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Catalyzing Sustainability of Thailand's Protected Area System

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Brief description

The project aims to overcome barriers to sustainability of Thailand's protected area (PA) system, by looking into effective management and sustainable financing of protected areas.

The project will also build the confidence and capacities of the PA management authorities and provide them with resources to test innovative PA management and financing schemes. In addition, it will support development of appropriate incentives, establishment of an effective monitoring system, and community participation in conservation efforts.

Systemic barriers will be addressed at the national level, while demonstrations of strengthened PA management on the ground through sustainable financing will be done at demonstration sites. These demonstrations will include, for example, developing novel models of PA management, increased participation by local communities and other stakeholders, and mobilization of diversified revenue sources, supported by improved knowledge-based planning and accounting systems.

Financial management capacity weaknesses and systemic barriers to effective management and budgeting will be addressed at the national level, while demonstrations of strengthened PA management, design of new financing mechanisms, and the increased use of improved models of PA management and co-management will be pursued at the four pilot sites.

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Acronyms and Abbreviations

ADB	Asian Development Bank
AFD	Agence France de Development
APR	Annual Project Report
ARR	Annual Review Report
ASEAN	Association of South East Asian Nations
AWP	Annual Work Plan
CATSPA	Catalyzing Sustainability of Thailand's Protected Area System
CBD	Convention on Biological Diversity
CBO	Community Based Organisation
CC	Climate Change
CDR	Combined Delivery Report
CFB	Community Forestry Bill
CITES	Convention on International Trade in Endangered Species
CO	Country Office
CPAP	Country Programme Action Plan
DANIDA	Danish International Development Assistance
DMCR	Department of Marine and Coastal Resources
DNP	Department of National Park, Wildlife and Plant Conservation
EFC	Eastern Forest Complex
FCFP	Forest Carbon Partnership Facility
GEF	Global Environment Facility
ha	Hectares
HACT	Harmonized Approach to Cash Transfer
HQ	Head Quarter
IW	Inception Workshop
IUCN	International Union for Conservation of Nature
KCM	Khao Chamao
KM	Kilometre
KW	Kilowatt
MDG	Millennium Development Goal
M&E	Monitoring and Evaluation
METT	Management Effectiveness Tracking Tool
MONRE	Ministry of Natural Resources and Environment
NCCBD	National Committee on Conservation of Biological Diversity
NEB	National Environmental Board
NESDB	National Economic and Social Development Board
NGO	Non Government Organization
NLA	National Legislative Assembly
Lao PDR	Lao People's Democratic Republic
OFP	Operational Focal Point
ONEP	Office of Natural Resources and Environmental Policy and Planning
PA	Protected area
PAC	Protected Area Advisory Committee
PBM	Project Board Meeting
PCF	Provincial Conservation Forums
PES	Payment for ecosystem services
PIF	Project Identification Form
PMU	Project Management Unit
PIR	Project Implementation Review

POWPA	Programme of Work on Protected Areas
PPG	Project Preparation Grant
PPR	Project Progress Report
PSC	Project Steering Committee
RBAP	Regional Bureau for Asia and the Pacific
RCU	Regional Coordinating Unit
RFD	Royal Forest Department
SAMPAN	Strengthening Andaman Marine Protected Areas Network
SBAA	Standard Basic Assistance Agreement
SC	Service Contract
TAO	Tambon Administrative Organisations
TPR	Tripartite Review
TTR	Terminal Tripartite Review
UNESCO	United Nations Education, Scientific and Cultural Organization
UNDP	United Nations Development Program
UNPAF	United Nations Partnership Assistance Framework
USD	United States Dollars
WEFCOM	Western Forest Complex
WWF	World Wildlife Fund

SECTION I: ELABORATION OF THE NARRATIVE

Part I: Situation Analysis

1.1 Context and global significance

Environmental Context

1. Thailand lies between latitudes 5⁰35' and 20⁰25' N, and longitudes 97⁰20' and 105⁰40' E. Most of the country lies in the Indo-Chinese Peninsula but its southern part extends into the Malay Peninsula. Its total area is 514,000 km².¹ Thailand's neighbors are Myanmar to the west and north, Lao PDR to the northeast and east and Cambodia to the southeast. The country's narrow southern extremity runs between the Andaman Sea to the west and the Gulf of Thailand to the east, and the southernmost tip adjoins Malaysia. The country is administratively divided into 76 provinces.

2. About one third of the Thailand is consists of the Khorat Plateau which extends up to the Mekong River in the north. Mountainous terrain dominates northern and western areas. The country's elevations range from sea level to 2,955 meters at the summit of Doi Inthanon. The major river systems in Thailand are the Chao Phraya, which flows between the western and central mountains to the south, reaching the Gulf of Thailand near Bangkok, and the Mekong, which runs along much of the border with Lao PDR. Thailand also possesses significant coastal and marine ecosystems and resources, particularly along the thin, long peninsula of southern Thailand, with the Andaman Sea on the west and the Gulf of Thailand to the East.

3. Thailand's biodiversity is globally significant. IUCN's Red List notes that Thailand has over 1700 globally threatened species, including several Critically Endangered species -including 13 mammal species, 43 bird species, 11 reptile species, 18 fish species, and 20 plant species. Thailand also has 7 endemic mammal species, 2 bird species, 47 reptile species, 7 amphibians, 72 fish species and 757 plant species. Nine per cent of all species known to science can be found in the country.² Significant portions of several WWF Ecoregions 200 fall inside Thailand - including Northern Indochina Subtropical Moist Forests, Kayah-Karen/Tenasserim Moist Forests, Peninsular Malaysian Lowland and Mountain Forests, and Cardamom Mountains Moist Forests. Thailand's topography contributes to high gamma diversity, particularly of coastal and marine ecosystems along the thin long mountainous peninsula of Southern Thailand. This has coastal and marine ecosystems of the Gulf of Thailand on one side and the Andaman Sea's marine and coastal ecosystem on the other side with substantially different species assemblages. There are more than 100 endemic animal species and over 700 endemic plant species found in Thailand.³ About 35 species of mangroves and 15 species of seagrass have been reported. Five species of marine turtles (Green, Hawksbill, Loggerhead, Olive Ridley and Leatherback) have been recorded in Thailand.

Map 1: Thailand



¹ 511,770 sq km is land and 2,230 sq km is water.

² Bugna, Sahlee and Giacomo Rambaldi. 2001. A Review of the Protected Area System of Thailand. Biodiversity. July – September 2001 pp 1-5.

³ IUCN Red List, Thailand.

Dugongs are also found in Thailand mainly along the southern part of the West Coast in the Andaman Sea and the eastern part of the Gulf of Thailand.⁴

Thailand's Protected Area System

4. In order to conserve its globally and nationally important biodiversity, Thailand started to establish protected areas (PA) in the 1960s with the enactment of the *Wildlife Protection and Reservation Act (1960, revised in 1992)* and the *National Parks Act (1961)*. PAs are largely managed by the Department of National Park, Wildlife and Plant Conservation (DNP) under the Ministry of Natural Resources and Environment (MONRE).

5. Thailand's protected area system consists of more than 400 PAs, including national parks, wildlife sanctuaries, forest parks, non-hunting areas, botanical gardens, and arboreta.⁵ The PA system currently covers approximately 18% of the country's total land area and 8% of its territorial seas. The area under the PA system is set to expand through addition of new areas (see Table 1).⁶ While these PA categories represent how DNP currently defines its system, it is important to note that botanical gardens and arboreta have no specific legislation regulating their management per se, nor do they meet standard IUCN protected areas' categories. As such, they are not considered as part of the primary PA system for purposes of this project. This project focuses on the following four primary classifications: national park, wildlife sanctuaries, forest parks and non-hunting areas. These are defined and described further in the following section. Combined they constitute 379 PAs, or 11,589,718 hectares - approximately 95% of Thailand's national system of PAs. Although national parks and wildlife sanctuaries average between 50,000 – 60,000 hectares (500-600 km²) in size, more than half of these are less than 400 km². The average size of the other categories of PAs is significantly smaller.

Policy and Legislative Context

6. The legal framework for protected area management in Thailand rests on three important Acts:

7. The National Parks Act of 1961 provides for the establishment of both terrestrial and marine national parks. The Act permits visitors inside national parks, but forbids residence, hunting, clearing and gathering of vegetation, mining and the introduction of livestock within park boundaries. The National Park Act of 1961 states that a national park is to be, '*preserved in its natural state for the public education and enjoyment*', and provides for the following.

- The manner in which national parks are declared, altered, or degazetted by Royal Decree, and the requirement that boundaries be demarcated.
- Formation of a National Park Committee to serve in an advisory capacity to the Minister responsible for national parks (MONRE).

⁴ http://www.arcbc.org.ph/arcbcweb/pdf/mpa/04_marine_in_asean.pdf

⁵ Conservation mangrove forests and critical watersheds are also viewed as conservation areas in Thailand but are not officially counted in the DNP *Statistical Data 2007* reports. It has been estimated that conservation mangrove forests cover approximately 42,800 ha and Class 1 Watersheds an extensive 9,300,000 ha. Several of these protected areas maintain international-designations for protected areas, including two (2) Natural World Heritage Sites, ten (10) Ramsar wetland sites, and four (4) UNESCO-Biosphere Reserves. Ramsar sites are managed by ONEP. The others include existing protected areas under the management of the DNP.

⁶ *Statistical Data*, Department of National Park, Wildlife and Plant Conservation (DNP), Planning and Information Office. (2007)

- Rules for protecting and maintaining national parks. Entry is permitted under prescribed rules of conduct. Prohibited acts include hunting, clearing or gathering vegetation, mining, introducing domestic livestock, causing fires, polluting water and causing disturbances.
- Fees for entry into or use of national parks.
- Penalties for offences committed under the Act.

Table 1: Thailand Protected Areas 2007⁷ and 2008⁸ Data

Type of PA	2007		2008 ⁹		Authority	
	Number	Hectares	Number	Hectares	Agency	Legislation
National Park (incl. Marine)	108	5,473,300	148	7,290,858	National Parks Division, DNP	National Park Act of 1961
Forest Parks	113	123,879	112	123,879	National Parks Division or Regional Forest Offices	National Reserve Forest Act of 1964
Wildlife Sanctuary	57	3,620,500	60	3,689,609	Wildlife Conservation Division, DNP	Wildlife Protection and Preservation Act of 1960
Non-hunting Areas	51	377,624	59	485,372	Wildlife Conservation Division, DNP	National Reserve Forest Act of 1964
TOTAL	329	9,595,303	379	11,589,718		

8. The Wildlife Protection and Preservation Act of 1960 (revised in 1992) provides for the establishment of wildlife sanctuaries as primarily wildlife conservation areas under DNP authority. Wildlife sanctuaries are not generally open to the public but researchers are allowed. The Act also stipulates rules governing hunting and trade of wild animals and list protected species. They are primarily areas for biodiversity conservation. Specifically, it states that wildlife sanctuaries are areas for, 'the conservation of wildlife habitat so that wildlife can freely breed and increase their populations in the natural environment', and provides for the following:

- Rules applying to entry and land use within them. Entry is subject to Ministerial Notification; hunting, clearing vegetation, mining, grazing domestic livestock, changing river or stream flow, polluting water and wetlands are prohibited.
- Offences, penalties and license fees.

9. The National Forest Reserve Act of 1964 provides the underlying legislative framework for all Government regulation of forest areas in Thailand, including forest parks and non-hunting areas. This includes the authority of the Government to declare a given area under protection from resource use. The main features of forest parks and non-hunting areas are:

- *Forest parks* are forested areas that have at least one significant feature such as waterfall, large trees or geomorphologic formations. Their chief purpose is to provide sites for local tourism and recreation.

⁷ *Statistical Data*, Department of National Park, Wildlife and Plant Conservation (DNP), Planning and Information Office. (2007).

⁸ Thailand PA UNDP Financial Sustainability Scorecard 2008 and related interviews.

⁹ Only 110 of the national parks, 57 of the wildlife sanctuaries, and 53 of the non-hunting areas are formally gazetted. The remainder are operating but not yet gazetted. All the Forest Parks are gazetted.

- *Non-hunting Areas* are open to consumptive uses such as fishing and gathering of non-timber forest products but hunting is banned.

10. A number of other important Acts, Resolutions and policies also important for protected areas management and conservation of biodiversity in Thailand. They include the following:

- i. The Cabinet Resolution of 1998 provides some recognition of communities living within National Parks. According to the resolution, communities within protected areas shall be registered and their year of arrival in the area investigated. Those who can document residence in the area prior to establishment of the PA may subsequently be granted formal recognition and their settlements be demarcated. Limited subsistence activities may be allowed if found sustainable. The resolution clearly states that it does not include land or property rights as such. (Much registration work with the communities remains to be done, constrained by substantial staff workloads.)
- ii. The Cabinet Resolution on Watershed Classification established different categories of watersheds. Under the resolution, total forest protection will be done in watersheds under Class I category. Such watersheds may contain protected areas within them as well.¹⁰
- iii. The National Forestry Policy (1985) has set a target of achieving 40% forest cover in Thailand, with 25% earmarked for conservation. It emphasizes the need for long term planning and the involvement of the private sector in forest management. The policy is complemented through the National Forestry Development Plan (1997).
- iv. The Fisheries Act of 1947 provides powers to authorities including provincial governors to enact conservation and regulatory measures related to aquatic species.
- v. Enhancement and Conservation of Environmental Quality Act (1992) established the National Environmental Board (NEB) under the Ministry of Science, Technology and Environment to improve Thailand's environmental laws and standards.

11. Thailand's National Policy, Strategies and Action Plan on the Conservation and Sustainable Use of Biodiversity (2003-2007) includes 7 strategies, each of which has between one and four objectives, and numerous associated actions. Strategy 2 is entitled "Enhance the efficiency in management of protected areas". Under the objective "To increase capacity in PA management" are measures such as "Seek [diversified] funding for managing PAs". Under the objective "To support sustainable use in protected areas" are measures such as "Promote appropriate management of benefits" and "Recognize the vital roles of local communities as partners". Both of these this project will support. Several other strategies and objectives are also relevant. For example, strategy 4 deals with "Ensuring efficiency in conservation and sustainable use of species and genetic diversity", which includes an objective related to improving capacity for conservation. Similarly, strategy 5 is "Control, regulate, and reduce threats to biodiversity".

12. The long-term Policy and Prospective Plan for Enhancement and Conservation of National Environmental Quality 1997-2016 includes essential strategies to raise environmental awareness, conserve forest resources and biodiversity.

¹⁰ While Class 1 watersheds are generally viewed as conservation areas in Thailand they are not primarily managed for biodiversity conservation objectives, and are not officially counted in the DNP *Statistical Data 2007* reports as part of the system of protected areas. It has been estimated that Class 1 Watersheds in Thailand cover an extensive 9,300,000 ha. Results from recent GIS analysis reveals that more than 50% of these (almost 50,000 km²) of Class 1 watersheds in Thailand overlap existing national parks and wildlife sanctuaries.

13. Thailand also is a signatory to several international conventions relevant to PA management:

- The Convention on Biological Diversity
- The Ramsar Convention on Wetland Conservation
- The World Heritage Convention on Nature and Culture Sites under UNESCO
- The Convention on International Trade in Endangered Species (CITES)

14. Finally, it is important to note that the new Constitution (2007) provides a mandate for radical reform of the governance system, and for management and governance of rural natural resources with peoples' participation. The Government Reform Act 2002 aims to replace Thailand's inefficient centralized bureaucracy with a more efficient, integrated and decentralized system of administration. Several articles in the new Constitution refer specifically to rural community responsibility to manage natural resources.¹¹ These are reflected in the government reform process, which increasingly acknowledges the need for integrated and participatory natural resource management. And, while historically local community participation in protected areas has been inhibited by the emphasis in the National Parks Act and the Wild Animals Reservation and Protection Act, which emphasized strict protection, in August 2001, the Community Participation in National Park Management - Pilot Project was initiated by the Ministry of Agriculture and the Royal Forestry Department as a direct result of the new Constitution. This significant project was undertaken in six areas: Thaleban Marine National Park and Laem Son, Chaloei Rattanakosin, Phu Pha Maan, Obluang and Doi Phu Kha national parks. PACs have been established in each of these protected areas to facilitate ongoing community involvement. Outside of PAs, too, community involvement in forest management has remained at a pilot stage. The Community Forestry Bill (CFB) was proposed for the first time by Royal Forestry Department in 1991 has gone through several revisions but still awaits approval. It is widely supported by NGOs and community based organizations. Two drafts were ultimately proposed to the National Legislative Assembly (NLA) in 2007: one by the Community Forest Networks; the other by the Royal Forest Department. The two drafts were merged, and it has since been argued that the merged version did not reflect the community needs. It has not yet been passed by the NLA.

Institutional Context

15. The agency that specifically has the mandate and jurisdiction for management of protected areas in Thailand is the Department of National Park, Wildlife and Plant Conservation (DNP) within the Ministry of Natural Resources and Environment (MONRE).¹² DNP consists of 13 divisions/offices at the national level and has 21 sub-national (regional) offices (see Annex B for the DNP organization chart), including:

- National Park Office/Division, which is in charge of policies and planning related to national parks including recreation, study and research, natural resource management and development & information. Park management is enforced by the National Park Act of 1961.
- Wildlife Conservation Office/Division, which is responsible for policy and planning related to wildlife sanctuaries, including wildlife research, wildlife protection, extension and promotion, management and development. Wildlife sanctuary management is enforced by the Wild Animals Preservation and Protection Act of 1992 (amended from 1960).

¹¹ Articles 46, 56, and 79.

¹² In late 2002, during the public sector reform process at the time, the mandate for managing protected areas was changed from the Royal Forest Department to DNP. Most protected area planning and management responsibilities were at the same time decentralized and transferred to the DNP Regional Offices.

- Watershed Conservation and Management Office, which is in charge of watershed area restoration policy and planning and improvement of livelihoods of minority hill tribes who reside in watershed areas. Watershed classes 1 and 2 are classified as special conservation areas with relatively intact forest cover. Strict measures on land-use and settlement of the communities living in these watershed classes are enforced. A recent cabinet resolution prohibits settlement in Class 1 Watershed.
- 21 Regional DNP Offices, which are responsible for supervision, backstopping and overseeing PA management in their regions. Their main divisions are Administration, Protection, and divisions for management of National Parks, Wildlife Sanctuaries and Watersheds. Most of the DNP central divisions/offices are thus reflected at the regional level. These regional offices act on behalf of the central offices, but may not necessarily report to local governments.
- At the individual Protected Area level, a head station and a number of sub-stations exist, depending on the budget and the extent of the PA. The officer in charge is the PA superintendent, seconded by one or more assistant superintendents, who in turn oversee the work of park rangers and various logistic staff. Temporary staff is hired on monthly and sometimes on long-term basis. The range of staffing is typically 1 to 3 government officials, 5 to 20 permanently hired rangers and 50 to 100 temporary staff. Superintendents report to their central offices (and coordinate with and inform the appropriate DNP Regional Offices) and travel to central DNP in Bangkok on monthly or bimonthly (or as required) basis for management meetings within their Division. In practice, a number of day-to-day tasks and some management decisions remain within the discretion of the individual superintendents. Other decisions appear to be made at the DNP Bangkok level.

16. The Office of Natural Resources and Environmental Policy and Planning (ONEP), also under MONRE, deals with Thailand's environmental policy and serves as the coordination center for natural resources management.

17. At the provincial level, Provincial Conservation Forums (PCF) have been established only at the Western Forest Complex. Six (6) PCFs have been active there for nearly a decade helping in and advising on conservation matters in their provinces. The PCFs are composed of members from government departments (including staff from PAs in the province), from local communities and governments, civic society, local institutes and NGOs. They are nominated by the local PA managers for the purposes of ensuring improved communication and coordination. Their roles have been to advise park managers, to raise awareness on conservation, to help in conflict resolution, to implement pilot projects with communities and to be a forum for public hearings.

18. The Local Governments located within or immediately around PAs include the elected councils under the Tambon Administrative Organisations (TAO), which are mandated to undertake local environmental planning and management, as well as developing local infrastructure and spatial planning. DNP's regulation dated 18 March 2003 stipulated that five percent (5%) of all national park revenue is transferred to the TAO via the Department of Local Administration (Ministry of Interior). This budget allocation is an example of direct PA benefits to local stakeholders.

