced in 2010 will increase the relevance of this investment. At the time of the preparation of this report, two of the PPAs strengthened under the project have been declared as World Heritage Sites. This will increase the interest of both international and domestic tourists to visit these and the other protected areas, thereby strengthening the justification for the infrastructure investments. In addition, private investors are expected to

expand investment in ecotourism-related facilities around the protected areas, bringing economic benefits to communities.

19. A total of 315 kilometers (km) of electric fencing was installed with community participation under Component D aimed to mitigate the human-elephant conflict (HEC) that is prevalent around most of the PPAs. At the time of appraisal, the DWC was paying out an average of SLRs2.5 million per year as compensation to affected families. This was expected to decline considerably due to project interventions. Records show a declining trend in HEC related human deaths (79 deaths in 2006 to 50 in 2009). However, no trend is yet discernable in the compensation paid to victims except that the amount for property damage has increased significantly when compared with that for death and injury.

20. Component B also included the demarcation of boundaries around the PPAs. This aimed to curtail illegal encroachment, estimated at appraisal to be occurring at a rate of 1.0% per year. Some of the PPAs, especially Peak Wilderness Sanctuary and Horton Plains National Park, form the upper catchment areas of several major rivers. With encroachment, land becomes degraded, which increases erosion and consequent soil losses (estimated at 5 tons per ha. per year). Apart from reducing other economic benefits of the rivers, erosion also affects the generation of hydroelectricity further downstream. A total of 627 km of boundary has been demarcated under this program. This is expected to have a substantial indirect economic benefit.

3. Benefits of Biodiversity Conservation

21. An objective of the project was the conservation of the national wildlife biodiversity for the well-being of current and future generations. The RRP notes that earlier studies have estimated the value of biodiversity conservation in Sri Lanka at SLRs660 per hectare (1994 prices). Sri Lanka is recognized internationally as a biodiversity hotspot (Appendix 10) and interventions made under the project will result in significant but unquantifiable economic benefits.

Table A9.1: Summary of Economic Cash Flows
(\$'000)

Year	Project Costs	Recurrent Costs	Incremental Benefits	Net Benefits
2001	-	13	649	636
2002	614	98	554	(158)
2003	2,021	210	1,322	(909)
2004	3,337	270	1,902	(1,705)
2005	3,942	210	248	(3,904)
2006	3,628	278	980	(2,927)
2007	3,323	375	136	(3,563)
2008	4,397	290	(401)	(5,088)
2009	604	43	375	(272)
2010		87	1,320	1,233
2011		87	2,483	2,396
2012		87	4,115	4,029
2013		87	6,361	6,274
2014		87	8,662	8,575
2015		87	11,646	11,559
2016		87	14,261	14,174

Year	Project Costs	Recurrent Costs	Incremental Benefits	Net Benefits
2017		87	17,578	17,492
2018		87	21,038	20,951
2019		87	25,688	25,601
2020		87	32,129	32,042

Notes:

1. Economic internal rate of return (EIRR) = 22.5%, Net present value = 12, 551,
2. Sensitivity Test: Revenues reduced by 10%, EIRR=20.5%

Source: Asian Development Bank estimates

BIODIVERSITY IMPROVEMENT MEASURES

A. Biodiversity Issues and Project Design

1. Biodiversity is an essential component of human development and human security through its provision of biological resources and ecosystem services. The Convention on Biological Diversity 1992 (CBD) is one of the most important international conventions.¹

2. Sri Lanka has high levels of biodiversity and concentrations of endemic species, especially in its Wet Zone, and is recognized internationally as a biodiversity hotspot. Many of the endemic species are threatened or endangered (Tables A10.1 and A10.2).² The Bundala protected area, a pilot protected area (PPA) under the Asian Development Bank's Protected Area Management and Wildlife Conservation Project, received an award from United Nations Educational, Scientific and Cultural Organization-Man and Biosphere program as a Migratory Bird Site in 2005. Horton Plains and Peak Wilderness, two of the PPAs, as well as Knuckles protected area were declared World Heritage Sites in July 2010. The recent rediscovery after 72 years of a Slender Loris species in the Horton Plains forest further demonstrates the importance of research and habitat protection.³

Table 10.1 Endemic Species of Sri Lanka

Taxa	Species		Threatened	
	Total	Endemic	Total	Endemic
Vertebrates				
Mammals	91	16	41	14
Birds	227	33	46	16
Reptiles	171	101	56	37
Amphibians	106	90	52	51
Freshwater fish	82	44	28	20
Invertebrates				
Butterflies	243	20	66	13
Dragonflies	120	57	20	20
Freshwater crabs	51	51	37	37
Theraphosid spiders	7	5	1	1
Land snails	246	204	33	32
Flora (1)	1099	553	675	412

Note:

1. Total species of Angiosperm flora 3,500; 1099 evaluated in the 2007 Red List study.

Source: IUCN and Ministry of Environment and Natural Resources. 2007. *The 2007 Red List of Threatened Fauna and Flora of Sri Lanka*. Colombo.

¹ IUCN and UNDP. 2003. *Biodiversity and the Millennium Development Goals*. IUCN Regional Biodiversity Programme, Asia. Colombo.

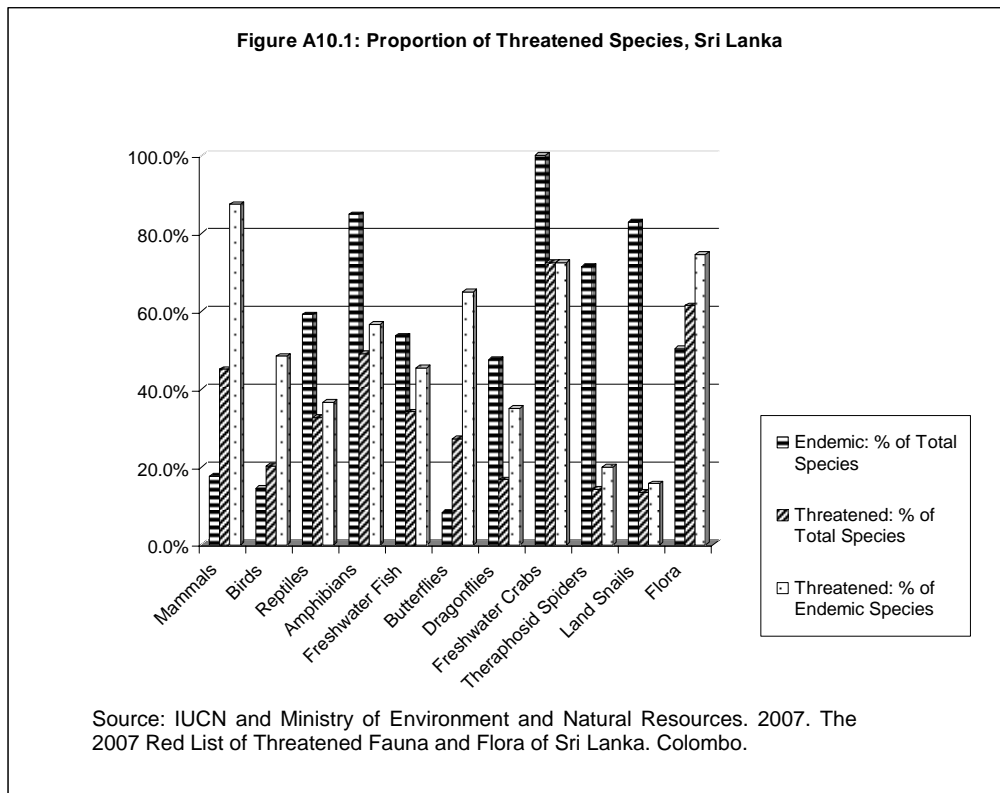
² IUCN and Government of Sri Lanka, MENR. 2007. *The 2007 Red List of Threatened Fauna and Flora of Sri Lanka*. Colombo