19. The Local communities within and adjacent to PAs which are dependent on resource use inside the PAs, and often have been there prior to the gazettelement of the PAs, can potentially play a significant role in effective PA management if given the opportunity. The Village Headman structure (Phu Yai Baan) plays a significant role in village level decision-making and links upwards to the Sub-district (Tambon) and District Authorities. Some community members are organised into Community Based Organisations (CBOs) which have grown considerably in the past decade. CBOs constitute relatively influential stakeholders in and around many protected areas.

18. A variety of Non government organisations (NGOs) are active in relation to the PA sector. They are regarded as direct stakeholders in their function as supporters of CBOs and range from local, provincial, national, and international NGO's and from conservation to development NGOs.

19. Protected Area Advisory Committee (PAC) are required by the Administrative Order, as nominated by the PA managers and appointed by the Director General for each protected area. Each PAC is composed of representatives from the PA staff, the local TAO, local communities and leaders, and local NGOs. The role of a PAC is to advise and assist PA staff in conflict resolution, management planning and monitoring, benefit and responsibility sharing, and approval and evaluation of pilot projects proposed by local communities.

20. In addition, at the National Park Committee, enshrined in the National Parks Act, which serves in an advisory capacity to the Minister of Natural Resources and Environment. Also, in 1993 The National Committee on Conservation of Biological Diversity (NCCBD) under NEB was created to formulate plans to implement national policies regarding commitments to the *Convention on Biological Diversity (CBD)*. The Office of Natural Resources and Environmental Policy and Planning acts as the secretariat of the NEB.

1.2 Threats, causes and impacts

21. Thailand's protected area system is experiencing growing fragmentation and there are concerns that the size of many gazetted national parks and wildlife sanctuaries are insufficient to sustain their flora and fauna. Biodiversity within the protected areas remain under threat from several sources. While the government, NGOs and other partners have focused much effort through the existing protected area system and other conservation initiatives in Thailand over the past few decades, the loss of habitat and biodiversity continues primarily through forest clearance for housing, infrastructure development, and agricultural expansion, as well other unsustainable land uses, hunting, and even poorly managed tourism development. In the five (5) protected areas evaluated as pilot, or demonstration for this project,¹³ the key threats mentioned by PA superintendents were: wildlife hunting, community agriculture, improper waste disposal/contaminated watersheds, and 'unsustainable' tourism.

22. The following are amongst the key types of threats associated with biodiversity loss in Thailand¹⁴

23. Deforestation: During the past 40 years, Thailand has undergone rapid economic development. Much of this growth has depended on rapid exploitation of its rich natural resource endowments. For example, in 1960, Thailand was almost 60% forested, of which dry dipterocarp (33%), semi-evergreen (23%) and tropical moist deciduous forest (19%) were predominant.¹⁵ By 2000, forest cover had dropped to below 30%. While there has been an increase in forest cover in recent years, the percent coverage is still below 40%.¹⁶ This forest loss was caused by increasing pressure on land, including infrastructure development, industrialization, and promotion of cash crops such as corn, sorghum, sugar cane and cassava for export. Today, dry dipterocarp forest cover is now less than 5% percent of total land area in Thailand, while semi-evergreen and tropical moist deciduous are both figured at less than 5 percent of land cover each, a dramatic drop from the 1960 baseline.¹⁷ While there has been a nationwide ban on

¹³ Doi Inthanon National Park, Klong Lan National Park, Huai Kha Khaeng Wildlife Sanctuary, Tarutao National Park, and Khao Chamao National Park.

¹⁴ Associated barriers are highlighted in the following section

¹⁵ Biodiversity & Protected Areas of Thailand, Clark, J.E. (1997).

¹⁶ Jesdapipat, S. 2006.

¹⁷ Trisurat, Y. Applying Gap Analysis and a Comparison Index to Evaluate Protected Areas in Thailand. Environmental Management, Springer. (2007)

logging since 1988, illegal logging continues. Investigations by NGOs reveal that trees are felled in Thailand and smuggled into Burma to be exported as Burmese logs or processed logs. In remote areas, forestry officials have difficulty enforcing the logging ban due to lack of resources. Communities in some parts of Thailand have come to rely on logging as their primary source of income. Parks appear to serve as prime harvesting grounds. For example, 30 percent of Salween National Park was logged between 1997 and 1998.¹⁸ In most cases, PA management plans do not effectively address managing this threat, nor are resources adequately allocated to do so. On a positive note, overall deforestation rates have fallen significantly since the end of the 1990s. In recent years, the rate of deforestation has declined significantly. FAO's 2005 assessment showed that between 1990 till 2005, the area of primary forest remained stable but the area under modified natural forests declined from 6478000 ha to 4970,000 ha¹⁹.

24. Agricultural: There are no definitive figures on the numbers of people living inside protected areas in Thailand (estimates suggest five million living inside all PA categories and more than 500,000 people living inside just national parks and wildlife sanctuaries). The number of people living adjacent to protected areas and dependent on them either in the form of land and resource use or in the form of ecosystem services is much higher. Many of these communities rely on resources within the protected areas for their livelihoods, including timber (mentioned above), wildlife for hunting (mentioned below) and also land for agriculture. In addition, large scale commercial agricultural development (primarily for exports) has placed incredible strains on water resources and watersheds. Unchecked agricultural expansion is a serious threat to habitats and species. It is important to increase management of lands in and near protected areas and critical watersheds, to prevent conversion of forested lands to agricultural, and to communicate the importance of PAs for supporting sustainable agriculture in various important ways: for example, in providing reliable water resources, and in maintaining genetic resources and in providing habitat for pollinators. Activities such as conversion of mangrove forest to shrimp farms are also threatening marine and coastal PAs. Forest disturbance due to domestic animals grazing and spread of diseases from domestic animals to wild animals is also considered a threat in many parts of Thailand. Use of agro-chemicals and their leakage into wetlands and marine environment are considered an important non-point pollution source in Thailand.

25. Development and Urbanization: Urban and economic development in the past 40 years has led to substantial amounts of conversion of natural habitats and ecosystems. While this development (including building roads and transport infrastructure) plays a critical role in the attainment of higher living standards for many in Thailand, they can also fragment critical habitat, destroy natural assets and place critical natural resource systems in jeopardy by opening them up to illegal exploitation. Domestic pollution and development are perceived as the most serious threats to marine PAs in Thailand. Furthermore, oil and gas operations and transportation also increase the threats to the coastal and marine biodiversity. Construction of roads and other infrastructure have also caused fragmentation and losses of habitats. Construction of dams in Thungyai – Huai Kha Khaeng area, for example, made several parts of the protected areas more accessible and led to increased numbers of poaching incidences²⁰.

26. Tourism: Ecotourism is now the fastest growing sector of the global tourism industry and Thailand stands to gain significant economic benefits by safeguarding the integrity of its natural environment. The number of tourists coming to Thailand has increased steadily, from 1.2 million in 1977 to 7.44 million in 1996. By 1996, the collective expenditures of international tourists to Thailand increased to \$11.25 billion, becoming the country's primary source of foreign exchange.²¹ Tourism is an important contributor for Thailand's protected area system.²² However, tourism development within

¹⁸ Mongabay Website (<http://rainforests.mongabay.com/20thailand.htm>).

¹⁹ <http://www.fao.org/forestry/32185/en/tha/>

²⁰ <http://www.unep-wcmc.org/sites/wh/pdf/Thungyai-%20HKK.pdf>

²¹ ICEM, 2003. Thailand National Report on Protected Areas and Development. Review of Protected Areas and Development in the Lower Mekong River Region, Indooroopilly, Queensland, Australia. 131 pp.

²² Tourism accounted for approximately \$11.8 million USD (or 420 million Baht) in 2007.

protected areas must be carried out with great care if it is not to damage forests and wildlife. Inappropriate facilities have been built or proposed in Thailand's national parks to promote tourism. Excessive tourism activities and improper management of pollution have contributed to the degradation of coastal habitats and marine resources. These include, for example, bungalow resorts at Koh Samet and Phi Phi Island and elsewhere. Collection of other marine resources (particularly seashells) as tourist souvenirs and for export and aquarium fish trade seems to have an equally damaging impact as that of destructive fishing outside established parks.

27. Unsustainable Use, including Hunting and Fishing: While hunting and fishing are not permitted, communities living in and around protected areas continue to hunt and fish for subsistence purposes. In addition, the trade in illegal and endangered species continues for certain species. Enhancing the capacity of protected area rangers to work with communities to reduce the amount of unsustainable hunting and enforce the existing laws is critical. Unsustainable use of some has also had indirect impacts on other aspects of biodiversity. For example, losses of seagrass beds in the Andaman Sea have been attributed to use of push nets and bottom trawls in fishing. This may have contributed to the slow decline of the dugong population, due to accidentally killing by fishing gear, and also through their hunting for food.

1.3 Long-term solution and barriers to achieving the solution

28. The proposed **long-term solution** for Thailand's protected area system is "strengthened and systematic protected area management planning, improved institutional and staff capacity, and effective use of new models of protected area management, all supported by knowledge-based planning, improved budget allocations, and new and sustainable financing mechanisms". Implementation of the solution rests on four interlinked pillars. First, improved governance and information management will provide an enabling environment for long term PA system sustainability. Second, adequate capacity of MONRE/DNP management and staff, and their partners, to ensure effective management and financial planning of the protected area systems is essential, so that they can design of objective-driven protected area management plans linked to transparent and balanced protected area budget decision making. Third, the solution requires a system for designing and implementing innovative and appropriate sustainable financing mechanisms, involving the application of clear economic valuations at the protected areas at national level to site level. Finally, new models of PA management must be utilized that can enhance ecosystem well being as well as- community engagement and their well-being.

29. The key barriers to the long-term solution act by preventing the emergence and operation of the above four pillars are described below.

30. Barrier # 1: Weak policies, planning and information management. Whilst broad policies on different aspects of PA management exist for site level, there is no overall national vision or plan on PA system and particularly on PA financing. Even policy guidance for site level PA management are not effectively used – such as not all PAs have PACs, nor all PAs have required management plans. To add to this, poor data collection and information management and sharing means it is very hard to understand the state of PA management effectiveness in order to apply adaptive or corrective action measures.

31. Barrier #2: Institutional and individual capacities for effective PA management and financial planning. Although the overall capacity of the key organizations involved in PA management is relatively high compared with many other developing countries, several institutional and staff capacity weaknesses remain. The Thailand PA system is large and growing, yet basic management and cost effectiveness skills and capacity are not being systematically developed. The skills required to effectively manage the PA system – including management planning, budgeting, financial planning, revenue generation planning, and collaborating with other stakeholders - are not fully developed. Staff

performance evaluations are not systematically undertaken. While emerging emphasis in DNP is on ecosystem management, as well as on the need for stakeholder involvement at the PA level through PA Advisory Committees (PAC), there is no emphasis on the value of such approaches from a management and cost effectiveness standpoint. A key barrier remains a lack of professional development programs or incentives to encourage staff motivation for capacity development.

Park superintendents and staff do not have access to tools, methods, or guidelines for developing management plans. There is incentive to develop such plans, as budget allocation decisions are not dependent on their existence. Less than 50% of PAs actually possess completed plans and many of these need revision as they are out-of date. PA staff themselves are not required to develop these (again, outside contractors typically do). Where PA management plans exist, they are not used to guide PA activities. Current PA management plan templates focus on broad conservation strategies but are not action-oriented. The management plan approach currently does not require formal participation of other relevant stakeholders or an assessment of how such collaborations might help to offset costs and ultimately improve PA management effectiveness. Currently, PA budgets only reflect costs like non-full time staff salaries and basic expenses for the year. DNP budgeting system does not demand budget justification related to conservation objectives, threats and other local conditions. The current process for resource allocation is based on previous year's spending (the use of historical "norms"). And while it is generally accepted that current levels of PA financing is not sufficient to meet the full needs of the system, lack of proper management planning makes it difficult to assess true financing gaps in terms of achieving conservation objectives at each site.

32. Barrier #3: Deficiencies in capacity and the variety and scale of revenue and financing generating activities and mechanisms for protected areas. The current management planning and budgeting processes do not require a normal analysis of actual expenditures required to meet PA management objectives, therefore fund raising for meeting shortfalls in budgets has not been a high priority for most PAs. Besides annual budget requests, the PA is not responsible for developing longer term financial strategies which might include identifying new revenue mechanisms. Neither the PA system nor individual PAs maintain a sustainable tourism plan to determine the appropriate revenue opportunities from entrance fee or visitor services and products (despite recent willingness to pay studies which show there is an opportunity). Aside from DNP budget allocations and the revenues from tourist entrance fees (or visitor hotel and restaurant facilities within the national parks) no additional revenues of significance are realized across the PA system. The DNP currently does not have the skill or capacity to conduct feasibility assessments or to design new revenue mechanisms.

33. Barrier #4: Limited range and examples of effective models of PA management. All of Thailand's PAs are managed by the government and there is limited cooperation with other stakeholders, particularly the local communities. Thailand's recent expansion of the PA system is straining a limited budget. DNP is currently pursuing a model of managing PAs as Forest Complexes, which means managing contiguous PAs as one complex. However, integrated management and budgeting frameworks do not currently exist to really ensure that such an approach is more cost effective or results in a more optimal management outcome. Since both the National Parks Act and the Wildlife Protection and Preservation Act significantly restrict activities and uses of resources within protected areas, it means people living inside such PAs are doing illegal activities even if they are only practicing their normal livelihoods. A good illustration of this is the fact that there are 100 villages (40,000 people) inside the 18,000km² Western Forest Complex (WEFCOM), which is composed of 11 national parks and 6 wildlife sanctuaries. In legal terms these communities are living there "illegally". There are limited ways for communities to actually get involved in the management of protected areas including participating in Protected Area Advisory Committees (PACs). However PA staff are not trained to establish effective PACs and do not currently have a strategy to include community interaction in management plans. Also, though communities ultimately play an important role in PA management success and effectiveness, PA

committees are in place and involved as advisors in only some PAs (although all are meant to have them). Funding to cover the costs associated with meeting the needs of communities (alternative or sustainable livelihoods, education, outreach) is lacking or non-existent as these functions are not a part of the current PA management plans. Formal mechanisms (for instance community funds) have not been established to assist with covering the costs of working with local communities.

1.4 Stakeholder analysis

34. As previously mentioned, the primary agency responsible for the management of the protected areas system in Thailand is the Department of National Park, Wildlife and Plant Conservation. However, stakeholder participation in conservation of natural resources is legally mandated, by the present Constitution and Executive Order of DNP. The current Constitution, as well as various laws and regulations of the DNP, call for broader participation of other stakeholders in conservation of natural resources and environment (this needs to be mentioned and expanded under the policy, legal section). Of particular concern is the proper formal level of participation of communities and local governments in supporting PA management, since the national park laws only bind DNP staff.

35. The role and responsibilities of stakeholders in the project are addressed in the following table.

Table 2: Stakeholder Roles and Responsibilities

Stakeholder	Roles and Responsibilities
MONRE	<p>MONRE is mandated to conserve biodiversity resources and protect the environment, by setting standards, laws and providing annual budget supports to line agencies. The National Environment Board (NEB) supported by MONRE, is the highest decision-making body for the environment. It is chaired by the Prime Minister, but often the delegation of this chairmanship is given to the Deputy Prime Minister, who often than not is also minister of MONRE.</p> <p>MONRE is the ministerial host of this project and through DNP will facilitate project execution. MONRE will pursue intra- and inter-ministerial cooperation and change and reform, through NEB (suggesting changes in policy and budget supports.)</p>
DNP	<p>DNP is the primary agency responsible for managing the PA system and for biodiversity conservation. NDP is the principal proponent and implementer for this project, facilitating the successful execution of the project, providing necessary operational support, and most importantly, ensuring that lessons learnt from CATSPA leads to sustained improvements in PA management at the national level.</p>
Office of Natural Resources and Environmental Policy (ONEP)	<p>As the Secretariat to NEB, ONEP also sets policies and measures for conservation of natural resources and environment. ONEP is the focal point of all environmental treaties, and it also houses an office that approves environmental impact assessment report. In this project, ONEP's contribution comes from assisting DNP in its overall project execution, and specifically guiding and facilitating DNP in its capacity as a member of the Project Board. ONEP could also take part in some components of the project to ensure policy consistency.</p>
National Economic and Social Development Board (NESDB)	<p>NESDB is the highest authority for economic and social development planning in Thailand. A five-year economic and social development plan, presently 10th plan, is produced and monitored by NESDB. As a potential member of the Project Board, NESDB's involvement in the CATSPA project could ensure policy consistency and synergies with broader</p>

	development plans, particularly the national five-year plans.
Department of Coastal and Marine Resources	DCMR has the exclusive administrative authority over coastal zones and marine areas of the country. Its potential role, besides being a member on the Project Board to guide the project operations, is to collaborate in the project implementation at the site level, specifically at Tarutao Island. It could also provide technical advice and logistical supports for project implementation, as well as policy integration.
Provincial government	The appointed governors (by the Ministry of Interior) have the highest authority at the provincial level. In principle, most of the line government agencies present at the provincial level report to the governor. The Provincial Administrative Organization is headed by an elected Head that facilitates development of a province. Provincial government will have an important role in coordinating administrative support needed at the provincial level, and in ensuring policy and planning consistency at that level. They will be encouraged to provide additional co-funding for project initiatives that bring about local benefits.
Local governments	Local governments at the lowest level are called Tambon Administrative Organization (TAO). TAO, are directly elected by local peoples, and thus has the administrative authority at the sub-district level. Local governments could provide matching fund, participate as a member of PAC, and provide critical guidance to the operations and enforcement of rules and regulations and ensure that local planning include lessons/ outputs from CATSPA.
Local communities	Village and sub-district heads report to the Ministry of Interior through the appointed District Head. Local communities normally also have their own “natural” leaders, who could speak, facilitate, cooperate and mediate conflicts on behalf of the larger members of the communities. These leaders could be appointed to be members of PACs.
Royal Forest Department	RFD is responsible for the management of public forests outside, normally adjacent to, PAs. Their support to the project through the Project Board, and at the site level will be important for achieving project objectives
NGOs	NGOs and other civil societies operate quite actively to assist communities, and in some cases in close collaboration with the DNP, on various aspects, such as livelihood improvement, and water resources management. Relevant international NGOs as well as local NGOs will contribute public awareness and capacity development skills and guidance to the project. Some of them will be invited to join the Project Board. Moreover, where possible, additional co-funding will be encouraged.
Provincial Conservation Forum (PCF)	PCF has been established at the Western Forest Complex Project to be a forum of exchange of information, and consultation regarding natural resources management in the area. PCF will contribute directly to the CATSPA project by sustaining the collaborative activities initiated during the WEFCON initiative, and ensuring that improved management and financing options are properly designed to fit local environments and conditions.
Local schools	Local schools have gained and enjoyed free access to use of PA facilities and human resources as part of lessons in science and nature studies. A representative from local schools should be a member of the PAC, and students could join in some local activities, such as fund-raising, public campaign, awareness raising and be local tour guides.

Trade & tourism associations	Tourism organizations and tour companies have very remote contact with DNP, except at the site, especially when problems arise. In principle, tour operations and association have to observe and be obliged by laws governing the PAs. A collaborative role is mainly expected for these associations, including in bringing more resources to the park, and ensuring that the kind of tourism activities being promoted do not go against the objectives of conservation, but rather help enhancing it.
Protected Area Committees	PACs have been mandated by the Director General Order in 2005 to broaden participation of local stakeholders in conservation of a PA. PAC is the most tangible form of local stakeholder participation in local activities, including conflict resolution and fund-raising.

1.5 Baseline analysis

36. Presentation of baseline analysis has been divided into five main areas, corresponding with the four project outcomes (protected area management and budgeting are broken out into two separate sections for purposes of this baseline analysis). These are described below.

37. Institutional policies and information management: As noted in the section on Situation Analysis earlier in this document, Thailand does have a number of policies and laws on effective PA management. However, there is no document that provides a comprehensive management and financing strategy document or framework to guide short- and long-term sustainability and effectiveness at the national level (system level). Though management plans are to be developed for each PA, most individual PAs do not have such plans, making a system wide plan difficult to assemble. A recently launched UNDP GEF project focusing on the supporting Thailand's country action on the CBD Programme of Work on Protected Areas (POWPA) is proposing to develop a national Master Plan for PA management in Thailand to provide a coherent and long-term vision for PA design, establishment and management, however this needs to be strengthened through inclusion of the issue on sustainable financing. Existing management system is inadequate and while the DNP Policy and Information team has been looking at developing a monitoring and evaluation (M&E) system, to date, no formal M&E program exists for PA management and cost effectiveness within the DNP.

38. PA staff capacity and status of PA management and financial planning processes: Currently, within DNP no unit exist whose mandate is to develop institutional and staff capacity. While there are some training programs that are carried out for some DNP staff at the central level (a general budgets audit team, for instance), these are not based on through formal capacity needs assessment and there is no comprehensive training program. One problem facing PA management effectiveness is the frequency of staff, and especially PA superintendent, transfers. A PA superintendent serves an average of only three (3) years before being transferred to another position, usually another PA posting or to the central-regional level offices, disrupting the development and efficacy of potential long term planning and management ideas. Institutional assessment is done on an annual basis, using few performance indicators but mainly assessing budget account accuracy. Some staff capacity building is conducted through specific project initiatives to help strengthen technical capacity on some areas of PA management, including for instance, patrolling, use of GPS and mapping. Budget training for some PA superintendents was recently initiated, but training for project monitoring and financial planning is conducted only for staff at the Audit Division of the DNP. No management training is offered to staff who are promoted to managerial positions. Most PA staff do not have educational background directly relevant to conservation or natural resources management. Most DNP full time staff receives only on the job training for their roles (ranger, administrator, etc).²³ Though guidelines and instructions are available for PA superintendents on how to compete annual budget proposals to DNP, formal training or skills development on their use do not exist. In addition, while basic management planning guidelines exist, they are not presented or utilized in a way that effectively builds capacities of PA staff.

39. The current PA management and budgeting systems in Thailand are inconsistent, incomplete, and are not effectively linked to allow appropriate flow of available resources to PA management activities. The DNP requires that all gazetted national parks and wildlife sanctuaries complete 5-10 year management plans. However, only 60 of the existing 110 national parks and far less than half of the wildlife sanctuaries have such plans. Most of these (approximately 60%) are either incomplete or are in need of revision or reformulation as the period for which they were designed has come to an end. Of the five protected areas selected for this project's demonstration sites, three had a current management plan

²³ Certain contract positions (non-full time) require that the individual pass a basic civil service exam.

(although only 1 is being implemented) while the other two have outdated management plans. Preparation of the plan is usually contracted to universities or consultancy companies that work in limited cooperation with PA staff. Management planning does not have consistent involvement of critical parties, such as local stakeholders, during their preparation. Most plans consist of broad areas (national resource and environment conservation, protection and prevention, research and study, tourism) and describe general objectives for each area. They lack clear plans of action²⁴ and specific indicators to meet those objectives. Many DNP officials acknowledge that the existing management plans are overly academic and are of limited operational or implementation value that are not *effectively implemented*.²⁵

40. Currently there are four main sources of finance for protected areas in Thailand: 1) government allocations, 2) revenues generated at the PA level through tourism entrance fees and 3) other user-fees²⁶, and 4) Donor funded special project revenues (this last item is not tallied or tracked by DNP). DNP policy requires PA superintendents to submit an annual budget proposal to DNP. DNP then submits each of these along with staff salary budgets²⁷ as a combined annual DNP budget to the Cabinet through the Thailand Budget Bureau. With agreement from the Cabinet, the plan is sent to the Parliament for approval. After approval, DNP's Finance Division transfers funds to its 21 Regional Offices, who then distribute budgets to each of the PAs in their region. About 50% of all allocations go to wages and salaries, one quarter to infrastructure and building materials, and one quarter to other expenses such as travel, office equipment and supplies and incidentals. As shown in the Table 3, the Thailand primary protected area system (consisting of the current 379 protected areas covering almost 12 million hectares) receives approximately US\$47 million per year, excluding salaries for full-time DNP staff.²⁸ Close to US\$12 million of this is revenue generated from tourism entrance fees and services. The current system allows each Protected Area to retain up to 10% of these revenues for use as "special projects" within the PA.²⁹ The actual requested budgets from the PAs to central DNP for non-salary costs (salaries are covered from DNP directly and not included in the PA specific budget requests) usually runs at 120% of what is ultimately awarded. This practice of requesting 20% more than what is provided has been quite consistent over the past decade but should not be viewed as an indication of the true financial "gap" in terms of what is needed versus what funding is available. The true gap is not now known or understood since budgets are not linked to any management plans (which should determine what is needed). Some of the 2008 tourism revenues of approximately US\$ 11.5 million were diverted back to the PAs but not all. In the past few years the government has increased the budget allocation for most PAs by 5% every year, which is not on need-based requests. An assessment using the PA Financial Sustainability Scorecard in late 2008 examined critical aspects of the Thailand protected area system, including the legal, regulatory and institutional frameworks, business planning and tools for cost-effective management and tools for revenue generation. The scorecard measured the percentage of achievement for all three components. All three components stand at approximately 34% performance out of 100% (see Table 4 below for summary and see Annex D for details). It is clear that improvement is required in all areas in order to ensure that sustainability is achieved in PA financing.

²⁴ Tanakanjana, N, et al. *Monitoring and Evaluation of National Park and Wildlife Sanctuary Management Plan Implementation*. A Technical Report submitted to MONRE. Faculty of Forestry, Kasetsart University. (In Thai) (2004).

²⁵ Interviews.

²⁶ Including limited revenues from DNP managed hotels and restaurants, research fees, filming fees, fines and penalties.

²⁷ PA specific budgets do not include budgets for staff salaries, which are handled separately at the central DNP level.

²⁸ Based on looking at historical data, DNP staff salaries for the divisions responsible for managing existing, gazetted protected areas is equal to the budget spent on other costs. For every \$1 spent on the costs reflected in this table, another \$1 is available through government budget allocation to cover costs of relevant DNP staff.

²⁹ A revision of the revenue disbursement, from 10% to 15% as of late 2008 may provide increased incentive to improve management capacity and performance, however more is needed.

Table 3: DNP Thailand PA system Available Finances³⁰2008

Type of Protected Area	Number	Coverage (ha)	Total Government Budgets \$ (non-salary)	Total PA Generated Revenue \$ ³¹	Total Available Finances \$ ³²	Requested Budget \$ (2009)
National Park	148	7,290,858	24,811,380	11,327,199	36,138,579	***
Forest Parks ³³	112	123,879				
Wildlife Sanctuary	60	3,689,609	10,674,962	535,963	11,210,925	
Non-hunting areas	59	485,372				
TOTAL	379	11,589,718	35,486,342	11,863,162	47,349,504	54,509,315

Table 4: Thailand PA UNDP Financial Scorecard Results - 2008

	Legal, Regulatory & Institutional	Business Planning & Tools	Revenue Generation Tools	Total Score
Total Score	35	17	25	77
Total Possible Score	95	61	71	227
Actual score (% of total possible)	37%	28%	35%	34%
Percentage scored - previous year	NA	NA	NA	NA

41. Capacity and the variety and scale of revenue and financing generating activities and mechanisms for protected areas. Diversification of PA financing has rarely the focus of DNP efforts or even Donor projects to-date – especially at the PA system level. Aside from DNP managed lodging and restaurant facilities in many national parks, there have been no formal commercial concessions awarded where benefits and revenues are accrued to the national protected areas system.³⁴ Tourism is currently responsible for approximately US\$12 million in revenues to the PA system from entrance fees. This is actually low given the estimated number of tourists visiting PAs in Thailand was almost 13 million in fiscal year 2008. The entrance fee is set at approximately US\$1.13 (US\$ 0.57 for children) for locals and \$5.70 (\$2.80 for children) for foreigners. The DNP accepts that not all visitors are tallied nor are all possible fees collected as a result of too many unmanned entry points as well as a lack of formal collection facilities at many protected areas. Recent studies suggest tourists are willing to pay more for

³⁰ Thailand PA UNDP Financial Sustainability Scorecard 2008.

³¹ PA generated revenue is almost entirely entrance fees and service fees from tourism. A very small percentage is also from penalties and fines assessed for breaking PA laws.

³² Available finances include government budgets allocated for non-salary costs and actual PA generated revenues only. They do not account for government allocations in the form of staff salary and related compensation for all full-time DNP staff as this information was not made available. In addition, while there is Donor funding flowing into the protected area system through various special projects, this information is not tracked by DNP.

³³ Forest parks budgets are administered together with National parks and Non-hunting areas together with the wildlife sanctuary system.

³⁴ MONRE considered the idea of awarding long-term concessions to the private sector to manage accommodations and restaurants inside national parks, using the concession fees as a source of revenue for covering costs of the protected areas. The plan, however, was shelved over the strong objectives of NGOs and academics who were not confident that the government could effectively handle the concessions; and who feared that this may have negative effects on the protected area system.

PA visits.³⁵ In addition, there are opportunities to diversify “visitor experience” services or products which could attract additional user fees (special trekking, boating, or similar excursion packages, etc.) inside PAs, which have not been systematically assessed. However, the challenge is to ensure that tourism activities inside protected areas are conservation compatible – as there are concerns that current tourism activities are not always compatible with conservation. In many instances, PA staff spend more time in tourism management than in conservation activities. There has been limited private sector involvement in financing the protected area system in Thailand, from the lack of a formal concession system which would allow private companies to secure rights (for a fee) to operate and manage hotels or other tourist-related commercial ventures. There have been recent discussions within MONRE regarding the creation of private sector concessions as revenue mechanisms for protected areas. Payment for environmental (or ecosystem) services (PES) such as water use, hydro electric, and carbon, are also being discussed but have not yet been formally pursued by DNP due to low capacities and low prioritization of financing issues within DNP.

42. Models of effective PA management and coordination. As already noted earlier in this document, there are several categories of protected areas in Thailand. More than 90% of these in terms of coverage are national parks and wildlife sanctuaries. Both the National Parks Act and the Wildlife Protection and Preservation Act significantly restrict activities and uses of resources within protected areas. Neither Acts takes into consideration the existence of the large numbers of local communities living within the PA boundaries before PA establishment. Within wildlife sanctuaries alone, where access (in principle) is strictly limited, there are more than 100,000 people settled on a permanent basis, who depend on resources therein but this use of resources in legal terms is illegal.³⁶ Increasingly, the DNP ensures that various stakeholders, including local communities, are consulted through mechanism such as Protected Area Advisory Committees, but this is not yet a standard, and there is not yet a comprehensive strategy or policy for dealing with such issues. Protected Area Advisory Committees have not yet been established at all the PAs, and do not include representatives from key sectors such as the local office of the Tourism Authority of Thailand, provincial and district authorities, agricultural officers and representatives from local communities within/ nearby the PAs. Thailand has been piloting the management of forest complexes, which are groups of protected areas linked through natural systems. As of 2008, 19 complexes (17 forest and 2 marine) have been identified, each comprising a number of national parks or wildlife sanctuaries. This is an important initiative as it will pave the way for more effective integration of protected areas with sustainable development throughout wider landscapes, providing a model for connecting protected areas. This could both enhance their conservation potential and also optimize resources across the PA system. As the complexes are administered through the DNPs regional offices, there is an excellent opportunity to effectively and efficiently manage PA complexes through these regional administrative offices – which would provide central platforms for management, budget and technical assistance disbursements, and coordinating effectively with local and regional stakeholders. This is yet to happen effectively in most complexes.

Part II: Strategy

2.1 Project Rationale and Policy Conformity

43. This project has been developed to address key issues and overcome barriers to effective PA management in Thailand as discussed earlier in this document. The project is in conformity with national, UNDP and GEF policies. This project is consistent with Thailand’s Third National Policy, Strategies and

³⁵ ICEM, 2003. Thailand National Report on Protected Areas and Development. Review of Protected Areas and Development in the Lower Mekong River Region, Indooroopilly, Queensland, Australia. 131 pp.

³⁶ ICEM, 2003. Thailand National Report on Protected Areas and Development. Review of Protected Areas and Development in the Lower Mekong River Region, Indooroopilly, Queensland, Australia. 131 pp.

Action Plan on the Conservation and Sustainable Use of Biodiversity (2008-2012), which includes 5 strategies, namely:³⁷

- i. Strategy 1: Protecting the Components of Biodiversity, including the action plan on ecosystem conservation;
- ii. Strategy 2: Encouraging the Sustainable Use of Biodiversity, including the action plan on sustainable use of biodiversity, and on access and benefit sharing;
- iii. Strategy 3: Reducing Threats to Biodiversity, including the action plan on climate change impact mitigation;
- iv. Strategy 4: Promoting Research and Training, including the action plan on public awareness;
- v. Strategy 5: Building National Capacity to Implement the Convention on Biological Diversity.

44. The project will be complementary to other projects or initiatives on biodiversity conservation in Thailand that were implemented or are being implemented by the Royal Thai Government in partnership with different international agencies. The has been designed by incorporating lessons from past projects. The project will benefit from lessons learned from DANIDA's "Joint Management of PAs project". Additionally, it will also build on lessons from the ADB's programme to promote biodiversity corridors in SE Asia and the World Bank's International Waters project "Bay of Bengal Large Marine Ecosystem". The World Bank project will address issues affecting trans-boundary coastal/marine eco-systems within the broader BOBLME region, including the Mergui Archipelago (Thailand and Myanmar). This proposed project will ensure strong collaboration and coordination with these initiatives and ensure that lessons from these are included into this GEF funded programme. This project one of several UNDP/GEF projects worldwide seeking to ensure sustainable financing of PA systems and links will be established with these other projects. The project will also build on activities of the "Greater Mekong Sub-region Biodiversity Conservation Corridor Initiative," by DNP together with ADB to promote sub-regional biodiversity conservation corridors (on-going: 2007-2010); "Strengthening Andaman Marine Protected Areas Network (SAMPAN) by DNP, together with the Agence France de Developpement (AFD), the French Global Environment Facility, and WWF Thailand (ongoing: 2008 -2010); and GEF-IUCN one-year project to develop a national Master Plan for PA Management in Thailand with DNP (ongoing). Other important project that this project will coordinate with include Management of the Phatam PA Complex(ITTO);Coastal Habitats and Resources Management(EU); Pilot Parks Project (DNP), Participatory Management Planning within Kuiburi National park (WWF);Model Forest Approach to Sustainable Forest Management(FAO-JICA)'Huay Mae Dee Environmental Education Project(Danced); and Monitoring of Ecosystem and Biodiversity in Thailand (ITTO).

45. The project is In line with the development results identified in the UN Partnership Framework with the Royal Thai Government (UNPAF 2007-2011) which aims to improve sustainable utilizations and management of natural resources and the environment at national and community levels through demonstration of sustainable financing and ecosystem valuation for conservation. The success will be replicated as a means to achieve MDG # 7 - ensure environmental sustainability.

46. The project expected outcomes are also in line with the UNDP Country Programme Action Plan (CPAP) 2007 – 2011 on increased capacity of national focal points in removal of barriers in pursuing local sustainable management of natural resources and environment and promotion of area-based environmental management. The aligned outcomes are:

- Efficient community work in sustainable use of local natural resources with engagement in policy and decision making processes;
- Alternative knowledge management for community learning based on indigenous livelihoods and evidence-based empirical studies in enhancing support of pro-poor policy.

³⁷ <https://www.cbd.int/doc/meetings/nbsap/nbsapcbw-seasi-01/other/nbsapcbw-seasi-01-th-strategy-en.pdf>

47. The project will build on UNDP's successful record of partnership with Thai counterparts in a number of key development areas. Specifically, UNDP has long worked in Thailand to promote policy linkages and community participation in natural resources and environmental management. UNDP will work closely with DNP and other relevant agencies on biodiversity conservation and sustainable development, as well as with the provincial and local authorities in establishing the necessary policies, capacity strengthening in both technical and managerial skills, which are considered critical for the success and sustainability of the project.

48. This project will directly contribute to GEF Strategic Objective 1: To Catalyze Sustainability of Protected Area Systems and will contribute to the GEF Strategic Program 1: Sustainable Financing of Protected Area Systems at the National Level. The project will support national policy and institutional strengthening activities and demonstrations to ensure that the national PA system has plans and actions for long term financial sustainability. In line with SP1, the project will ensure development of plans that will include diversified funding sources and cost effective management and use of resources. The project will also develop the management and financial capacity of DNP and strengthen the partnerships between PA authorities and local communities, local government, NGOs and the private sector to achieve the long-term sustainability of PA financing.

Rationale and summary of GEF Alternative

49. Support for enhancing the sustainability of Thailand's protected area system defined by this project and the removal of barriers to do so constitutes the essential rationale for the present project. It forms the basis for the four (4) outcomes with the strategic intervention on inclusive planning and management, innovative financial incentives, and effective monitoring systems. In order to achieve these outcomes, GEF has joined in partnership with key PA management agencies DNP and ONEP, and will collaborate with other partners such as those referenced in the Stakeholder Analysis section of this document.

2.2 Project Goal, Objective, Outcomes and Outputs/activities

50. The project **Objective** is to overcome barriers to effective management and sustained financing of Thailand's protected area system. The project's outcomes and outputs are described below.

Outcome 1: Improved governance supports enabling environment for long term PA system sustainability.

51. Under Outcome 1, the project will focus on developing and delivering new policy guidance and rules enabling effective PA system management planning and financing, leading to improved conservation across the 11,589,718 hectares of national PA estate. Local communities will be effectively engaged and will participate in effective PA management leading to improved support of conservation objectives and reduced costs for PA system. Improved information management and a formal M&E program will be the corner stone of an improving PA system and for further policy changes as required.

52. The outputs necessary to achieve this outcome are described below.

53. **Output 1.1: Five (5)-year integrated national PA system management plan and financial strategy endorsed:** This project will facilitate the development of a national level PA financial strategy for the whole PA system by the third year of the project, based on lessons learnt and international best practices. These PA financing strategy will highlight specific financial gaps as well as outline possible new financial revenue models and mechanisms.

54. Output 1.2: Policies strengthening role of PA Committees and community participation in PA management is in place. A full set of guidance materials and methodologies will be developed and will be made available to DNP staff providing guidance and instruction on important aspects of co-management of protected areas. These materials will focus on community interaction, establishment and institutional strengthening of Protected Area Committees, and design and management of ecosystem-based ‘networks’ of PA areas, whether through existing Complex approaches or among a network of PAs under the same administrative (Regional Office) unit.
55. Output 1.3: Effective M&E and knowledge-based data management system is in place to assess progress and to inform policy decisions. The DNP Effectiveness Unit, working with the DNP Information Office, and other Divisions and Offices within DNP, will devise effective monitoring and evaluation approaches at the individual PA and at the system level as a whole, including using formal Management Effectiveness Tracking Tools (METT) and the UNDP Financial Scorecard as appropriate, at least on an annual basis. The Effectiveness Unit will implement monitoring and evaluation of staff performance and management effectiveness, using adaptive management and continuous improvement approaches to strengthen the PA system on an ongoing basis. A unified and integrated PA system management framework will be developed that maintains and summarizes all aspects of PA management plans, METT data, and other performance information, and is accessible to DNP staff and management.

Outcome 2: Institutional and individual capacities enhanced.

56. Under Outcome 2, a comprehensive and integrated approach to protected area management, budgeting and financing will be put in place that focuses on ensuring that, ultimately, each PA has an objective-driven³⁸ management plan, integrated with the overall national PA system management plan³⁹. The result will be a protected area system with consistent and standard management plans with business plans. Critical capacity development to DNP management and staff around issues of effective PA management and financial planning; revenue generation mechanism and business planning, and co-management. Skills training and mentoring programs will be developed and utilized. A critical “Effectiveness” Unit will be created within DNP to review specific management effectiveness and sustainable financing needs across the DNP and protected area system, and to develop and implement appropriate capacity building programs.
57. Output 2.1: New PA management planning framework, planning tools, and methods in place and implemented across the PA system: The DNP has reviewed specific needs for strengthening its management planning process so that they meet the dual objectives of both biodiversity conservation and community needs. The project will help to strengthen this through implementation of programme of work based on lessons from international best practices. As a part of learning-by-doing, the DNP and the Effectiveness Unit will work at five (5) demonstration PAs to assess management planning and resourcing requirements. The objective here will be to develop a common PA management framework and business plans so that these are implementable at the individual PA level but also can be compared across the system. This may also allow certain PA management functions or costs can be shared at a regional or at the whole system level. Once the DNP has applied the new management

³⁸ Each management plan will consider and define very specific objectives and goals based on the unique local, regional and in some cases international priorities related to conservation of important biodiversity and community needs and requirements.

³⁹ This project will link to the planned GEF funded Supporting Country Action on the CBD Programme of Work on Protected Areas (POWPA) which seeks to develop a Thailand PA system management strategy.

planning approach in the five (5) demonstration protected areas under this project, it will be supported to develop a strategy to apply the approach across the full PA system. The project will help DNP to develop a PA network management plan (at “PA Complex”) and business plan to optimize resource use, using the Western Forest Complex as the demonstration, to demonstrate the operational and cost efficiencies for such an approach. The management planning will also ensure that PA management plans will include issues on climate change adaptation.