³ Saman Gamage, Reardon J.T., Padmalal U.K.G.K., and Kotagama S.W. 2010. First physical examination of the Horton Plains slender loris, *Loris tardigradus nycticeboides*, in 72 years. *Primate Conservation* 25, 1-4.

3. This Appendix discusses the impacts of the project on biodiversity conservation in terms of PPAs and in a wider national context. The project’s goal was to contribute to enhancing protected area and biodiversity conservation in Sri Lanka for the benefit of current and future generations.

4. Its design was very relevant. The Constitution of Sri Lanka (1980 and 1988) states that it is the duty of every person in Sri Lanka to protect nature and conserve its riches. The project’s focus on biodiversity conservation was consistent with Sri Lanka’s Fauna and Flora Protection Ordinance (1937) (FFPO), the National Environment Act (1980), the National Conservation Strategy (1988); and the National Environmental Action Plan (1993). It also helped to meet Sri Lanka’s commitments to international conventions—for example, the Ramsar Convention on Wetlands, the Convention on International Trade in Endangered Species, Convention on Migratory Species, and the World Heritage Convention. The endangered species recovery plans under component C directly served to help the Ministry of Environment and Natural Resources (MENR) meet its obligations under the Convention on Biological Diversity.

5. The RRP identified threats, causes, and proposed project responses for each of the PPAs in order of biodiversity importance. Peak Wilderness PPA is cited as one of the most valuable conservation areas in Sri Lanka, with high numbers of endemics, notably birds, reptiles, and amphibians. Ritigala Strict Nature Reserve supports over 400 plant species, 20% of them endemic, and three tree and shrub species known only from this site (*Thunbergia fragrans*, *Coleus elongates*, and *Madhuca clavata*). In Horton Plains PPA, 50% of woody plants are endemic and the vegetation includes wild relatives of cultivated pepper, guava, tobacco, and cardamom that offer vital germ plasm reserves. Bundala PPA is the country’s only wetland of international importance under the Ramsar Convention.



6. Components A, B, and D sought to address biodiversity conservation approaches in the PPAs. Component C focused on enhancing the scientific base for biodiversity conservation in Sri Lanka as a whole, especially through updating the International Union for the Conservation of Nature (IUCN) Red List, analysis of ecological gaps in the protected area system and supplementing the biodiversity conservation action plan (BCAP).

7. Many project activities had direct positive impacts on biodiversity and conservation in the PPAs. Others will have longer-term indirect benefits across Sri Lanka. These are summarized below. However, opportunities were missed under the project that could have further strengthened the DWC's ability to promote biodiversity conservation and nature-based tourism. Some recommendations are offered.

B. Direct Benefits within Project Areas

8. Many direct benefits can be detected that are contributing to improved PPA planning and management. The DWC has begun replicating many of the PPA experiences in other protected areas, which will have a positive impact on national protected area management.

9. **Improved park management.** Decentralization of management to the PPAs went some way towards delegating responsibility for decision making to the Deputy Director (DD) and Assistant Director (AD) Regions and Park Warden, enabling more creative and site-specific approaches, as well as more timely action in managing the areas.

10. Overseas training at all staff levels in a wide range of disciplines raised staff awareness of new concepts of protected area management and fostered links with outside organizations. The training overall increased the capacity of staff and boosted their self-confidence.

11. The improved planning procedures for protected area management established a sound, scientific basis for strategic planning and for developing future rolling plans for park management. However, much will depend on individual leadership abilities in the PPAs. Not all are using the management plans fully.

12. The biodiversity baseline studies created factual information to guide future planning. The field manual prepared under the project has already been used for undertaking such studies in other protected areas.⁴

13. **Defining boundaries.** Demarcating the previously unmarked PPA boundaries has helped reduce conflicts with surrounding communities. Previously, protracted arguments resulted from conflicting interpretations of park boundaries. Demarcation was a specific request of the PPA communities during the project preparation technical assistance consultations. As clarified in the revised FFPO, development activities are strictly curtailed in the buffer zones that provide a valuable cordon around the parks and help preserve their integrity.

14. **Community outreach program.** This has brought greater rapport between the DWC staff and communities in the surrounding areas and recognizes that humans are also part of the ecosystem. Community members and the DWC staff now have greater mutual respect and encroachment has been reduced. Villagers also have a better understanding and awareness of environmental issues and their reporting of poachers has increased. The outreach program may not have contributed significantly to poverty reduction as was envisaged in the RRP but it has had a major public relations impact. Many CBOs are still active 2 years after project closure and

⁴ Infotechs Ideas & Greentech Consultants. 2008. *Biodiversity Baseline Survey: Field Manual*. Protected Area Management & Wildlife Conservation Project, for DWC and Ministry of Environment & Natural Resources

interactions with PPA staff continue. Outreach programs have been applied in four other protected areas not part of the project.

15. **Research.** Outsourcing research topics to universities and research centers engendered a partnership culture within the DWC and provided a better scientific understanding of wildlife. Some research results are being applied to park management problems. The additional research on elephant movements conducted under the project has facilitated new approaches to managing HEC, including designating elephant conservation reserves that match controls to actual elephant migration routes. Research on controlled burning has led to better management methods for grassland habitats but is not being implemented widely in protected areas.

C. National Benefits

16. **Legal Powers.** Amendments to the FFPO that were prepared under the project and became law in 2009 brought the protection rules up to date and in line with the National Wildlife Policy (2000).⁵ The act take many steps to strengthen the management of protected areas and protection of wildlife throughout Sri Lanka, including:

- (i) a requirement that all protected areas have management plans, with impact studies as needed;
- (ii) provision of visitor services in protected areas
- (iii) provision of nature trails in protected areas (foot or vehicle as permitted);
- (iv) definition of illegal entry into protected areas and updated fines;
- (v) definition of a 1.65-km buffer zone around protected areas, with development restrictions;
- (vi) regulations on protection of elephants outside of protected areas;
- (vii) empowerment of DWC officers to arrest persons illegally taking timber, animals, plants, etc. from protected areas;
- (viii) establishment of the Wildlife Preservation Fund (WPF) under the DWC;
- (ix) requirement that the DWC prepare plans and programs for wildlife protection, including guidelines; and
- (x) the requirement for a comprehensive update of the protected species lists.

17. **Decentralized planning.** Delegated management and the outreach principles developed under the project are being applied to other parks by the DWC. However, delegating powers increases the need for committed, self-motivated leadership by field officers. Exposure to outside research agencies, consultants, and overseas training have gone some way toward addressing earlier criticism that the DWC was an inward-looking organization and unwilling to adopt new techniques.

18. **Collaboration.** The greater collaboration among the three key wildlife-related institutes, the DWC, the Forest Department, and the Biodiversity Secretariat brought direct benefits in experience sharing and joint action. This was helped by the fact that for most of the implementation period the three were all under the MENR. The DWC is now under the Ministry of Economic Development, which may hamper continuation of the collaborative efforts.

19. **Training.** Upgrading the curriculum at the National Wildlife Training Center (NWTC), based on experiences of the project, to include improved protected area management, research, biodiversity baseline surveys, and outreach programs is enhancing the capacity of current and

⁵ Parliament of the Democratic Socialist Republic of Sri Lanka. 2009. *Fauna and Flora Protection Ordinance (Amendment) Act, No 22 of 2009*. Department of Government Printing. Colombo

future DWC staff trainees. Moreover, the NWTC has also initiated 15 biodiversity surveys, based on project methods.

20. **Strengthening the Biodiversity Secretariat.** Technical training and consultancy strengthened the biodiversity secretariat (BDS) and stimulated the development of a valuable database for conservation, as well as numerous technical publications and public awareness material to support future conservation efforts (Table A10.3). This capacity to produce educational and awareness material for schools, the public, and decision makers has enhanced awareness of biodiversity issues.

21. The biodiversity baseline surveys (BBS), habitat mapping, and ecological gap-filling studies have strengthened the national scientific base of biodiversity conservation. Using this information and building on recommendations of the National Conservation Review (1996), 119 new protected areas have been gazetted by the Forest Department to conserve or link areas of ecological significance. The designation of new protected areas as a result of the gap-filling studies has strengthened the network of such areas. This network will be crucial as the impacts of climate change force a migration of species.

22. The addenda to BCAP, prepared with the BDS under the project, updated the original BCAP⁶ and created a firmer base for future biodiversity conservation. The BCAP has enabled the MENR to comply with the Convention on Biological Diversity. The project went beyond the original design and prepared provincial biodiversity profiles and action plans because several of the activities will have to be implemented at the provincial level. The BCAP addendum material has been fed into the *Harithe Lanka* Program (Green Lanka) 2010–12 under the National Council for Sustainable Development.

23. Updating the 2007 Red List of endangered species, in collaboration with IUCN, provides a basis for their conservation. A species conservation advisory group has been established and, with the enhanced capacity created by the project (staff trained by working in collaboration with IUCN), the BDS established a new unit for species assessment (red listing) and coordination. This unit is currently preparing an updated 2011 Red List and plans to continue it every 5 years. Critically endangered species recovery plans developed under the project are being implemented for *Puntius bundala* (a freshwater fish) and *Ravana politissima* (a snail).

24. A repository of fauna and flora specimens was established at the NWTC to house specimens collected as part of the biodiversity baseline surveys. This repository forms a useful archive for present and future research and training in biodiversity conservation.

25. **Learning Experiences.** The lessons of the project are being applied by World Bank in preparing the new national Ecosystem Conservation and Management Project.

D. Recommendations

26. Despite improvement during the project, the DWC remains somewhat insular and suspicious of outside collaboration, especially with the nongovernmental organization (NGO) sector. Twinning with reputable international NGOs and involving them in the biodiversity baseline studies, as envisaged in the RRP, would have brought positive benefits through the cross-fertilization of ideas, experience-sharing, exchange visits, and international recognition. However, sentiment in Sri Lanka was against international NGOs over fears of biopiracy. IUCN,

⁶ Government of Sri Lanka, Ministry of Forest and Environment, Biodiversity Secretariat. 1999. *Biodiversity Conservation in Sri Lanka, a framework for action*. Colombo.

however, which was an active member of the scientific team, is itself an international NGO but was respected due to its long association and presence in Sri Lanka.

27. Given the global importance of Sri Lankan biodiversity and the many endemic and threatened species, links with international organizations would offer opportunities for additional funding. DWC should explore links with the United Nations Climate Change organization, the Reduced Emissions from Deforestation and Degradation programs, and a recently proposed \$4.5 billion global fund for rainforest protection.⁷ Links should also be established with international NGOs like BirdLife International (www.birdlife.org), World Conservation Monitoring Centre (www.unep-wcmc.org), and Fauna & Flora International (www.fauna-flora.org) that can provide technical support for specific biodiversity conservation activities.

28. The project team could have made greater and better efforts to explain the project rationale, which might have neutralized NGO lobbyists and avoided confrontations with a small but vocal group of local wildlife enthusiasts that resulted in court cases and delays at the start.

E. Ecotourism and Enhancing Visitors' Experience

29. At project design (RRP), revenue from ecotourism was expected to have a significant impact on the government treasury and potentially on incomes of local communities.

30. The project has gone some way towards raising awareness within the DWC of the importance of visitor services and ecotourism for the future of protected areas and has raised public understanding of the DWC's work.⁸ Quality visitor centers and walkways were constructed, which will cater for the future, but more needs to be done through park management to improve visitor experience.

31. Sharing tourism revenue with the government and the Wildlife Preservation Fund (WPF), as encompassed in a loan covenant, has helped encourage a sense of ownership among important stakeholders. Moreover, designating WPF resources to benefit communities in surrounding areas has given them a further sense of involvement.

32. Although visitor services and ecotourism (VSE) was strengthened under the project, wide scope remains for improving visitor experience and spreading benefits to communities. A dilemma remains, however: the greatly increased visitor levels envisaged at project design could conflict with the prime purpose of the protected areas, which is to conserve biological resources.⁹ Nevertheless, visitors contribute much-needed funds.