58. Output 2.2: New PA business plan framework, integrating management and financial planning, including tools, and methods in place, implemented across the PA system: By the end of the project, the Effectiveness Unit will have developed specific cost modelling tools and budgeting model framework in line with new management plans, including standard budget categories and scenario setting, etc. International best practices will be considered and DNP and the Effectiveness Unit will evaluate all current PA budget processes and requirement and seek to streamline and clarify system. By the end of the project, DNP will have developed operational management plans and budget models for national replication.
59. Output 2.3: Capacity building programs on effective PA management and financial planning developed and institutionalized within DNP and implemented at 5 PA demonstration Sites: The project will support the development of capacity building curriculum / program for DNP staff, and their partners so that specific skills and knowledge necessary for effective PA management and financial plans for individual PAs and the whole national PA system. The curriculum will include appropriate topics, including: effective PA management planning, theories of cost management and continuous improvement, “sustainable finance 101”, cost accounting and budgeting, financial analysis, business planning. Training needs assessments will be undertaken to define the priority needs. In addition, training materials will also be developed.⁴⁰ A core Effectiveness Unit will be established within the DNP, drawing on expertise within DNP and working directly with consultants/experts to develop the DNP’s capacity. Finally, this project will utilize the five demonstration protected areas as pilots for the capacity building programs for testing and refining materials and approaches, after which they will be refined for replication across the PA system. Appropriate and varied delivery mechanisms will be established (such as through partner training organizations in Thailand equipped with materials, formal internal DNP training sessions/requirements, etc).

Outcome 3: Revenue generation mechanisms and management approaches are assessed and tested at 5 PA demonstration sites leading to increased funding levels of the PA system.

60. Under Outcome 3, the project will focus on identifying, designing and initiating new financing mechanisms and related efforts at the 5 demonstration PA sites. In particular, the project will evaluate ways to increase revenue through sustainable tourism services and products and/or special user fees (diving, trekking) as well as look at PES opportunities. In addition, the project will consider system-wide financing mechanisms either through adjustments to the entrance fee system or private concession fees or PES agreements negotiated at the national or regional level. Other innovative ideas will also be considered as appropriate. The project will assist DNP, and especially superintendents and staff in pilot protected are sites, to identify, develop and to implement innovative financing and income generating mechanisms. Finally,
- Cost offsetting opportunities integrated with each PA management plan and or at a complex level result in 10% reduction in PA cost requirements.

⁴⁰ The management planning will also ensure that PA management plans will include issues on climate change adaptation.

- Diversified revenue streams constitute at least 20% of PA budget streams at demonstration sites.
- Capacity building, including sustainable financing, leads to more effective PA management of 11,589,718 ha of globally important PA estate (all demonstration area) (METT scores increased by 20% over baseline for each of 5 demonstration PAs)

. In addition, valuation studies for ecosystem services of each PA will be done to determine direct value of conservation efforts and assist with the design and success of new financing mechanisms, particularly PES mechanisms.

61. Output 3.1: Capacity built to assess and implement new financing mechanisms, including sustainable tourism plans: The Project team will conduct financial gap analysis and valuation studies for each demonstration PA. The team will also conduct finance mechanism demonstration projects in at least 3 of the 5 demonstration PAs, conducting full feasibility assessments and business planning to design and implement appropriate financing and revenue generation mechanisms. These will include PES mechanisms and deals, new tourism related services and fee systems, private concessions (hospitality, science, commercial), and corporate donations. The project will support institutional and PA staff capacity building to engage in finance mechanisms design and management. As part of this effort, DNP and other policies and regulations will be reviewed and adjusted as appropriate to allow the development of specific, new financing methods, particularly around development of PES mechanisms and private sector concessions. The project will focus on reviewing and adjusting tourism revenue mechanisms so that they are optimized as a source of revenue for the PA system in Thailand. Each PA will produce a sustainable tourism plan that identifies and determines best opportunities for improved tourism facilities and services.

62. Output 3.5. Appropriate cost offsetting / sharing mechanisms in place and implemented: Opportunities for cost offsetting, or cost sharing, will be identified to find ways to share and collaborate on certain cost requirements with foundations, NGOs and with the private sector. Specific examples include compliance monitoring, communications and community capacity building. In addition to revenue generation, cost-offsetting or cost-sharing opportunities represent an important way to reduce DNP's recurrent and project costs. These opportunities will be identified under the new PA and system management and budgeting processes defined in Outcome 2 above. Examples include working with local NGOs to raise public awareness amongst the local communities, leveraging additional resources with others that have common interests. To implement this, DNP capacities will be built to actively engage with wider stakeholders for such arrangements and agreements.

Outcome 4: New models of PA management support effective management of the System.

63. It is important to move the PA system more strategically toward the use of innovative models of PA management, including regional, ecosystem-based PA network approaches and approaches which allow direct input and participation from key stakeholders such as communities and the local government. Under Outcome 4, the project will focus on strengthening the establishment and use of Protected Area Advisory Committees in the demonstration PAs as a means to reduce existing conflicts and negative impacts of resource use by these communities. This effort will contribute to better management of the PA system. The project will support the case for the Complex approach to effective PA management by demonstrating the potential for managing PAs activities and realizing operational cost efficiencies.

64. Output 4.1: Community, local government and other stakeholder support and collaboration for PA management supported through 'operationalization' of PACs: The project will work with the five (5) demonstration PA sites to establish and improve Protected Area Committees (PACs). The project will help DNP to develop policies and strategies for interacting with, and utilizing of, PACs to

deal with issues of resource use and security within and around PAs, and to get communities involved more directly in relevant aspects of PA management and sustainable enterprise development. PAC and related co-management guidelines and communication materials will be prepared. Community interaction and awareness programs will also be made a formal part of PA management objectives and management plans.

65. Output 4.2: Capacity developed for communities to establish and effectively operate Community PA: While most past efforts to improve community security and participation in PAs has included short term projects, this project will support the DNP to assess appropriate needs for community engagement and their development to reduce threats to PAs (for communities living inside and adjacent to PAs) in the 5 pilot sites. Mechanisms will be developed that will generate additional resources for community development – including possible Community PA funds, community savings and loan – through contributions from local government, private sector, DNP and communities themselves. Community capacities will be strengthened so that they are able to propose projects for specific grants and secure loans for sustainable enterprise activities.
66. Output 4.3: Regional DNP offices and PA staff capacities enhanced to coordinate management support and budget allocations across multiple PAs in WEFCOM for improved cost efficiencies: The project will assess opportunities for operational and financial optimization of PA management through a full analysis of an integrated management planning and budgeting approach across individual PAs within a Forest Complex. The project will develop full management and financial plans for the two ‘proxy’ PA sites (Klong Lan National Park and Huai Kha Khaeng Wildlife Sanctuary) in the Western Forest Complex as part of the five (5) demonstration PA sites (as discussed in Component 2 above). The project will undertake a full review of ways to better integrate the management and resource sharing potential between the two PAs, and considerations for how this can optimally happen. This will be demonstrated and lessons will be used to promote the value of the Complex approach in Thailand. Improved means for cooperation and resource sharing potential is expected lead to improved administration of all 17 WEFCOM PAs.

2.3 Project Indicators, Risks and Assumptions

67. The project indicators are detailed in the Logical Framework (attached in Section II of this document).

Table 5: Project Indicators

Objective / Outcomes	Indicators:	Target
<p>Objective: To overcome barriers to effective management and sustained financing of Thailand's protected area system.</p>	<p>1. Policy guidelines and rules enable successful implementation of effective management plans, designing new revenue mechanisms, and improving co-management efforts, particularly with communities and local government.</p> <p>2. Formal DNP management and financial effectiveness capacity programs in place.</p> <p>3. Completed objective-driven PA management plans and budgets provide clarity on financial need / gap.</p> <p>4. Improvements in DNP budget allocations, and increased non-government PA revenues and sources reduces financial gaps.</p> <p>5. Co-management approaches mainstreamed and effective.</p>	<p>New policy guidelines, and / or new policies, in place to facilitate PA management planning, budgets, finance and so-management.</p> <p>Specific programs and materials in place.</p> <p>100% of project demonstration PAs and a growing number of PAs system wide have management plans and budgets (target is 65% by end of project).</p> <p>Additional revenue sources contribute an additional 10% to 5 project PA demonstration sites and PA system plans in place to target a 10% increase across system.</p> <p>Complex management plan and budget analysis reveals value of Complex approach. PACs are fully functioning and contributing to management in 5 project demonstration PAs.</p> <p>UNDP Financial Scorecard Total Score = 55%</p>
<p>Outcome 1: Improved governance supports enabling environment for long term PA system sustainability.</p>	<p>1.1 5-year integrated national PA system management plan and financial strategy endorsed.</p> <p>1.2 Policies strengthening role of PA Advisory Committees and community participation in PA management is in place.</p> <p>1.3 Effective M&E and knowledge-based data management system is in place to assess progress and to inform policy decisions</p>	<p>A financial gap analysis reveals true financial needs, or gaps, for the 5 project pilot PAs and the PA system. The System and 5 PAs have financing strategies. Approach is being rolled out to full PA system.</p> <p>Policy is strengthened and guidance materials exist.</p> <p>DNP has M&E program (utilizing METT and UNDP Scorecard or similar) and is evaluating PAs, starting with 5 project PAs. Adaptive management measures and processes are in place.</p>
<p>Outcome 2: Institutional and individual capacities enhanced</p>	<p>2.1 New PA management planning framework, planning tools, and methods in place and implemented across the PA system</p> <p>2.2 New PA business plan framework, integrating management and financial planning, including tools, and methods in</p>	<p>Each of the 5 project PA sites has complete, functional management plans. A Clear and consistent PA management framework exists for the PA system.</p> <p>Each of the 5 project PA sites has complete budgets linked to management plans. DNP is using budgets for allocation decisions. UNDP</p>

	<p>place, implemented across the PA system</p> <p>2.3 Capacity building programs on effective PA management and financial planning developed and institutionalized within DNP and implemented at 5 PA demonstration sites.</p>	<p>financial scorecard Rating increased from 2008 baseline total score of 34% to at least 60% by project end</p> <p>Training materials and curriculum developed. Training completed for key management and 5 demonstration PA sites. A Effectiveness Unit is in place to support project and is considered for long term role within DNP. UNDP Capacity scorecard performance increases 25% over baseline year.</p>
<p>Outcome 3: Revenue generation mechanisms and management approaches are assessed and tested at 5 PA demonstration sites leading to increased funding levels of the PA system.</p>	<p>3.1. Capacity built to assess and implement new financing mechanisms, including sustainable tourism plans</p> <p>3.2. Appropriate cost offsetting / sharing mechanisms in place and implemented</p>	<p>Sustainable finance mechanisms assessed and being pursued within at least 3 of 5 PA sites as appropriate.</p> <p>Diversified revenue streams constitute at least 20% of PA budget streams at demonstration sites.</p> <p>Capacity building, including sustainable financing, leads to more effective PA management. (METT scores increased by 20% over baseline for each of 5 demonstration PAs).</p>
<p>Outcome 4: New models of PA management support effective management of the System.</p>	<p>4.1 Community, local government and other stakeholder support and collaboration for PA management supported through ‘operationalization’ of PACs</p> <p>4.2. Capacity developed for communities to establish and effectively operate Community PA Funds</p> <p>4.3 Regional DNP offices and PA staff capacities enhanced to coordinate management support and budget allocations across multiple PAs in WEFCOM for improved cost efficiencies</p>	<p>New community, local government and other stakeholders’ partnerships leads to better management of PA system. PACs in particular are utilized more effectively at 5 project demonstration PA sites. (METT scores improve 20% over baseline partially due to these efforts).</p> <p>Well designed and managed funds set-up, leveraging community savings and sourcing funding from variety of sources (including PA income).</p> <p>Promotion of Regional / complex management system leads to better management of PAs in Western Forest Complex (measured by METT scores of two demonstration PA sites within WEFCOM)</p>

Table 6. Risks facing the project and the risk mitigation strategy

Risks	Risk status	Mitigation
Government commitment to PA management is reduced under the changing political scenario	Low	While changes are likely in store in terms of new administrative and Ministerial staff, the current PA laws, regulations, and processes are not likely to change for better or worse. Thailand's proposed new constitution still gives strong emphasis on environmental management. Thailand's nature and environment management continues to receive support from its Royal family.
The Ministry of Natural Resource and Environment may not be able to coordinate work with other key Ministries to clarify overlapping mandates	Low	The project management setup will explicitly address this risk by using senior (retired) charismatic project leaders to forge links among agencies that currently do not exist, and to design and help implement new mechanisms to institutionalize such positive links.
Local communities will not be willing to work on PAs management issues given the long history of distrust between them and the government	Low	The project strategy is explicitly to break-down the historic antipathy between local communities and the Royal Forest Department. There are numerous lessons to be drawn from previous efforts to overcome these problems, and such lessons will be incorporated into the project strategy.
Establishing PES concessions, rationalizing/ optimizing tourism revenues, and generally pursuing a balanced approach to improving PA management and financing will require a close look at what is allowed and feasible within Pas under the current PA laws in Thailand.	Medium	It is not yet clear what the feasibility of adjusting the PA law restrictions on use and activities within PAs will require, however, the project will place particular emphasis on developing clear value arguments (value propositions and financial analysis) to make the case for a more liberal approach to multiple use approaches in Thailand's PAs.
International financial crises will almost certainly have an effect on Thai GDP and government budget allocations to the national protected area system.	high	This is a risk that will certainly have some impact on the short-term management of the PA system as the Thailand government is planning a reduction in the total budget for 2009. The current financial crises places even more urgency on the need to secure new means of financing as well as optimizing the currently available amount of financial and human resources.
Climate change (CC) undermines conservation of biodiversity within Thailand's Pas.	Low	Climate change is likely to affect natural ecosystems over time, but this project actually will strengthen the resilience of PAs in Thailand to respond to CC impacts by establishing the operational and financial capacities to manage PAs. Additionally, guidance and capacities will be built of PA staff to design and implement nature-based adaptation measures as a part of the PA management plans.

2.4 Incremental reasoning and expected global, national and local benefits

68. The project addresses the main barriers that prevent Thailand from achieving sustainable PA management nationally. Under the "business-as-usual" scenario, Thailand's protected area system, which have significant global values, would remain poorly managed, under financed and would not effectively meet conservation objectives. The effectiveness of the protected area system would further suffer from institutional constraints as well as poorly developed financial planning systems.

69. Without the GEF support, continuing poor management of protected areas, driven by the lack of clear, objectives-led planning, weak operational capacity, underutilized PA models, and poorly resourced and allocated budgets will continue to hinder effective management of Thailand's protected area system. Protected area budgeting and planning will continue to be based on historic norms rather than being needs driven. Overall, the financing of the system will continue to rely on inadequate and poorly managed government budget allocations, and miss opportunities to secure new funds from appropriate sources. All of this will most likely add up to continued decline in global biodiversity values in the current Thailand PA system.

70. Under the alternative scenario, staff, institutional and systemic financial and operational barriers will be overcome and new management and budget models will be deployed, allowing for improved management and resource administration of the PA system. Project will work on strengthening of four key institutional and strategic aspects of the Thailand protected areas system, including: 1) developing an integrated system of protected area management planning and budgeting methods and tools, linking management and financing needs at each protected area with management and budget allocation decisions; 2) strengthening the capabilities and capacities of DNP staff to effectively design and coordinate effective protected area management; 3) assisting DNP, and especially superintendents and staff in pilot protected area sites, to identify, develop and implement successful financing and income generating mechanisms; and 4) the use of innovative models of PA management, management models and approaches which allow direct input and participation from key stakeholders. The project's activities to promote capacities and actions to increase resources for effective and sustainable PA management from diversified sources are expected to have significant cost effectiveness. Firstly, it will be more cost effective than the baseline scenario of largely government or GEF funding of PAs, as additional streams of resource generation will be explored – such as from local government, the private sector and the local communities. The more inclusive PA management models this project seeks to promote is also expected to lead to cost-effective use of resources resulting from increased transparency, and accountability of PA managers to other stakeholders. The consequent effective biodiversity conservation through sustainable PA management will also have a long-term cost-saving impact as high costs for remedial actions to biodiversity loss and degradation will be avoided.

71. Summary of costs: The total cost of the project, including co-funding and GEF funds, amounts to **US\$17,564,545**. Of this total, co-funding constitutes nearly 81% or US\$14,200,000. GEF financing comprises the remaining 19% of the total, or US\$3,364,545. The incremental cost matrix in the Project Document provides a summary breakdown of baseline costs and co-funded and GEF-funded alternative cost.

Expected global, national and local benefits

72. The project will have several global, national and local benefits. In terms of global benefits, improved PA management and sustainable financing will lead to better management of overall terrestrial, marine and coastal PA estate in Thailand of 11.3 million ha. As noted in this document, there are significant global biodiversity values in Thailand – much of which have been included into formal PA system. Specifically, the pilot sites for demonstration will deliver such direct global benefits in area of over one million ha. These PAs harbour several species of global significance, including tiger (*Panthera tigris*), Banteng (*Bos javanicus*); gaur (*Bos gaurus*), wild elephant, (*Elephas maximus*), serow, (*Capricorins summatra nensis*) and other globally threatened species. Other global benefits from better management of Thailand's PA estate include reduced greenhouse gas emission from deforestation and land degradation, as well as significant carbon capture in much of its forests.

73. National benefits of this project will stem from the conservation and sustainable use of natural resources in Thailand's PAs – particularly as better ecosystem management in PAs is also expected to contribute to other improved ecosystem provision services such as better water qualities and forest

products. Other national benefits of the project will be through the extensive capacity building activities of the project – from national to local levels. These are expected to help in achieving a number of national development (including conservation) objectives as well as global objectives. Improved cost-effectiveness of resource use and contributions to conservation from multiple sources (other than government) is also expected to lead to additional national benefits.

74. Local benefits: In addition to better ecosystem provision services such as better water qualities and forest products to local communities through PA management, the work by the project to strengthen community collaboration in PA management is expected to lead to better people-park relationships. Capacity building of local communities and institutions are also expected to lead to spin off local benefits.

2.5 Country ownership: Country eligibility and drivenness

75. Eligibility: Thailand ratified the CBD in 2003, to become a full member on January 29, 2004, and is therefore is eligible for GEF grants.

76. Country Drivenness: This project is Country Driven as it is in line with national policies and priorities identified under section 2.1 above. The project was identified as a high priority project and has been endorsed by the GEF Operational Focal Point in his letter to UNDP/GEF in 2007. The formulation of the project through extensive involvement of, and discussions with different government stakeholders and others has also ensured that the proposed project activities, outputs and outcomes have high national ownership. The large co-funding committed by the Royal Thai Government to this project is an added testament to the importance attached to this project by the government.

2.6 Sustainability

77. Environmental sustainability: The project is considered environmentally sustainable as it is strengthening better management of protected areas and their financial sustainability through overall systemic capacity building at the national level. The work done at five demonstration sites, in particular, will ensure environmental sustainability of those sites.

78. Financial sustainability: A baseline level of financial sustainability for DNPs protected area system has been estimated during preparation of the present document using the financial sustainability scorecard. The final outcome of the **UNDP Financial Scorecard (2008) was a total actual score of 34%**. The highest score was achieved in the area of Legal and Regulatory Framework (37%) while tools for Revenue Generation scored 35% and Business and Planning scored 28% respectively. This project has been designed to improve financial sustainability, with several outputs aimed at increasing each of these elements of financial sustainability. Under the alternative scenario, DNP will have the tool to identify and implement a range of affordable and sustainable financing options and mechanisms for funding the planning and management of PAs. In addition, it is estimated that DNP's percentage of self-funded revenues will rise from approximately **24%** under the baseline to **35%** under the alternative scenario. This project's activities will, therefore, put the PA systems under path for financial sustainability.

79. Social sustainability: A key aspect of the project is on strengthening local stakeholders' involvement in PA management – including local communities, local government and the private sector. Their involvement at demonstration sites and subsequent replication of approaches developed by this project nationally is expected to strengthen social sustainability of Thailand's PAs. The project will give strong emphasis on promoting gender equity in its actions, thereby further aiding social sustainability.

80. Institutional sustainability: The project is largely designed to be based on existing institutional arrangements. The key new unit being proposed under this project – the Effectiveness Unit – is expected to be made a regular part of the DNP after the project ends. The DNP is fully engaged and committed to

the process of PA management and financing improvements. Efforts to raise DNP's staff and institutional capacities will help to ensure that follow-up efforts are undertaken professionally and cost effectively. In order to ensure that it will continue to meet its mandates to conserve biodiversity and effectively manage the national PA system, and also act on its goals for expanding and improving the system, the DNP is committed to the CTASPA project as means to help it to innovate and improve.

2.7 Replicability

81. The project's approach to strengthening overall PA management effectiveness and PA financing will be replicable to other countries in the region and other parts of the world too. Lessons from this project will be available to other nations through websites, publications and lessons sharing through the government, the GEF and UNDP. UNDP and GEF are supporting similar PA financing projects in Asia (for example Mongolia and Vietnam) and replication of successful approaches in Thailand could be of interest to these countries. Within the project, many activities will focus on testing and demonstrating specific approaches in five demonstration sites. The project has built in mechanisms so that lessons from the demonstration sites are learnt and disseminated throughout the PA system. One innovative approach to do this, proposed by this project, is to have peer review by other PA superintendents of actions at demonstration sites (please see section on M&E).

Part III: Management Arrangements

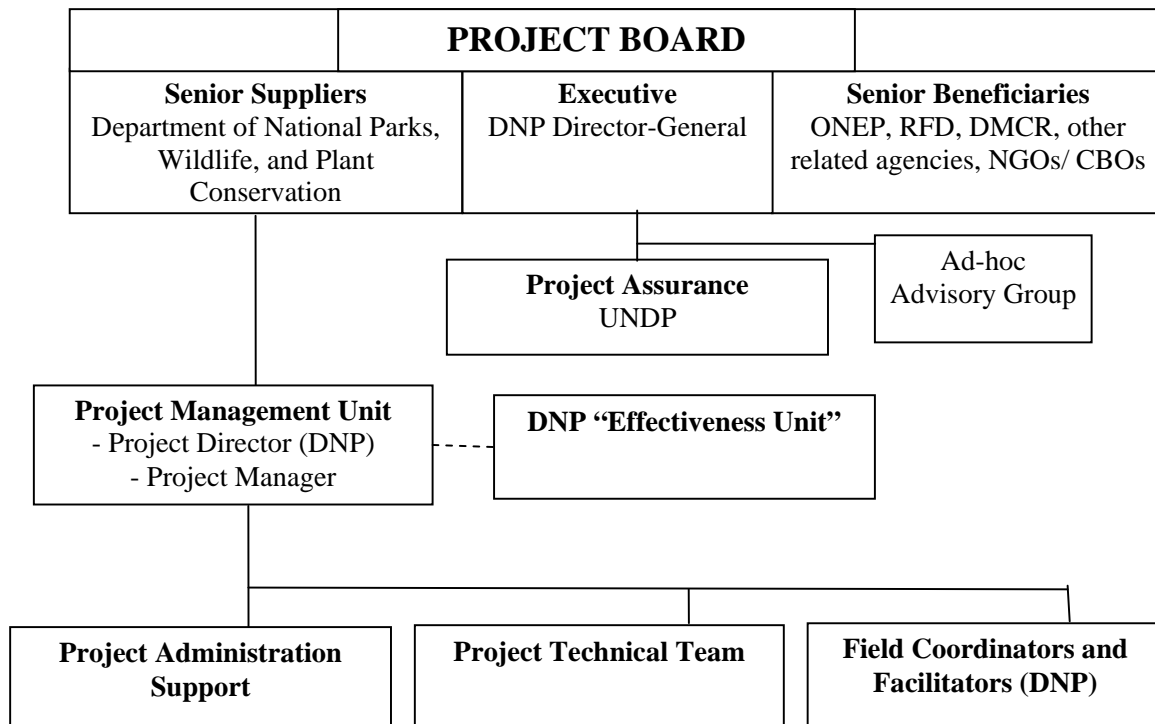
82. The project will be executed by the Department of National Park, Wildlife and Plant Conservation under the Ministry of Natural Resources and the Environment following UNDP guidelines for nationally executed projects (NEX). The Executing agency will sign a grant agreement with UNDP and will be accountable to UNDP for the disbursement of funds and the achievement of the project objective and outcomes, according to the approved work plan. In particular, the Executing Agency will be responsible for the following functions: (i) coordinating activities to ensure the delivery of agreed outcomes; (ii) certifying expenditures in line with approved budgets and work-plans; (iii) facilitating, monitoring and reporting on the procurement of inputs and delivery of outputs; (iv) coordinating interventions financed by GEF/UNDP with other parallel interventions; (v) approval of Terms of Reference for consultants and tender documents for sub-contracted inputs; and (vi) reporting to UNDP on project delivery and impact.

83. The Department of National Park, Wildlife and Plant Conservation will implement the project and work in close cooperation with the ONEP, and research institutes, communities, and national and local NGOs.

84. The project will establish a Project Board, a Project Management Unit (PMU), which will be located at DNP, in Bangkok. The Project Board and Project Management Unit will be instrumental in conveying the messages/outcomes of actual site work to relevant central bodies and make use of them in developing new policies.

85. The overall programme management structure of the project is shown below:

Chart 1: Project Management Structure



86. The Project Board. A Project Board (PB) will be set up at the inception of the project to supervise and monitor the project delivery according to the annual work plan. The PB will have three roles: Executive: Chair of the Board (Director-General of DNP), Senior Supplier: will provide guidance regarding the technical and overall feasibility of the project (DNP and Project Manager), and Senior Beneficiary: ensure the project benefits reach the intended beneficiaries (ONEP, RFD, DMCR, and NGOs/CBOs). The Director-General of DNP will be the Executive, who will chair the Project Board. Members of PB include representatives from ONEP, RFD, DMCR, national NGOs and CBOs. It will meet at least quarterly and it will be convened and supported logistically by the PMU. The PB is responsible for making executive management decisions, including approval of work plans, budget plans and project revisions. The PB will also provide guidance regarding the technical feasibility of the project, and ensure the realization of project benefits to the project beneficiaries. Specifically the PB will be responsible for: (i) achieving co-ordination among the various government agencies; (ii) guiding the program implementation process to ensure alignment with national and local statutory planning processes and sustainable resource use and conservation policies, plans and conservation strategies; (iii) ensuring that activities are fully integrated between the other developmental initiatives in the region; (iv) overseeing the work being carried out by the implementation units, monitoring progress and approving reports; (v) overseeing the financial management and production of financial reports; and (vi) monitor the effectiveness of project implementation.

87. The Project Management Unit (PMU). The project administration and coordination between central and field divisions / offices within DNP and relevant organizations will be carried out by a PMU under the overall guidance of the Project Board. The PMU will be composed of an overall **Project Director**, from within DNP, who will be the focal point to provide overall guidance to the Project Management Unit members who are hired on the project budget. The PMU members include (1) a project manager, (2) a project assistant/ financial Officer; (3) project field coordinators and facilitators; (4) a project technical team.

88. More specifically, the role of the PMU will be to: (i) ensure the overall project management and monitoring according to UNDP rules on managing UNDP/GEF projects; (ii) facilitate communication and networking among key stakeholders; (iii) organize the meetings of the PB; and (iv) support the local stakeholders. The **Project Manager** has the authority to run the project on a day-to-day basis on behalf of the Project Board within the constraints laid down by the Project Board and is responsible for day-to-day management and decision making for the project. The project manager's prime responsibility is to ensure that the project produces the results specified in the project document, to the required standard of quality and within the specified constraints of time and cost. Responsibilities include the preparation of progress reports which are to be submitted to the members of the Project Board. The project manager will also coordinate directly with UNDP Environment Unit manager who will subsequently report to the Regional Coordination Unit of UNDP-GEF office. A monthly meeting between UNDP and the project management team will be held to regularly monitor the planned activities and their corresponding budgets in the project's Annual Work Plan (AWP). The Field Coordinators/Facilitators will ensure the coordination and effective liaising between the PMU and site level partners and DNP staff; while the **Project Technical Team**, will consist of national and international consultants to provide technical support to project implementation.

89. DNP staff will be assigned to work in partnership with members of the project management unit to enhance the mutual learning process during project implementation. The project management unit will evolve into the proposed Effectiveness Team within the DNP to ensure the sustainability of the outcomes beyond the life of the project.

90. Ad-hoc Advisory Group. An ad-hoc advisory group might be established to provide technical guidance and advice on specific issues.

91. The Project Assurance. The Project Assurance function will be performed by UNDP. The function supports the Project Board by carrying out objective and independent project oversight and monitoring functions. The role ensures appropriate project management milestones are managed and completed. Project Assurance has to be independent of the Project Manager; therefore the Project Board cannot delegate any of its assurance responsibilities to the Project Director or the Project Manager.

92. In order to accord proper acknowledgement to GEF for providing funding, a GEF logo should appear on all relevant GEF project publications, including among others, project hardware and vehicles purchased with GEF funds. Any citation on publications regarding projects funded by GEF should also accord proper acknowledgment to GEF. The UNDP logo should be more prominent -- and separated from the GEF logo if possible, as UN visibility is important for security purposes.

93. In line with the United Nations reform principles, especially simplification and harmonization, the Annual Work Plan (AWP) will be operated with the harmonized common country programming instruments and tools, i.e. the UNDAF results matrix, M&E and the Harmonized Approach to Cash Transfer (HACT). At the day-to-day operational level, ATLAS will be used for keeping track of timely and efficient delivery of the activities and for effective financial monitoring under the AWP.

Part IV: Monitoring and Evaluation Plan and Budget

94. The following sections outline the principle components of the Monitoring and Evaluation Plan and indicative cost estimates related to M&E activities. The project's Monitoring and Evaluation Plan will be presented and finalized at the Project's Inception Report following a collective fine-tuning of indicators, means of verification, and the full definition of project staff M&E responsibilities.

95. Project monitoring and evaluation (M&E) will be conducted in accordance with established UNDP and GEF procedures and will be provided by the project team and the UNDP Country Office with support from the UNDP/GEF Regional Coordination Unit. The Logical Framework Matrix (Section II, Part I) provides performance and *impact* indicators for project implementation along with their corresponding *means of verification*. The METT tool (Annex C) and Financial Scorecard (Annex D) will all be used as instruments to monitor the progress against the outcomes of this project. The following sections outline the principle components of the M&E Plan and indicative cost estimates related to M&E activities.

4.1 Project Inception Phase

96. A Project Inception Workshop (IW) will be conducted with the full project team, relevant government counterparts, and representatives from pilot sites, co-financing partners, the UNDP-Country Office (CO) and representation from the UNDP-GEF Regional Coordinating Unit, as well as UNDP-GEF (HQs) as appropriate. A fundamental objective of this Inception Workshop will be to assist the project team to understand and take ownership of the project's goal and objective, as well as finalize preparation of the project's first annual work plan on the basis of the log frame matrix. This will include reviewing the log frame (indicators, means of verification, assumptions), imparting additional detail as needed, and on the basis of this exercise, finalizing the Annual Work Plan (AWP) with precise and measurable performance indicators, and in a manner consistent with the expected outcomes for the project. Additionally, the purpose and objective of the IW will be to: (i) introduce project staff with the UNDP-GEF team which will support the project during its implementation, namely the CO and responsible Regional Coordinating Unit (RCU) staff; (ii) detail the roles, support services and complementary responsibilities of UNDP-CO and RCU staff vis à vis the project team; (iii) provide a detailed overview of UNDP-GEF reporting and monitoring and evaluation (M&E) requirements, with particular emphasis on the Annual Project Implementation Reviews (PIRs) and related documentation, the Annual Review Report (ARR), as well as mid-term and final evaluations.

97. The IW will provide an opportunity to inform the project team on UNDP project related budgetary planning, budget reviews, and mandatory budget re-phasing. The IW will also highlight the project's decision-making structures, including reporting and communication lines, and conflict resolution mechanisms. The Terms of Reference for project staff and decision-making structures will be discussed again, as needed, in order to clarify for all, each party's responsibilities during the project's implementation phase.

4.2 Monitoring responsibilities and events

98. A detailed schedule of project review meetings will be developed by the project management and incorporated in a Project Inception Report (PIR). Such a schedule will include: (i) tentative time frames for Project Board Meetings and (ii) project related Monitoring and Evaluation activities. Day-to-day monitoring of implementation progress will be the responsibility of the Project Manager based on the project's Annual Work Plan and its indicators. The Project Manager will inform the UNDP-CO of any

delays or difficulties faced during implementation so that the appropriate support or corrective measures can be adopted in a timely and remedial fashion. The Project Manager will fine-tune the progress and performance/impact indicators of the project – both full project and subsets of indicators at the PA demonstration site levels - in consultation with the full project team at the Inception Workshop with support from UNDP-CO and assisted by the UNDP-GEF Regional Coordinating Unit. Specific targets for the first year implementation progress indicators together with their means of verification will be developed at this Workshop. These will be used to assess whether implementation is proceeding at the intended pace and in the right direction and will form part of the Annual Work Plan. Targets and indicators for subsequent years would be defined annually as part of the internal evaluation and planning processes undertaken by the project team.

99. Measurement of impact indicators related to global biodiversity benefits will occur according to the schedules defined in the Inception Workshop, using METT scores. The measurement of these will be undertaken through subcontracts or retainers with relevant institutions. Periodic monitoring of implementation progress will be undertaken by the UNDP-CO through quarterly meetings with the Implementing Partner, or more frequently as deemed necessary. This will allow parties to take stock and to troubleshoot any problems pertaining to the project in a timely fashion to ensure smooth implementation of project activities.

100. Periodic Monitoring of implementation progress will be undertaken by the UNDP-CO through quarterly meetings with the project proponent, or more frequently as deemed necessary. This will allow parties to take stock and to troubleshoot any problems pertaining to the project in a timely fashion to ensure smooth implementation of project activities. UNDP Country Offices and UNDP-GEF RCUs as appropriate, will conduct yearly visits to projects that have field sites, or more often based on an agreed upon schedule to be detailed in the project's Inception Report / Annual Work Plan to assess first hand project progress. Any other member of the Project Board can also accompany, as decided by the SC. A Field Visit Report will be prepared by the CO and circulated no less than one month after the visit to the project team, all SC members, and UNDP-GEF.

101. Annual Monitoring will occur through the Tripartite Review (TPR). This is the highest policy-level meeting of the parties directly involved in the implementation of a project. The project will be subject to TPR at least once every year. The first such meeting will be held within the first twelve months of the start of full implementation. The project proponent will prepare an Annual Project Report (APR) and submit it to UNDP-CO and the UNDP-GEF regional office at least two weeks prior to the TPR for review and comments. The APR will be used as one of the basic documents for discussions in the TPR meeting. The project proponent will present the APR to the TPR, highlighting policy issues and recommendations for the decision of the TPR participants. The project proponent also informs the participants of any agreement reached by stakeholders during the APR preparation on how to resolve operational issues. Separate reviews of each project component may also be conducted if necessary.

102. In addition, the project team will coordinate Peer Reviews each year during the project, whereby protected area superintendents from protected areas within the same cluster as the pilot sites will be invited to evaluate the relevance of the project to their protected areas and the PA system. Feedback from these reviews will provide the project team and the DNP with guidance and inputs into appropriate adjustments and highlight aspects of the project to communicate to the PA system more broadly.

4.3 Project Reporting

103. The Project Manager in conjunction with the UNDP-GEF extended team will be responsible for the preparation and submission of the following reports that form part of the monitoring process. The first

six reports are mandatory and strictly related to monitoring, while the last two have a broader function and the frequency and nature is project specific to be defined throughout implementation.

104. A Project Inception Report will be prepared immediately following the Inception Workshop. It will include a detailed First Year/ Annual Work Plan divided in quarterly time-frames detailing the activities and progress indicators that will guide implementation during the first year of the project. This Work Plan will include the dates of specific field visits, support missions from the UNDP-CO or the Regional Coordinating Unit (RCU) or consultants, as well as time-frames for meetings of the project's decision making structures. The Report will also include the detailed project budget for the first full year of implementation, prepared on the basis of the AWP, and including any monitoring and evaluation requirements to effectively measure project performance during the targeted 12 months time-frame. The Inception Report will include a more detailed narrative on the institutional roles, responsibilities, coordinating actions and feedback mechanisms of project related partners. In addition, a section will be included on progress to date on project establishment and start-up activities and an update of any changed external conditions that may affect project implementation. When finalized, the report will be circulated to project counterparts who will be given a period of one calendar month in which to respond with comments or queries. Prior to this circulation of the IR, the UNDP Country Office and UNDP-GEF's Regional Coordinating Unit will review the document.

105. Quarterly progress reports: Short reports outlining main updates in project progress will be provided quarterly to the local UNDP Country Office and the UNDP-GEF RCU by the project team.

106. Periodic Thematic Reports: As and when called for by UNDP, UNDP-GEF or the Implementing Partner, the project team will prepare Specific Thematic Reports, focusing on specific issues or areas of activity. The request for a Thematic Report will be provided to the project team in written form by UNDP and will clearly state the issue or activities that need to be reported on. These reports can be used as a form of lessons learnt exercise, specific oversight in key areas, or as troubleshooting exercises to evaluate and overcome obstacles and difficulties encountered. UNDP is requested to minimize its requests for Thematic Reports, and when such are necessary will allow reasonable timeframes for their preparation by the project team.

107. Technical Reports are detailed documents covering specific areas of analysis or scientific specializations within the overall project. As part of the Inception Report, the project team will prepare a draft Reports List, detailing the technical reports that are expected to be prepared on key areas of activity during the course of the Project, and tentative due dates. Where necessary this Reports List will be revised and updated, and included in subsequent APRs. Technical Reports may also be prepared by external consultants and should be comprehensive, specialized analyses of clearly defined areas of research within the framework of the project and its sites. These technical reports will represent, as appropriate, the project's substantive contribution to specific areas, and will be used in efforts to disseminate relevant information and best practices at local, national and international levels.

108. An Annual Review Report shall be prepared by the Project Manager and shared with the Project Board. As a self-assessment by the project management, it does not require a cumbersome preparatory process. As minimum requirement, the Annual Review Report shall consist of the Atlas standard format for the Project Progress Report (PPR) covering the whole year with updated information for each element of the PPR as well as a summary of results achieved against pre-defined annual targets at the project level. As such, it can be readily used to spur dialogue with the Project Board and partners. An ARR will be prepared on an annual basis prior to the Project Board meeting to reflect progress achieved in meeting the project's Annual Work Plan and assess performance of the project in contributing to intended outcomes through outputs and partnership work. The ARR should consist of the following sections: (i)

project risks and issues; (ii) project progress against pre-defined indicators and targets and (iii) outcome performance.

109. The Project Implementation Review (PIR) is an annual monitoring process mandated by the GEF. It has become an essential management and monitoring tool for project managers and offers the main vehicle for extracting lessons from ongoing projects. Once the project has been under implementation for a year, a Project Implementation Report must be completed by the CO together with the project team. The PIR should be prepared and discussed with the CO and the UNDP/GEF Regional Coordination Unit with the final submission to the UNDP/GEF Headquarters.

110. Project Terminal Report: During the last three months of the project the project team will prepare the Project Terminal Report. This comprehensive report will summarize all activities, achievements and outputs of the Project, lessons learnt, objectives met, or not achieved structures and systems implemented, etc. and will be the definitive statement of the Project's activities during its lifetime. It will also lay out recommendations for any further steps that may need to be taken to ensure sustainability and replicability of the Project's activities. The project proponent is responsible for preparing the Terminal Report and submitting it to UNDP-CO and RBAP-GEF's Regional Coordinating Unit. It shall be prepared in draft at least two months in advance of the TTR in order to allow review, and will serve as the basis for discussions in the TTR. The terminal tripartite review considers the implementation of the project as a whole, paying particular attention to whether the project has achieved its stated objectives and contributed to the broader environmental objective. It decides whether any actions are still necessary, particularly in relation to sustainability of project results, and acts as a vehicle through which lessons learnt can be captured to feed into other projects under implementation of formulation. The TPR has the authority to suspend disbursement if project performance benchmarks are not met. Benchmarks will be developed at the Inception Workshop, based on delivery rates, and qualitative assessments of achievements of outputs.