33. A reasonable balance is needed between access and protection. The DWC should focus on responsible tourism, with enhanced visitor experience and raised awareness of biodiversity issues, which will thereby encourage public support for biodiversity conservation both nationally and internationally. This needs to be linked to strict limits on access and numbers. Horton Plains has large numbers of visitors and the management could introduce flexible entry fees to attenuate the visitor peaks and charge lower prices during off-peak periods.

34. Greater involvement by the private sector through visitor center concessions could have enhanced the visitor experience at the parks. These could have included softer but commercial approaches to tourists, such as inclusion of cafeterias, souvenir and park information shops, and a more welcoming approach than can be provided by a government organization.

⁷ A central point to apply to for funds has yet to be announced. They will probably cover 2010–12.

⁸ During the project period, however, tourism was adversely affected by the civil war.

⁹ Two of the PPAs (Peak Wilderness and Ritgala) are strict nature reserves where no visitors are allowed.

35. The scope of visitor attractions could be expanded beyond elephant watching to include specialist wildlife excursions along selected, protected¹⁰ walking routes (bird watching, botany, butterflies, mammals, reptiles, endangered species, etc.). It should be possible better to emphasize the presence of endangered and threatened species for specialist tour groups and to attract keen naturalists. For example, 75% of the reptiles, 65% of the mammals, and 25% of birds in Minneriya protected area are threatened species. Provision of nature trails is included in the FFPO (2009).
36. Greater emphasis should have been included in the project on marketing, including liaison and lobbying with tour operators, hotels, and the Sri Lanka Tourist Board, to promote more diverse tourism packages catering to specialist interest groups.
37. The CBOs in the surrounding areas could be encouraged to develop tourist accommodation for visitors to the parks. One such example is a community-based ecotourism camping initiative near Bundala PPA. Linking CBOs to organizations that could promote community-based tourism initiatives and market products such as specialist wildlife holidays would expand the responsible visitor base and benefit villagers in the buffer zones.
38. The guides (or volunteer trackers) are key to the visitor experience and need to be encouraged through additional training in wider nature-related and local history subjects.
39. The terminology used in advertising park entry fees needs to be more friendly, using the expression “non-residents” instead of “foreigners”. Signs should emphasize that a share of the revenue feeds back to buffer zone communities and park operations via the Wildlife Preservation Fund. This would make visitors feel that they are being responsible by contributing to a good cause, thereby enhancing their experience.

Table A10.2: Selection of Publications Produced with Project Support

Title
Technical Publications
Jayasuriya AHM, Kitchener D and Biradar C. 2006. <i>Portfolio of Strategic Conservation Sites/ Protected Area Gap Analysis in Sri Lanka</i> . EML Consultants for MENR, Colombo.
IUCN and Ministry of Environment & Natural Resources. 2007. <i>Redlist of Threatened Fauna and Flora of Sri Lanka</i>
IUCN and Ministry of Environment and Natural Resources. 2006. <i>The Fauna of Sri Lanka: status of taxonomy, research and conservation</i>
IUCN and Ministry of Environment and Natural Resources. 2007. <i>The Flora of Sri Lanka: status of taxonomy, research and conservation</i>
Infotechs Ideas and Greentech Consultants. 2008. <i>Biodiversity Baseline Survey: Field Manual</i> . PAMWCP, for DWC and Ministry of Environment and Natural Resources.
Government of Sri Lanka, MENR, Biodiversity Secretariat. 2007. <i>Biodiversity Conservation in Sri Lanka, a framework for action: Addendum</i> . Ministry of Environment and Natural Resources, with 18 Chapter volumes.
Booklets, Field Guides
Our Biological Heritage Fauna/flora
Freshwater Fishes of Sri Lanka
Endemic Flowering Plants of Sri Lanka

¹⁰ Apart from Horton Plains, walking is not allowed in the PPAs because of risks posed by elephants and crocodiles.

Title

Frogs and Toads for School Children
Field Guide on Mangroves of Sri Lanka
Common Diseases Transmitted by Animals to Humans (Sinhala/ English/ Tamil)
Provincial Conservation Profiles
Field Guides for Horton Plains, Ritigala, Minneriya, Wasgamuwa & Udawalawe
Nature Guide to Horton Plains
Directory of Traditional Knowledge
Biology and Status of Star Tortoise
Economics of Human-Elephant Conflict
Anti-Poaching Awareness
Nine Medicinal Plant Species
Bats of Sri Lanka
Rats and Shrews of Sri Lanka
Molluscs of Sri Lanka
Set of audio-visual presentations (DVDs) on wildlife

STATUS OF COMPLIANCE WITH LOAN COVENANTS

Table A11.1 Particular Covenants as Specified under Article IV of Loan Agreement¹

Covenant	Reference to Loan Agreement	Status of Compliance
The Borrower shall cause the Project to be carried out with due diligence and efficiency and in conformity with sound administrative, financial, engineering, environmental, wildlife conservation, and community participation practices.	Section 4.01(a)	Complied with
In the carrying out of the Project and operation of the Project facilities, the Borrower shall perform, or cause to be performed, all obligations set forth in Schedule 6 to this Loan Agreement	Section 4.01(b)	Substantially complied with
The Borrower shall make available, promptly as needed, the funds, facilities, services, land and other resources which are required, in addition to the proceeds of the Loan, for the carrying out of the Project and for the operation and maintenance of the Project facilities	Section 4.02	Complied with
In the carrying out of the Project, the Borrower shall cause competent and qualified consultants and contractors, acceptable to the Borrower and the Bank, to be employed to an extent and upon terms and conditions satisfactory to the Borrower and the Bank	Section 4.03 (a)	Complied with
The Borrower shall cause the Project to be carried out in accordance with plans, design standards, specifications, work schedules and construction methods acceptable to the Borrower and the Bank. The Borrower shall furnish, or cause to be furnished, to the Bank, promptly after their preparation, such plans, design standards, specifications and work schedules, and any material modifications subsequently made therein, in such detail as the Bank shall reasonably request.	Section 4.03 (b)	Complied with
The Borrower shall ensure that the activities of its departments and agencies with respect to the carrying out of the Project and operation of the Project facilities are conducted and coordinated in accordance with sound administrative policies and procedures.	Section 4.04	Complied with
The Borrower shall make arrangements satisfactory to the Bank for insurance of the Project facilities to such extent and against such risks and in such amounts as shall be consistent with sound practice.	Section 4.05 (a)	Complied with
Without limiting the generality of the foregoing, the Borrower undertakes to insure, or cause to be insured, the goods to be imported for the Project and to be financed out of the proceeds of the Loan against hazards incident to the acquisition, transportation and delivery thereof to the place of use or installation, and for such insurance any indemnity shall be payable in a currency freely usable to replace or repair such goods.	Section 4.05 (b)	Complied with
The Borrower shall maintain, or cause to be maintained, records and accounts adequate to identify the goods and services and other items of expenditure financed out of the proceeds of the	Section 4.06 (a)	Complied with

¹ As per Amendments agreed by the Government and ADB on 22 January 2002

Covenant	Reference to Loan Agreement	Status of Compliance
Loan, to disclose the use thereof in the Project, to record the progress of the Project (including the cost thereof) and to reflect, in accordance with consistently maintained sound accounting principles, the operations and financial condition of the agencies of the Borrower responsible for the carrying out of the Project and operation of the Project facilities, or any part thereof		
The Borrower shall (i) maintain, or cause to be maintained, separate accounts for the Project; (ii) have such accounts and related financial statements audited annually, in accordance with appropriate auditing standards consistently applied, by independent auditors whose qualifications, experience and terms of reference are acceptable to the Bank; (iii) furnish to the Bank, as soon as available but in any event not later than twelve (12) months after the end of each related fiscal year, certified copies of such audited accounts and financial statements and the report of the auditors relating thereto (including the auditors' opinion on the use of the Loan proceeds and compliance with the covenants of this Loan Agreement as well as on the use of the procedures for imprest account/statement of expenditures), all in the English language; and (iv) furnish to the Bank such other information concerning such accounts and financial statements and the audit thereof as the Bank shall from time to time reasonably request.	Section 4.06 (b)	Complied with
The Borrower shall enable the Bank, upon the Bank's request, to discuss the Borrower's financial statements for the Project and its financial affairs related to the Project from time to time with the Borrower's auditors, and shall authorize and require any representative of such auditors to participate in any such discussions requested by the Bank, provided that any such discussion shall be conducted only in the presence of an authorized officer of the Borrower unless the Borrower shall otherwise agree.	Section 4.06 (c)	Complied with
The Borrower shall furnish, or cause to be furnished, to the Bank all such reports and information as the Bank shall reasonably request concerning (i) the Loan, and the expenditure of the proceeds and maintenance of the service thereof; (ii) the goods and services and other items of expenditure financed out of the proceeds of the Loan; (iii) the Project; (iv) the administration, operations and financial condition of the agencies of the Borrower responsible for the carrying out of the Project and operation of the Project facilities, or any part thereof; (v) financial and economic conditions in the territory of the Borrower and the international balance-of-payments position of the Borrower; and (vi) any other matters relating to the purposes of the Loan.	Section 4.07 (a)	Complied with
Without limiting the generality of the foregoing, the Borrower shall furnish, or cause to be furnished, to the Bank quarterly and annual reports on the carrying out of the Project and on the operation and management of the Project facilities. Such reports shall be submitted in such form and in such detail and within such a period as the Bank shall reasonably request, and shall indicate, among other things, progress made and problems encountered during the quarter or year, as the case may be, under review, steps taken or proposed to be taken to remedy these problems,	Section 4.07 (b)	Complied with

Covenant	Reference to Loan Agreement	Status of Compliance
and proposed program of activities and expected progress during the following quarter or year		
Promptly after physical completion of the Project, but in any event not later than three (3) months thereafter or such later date as may be agreed for this purpose between the Borrower and the Bank, the Borrower shall prepare and furnish to the Bank a report, in such form and in such detail as the Bank shall reasonably request, on the execution and initial operation of the Project, including its cost, the performance by the Borrower of its obligations under this Loan Agreement and the accomplishment of the purposes of the Loan.	Section 4.07 (c)	Complied with. Borrower and ADB agreed to a submission date of 3 months after loan closure. Report submitted in March 2009
The Borrower shall enable the Bank's representatives to inspect the Project, the goods financed out of the proceeds of the Loan, and any relevant records and documents.	Section 4.08	Complied with
The Borrower shall ensure that the Project facilities are operated, maintained and repaired in accordance with sound administrative, financial, engineering, environmental, and maintenance and operational practices	Section 4.09	Complied with
It is the mutual intention of the Borrower and the Bank that no other external debt owed a creditor other than the Bank shall have any priority over the Loan by way of a lien on the assets of the Borrower. To that end, the Borrower undertakes (i) that, except as the Bank may otherwise agree, if any lien shall be created on any assets of the Borrower as security for any external debt, such lien will <u>ipso facto</u> equally and ratably secure the payment of the principal of, and interest charge and any other charge on, the Loan; and (ii) that the Borrower, in creating or permitting the creation of any such lien, will make express provision to that effect.	Section 4.10 (a)	Complied with
The provisions of paragraph (a) of this Section shall not apply to (i) any lien created on property, at the time of purchase thereof, solely as security for payment of the purchase price of such property; or (ii) any lien arising in the ordinary course of banking transactions and securing a debt maturing not more than one year after its date.	Section 4.10 (b)	Complied with
The term "assets of the Borrower" as used in paragraph (a) of this Section includes assets of any political subdivision or any agency of the Borrower and assets of any agency of any such political subdivision, including the Central Bank of Sri Lanka and any other institution performing the functions of a central bank for the Borrower.	Section 4.10 (c)	Complied with

Table 11.2 Schedules as Specified under the Loan Agreement

Schedule 3: Allocation and Withdrawal of Loan Proceeds

Schedule 4: Procurement

Schedule 5: Consultants

Schedule 6: Execution of Project and Other Matters

Covenant	Reference to Loan Agreement	Status of Compliance
1. IMPLEMENTATION ARRANGEMENTS		
A. Executing Agency and Project Management Office		
<p>Imprest Account; Statement of Expenditure Except as the Bank may otherwise agree, the Borrower shall establish immediately after the Effective Date, two imprest accounts at the Central Bank of Sri Lanka, one to be managed by DWLC for Components A and B of the Project, and one to be managed by MFE for Component C. The imprest accounts shall be established, managed replenished and liquidated in accordance with the Bank's "Loan Disbursement Handbook" dated June 1996, as amended from time to time, and detailed arrangements agreed upon between the Borrower and the Bank. The initial amounts to be deposited into the imprest account managed by DWLC, and (ii) \$50,000 for the imprest account managed by MFE.</p>	Schedule 3. Para 8 (a)	Due to difficulties in implementation, in 2003 ADB approved a change in implementation arrangements whereby three imprest accounts were opened for ADB, GEF, and Government of the Netherlands financing in lieu of the existing arrangements.
<p>The statement of expenditures (SOE) procedure may be used for reimbursement of eligible expenditures and to liquidate advances provided into the imprest accounts, in accordance with the Bank's "Loan Disbursement Handbook" dated June 1996, as amended from time to time, and detailed arrangements agreed upon between the Borrower and the Bank. Any individual payment to be liquidated under the SOE procedure shall not exceed the equivalent of \$50,000.</p>	Schedule 3. Para 8 (b)	Complied with
<p>Contracts for research activities may be awarded to local research institutions selected and engaged by DWLC on the basis of recommendations made by the Protected Areas Management and Wildlife Conservation Advisory Committee mentioned in paragraph 4 of Schedule 6 to this Loan Agreement. Promptly after each contract is awarded, the Bank shall be furnished with three copies of the contract as executed.</p>	Schedule 4. Para 8 (a)	Complied with
<p>Contracts for development of a Web – page and information technology and production of brochures may be awarded to contractors on the basis of local competitive bidding procedures acceptable to the Bank. Promptly after each contract is awarded, the Bank shall be furnished with three copies of the contract as executed.</p>	Schedule 4. Para 8 (b)	Complied with. Webpage was developed in-house.