4.4 Independent evaluations

111. The project will be subjected to at least two independent external evaluations as follows: An independent Mid-Term Evaluation will be undertaken at exactly the mid-point of the project lifetime. The Mid-Term Evaluation will determine progress being made towards the achievement of outcomes and will identify course correction if needed. It will focus on the effectiveness, efficiency and timeliness of project implementation; will highlight issues requiring decisions and actions; and will present initial lessons learned about project design, implementation and management. Findings of this review will be incorporated as recommendations for enhanced implementation during the final half of the project's term. The organization, terms of reference and timing of the mid-term evaluation will be decided after consultation between the parties to the project document. The Terms of Reference for this Mid-term evaluation will be prepared by the UNDP CO based on guidance from the UNDP-GEF Regional Coordinating Unit.

112. An independent Final Evaluation will take place three months prior to the terminal Project Board meeting, and will focus on the same issues as the mid-term evaluation. The final evaluation will also look at impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental goals. The Final Evaluation should also provide recommendations for follow-up activities. The Terms of Reference for this evaluation will be prepared by the UNDP CO based on guidance from the UNDP-GEF Regional Coordinating Unit.

4.5 Learning and knowledge sharing

113. Results from the project will be disseminated within and beyond the project intervention zone through a number of existing information sharing networks and forums. In addition, the project will

participate, as relevant and appropriate, in UNDP/GEF sponsored networks, organized for Senior Personnel working on projects that share common characteristics. UNDP/GEF Regional Unit has established an electronic platform for sharing lessons between the project coordinators. The project will identify and participate, as relevant and appropriate, in scientific, policy-based and/or any other networks, which may be of benefit to project implementation though lessons learned. The project will identify, analyze, and share lessons learned that might be beneficial in the design and implementation of similar future projects. Identifying and analyzing lessons learned is an on-going process, and the need to communicate such lessons as one of the project's central contributions is a requirement to be delivered not less frequently than once every 12 months. UNDP/GEF shall provide a format and assist the project team in categorizing, documenting and reporting on lessons learned. These lessons will be shared widely throughout DNP – and MONRE – to help develop and initiate ongoing projects and new initiatives. Such mechanism for sharing will include newsletter, websites, and technical and general publications.

114. Project Publications will form a key method of crystallizing and disseminating the results and achievements of the Project. These publications may be scientific or informational texts on the activities and achievements of the Project, in the form of journal articles, multimedia publications, etc. These publications can be based on Technical Reports, depending upon the relevance, scientific worth, etc. of these Reports, or may be summaries or compilations of a series of Technical Reports and other research. The project team will determine if any of the Technical Reports merit formal publication, and will also (in consultation with UNDP, the government and other relevant stakeholder groups) plan and produce these Publications in a consistent and recognizable format. Project resources will need to be defined and allocated for these activities as appropriate and in a manner commensurate with the project's budget.

115. The M&E plan is described in detail in Part VIII of the Project Document and is summarized in the table below.

Table 7: Indicative Monitoring and Evaluation Work plan and corresponding Budget

Type of M&E activity	Responsible Parties	Budget US\$ <i>Excluding project team Staff time</i>	Time frame
Inception Workshop	<ul style="list-style-type: none"> ▪ Project Management Unit ▪ UNDP CO ▪ UNDP GEF 	\$5,000	Within first two months of project start up
Inception Report	<ul style="list-style-type: none"> ▪ Project Management Unit ▪ UNDP CO 	None	Immediately following IW
Micro-assessment of the implementing partner	<ul style="list-style-type: none"> ▪ Hired third-party assessment 	\$1000	During the inception phase
Quarterly progress reports and operational reports	<ul style="list-style-type: none"> ▪ Project Management Unit ▪ UNDP-CO ▪ UNDP-GEF 	None	Annually
Annual Progress Report (APR) and Project Implementation Report	<ul style="list-style-type: none"> ▪ Project Management Unit ▪ UNDP-CO ▪ UNDP-GEF 	None	Annually
Tripartite Review (TPR) and TPR report	<ul style="list-style-type: none"> ▪ Government Counterparts ▪ UNDP CO ▪ Project Management Unit ▪ UNDP-GEF Regional Coordinating Unit 	None	Every year, upon receipt of APR
Project Board	<ul style="list-style-type: none"> ▪ Project Management Unit 	None	Following Project

Meetings	▪ UNDP CO		IW and subsequently at least once a year
Mid-term Review	▪ Hired third-party assessment	30,000	At the end of the second year
Periodic status reports	▪ Project Management Unit	None	To be determined by Project team and UNDP CO
Technical reports	Project Management Unit ▪ consultants	\$ 5,000	To be determined by Project Team and UNDP-CO
Audit	▪ UNDP-CO ▪ Project team	\$4,000 (average \$1000 per year)	Yearly
Visits to field sites (<u>excluding</u> UNDP staff travel costs)	▪ Government representatives and others (such as peer group)	\$10,000	Yearly
Final Evaluation	▪ Hired third-party assessment	30,000	3 months before the project ends.
TOTAL INDICATIVE COST			
<i>Excluding project team staff time expenses</i>		\$ 85,000	

Part V: Legal Context

118. The Royal Thai Government and the United Nations Special Funds have entered into the Agreement to govern assistance from the Special Fund to Thailand, which was signed by both parties on 04 June 1960. Pending the finalization of the Standard Basic Assistance Agreement (SBAA) between UNDP and the Government, the Agreement will govern the technical assistance provided by UNDP Thailand under the Country Programme Action Plan (CPAP), which was signed between the Government and UNDP Thailand on 10 January 2007.

119. Under the UNDP-funded programmes and projects, the responsibility for the safety and security of the implementing partner and its personnel and property, and of UNDP's property in the implementing partner's custody, rests with the implementing partner in accordance with the aforementioned Agreement between the UN Special Fund and the Government of Thailand concerning Assistance from the Special Fund 1960.

120. The implementing partner shall:

- put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the Programme is being carried;
- assume all risks and liabilities related to the implementing partner's security, and the full implementation of the security plan.

121. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of this agreement.

122. The implementing partner agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received pursuant to the Programme Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267

(1999). The list can be accessed via <http://www.un.org/Docs/sc/committees/1267/1267ListEng.htm>. This provision must be included in all sub-contracts or sub-agreements entered into under this Programme Document.

SECTION II: STRATEGIC RESULTS FRAMEWORK AND GEF INCREMENT

Part I: Project Logical Framework

Project Strategy	Objectively Verifiable Indicators	Baseline	Target	Sources of Verification	Risks and Assumptions
<p>Project Objective: To overcome barriers to effective management and sustained financing of Thailand's protected area system.</p>	<p>1. Policy guidelines and rules enable successful implementation of effective management plans, designing new revenue mechanisms, and improving co-management efforts, particularly with communities and local government.</p> <p>2. Formal DNP management and financial effectiveness capacity programs in place.</p> <p>3. Completed objective-driven PA management plans and budgets provide clarity on financial need / gap.</p> <p>4. Improvements in DNP budget allocations, and increased non-government PA revenues and sources reduce financial gaps.</p> <p>5. Co-management approaches mainstreamed and effective.</p>	<p>Regulations and policies exist but are not clear enough, or enforced properly. Gaps in specific regulations may be hindering PA achievement.</p> <p>Limited formal capacity programs or materials.</p> <p>Less than 50% of PAs have management plans. Currently PA or system financial gap is not clear as not all PAs have management plans and DNP budgeting system is based on rough estimates and historical norms.</p> <p>Approximately 75% of non-salary PA system financing is government budget and 25% is tourism. No other significant sources exist.</p> <p>Co-management approaches between PA (such as Complex) and with communities and other stakeholders (PAC) are relatively new, poorly understood, and underutilized.</p>	<p>New policy guidelines, and / or new policies, in place to facilitate PA management planning, budgets, finance and so-management.</p> <p>Specific programs and materials in place.</p> <p>100% of project demonstration PAs and a growing number of PAs system wide have management plans and budgets (target is 65% by end of project).</p> <p>Additional revenue sources contribute an additional 10% to 5 project PA demonstration sites and PA system plans in place to target a 10% increase across system.</p> <p>Complex management plan and budget analysis reveals value of Complex approach. PACs are fully functioning and contributing to management in 5 project demonstration PAs.</p> <p>UNDP Financial Scorecard Total Score = 55%</p>	<p>Written policies and approved guidelines, and actual achievements on the ground.</p> <p>Needs assessment and materials and deployment strategies.</p> <p>Completed management plans and budgets.</p> <p>PA income and financial mechanism business plans. PA system financing strategy.</p> <p>Complex management and budget analysis report and PAC reports and PA management plans.</p> <p>UNDP Financial Scorecard</p>	<p>Existing rules and policies should facilitate much of what is need, yet do not. With this as precedent, the GoT may choose to not pursue necessary policy adjustment.</p> <p>Project focuses on 5 PAs but assumes others will also develop management plans during period of project.</p> <p>Effective finance mechanisms can be identified and resources mobilized to implement them.</p> <p>Integration of PA management and budget processes is possible at an individual PA and a regional complex level within the PA system.</p>

		UNDP Financial Scorecard Total Score = 34%			
Outcome 1: Improved governance supports enabling environment for long term PA system sustainability.	1.1 5-year integrated national PA system management plan and financial strategy endorsed.	Currently PA or system financial gap is not clear as not all PAs have management plans and DNP budgeting system is based on rough estimates and historical norms. Formal, bottom-up, financing strategies do not exist.	A financial gap analysis reveals true financial needs, or gaps, for the 5 project pilot PAs and the PA system. The System and 5 PAs have financing strategies. Approach is being rolled out to full PA system.	5 year PA system strategy document. Analysis models and reports.	DNP endorses financial gap and strategic plans.
	1.2 Policies strengthening role of PA Advisory Committees and community participation in PA management is in place.	Limited guidance or training material exists to promote collaboration with Local government or PA committees.	Policy is strengthened and guidance materials exist.	Policy guidelines and materials. Communities participating in PA management.	DNP supports policy changes and development of guidance materials.
	1.3 Effective M&E and knowledge-based data management system is in place to assess progress and to inform policy decisions	Actual management and cost performance is not tracked. No formal M&E system looking at total effectiveness of performance exists. Adaptive management is not utilized.	DNP has M&E program (utilizing METT and UNDP Scorecard or similar) and is evaluating PAs, starting with 5 project PAs. Adaptive management measures and processes are in place.	M&E program. PA evaluation reports.	
Activities Outcome 1	<ul style="list-style-type: none"> Assess and publish PA strategy Policy review, needs assessments, and recommendations Information Systems Development Design DNP Management Effectiveness and Evaluation system 				
Outcome 2: Institutional and individual capacities enhanced.	2.1 New PA management planning framework, planning tools, and methods in place and implemented across the PA system	Basic management plan templates exist. Most plans contain few specific requirements (actions) against clear objectives.	Each of the 5 project PA sites has complete, functional management plans. A Clear and consistent PA management framework exists for the PA system.	Management plans and system wide framework.	DNP is willing and able to adapt and adopt a new PA and system management framework.
	2.2 New PA business plan framework, integrating management and financial planning, including tools, and methods in place, implemented across the PA system	Management plans are not directly linked to a consistent budget framework or used for budget proposals or allocations.	Each of the 5 project PA sites has complete budgets linked to management plans. DNP is using budgets for allocation decisions. UNDP financial scorecard Rating increased from	Budget framework and PA budgets. UNDP Financial Scorecard.	DNP PA budget policies can be adjusted.

			2008 baseline total score of 34% to at least 60% by project end		
	2.3 Capacity building programs on effective PA management and financial planning developed and institutionalized within DNP and implemented at 5 PA demonstration sites.	No such formal training or capacity building materials or curriculum exists.	Training materials and curriculum developed. Training completed for key management and 5 demonstration PA sites. An <i>Effectiveness Unit</i> is in place to support project and is considered for long term role within DNP. UNDP Capacity scorecard performance increases 25% over baseline year.	Training materials, and actual training reports. Effectiveness Unit staffing and project reports. UNDP Capacity Scorecard.	DNP makes adequate and appropriate staff available for training and capacity building programs. DNP will create an Effectiveness Unit, leveraging multiple departments. It will be considered as a long-term unit. UNDP Capacity scorecard will be completed in first year of project as a baseline and each year thereafter.
Activities Outcome 2	<ul style="list-style-type: none"> • Review current practices – Initial assessment of PA system (management/budgets) (Status Quo assessment) • Development of the new management plan template and framework • Conduct capacity needs assessment • Develop guidance and training materials, tools • Training across 5 PAs • Develop PA management plans and budgets • Effectiveness Unit design and creation 				
Outcome 3. Revenue generation mechanisms and management approaches are assessed and tested at 5 PA demonstration sites leading to increased funding levels of the PA system.	3.1. Capacity built to assess and implement new financing mechanisms, including sustainable tourism plans	No feasibility or valuation approaches or studies in place. Sustainable finance mechanisms largely absent from PA system and such income is generally US\$0 per year. Tourism accounts for US\$11.5 million or 25% of no-staff PA system income.	Sustainable finance mechanisms assessed and being pursued within at least 3 of 5 PA sites as appropriate. Diversified revenue streams constitute at least 20% of PA budget streams at demonstration sites. Capacity building, including sustainable financing, leads to more effective PA management. (METT scores increased by 20% over baseline for each of 5	Feasibility studies, business plans, income statements. Tourism plans. Revenue recorder (Income statements / budgets). (Use of UNDP Scorecard or similar to track). PA METT scorecards.	Each PA identifies feasible and viable finance mechanism opportunities and adequate resources and necessary policy adjustments ensure they are implemented. Tourism Ministry and DNP agree on need for, and implement new sustainable tourism strategy development

			demonstration PAs).		processes and are willing to adjust policies and expected revenues from tourism.
	3.2. Appropriate cost offsetting / sharing mechanisms in place and implemented	No cost offsetting strategy exists. Opportunities for cost sharing or reduction not fully utilized. Systematic approach absent	Identified Cost offsetting opportunities integrated with each PA management plan and or at a complex level result in 10% reduction in PA cost requirements.	Cost offsetting plans. Management plans.	Cost sharing – or offsetting – collaborations are possible under DNP policies.
Activities Outcome 3	<ul style="list-style-type: none"> Valuation of PES opportunities (5 PAs) Review and feasibility assessment of specific financing mechanisms (5 PAs) Design and Implementation specific mechanisms (3 PAs) Develop Tourism Plan for each site for site tourist revenue optimization Develop PA site-based partnership and cost effective strategies 				
Outcome 4: New models of PA management support effective management of the System.	4.1 Community, local government and other stakeholder support and collaboration for PA management supported through 'operationalization' of PACs	PACs are underutilized and communities and local governments are not engaged in PA management in a consistent or effective manner.	New community, local government and other stakeholders' partnerships leads to better management of PA system. PACs in particular are utilized more effectively at 5 project demonstration PA sites. (METT scores improve 20% over baseline partially due to these efforts).	PAC reports and PA management plans. PA METT scorecards.	
	4.2. Capacity developed for communities to establish and effectively operate Community PA Funds	Community Funds have been looked at in a limited way. Lack of financing options for community led sustainable enterprise development.	Well designed and managed funds set-up, leveraging community savings and sourcing funding from variety of sources (including PA income).	Fund plans and charters. Fund accounts.	Community funds are formally developed and well governed.
	4.3. Regional DNP offices and PA staff capacities enhanced to coordinate management support and budget allocations across multiple PAs in WEFKOM for improved cost efficiencies	Complex plan and budget strategy allows comparison with PA level approach and optimizes management of individual PAs involved.	Promotion of Regional / complex management system leads to better management of PAs in Western Forest Complex (measured by METT scores of two demonstration PA sites within WEFKOM)	Complex (network) plan and budget analysis. METT scorecards.	
Activities Outcome 4	<ul style="list-style-type: none"> Assess and strengthen PAC conditions at each site Develop PA Community fund options and plans (5 PAs) Develop guidance and training materials for collaborations Develop optimal management and financial plan recommendations (leveraging from 2.0 above) at regional complex level 				

Part II: Incremental Cost Matrix

Cost/Benefit	Baseline (B)	Alternative (A)	Incremental costs (A-B)
Global Benefits	<p>Under the “business-as-usual” scenario, Thailand’s protected area system, which have significant global values, would remain poorly managed, under financed and would not effectively meet conservation objectives, leading to a net-loss of globally important biodiversity. Related, international support for Thailand’s global biodiversity conservation – such as through the GEF - will continue to face systemic weaknesses in management and policy barriers nationally, which individual PA management projects cannot effectively address. The resource utilization will not be cost-effective and would not leverage significant support from other stakeholders.</p> <p>Few funding sources besides government and tourism currently exist for the PA system. The current status of PA management practices, which do not have clear management objectives, plans and resource allocations based on them, will continue and their ability to pursue improvements will continue to be hindered, and effective financial strategies will not be effectively pursued.</p>	<p>Under the alternative scenario, staff, institutional and systemic financial and operational barriers will be overcome and new management and budget models will be deployed, allowing for improved management and resource administration throughout the PA system. The project will work on strengthening of four key institutional and strategic aspects of the Thailand protected areas system, including: 1) developing an integrated system of protected area management planning and budgeting methods and tools, linking management and financing needs at each protected area with management and budget allocation decisions; 2) strengthening the capabilities and capacities of DNP staff to effectively design and coordinate effective protected area management; 3) assisting DNP, and especially superintendents and staff in pilot protected area sites, to identify, develop and implement successful financing and income generating mechanisms; and 4) the use of innovative models of PA management, management models and approaches which allow direct input and participation from key stakeholders.</p>	<p>Maintenance of global biodiversity values, including the share of ecosystems services benefits that accrue to the global community. Reduced risks of loss of globally threatened and endemic species and habitats. Continued global existence values and global options values to sustainably utilize and benefit from biodiversity maintained. Lessons of wider international relevance identified and disseminated.</p>
Local/National Benefits	<p>Ecosystems’ regulating and provisioning services will be undermined and lost through ineffective PA management. Lack of cost effectiveness in PA</p>	<p>By strengthening the Thailand PA system management and budgeting processes as well as co-management efforts and approaches, the project will:</p> <ol style="list-style-type: none"> 1. contribute to the overall 	<p>Loss of direct and indirect national benefits prevented and on and off-site biodiversity values maintained. Enhanced PA system co-management and locally developed financial resource and income,</p>

Cost/Benefit	Baseline (B)	Alternative (A)	Incremental costs (A-B)
	management and poor stakeholders' involvement will also have negative impacts on local and national development – as there will be inefficiencies in resource utilization and parks-people conflict will continue.	<p>institutional and policy framework for PA management and biodiversity conservation, as one of its objectives;</p> <p>2. Improve resource planning and allocation in individual PAs as well as system-wide, particularly looking at Regional PA networks (PA complexes) as well as secure innovative new financial sources, and;</p> <p>3. Strengthen community and other stakeholder involvement in PA management and therefore contribute to sustainable socio-economic and sectoral development.</p> <p>These will lead to cost-efficiencies and resources sharing as well as improved stakeholder relationships.</p>	opportunities for local communities and stakeholders to collaborate with PA management, and benefits, including community funds and possible economic development opportunities from sustainable financing mechanisms.
Outcome 1: DNP's institutional and management capacity strengthened for national PA estate management and financing.	GOT-DNP: 2,500,000	GOT-DNP: 3,340,000 GEF: 619,720 Sub-total: 3,959,720	GOT-DNP: 840,000 GEF: 619,720 Sub-total: 1,459,720
Outcome 2: Integrated PA system management, budgeting and financial planning processes support improvements in PA system management and resource allocation.	GOT-DNP: 1750,000	GOT-DNP: 2,910,000 GEF: 815,250 Sub-total: 3,725,250	GOT-DNP: 1,160,000 GEF: 815,250 Sub-total: 1,975,250
Outcome 3: Innovative and sustainable finance mechanisms have been designed and successfully implemented and are generating revenues for the PA system.	GOT-DNP: 2,000,000	GOT-DNP: 6,000,000 GEF: 957,300 Sub-total: 6,957,300	GOT-DNP: 4,000,000 GEF: 957,300 Sub-total: 4,957,300
Outcome 4: New models of PA management pursued and coordination among stakeholders enhanced, leading to more effective PA management and resource use.	GOT-DNP: 1,200,000	GOT-DNP: 7,980,000 GEF: 636,275 Sub-total: 8,616,275	GOT-DNP: 6,780,000 GEF: 636,275 Sub-total: 7,416,275
Project Management	0	GOT-DNP: 1,420,000 GEF: 336,000 Sub-total: 1,756,000	GOT-DNP: 1,420,000 GEF: 336,000 Sub-total: 1,756,000

Cost/Benefit	Baseline (B)	Alternative (A)	Incremental costs (A-B)
Cost Totals	7,450,000	GOT-DNP: 21,650,000 GEF: 3,364,545 Total: 25,014,545	GOT-DNP: 14,200,000 GEF: 3,364,545 Total: 17,564,545

SECTION III: TOTAL BUDGET AND WORKPLAN

Part I: Total Budget and Work Plan

Award ID:	
Award Title:	Catalyzing Sustainability of Thailand's Protected Area System
Business Unit:	
Project Title:	Catalyzing Sustainability of Thailand's Protected Area System
Implementing Partner (Executing Agency)	Government of Thailand Department of National Park, Wildlife and Plant Conservation (DNP)

GEF Outcome/Atlas Activity	Responsible Party/Implementing Agent	Fund ID	Donor Name	Atlas Budgetary Account Code	ATLAS Description	Budget	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Amount Year 4 (USD)	Total (USD)
OUTCOME 1: Improved governance supports enabling environment for long term PA system sustainability.			GEF		International Consultants		45,900	45,900	45,900	45,900	183,600
					Local Consultants		31,280	31,280	31,280	31,280	125,120
					Contractual services		50,000	0	0	0	50,000
					Travel		8,600	31,000	8,600	37,800	86,000
					Supplies		50,000	30,000	30,000	15,000	125,000
					Miscellaneous		20,000	10,000	15,000	5,000	50,000
					Total Outcome 1				205,780	148,180	130,780
OUTCOME 2: Institutional and individual capacities enhanced.			GEF		International Consultants		83,513	83,513	83,513	83,511	334,050
					Local Consultants		49,300	49,300	49,300	49,300	197,200
					Contractual services		0	60,000	50,000	0	110,000
					Travel		28,500	26,200	28,500	20,800	104,000
					Supplies		20,000	5,000	5,000	5,000	35,000
					Miscellaneous		10,000	15,000	5,000	5,000	35,000
					Total Outcome 2				191,313	239,013	221,313
OUTCOME 3: Revenue generation mechanisms and management approaches are assessed and tested at 5 PA demonstration sites leading to increased funding levels of the PA system.			GEF		International Consultants		89,250	89,250	89,250	89,250	357,000
					Local Consultants		79,900	79,900	79,900	79,900	319,600
					Contractual services		0	0	0	0	0
					Travel		54,800	31,000	15,800	6,100	107,700
					Supplies		10,000	20,000	25,000	65,000	120,000

				Miscellaneous	8,000	10,000	15,000	20,000	53,000
				Total Outcome 3	241,950	230,150	224,950	260,250	957,300
OUTCOME 4: New models of PA management support effective management of the System.			GEF	International Consultants	50,363	50,363	50,362	50,362	201,450
				Local Consultants	51,340	51,340	51,340	51,340	205,360
				Contractual services	0	0	0	25,000	25,000
				Travel	6,000	23,700	8,500	41,100	79,300
				Supplies	10,000	20,000	32,000	25,000	87,000
				Miscellaneous	5,000	9,090	20,000	4,075	38,165
				Total Outcome 4	122,703	154,493	162,202	196,877	636,275
	PROJECT MANAGEMENT & PROJECT M&E.				GEF	International Consultants	9,563	9,563	9,562
			Local Consultants	70,537		70,537	70,538	70,538	282,150
			Contractual services	0		0	0	0	0
			Travel	0		0	0	0	0
			Supplies	2,775		2,775	2,775	2,775	11,100
			Miscellaneous	1,125		1,125	1,125	1,125	4,500
			Total Outcome 3	84,000		84,000	84,000	84,000	336,000
				Total Project	845,746	855,836	823,245	839,718	3,364,545

Summary of Funds^[1]:

Responsible Party/ Implementing Agent	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Amount Year 4 (USD)	Total (USD)
GEF	845,746	855,836	823,245	839,718	3,364,545
Thailand Department of National Park, Wildlife and Plant Conservation (DNP)	3,550,000	3,550,000	3,550,000	3,550,000	14,200,000
TOTAL	4,395,746	4,405,836	4,373,245	4,389,718	17,564,545

^[1] Summary table should include all financing of all kinds: GEF financing, co-financing, cash, in-kind, etc.

Part II: Budget Notes

General Cost Factors:

The budget and budget notes reference US dollars. The budget assumes average unit costs for the most common cost items as provided below. Other costs are determined on a case-by-case basis.

International Consultant (per week)	\$2,550
Local Consultant (per week)	\$1,360
International Travel (per trip)	\$2,500
Local Travel (per trip)	\$ 600

Outcome 1: Improved governance supports enabling environment for long term PA system sustainability.

1. International Consultants (total of 72 weeks or \$183,600 over the 4 years).

- International consultants will be used to assist with the following activities:
- Assess and publish PA strategy
- Policy review, needs assessments, and recommendations
- Information Systems Development
- Design DNP Management Effectiveness and Evaluation system

2. Local Consultants (total of 92 weeks, or \$125,120 over the 4 years)

Local consultants will be used to assist with the following activities:

- International consultants will be used to assist with the following activities:
- Assess and publish PA strategy
- Policy review, needs assessments, and recommendations
- Information Systems Development
- Design DNP Management Effectiveness and Evaluation

3. Contractual services (\$50,000): vendor 3 to design IT data base and capture system for DNP.

4. Travel: 14 international trips and 85 local trips (\$86,000)

5. Supplies, equipment, printing, communications, mail, etc. (\$125,000)

6. Miscellaneous: Training- and development-related costs and unforeseen expenditures related to inflation, raises, foreign exchange, etc. (\$50,000)

Outcome 2: Institutional and individual capacities enhanced.

1. International Consultants (total of 131 weeks or \$334,050 over the 4 years)

- International consultants will be used to assist with the following activities:
- Review current practices – Initial assessment of PA system (management/budgets) (Status Quo assessment)
- Development of the new management plan template and framework
- Conduct capacity needs assessment
- Develop guidance and training materials, tools
- Training across 5 PAs
- Develop PA management plans and budgets

- Effectiveness Unit design and creation

2. Local Consultants (total of 145 weeks or \$197,200 over the 4 years)

Local consultants will be used to assist with the following activities:

- International consultants will be used to assist with the following activities:
- Review current practices – Initial assessment of PA system (management/budgets) (Status Quo assessment)
- Development of the new management plan template and framework
- Conduct capacity needs assessment
- Develop guidance and training materials, tools
- Training across 5 PAs
- Develop PA management plans and budgets
- Effectiveness Unit design and creation

3. Contractual services (Total \$110,000): Vendor 1 (\$30,000) for accounting professional during budgeting architecture design process. Vendor 2 (\$50,000) to design, develop and publish final Management and Finance training modules and materials. Vendor 3 (\$30,000) to design, develop and publish final Co-Management training modules and materials.

4. Travel: 26 international trips and 65 local trips (\$104,000)

5. Supplies, equipment, printing, communications, mail, etc. (\$35,000)

6. Miscellaneous: Unforeseen expenditures related to inflation, raises, foreign exchange, etc. (\$35,000)

Outcome 3: Revenue generation mechanisms and management approaches are assessed and tested at 5 PA demonstration sites leading to increased funding levels of the PA system.

1. International Consultants (total of 140 weeks or \$357,000 over the 4 years)

International consultants will be used to assist with the following activities:

- Local consultants will be used to assist with the following activities:
- Valuation of PES opportunities (5 PAs)
- Review and feasibility assessment of specific financing mechanisms (5 PAs)
- Design and Implementation specific mechanisms (3 PAs)
- Develop Tourism Plan for each site for site tourist revenue optimization
- Develop PA site-based partnership and cost effective strategies

2. Local Consultants (total of 235 weeks or \$319,600 over the 4 years)

Local consultants will be used to assist with the following activities:

- Valuation of PES opportunities (5 PAs)
- Review and feasibility assessment of specific financing mechanisms (5 PAs)
- Design and Implementation specific mechanisms (3 PAs)
- Develop Tourism Plan for each site for site tourist revenue optimization
- Develop PA site-based partnership and cost effective strategies

3. Contractual services: \$0

4. Travel: 27 international trips and 67 local trips (\$107,700)

5. Supplies, equipment, printing, communications, mail, etc. (\$120,000)

6. Miscellaneous: Unforeseen expenditures related to inflation, raises, foreign exchange, etc (\$53,000)

Outcome 4: New models of PA management support effective management of the System.

1. International Consultants (total of 79 weeks or \$201,450 over the 4 years)

International consultants will be used to assist with the following activities:

- Assess and strengthen PAC conditions at each site
- Develop PA Community fund options and plans (5 PAs)
- Develop guidance and training materials for collaborations
- Develop optimal management and financial plan recommendations (leveraging from 2.0 above) at regional complex level.

2. Local Consultants (total of 151 weeks or \$205,360 over the 4 years)

Local consultants will be used to assist with the following activities:

- Assess and strengthen PAC conditions at each site
- Develop PA Community fund options and plans (5 PAs)
- Develop guidance and training materials for collaborations
- Develop optimal management and financial plan recommendations (leveraging from 2.0 above) at regional complex level.

3. Contractual services (\$25,000) Design, develop and Publish Forest complex/region specific training modules and materials.

4. Travel: 13 international trips and 78 local trips (\$79,300)

5. Supplies, equipment, printing, communications, mail, etc. (\$87,000)

6. Miscellaneous: Training related costs and unforeseen expenditures related to inflation, raises, foreign exchange, etc: (\$38,165)

Project Management & M&E:

1. International Consultants:

International Evaluator (Total of 15 weeks or \$38,250)

2. Local Consultants:

Local Evaluator (17 weeks or \$22,950)

Project Manager will be contracted (\$172,800 full time, over 4 years or 192 weeks).

Administrative support staff 1 (\$38,400 full time, over 4 years or 192 weeks).

Administrative support staff 2 (\$48,000 full time, over 4 years or 192 weeks).

(These last three are long-term assignments compensated as salary and so a different rate structure than the previous TA local consultant positions).

The Project Director, Field coordinators and Effectiveness Unit staff will be provided through DNP in-kind commitments. All other Technical experts are addressed as International and Local consultants in the budgets for component Outcomes 1 through 4 above.

3. Contractual services: \$0

4. Travel: (\$0) : Co funded for government staff related travel by the government

5. Supplies, equipment, printing, communications, mail, etc. (\$11,100)

6. Miscellaneous: Unforeseen expenditures related to inflation, raises, foreign exchange, etc. (\$4,500)

SECTION IV: ADDITIONAL INFORMATION

Part I: Other agreements

Please see co-funding letter from DNP (separate PDF file)

Part II: Terms of References for Key Project Staff

ANNEX C: CONSULTANTS TO BE HIRED FOR THE PROJECT USING GEF RESOURCES

Position Titles	Estimated person weeks (for GEF finance)	US \$/ person week	Tasks to be performed
For Project Management			
Project Manager (local)	192	900	<ul style="list-style-type: none"> • Supervise and coordinate the project to ensure its results are in accordance with the Project Document and the rules and procedures established in the UNDP Programming Manual; • Assume primary responsibility for daily project management - both organizational and substantive matters – budgeting, planning and general monitoring of the project; • Coordinate closely with and undertake any other actions related to the project as requested by UNDP or the DNP Project Director; • Maintain regular contact with UNDP Country Office and the DNP Project Director on project implementation issues of their respective competence; • Ensure adequate information flow, discussions and feedback among the various stakeholders of the project; • Ensure adherence to the project’s work plan, prepare revisions of the work plan, if required; • Assume overall responsibility for the proper handling of logistics related to project workshops and events; • Prepare necessary GEF project progress reports, as well as any other reports requested by the Executing Agency and UNDP; • Prepare, and agree with UNDP on, terms of reference for national and international consultants and subcontractors; • Guide the work of consultants and subcontractors and oversee compliance with the agreed work plan; • Monitor the expenditures, commitments and balance of funds under the project budget lines, and draft project budget revisions; • Assume overall responsibility for the meeting financial delivery targets set out in the agreed annual work plans, reporting on project funds and related record keeping; • Liaise with project partners to ensure their co-financing contributions are provided within the agreed terms; • Ensure collection of relevant data necessary to use in the Management Effectiveness Tracking Tool; • Assume overall responsibility for reporting on project progress vis-à-vis indicators in the logframe.
Project Assistant 1, Coordination and management (local)	192	200	<ul style="list-style-type: none"> • Provide general administrative support to ensure the smooth running of the project management unit; • Project logistical support to the Project Coordinator and project consultants in conducting different project activities (trainings, workshops, stakeholder consultations, arrangements of study tour, etc.); • During the visits of foreign experts, bear the responsibility for their visa support, transportation, hotel accommodation etc; • Keep files with project documents, expert reports; • Keep regular contact with project experts and consultants to inform them about the project details and changes; • Provide English translation as required; • Draft correspondence and documents; finalize correspondence of

Position Titles	Estimated person weeks (for GEF finance)	US \$/ person week	Tasks to be performed
			<p>administrative nature; edit reports and other documents for correctness of form and content;</p> <ul style="list-style-type: none"> • Arrange duty travel; • Act on telephone inquiries, fax, post and e-mail transmissions, and coordinate appointments; • Perform any other administrative duties as requested by the Project Coordinator;
Project Assistant 2, Accounts and financial (local)	192	250	<ul style="list-style-type: none"> • Provide general financial related administrative support to ensure the smooth running of the project management unit; • Organize control of budget expenditures by preparing payment documents, and compiling financial reports; • Maintain the project's disbursement ledger and journal; • Keep files with project documents, expert reports; • Control the usage non expendable equipment (record keeping, drawing up regular inventories); • Keep regular contact with project experts and consultants to inform them about the project budget details and changes; • Perform any other administrative/financial duties as requested by the Project Coordinator; • Organize and coordinate the procurement of services and goods under the project. • Under supervision of project manager, responsible for all aspects of project financial management
Evaluation experts (for mid-term and final) (local)	17	1350	The role of the national project evaluation consultant(s) will be to participate, alongside with the international consultants, in the mid-term and final evaluation of the project, in order to assess the project progress, achievement of results and impacts. The project evaluation specialists will develop draft evaluation report, discuss it with the project team, government and UNDP, and as necessary participate in discussions to realign the project time-table/logframe at the mid-term stage. The standard UNDP/GEF project evaluation TOR will be used.
Evaluation experts (for mid-term and final) (international)	15	2550	The international evaluation consultant will lead the mid-term and the final evaluations. He/she will work with the local evaluation consultant in order to assess the project progress, achievement of results and impacts. The project evaluation specialists will develop draft evaluation report, discuss it with the project team, government and UNDP, and as necessary participate in discussions to extract lessons for UNDP and GEF. The standard UNDP/GEF project evaluation TOR will be used.
For Technical Assistance			
Local consultants			
PA Management Experts	152	1360	<p>1.2.1 Support Senior PA Mngmt Expert on needs assessment and support development of develop of PA management guidance and training materials and tools</p> <p>1.2.2 Participate in Training across 5 PAs and Management level</p> <p>1.2.3 Follow-up Mentoring with PA sites after Training</p> <p>2.1.2 Development of the new Management Plan template and framework</p> <p>2.1.6 Develop Management approach recommendations for regional Complex, or Network, and national DNP System Management Strategy</p> <p>4.1.2 Regional Complex status quo Initial Assessment</p> <p>4.1.3 Develop Guidance and Training at regional Complex level</p>

Position Titles	Estimated person weeks (for GEF finance)	US \$/ person week	Tasks to be performed
			4.1.4 Develop Management and Financial Plan Recommendations at a regional Complex level
PA Budget Experts	90	1360	2.2.1 Support Senior PA Budget Expert on needs assessment and support development of Budget template and budgeting guidance and training materials and tools 2.2.3 Support development of Budget guidance and training materials and Tools 2.2.4 Participate in Training across 5 PAs and Management level (integrated with Management training) 2.2.5 Develop PA Budgets (integrated with Management training) 2.1.6 Develop Budget approach recommendations for regional Complex, or Network, and national DNP System Management Strategy 4.1.2 Regional Complex status quo Initial Assessment 4.1.3 Develop Guidance and Training at regional Complex level 4.1.4 Develop Management and Financial Plan Recommendations at a regional Complex level
Training experts	61	1360	1.2.1 Develop PA management training materials 2.2.1 Develop PA budget training materials 1.2.2 Lead Management Plan Training across 5 PAs and Management level 2.2.4 Lead Budget Plan Training across 5 PAs and Management level (integrated with 1.2.2 Management training) 1.2.4 Finalize guidance Materials full DNP Management training with Effectiveness Unit and Materials Design Contractor 4.1.3 Develop Guidance and Training at regional Complex level
M&E Expert	20	1360	1.4.1 Support design of DNP Management Effectiveness and Evaluation system 1.4.2 Support information Systems Development
Socio-Economist/ Finance/Business experts	90	1360	3.1.1 Assess and publish a PA system financing strategy recommendations document 3.2.2 Review and feasibility assessment of specific mechanisms (PAs) 3.2.3 Design and Implementation specific mechanisms (3 PAs) 3.5.1 Develop PA site-based partnership and co-financing strategies
Environmental Economist	40	1360	3.2.1 Valuation of PES opportunities (5 PAs)
Community experts	80	1360	3.4.1 Develop Community Concept at System level 3.4.2 Develop PA Community fund plans 4.2.1 Assessment and strengthen PAC conditions at each site
Sustainable Tourism Expert	50	1360	3.3.1 Develop Tourism Plan for each of 5 PA sites for site tourist revenue optimization
Policy Experts	40	1360	Support necessary Policy requirements and considerations surrounding the following: 3.4.1 Develop Community Concept at System level 4.1.6 Complex Management Strategy recommendations 4.2.1 Assessment and strengthen PAC conditions at each site
International consultants			
Senior PA Management Experts	121	2550	1.2.1 Lead needs assessment and support development of develop of PA management guidance and training materials and tools 1.2.2 Participate in Training across 5 PAs and Management level 1.2.3 Follow-up Mentoring with PA sites after Training 2.1.2 Development of the new Management Plan template and framework

Position Titles	Estimated person weeks (for GEF finance)	US \$/ person week	Tasks to be performed
			2.1.6 Develop Management approach recommendations for regional Complex, or Network, and national DNP System Management Strategy 4.1.2 Regional Complex status quo Initial Assessment 4.1.3 Develop Guidance and Training at regional Complex level 4.1.4 Develop Management and Financial Plan Recommendations at a regional Complex level
Senior PA Budget Experts	105	2550	2.2.1 Lead needs assessment and support development of Budget template and budgeting guidance and training materials and tools 2.2.3 Support development of Budget guidance and training materials and Tools 2.2.4 Participate in Training across 5 PAs and Management level (integrated with Management training) 2.2.5 Develop PA Budgets (integrated with Management training) 2.1.6 Develop Budget approach recommendations for regional Complex, or Network, and national DNP System Management Strategy 4.1.2 Regional Complex status quo Initial Assessment 4.1.3 Develop Guidance and Training at regional Complex level 4.1.4 Develop Management and Financial Plan Recommendations at a regional Complex level
Senior Training experts	40	2550	1.2.1 Develop PA management training materials 2.2.1 Develop PA budget training materials 1.2.2 Lead Management Plan Training across 5 PAs and Management level 2.2.4 Lead Budget Plan Training across 5 PAs and Management level (integrated with 1.2.2 Management training) 1.2.4 Finalize guidance Materials full DNP Management training with Effectiveness Unit and Materials Design Contractor 4.1.3 Develop Guidance and Training at regional Complex level
Senior M&E Expert	20	2550	1.4.1 Support design of DNP Management Effectiveness and Evaluation system 1.4.2 Support information Systems Development
Senior Socio-Economist/ Finance/Business experts	40	2550	3.1.1 Assess and publish a PA system financing strategy recommendations document 3.2.2 Review and feasibility assessment of specific mechanisms (PAs) 3.2.3 Design and Implementation specific mechanisms (3 PAs) 3.5.1 Develop PA site-based partnership and co-financing strategies
Senior Environmental Economist	30	2550	3.2.1 Valuation of PES opportunities (5 PAs)
Sustainable Tourism Expert	36	2550	3.3.1 Develop Tourism Plan for each of 5 PA sites for site tourist revenue optimization
Community experts	30	2550	3.4.1 Develop Community Concept at System level 3.4.2 Develop PA Community fund plans 4.2.1 Assessment and strengthen PAC conditions at each site

In addition the project will hire contractor firms and / or individuals for the following:

- Contract vendor: design, develop and publish final Management and Finance training modules and materials (\$50,000)
- Contract vendor: design, develop and publish final Co-Management training modules and materials (\$30,000)
- Contract vendor: design IT data base and capture system for DNP (\$50,000)

- Contract vendor: design PA system budget and accounts system architecture (\$30,000)
- Contract vendor: design, develop and publish regional PA complex/region specific training modules and materials (\$25,000)

DETAILS ON ** LINE ITEMS IN PROJECT MANAGEMENT BUDGET

Cost items	GEF (\$)	Other sources (\$)	Project Total (\$)	Comments
Local consultants	282,150	200,000	482,150	See table above for consultants. Co-funding is for DNP Project Director and other staff support
International consultants	38,250	0	38,250	15 weeks for an International Evaluation Expert for the M&E Plan (interim and final evaluations)
Office facilities, equipment, vehicles and communication	0	870,000	870,000	Government of Thailand will host the project and the use of vehicles etc. for its staff assigned to the project
Travel	0	200,000	200,000	Government staff related travel co funded by the government
Others (supplies and miscellaneous)	15,600**	150,000	165,600	**Supplies, equipment, printing, communications, mail, etc. (\$12,000) and Miscellaneous: Unforeseen expenditures related to inflation, raises, foreign exchange, etc. (\$3,6000)/ co fund will be also for related government office costs

SECTION IV, PART III: Stakeholder Involvement Plan

Stakeholder Identification

The DNP is the primary authority which will execute the project, thereby enabling it to realize its policy objectives. The DNP will work in close cooperation with other key government agencies, local governments, local communities, Universities, NGOs and other key stakeholders identified below in Table 1. The expected roles and responsibilities of identified project stakeholders are given in Table 1 below.