Covenant	Reference to Loan Agreement	Status of Compliance
<p>The consultants shall be selected by the Bank and engaged by the Borrower in accordance with the following procedures.</p> <p>(a) <u>Invitation for Proposals.</u> The invitation to submit proposals and all related documents shall be approved by the bank, before they are issued. For this purpose, three copies of the draft invitation to submit proposals, a list of consultants to be invited, the proposed criteria for evaluation of proposals and other related documents shall be submitted to the Bank. A period of at least 60 days shall be allowed for submission of proposals. A copy of the final invitation as issued, together with all related documents, shall be furnished to the Bank for information promptly after issuance.</p> <p>(b) <u>Draft Contract.</u> A draft contract with consultants shall be furnished to the Bank for approval sufficiently before the commencement of evaluation of proposals.</p> <p>(c) <u>Execution of Contract.</u> After the conclusion of negotiations but before the signing of the contract, the Bank shall be furnished with (i) the contract as negotiated for approval and (ii) the evaluation of the proposals. Promptly after the contract is signed, the Bank shall be furnished with three copies of the signed contract. If any substantial amendment of the contract is proposed after its execution, the proposed changes shall be submitted to the Bank for prior approval.</p>	Schedule 5. Para 3	Complied with
B. Implementing and Cooperating Agencies		
I. Project Implementation		
Components A and B		
<p>The PMU shall be responsible for the implementation of Components A and B. The Borrower shall ensure that throughout Project implementation the PMU shall be (i) headed by a Project Director with suitable qualifications and experience and (ii) staffed with an administration officer, and clerical , financial and other support staff, all assigned on a full time basis. The Borrower shall exert its best endeavors to ensure all the initially appointed Project Director will remain in their positions throughout Project implementation, subject to the incumbent's willingness to continue to serve in the position and satisfactory performance.</p>	Schedule 6. Para 1 (a)	Complied with
<p>Within one year of the Effective Date, the Borrower shall have appointed two persons at the level of Deputy Director for the Community Outreach and Management Information Systems technical units at DWLC headquarters.</p>	Schedule 6. Para 1 (b)	Not complied with by given date. Partly complied with at project closure, as existing DWC officers have been appointed to these positions on covering basis until they

Covenant	Reference to Loan Agreement	Status of Compliance
		meet the required years of professional experience and qualifications to be made permanent in these positions.
Within six months of the Effective Date , the Borrower shall have appointed six staff for the Visitor Services and Ecotourism , Management Information Systems, and Community Outreach units	Schedule 6. Para 1 (c)	Not complied with by given date. Complied with late. Given government procedures to establish and recruit new cadre, the time frame presented in covenants was unrealistic.
Within three years of the Effective Date, the heads of regional officers shall have the level of Deputy Director.	Schedule 6. Para 1 (d)	Not complied with by given date. Partially complied with at project closure. Two deputy directors appointed, each having two regional assistant directors reporting to them. The DWC adopted a phased approach due to lack of suitably qualified staff to take over as deputy directors in other regions.
Within one year of the Effective Date, DWLC Shall 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 Officers and Protected Area Field Units , under supervision of the Additional Director Technical	Schedule 6. Para 1 (e)	Complied with
Component C		
The BCS shall be responsible for the implementation of Component C. A joint planning team comprising staff from DWLC and the Forestry Department of MFE shall implement Components C (ii) and C (iii)	Schedule 6. Para 2	Complied with
Project Coordination - Project Coordinating Committee (PCC)		
Within six months of the Effective Date, the Borrower shall have established an inter – agency Project Coordinating Committee (PCC) to be chaired by the Secretary to the President of the Borrower. The PCC shall include representatives from the Ministry of Finance and Planning , Ministry of Local Government and Provincial Councils, Ministry of Tourism, Ministry of Agriculture and Lands, MFE, and the Ministry of Fisheries and Aquatic Resource Development	Schedule 6. Para 3	Complied with
II. Wildlife Conservation Policy and Legislation		
Within one year of the Effective Date, the Borrower shall have appointed a Protected Areas Management and Wildlife Conservation Advisory Committee representing	Schedule 6. Para 4	Complied with. At project extension the composition of team was reduced to fewer

Covenant	Reference to Loan Agreement	Status of Compliance
all concerned sectoral governmental, non – governmental, public, private and academic interests, to advise the Minister responsible for DWLC on the development of policy and legislation, with the PMU acting as its secretariat.		members and TOR of members revised in line with the recommendations provided in ADB's Special Evaluation Study on Global Environment Facility Co-financed Project, 2007.
Within one year of the Effective Date, the Borrower shall 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	Schedule 6. Para 5	Not complied with by given date. Amendments to FFPO approved by Parliament on 22 January 2009. The time frame allocated in covenants was unrealistic.
The BCS shall form a multi – sectoral task force comprising expert members to develop a BCAP, consistent with the National Wildlife Policy of 2000 and reflecting the concerns of all relevant governmental and non – governmental stakeholders. The Borrower shall ensure that the BCAP will have been prepared and published within three years of the Effective Date.	Schedule 6. Para 6	Not complied with by given date. Addendum to BCAP was published in 2007 (6 years after the effective date).
III. Protected Area Conservation Fund		
The PACF shall be established in Sri Lanka, with a charter and operating procedures satisfactory to the Bank and the Borrower. The PACF shall be operated by an independent Board of Directors, acceptable to the Bank and the Borrower. The Board shall comprise six independent eminent persons and three ex – officio members representing DWLC, the Forest Department and the Coast Conservation Department, respectively.	Schedule 6. Para 7	Complied with. In lieu of a Board of Directors, a national grant review committee was appointed, with same representations (i.e., six independent eminent persons and three ex-officio members) to guide the management and approve projects presented for funding under the PACF.
The Borrower shall refrain from any action which may interfere with the independence of the Directors of the PACF in their decision making as to which activities will be funded by the PACF	Schedule 6. Para 8	Complied with
IV. Wildlife Preservation Fund		
The Borrower shall cause at least 50 percent of the revenues generated by DWLC's protected areas 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 protected areas 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.	Schedule 6. Para 9	Complied with. Since 2002, 50% of revenue generated is transferred to the WPF.
DWLC shall maintain one separate, interest – bearing account for the Wildlife Preservation Fund and shall channel all revenues for and expenditures from the	Schedule 6. Para 10	Complied with

Covenant	Reference to Loan Agreement	Status of Compliance
Wildlife Preservation Fund exclusively through this account. The Borrower shall have this account audited annually by independent auditors.		
V. Resettlement		
DWLC shall 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 shall prepare and implement a resettlement plan in accordance with the Bank's Handbook on Resettlement and satisfactory to the Bank	Schedule 6. Para 11	Complied with. The need to resettle communities did not arise.
VI. Employment of Local Communities		
The Borrower shall appoint all new permanent Wildlife Guards to be stationed in a pilot Protected Area from among people residing within five kilometers of the boundaries of the same area.	Schedule 6. Para 12 (a)	Complied with to the extent possible within the norms of government recruitment procedures. According to government policy, recruitment is open to anyone from the country. However, in the recruitment of voluntary guards, preference is given to those residing close to the parks.
The Borrower shall employ people residing within five kilometers of the boundaries of pilot Project Areas as temporary laborers for works undertaken in those areas during the implementation of the Project.	Schedule 6. Para 12 (b)	Complied with
VII. NGO Partnership		
Within six months of the Effective Date, the Borrower shall have selected and engaged a consortium of NGO's including an international NGO with expertise in wildlife conservation and a local NGO with expertise in community development, to advise on implementation of Component A (iv) and to undertake baseline surveys in the first year and independent impact assessments in the third and sixth year of the Project. The consortium shall be selected from a shortlist agreed upon between the Bank and DWLC	Schedule 6. Para 13	Complied with late through a different mechanism. As per the major change in scope approved in November 2004, the existing TA consultants were contracted to conduct the biodiversity survey in 4 PAs over 12 months. A second contract was awarded to cover the remaining parks in November 2007 following approval of project extension
VIII. Other Matters		
DWLC shall pay to Wildlife Guards, Wildlife Rangers ,	Schedule 6.	Complied with based on the

Covenant	Reference to Loan Agreement	Status of Compliance
and Assistant Directors all field allowances that are due to them under relevant rules and regulations , such that Wildlife Guards and Wildlife Range Assistants will receive field allowances for at least 21 days per month, Wildlife Rangers for al least 15 days per month, and Assistant Directors for at least 10 days per month	Para 14	number of days spent in the field
The Borrower shall ensure that annually a report on national wildlife status and trends is prepared by DWLC, and that this report will be publicly available.	Schedule 6. Para 15	In compliance since 2002. However, due to a change in government requirements, an annual performance report is prepared. This report includes the same information expected in the report on national wildlife status and trends.
Within two years of the Effective Date, DWLC shall have commenced implementation of contracts with local communities/ private sector for the environmentally low impact operation by such local communities/ private sector of all DWLC tourist bungalows retained for tourist purposes. Such contracts shall be on an arms length and on terms and conditions satisfactory to the Borrower and the Bank.	Schedule 6. Para 16	Partially complied with. Due to severe public opposition to private sector involvement, the bungalows were not handed over to the private sector. Three bungalows are now being managed by the Wildlife Trust.

COST TABLES

Table A12.1: Project Donor Costs by Category
(\$'000)

Category	Category Name	Appraisal			At Loan Effectiveness			Last Revised Reallocation			Actuals		
		ADB	GEF	NG	ADB	GEF	NG	ADB	GEF	NG	ADB	GEF	NG
01	Civil works	3,242.4	0.0	0.0	3,573.2	0.0	0.0	6,141.0	0.0	0.0	5,847.0	0.0	0.0
01A	Habitat enrichment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,412.0	70.0	0.0	962.4	47.8
02	Equipment and vehicles	2,735.6	0.0	0.0	2,990.3	0.0	0.0	3,672.0	0.0	0.0	3,463.2	0.0	0.0
03	Training and workshops	1,388.5	0.0	0.0	1,551.2	2,690.0	507.0	840.0	1,189.0	225.0	768.9	1,046.3	207.3
04A	Consulting wervices	1,021.7	0.0	0.0	149.4	1,936.0	1,184.0	444.0	2,520.0	1,530.0	386.4	2,104.8	1,337.4
04B	Consulting services; media, publication, IT, research, NGO contracts	1,049.7	0.0	0.0	1,231.1	1,155.0	309.0	1,086.0	1,000.0	256.0	1,055.1	972.9	251.2
05	Incremental recurrent expenditures	360.1	0.0	0.0	302.8	219.0	0.0	489.0	298.0	0.0	424.8	246.8	0.0
06	Interest charge	425.5	0.0	0.0	425.5	0.0	0.0	489.0	0.0	0.0	320.2	0.0	0.0
07	Unallocated	1,776.6	0.0	0.0	1,776.6	0.0	0.0	351.0	0.0	0.0	0.0	0.0	0.0
	PACT/ PACF	0.0	4.0	4.0	0.0	3,000.0	2,000.0	0.0	2,581.0	1,919.0	0.0	2,572.1	1,757.4
	Total	12,000.0	4.0	4.0	12,000.0	9,000.0	4,000.0	13,512.0	9,000.0	4,000.0	11,506.3	7,905.3	3,601.0

ADB = Asian Development Bank, GEF = Global Environment Facility, IT = information technology, NG = Netherlands Government, NGO = non governmental organization, PACF = protected area conservation fund, PACT = protected area conservation trust
Source: Asian Development Bank estimates

Table A12.2: Totals Budgeted and Actual Project Component Costs
(\$'000)

Component	Estimate at Loan Effectiveness			Actual Cost			% Foreign Ex Budget Used	% Local Budget Used	% Total Budget Used
	Foreign	Local	Total Cost	Foreign	Local	Total Cost			
	Exchange	Currency		Exchange	Currency				
Enhancing institutional capacity for protected area management	4,723	7,244	11,967	4,918	4,040	8,958	104.1	55.8	74.9
Participatory adaptive management of protected areas	2,501	4,984	7,485	6,440	6,330	12,770	257.5	127.0	170.6
Collaborative conservation planning	807	1,429	2,236	100	590	690	12.4	41.3	30.9
Sustainable financing for community partnership building	5,672	1,559	7,231	4,500	3,100	7,600	79.3	198.8	105.1
Contingencies									
1. Physical contingencies	900	1,739	2,639	-	-	-	0.0	0.0	0.0
2. Price contingencies	554	962	1,516	-	-	-	0.0	0.0	0.0
Interest charges	426	-	426	320	-	320	75.1	0.0	75.1
Total	15,583	17,917	33,500	16,278	14,060	30,338	104.5	78.5	90.6

Source: Asian Development Bank and project management unit records

Table A12.3: Actual ADB Costs Per Category Per Year
(\$'000)

Category No	Category Name	Year								Total
		2002	2003	2004	2005	2006	2007	2008	2009	
01	Civil works	42.7	116.8	1,450.1	1,607.9	1,140.0	866.8	272.2	350.4	5,847.0
02	Equipment and vehicles	268.8	96.1	432.5	850.5	270.1	236.5	1,165.8	142.8	3,463.2
03	Training and workshops	41.1	49.6	130.5	98.9	123.0	86.3	139.3	100.4	768.9
04A	Consulting services	54.6	72.4	93.4	39.8	58.8	61.4	5.9	0.0	386.4
04B	Consulting services; media, publication, IT, research, and NGO contracts	1.6	0.3	30.4	115.1	224.4	411.6	238.6	33.2	1,055.1
05	Incremental recurrent expenditures	19.4	20.4	73.3	62.8	66.3	93.8	65.2	23.7	424.8
06	Interest charge	1.4	5.4	15.0	38.4	64.7	87.9	107.5	0.0	320.2
07	Unallocated	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	429.5	361.0	2,225.2	2,813.3	1,947.3	1,844.3	1,994.5	650.4	12,265.5

NGO = non governmental organization, IT = information technology

Source : Asian Development Bank and project management unit records

Figure A12.1: Budgeted and Actual Project Costs by Component (\$'000)

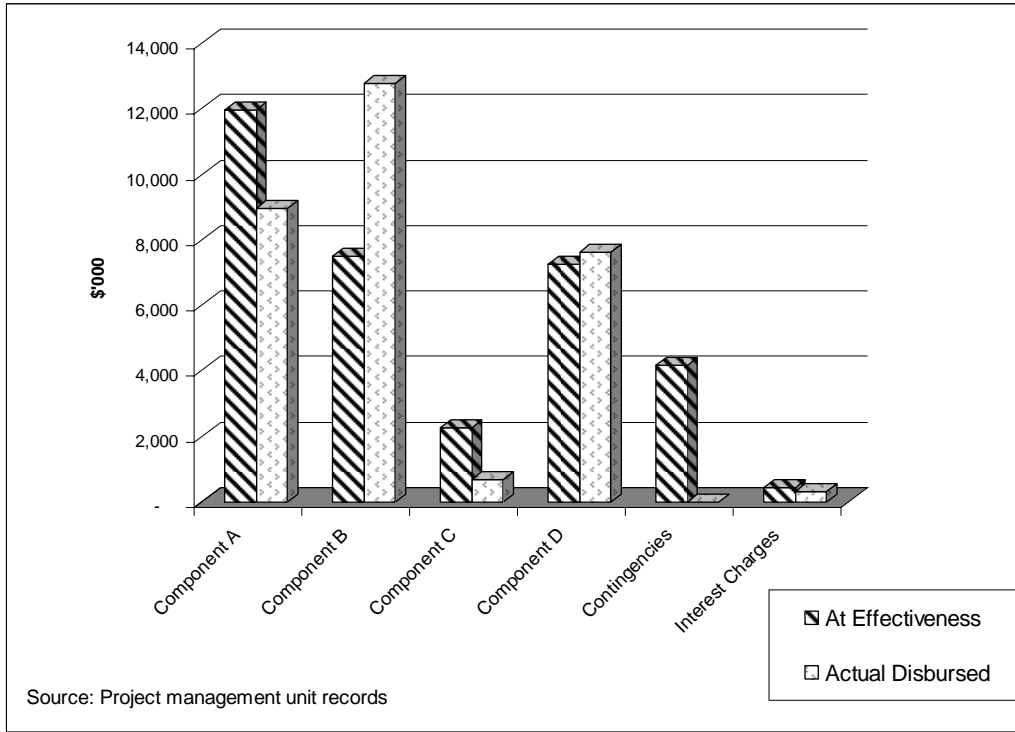


Figure A12.2: Cumulative Annual Disbursements by All Project Donors (2001–2009)

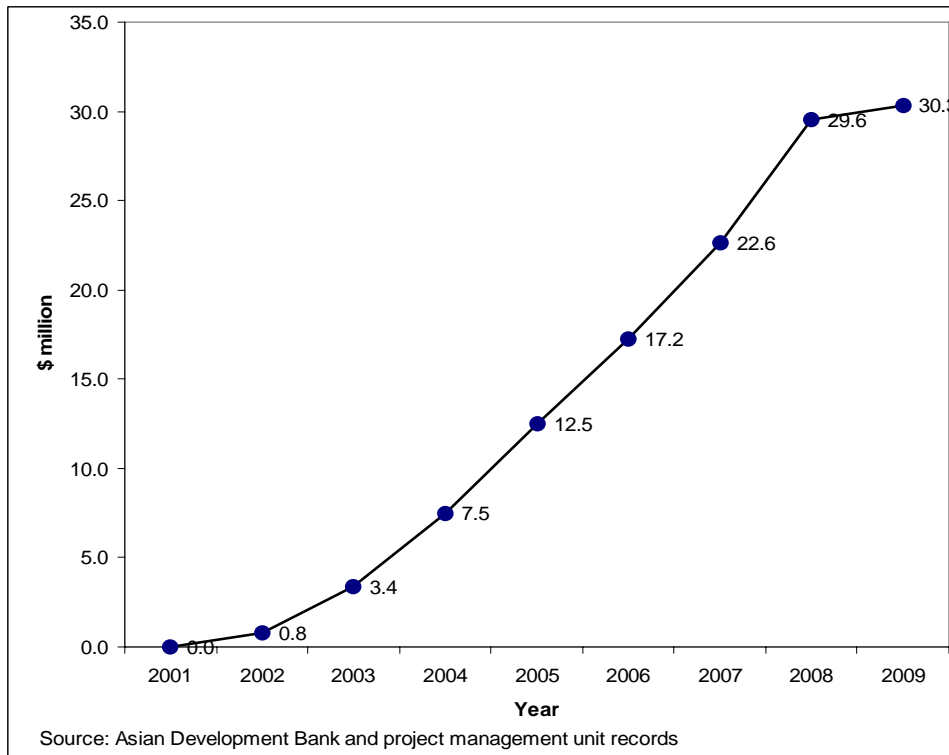


Figure A12.3: Total Annual Disbursements by All Project Donors