Table 1: Key stakeholders, roles and responsibilities

Stakeholder	Roles and Responsibilities
The Department of National Park, Wildlife and Plant Conservation (DNP)	Being the executing agency for the project, the DNP is the authoritative “owner” of the project. It will be responsible for the overall project execution, and will ensure the “after-project” sustainability and impacts, as well ensuring effective and full participation of other stakeholders in the project.
The National Economic and Social Development Board (NESDB)	Being the central planning agency and focal point of sustainable development, the NESDB will be closely engaged at two levels. Firstly, at the policy level, the NESDB will be involved in the Project Board, and in that capacity, it will ensure the consistency between project goals, objectives and activities and sustainable development policy and plan of the country. Secondly, the NESDB will also advise project team on technical matters related to sustainable financing and sustainable development.
The Office of Natural Resources Policy and Planning (OEPP)	OEPP will be a member in the Project Board, and in its capacity as the CBD focal point, it will ensure that implementation processes and outputs of project are consistent with the Convention. It will also provide technical advice to the project implementation at demonstration site level as appropriate, and to ensure that other activities that it is promoting (such as research) are consistent with project objectives.
Biodiversity Economic Development Organization, (BEDO)	Being an independent office to further support the implementation of the CBD, BEDO may be involved as a member of the Project Board and communities’ biodiversity-based economic activities.
The Ministry of Finance	One representative from the ministry will serve on the Project Board to ensure inter-ministerial communication and consistency between innovative financing and the general practice in government finance.
The Department of Marine and Coastal Resources (DMCR)	DMCR will serve on the Project Board and the project will work closely with this Department at the marine PA demonstration site.
Tourism Authority of Thailand (TAT)	One representative from TAT will be on the technical committee to provide general support, advice and facilitation on matters related to tourism. Representatives at the provincial level TAT will be involved in activities at the demonstration site level activities in the project as required.
Tourism Associations	One of the not-for-profit tourism associations will be invited to join the advisory committee to provide technical and logistical advice related to tourism activities.
Universities that have collaborated with government in research and activities	Major universities in Bangkok, and in the region, including Kasetsart University, Mahidol University, and Chulalongkorn University in Bangkok, Chiang Mai University in the north, Prince of Songkla

Stakeholder	Roles and Responsibilities
specifically at the pilot sites	University in the south and research units within these universities will be invited to collaborate in the project's relevant activities, especially at demonstration-sites for information exchange, planning, training etc. as appropriate.
Research Institutes	Other than research institutes in universities (mentioned above), some research and training institutes such as RECOFTC, TDRI, Biodiversity Research Thailand (BRT) and Thailand Environment Institute will be involved at appropriate level, including representation in the Project Board, to provide technical advice or be on the advisory board. These institutes may also help in capacity needs assessment and capacity building activities.
National NGOs	One representative from a national NGO will be a member of the Project Board, or the advisory committee. NGOs that operate at the relevant sites will be considered to be nominated as a member of PACs.
Local governments	With possibility of providing overall advice and additional cofinancing, local governments will be involved at the site level project implementation and there will be one representative on the PAC, and possibly one representative at the complex-level committee.
Local press and media	The project will collaborate with the local mass media for wide public communication and awareness raising activities. Emphasis will be given to public radios, which interact closely on a daily basis with the communities at demonstration sites.
Local NGOs and civic groups	These NGOs and civic groups will be invited to participate in project activities, and some of them will be asked to serve on local boards, and be closely involved in planning, implementation, fund-raising and monitoring activities.
Local communities	Representatives of local communities, including individuals, and "natural" leaders who are well respected by peoples in the communities will be invited to participate in the project implementation and events that need to involve wider circles of stakeholders.
UNDP-Thailand office	The roles and responsibilities of UNDP-Thailand office will include: Ensuring professional and timely implementation of the activities and delivery of the reports and other outputs identified in the project document; Coordination and supervision of the activities; Assisting and supporting the DNP for organizing, coordinating, and where necessary, hosting all project meetings; Contracting of and contract administration for qualified project team members; Where necessary, provide additional technical supports and advice; Manage and be responsible of all financial administration to realize the targets envisioned in consultation with DNP; Establishing an effective networking between project stakeholders, specialized international organizations and the donor community.

Information dissemination, consultation, and similar activities that took place during the PPG

During the project preparation stage, stakeholder discussions and analysis at the central office and local sites were conducted to:

- identify key stakeholders and their functions, financial standing and experience in conservation;
- review stakeholder interests and associated impacts (positive and negative) on the project, and vice versa;
- identify and develop opportunities for the project to benefit stakeholders, and for stakeholders to contribute to the success of the project.

The stakeholder participation plan has been developed based on the principles outlined in **Table 2** below.

Table 2: Stakeholder participation principles

Principle	Stakeholder participation will:
Value Adding	be an essential means of adding value to the project
Inclusivity	include to the extent possible, all relevant stakeholders
Accessibility and Access	be accessible and promote access to the process, based on voluntary basis
Transparency	be based on transparency and fair access to information; main provisions of the project’s plans and results will be published in local mass-media
Fairness	ensure that all stakeholders are treated in a fair and unbiased way
Accountability	be based on a commitment to accountability by all stakeholders to each other
Constructive	Seek to manage conflict and promote peace, cooperative spirit and the public interest
Redressing	Seek to redress inequity and injustice
Capacitating	Seek to develop and strengthen the needed capacity of all stakeholders so that they could contribute to conservation
Needs Based	be based on the needs of all stakeholders, while ensuring ecosystem integrity and sustainable livelihoods
Flexible	be flexibly designed and implemented within an adaptive, continual improvement manner
Rational and Coordinated	be rationally planned and coordinated, and not be ad hoc
Excellence	be subject to ongoing reflection and continual improvement

The project proposes a mechanism to achieve broad-based stakeholder involvement in the project preparation and implementation processes. Stakeholder participation will include the following two components:

1. The Project Board. A Project Board (PB) will be set up at the inception of the project to supervise and monitor the project delivery according to the annual work plan. The PB will have three roles: Executive: Chair of the Board (Director-General of DNP), Senior Supplier: will provide guidance regarding the technical and overall feasibility of the project (DNP and Project Manager), and Senior Beneficiary: ensure the project benefits reach the intended beneficiaries (ONEP, RFD, DMCR, and NGOs/CBOs). The Director-General of DNP will be the Executive, who will chair the Project Board. Members of PB include representatives from ONEP, RFD, DMCR, national NGOs and CBOs. It will meet at least quarterly and it will be convened and supported logistically by the PMU. The PB is responsible for making executive management decisions, including approval of work plans, budget plans and project revisions. The PB will also provide guidance regarding the technical feasibility of the project, and ensure the realization of project benefits to the project beneficiaries. Specifically the PB will be responsible for: (i) achieving co-

ordination among the various government agencies; (ii) guiding the program implementation process to ensure alignment with national and local statutory planning processes and sustainable resource use and conservation policies, plans and conservation strategies; (iii) ensuring that activities are fully integrated between the other developmental initiatives in the region; (iv) overseeing the work being carried out by the implementation units, monitoring progress and approving reports; (v) overseeing the financial management and production of financial reports; and (vi) monitor the effectiveness of project implementation.

2. Ad-hoc Advisory Group. An ad-hoc advisory group might be established to provide technical guidance and advice on specific issues.

A collaborative management approach, in which some or all of the relevant stakeholders in the demonstration PAs will be taken by the project this project, particularly emphasizing coordination between the PA management, regional DNP offices and local communities within or near each PA. Specifically, by this approach, DNP and the Project Management Unit will seek to productively engage these and other relevant stakeholders during demonstration PA activities as defined in the Project Outcomes and activities.

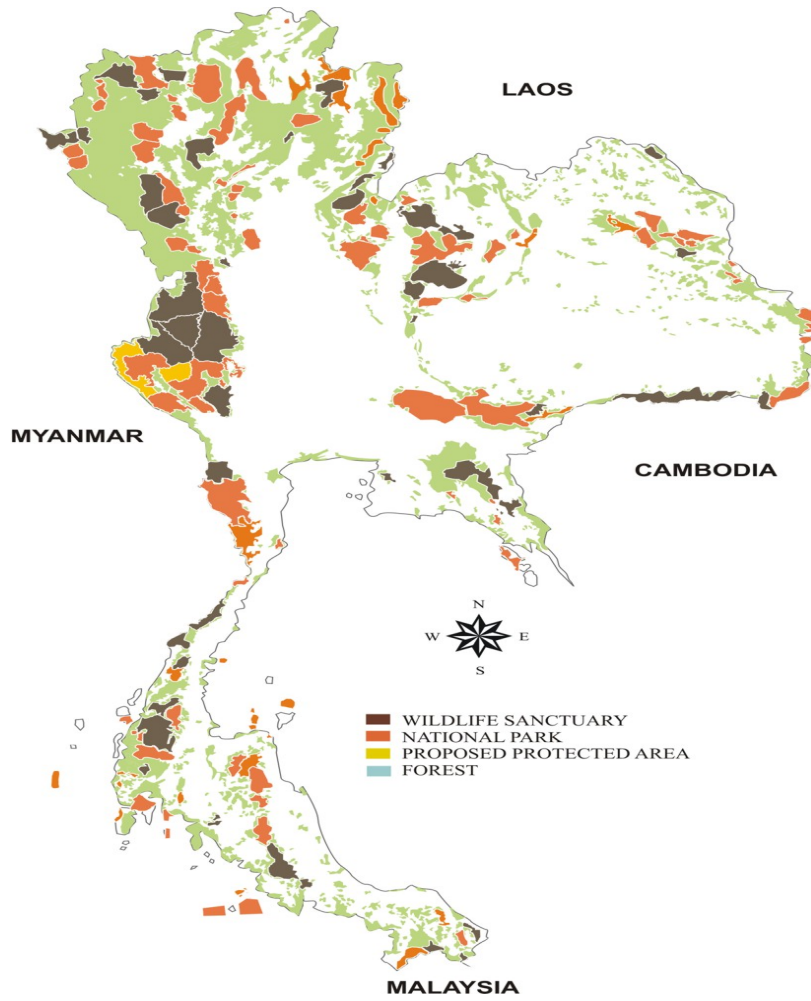
Long-term stakeholder participation

The project will provide opportunities for long-term participation of all stakeholders, with a special emphasis on the active participation of local communities. These will include:

1. Capacity building at systemic, institutional and individual PA levels – is one of the key strategic interventions of the project and will target all stakeholders that have the potential to be involved in effectively managing PAs and allocating resources (financial or otherwise) to help them to meet their objectives.
2. Communication will include the participatory development of an integrated communication strategy to provide information to all stakeholders, promote dialogue between all stakeholders, and promote access to information.

Finally, the project will be launched by a well-publicized Project Management Unit and multi-stakeholder inception workshop. This workshop will provide an opportunity to provide all stakeholders with updated information on the project as well as a basis for further consultation during the project's implementation, and will refine and confirm the work plan.

Part IV: Map – Thailand's Protected Area System



SIGNATURE PAGE

Country: Thailand

Outcome(s): UNDP Country Programme Action Plan (CPAP) 2007 – 2011 on increased capacity of national focal points in removal of barriers in pursuing local sustainable management of natural resources and environment and promotion of area-based environmental management. The aligned outcomes are:

- Efficient community work in sustainable use of local natural resources with engagement in policy and decision making processes;
- Alternative knowledge management for community learning based on indigenous livelihoods and evidence-based empirical studies in enhancing support of pro-poor policy.

Expected Output(s):

1.1 Five-year integrated national PA system management plan and financial strategy endorsed.; 1.2 Policies strengthening role of PA Committees and community participation in PA management is in place.; 1.3 Effective M&E and knowledge-based data management system is in place to assess progress and to inform policy decisions; 2.1 New PA management planning framework, planning tools, and methods in place and implemented across the PA system; 2.2 New PA business plan framework, integrating management and financial planning, including tools, and methods in place, implemented across the PA system; 2.3 Capacity building programs on effective PA management and financial planning developed and institutionalized within DNP and implemented at 5 PA demonstration sites.

3.1. Capacity built to assess and implement new financing mechanisms, including sustainable tourism plans; 3.2 Appropriate cost offsetting / sharing mechanisms in place and implemented; 4.1 Community, local government and other stakeholder support and collaboration for PA management supported through operationalization of PACs ; 4.2 Capacity developed for communities to establish and effectively operate Community PA Funds ; 4.3 Regional DNP offices and PA staff capacities enhanced to coordinate management support and budget allocations across multiple PAs in WEFCON for improved cost efficiencies

Implementing partner: Department of National Park, Wildlife and Plant Conservation

Programme Period: 2009 -2013 Programme Component: Biodiversity Project Title: PIMS 3825 Catalyzing sustainability of Thailand's Protected Area System Project ID: 00060852 Project Duration: 4 years Management Arrangement: NEX

Total budget:	US \$17,564,545
Allocated resources:	
• GEF	US \$3,364,545
• DNP Co-financing	US \$14,200,000

	<i>Project Preparation a</i>	<i>Project</i>	<i>Total</i>	<i>Agency Fee</i>
GEF financing	90,000	3,364,545	3,454,545	345,455
Co-financing	120,000	14,200,000	14,320,000	
Total	210,000	17,564,545	17,774,545	345,455


Agreed by:
Department of National Parks, Wildlife and Plant Conservation,
Ministry of Natural Resources and Environment



Mr. Jatuporn Buruspat
Director-General

Date 27.09.10

Agreed by:
United Nations Development Programme



Ms. Gwi-Yeop Son
UN Resident Coordinator
UNDP Resident Representative

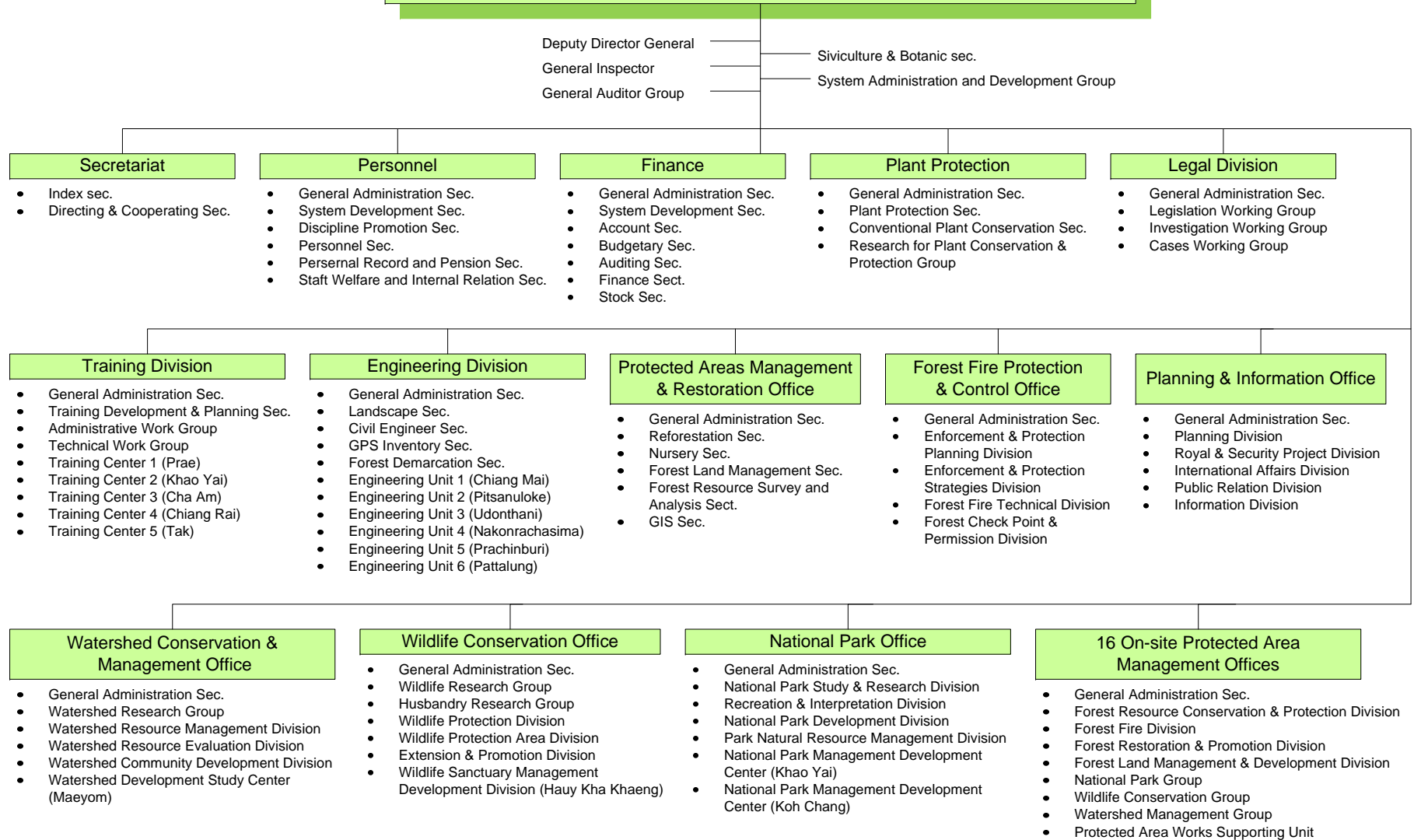
Date 27.09.10

ANNEXES

- A. Department of National Park, Wildlife and Plant Conservation (DNP) Organization Chart
- B. Brief Description of Selected Demonstration Protected Areas
- C. Selected Protected Area Management Effectiveness Tracking Tool Reports (2008)
- D. Thailand UNDP Financial Scorecard 2008 (2008)

A. Department of National Park, Wildlife and Plant Conservation (DNP) Organization Chart

Department of National Park, Wildlife, and Plant Conservation



B. Brief Descriptions of the Selected Demonstration Protected Areas

Protected Area (gazetted)	Location / Province	Hectares (Features)	Major Global Biodiversity	Authority	Management Plan in Place?	FY 2008 Budget
1. Khao Chamao – Khao Wong National Park (December 31, 1975)	Khao Chamao Sub-district in Rayong Province and Hang Meaw District in Chanthaburi Province, Thailand	8,368 ha (Forest Ecosystem, IUCN Category II)	<p>Tropical rain forest in Khao Chamao-Khao Wong National Park is a perfect home to many major plants including <i>Irvingia malayana</i>, <i>Chukasia tabularis</i>, <i>Lagerstroemia calyculata</i>, <i>Peltophorum dasyrachis</i>, <i>Markhania stipulata</i> and <i>Syzygium</i> spp. as well as wild orchids. The plants growing in dense shrub layer include <i>Calamus</i> spp., <i>Bambusa bambos</i> and different kind of fern.</p> <p>Forest habitat within the Khao Chamao-Khao Wong National Park are used by many wildlife species including Asian Elephant, Guar, Southern Serow, Bear, Common Wild Boar, Common Muntjak, Sambar Deer and Pileated Gibbon. Some bird species such as Hill Myna, red Junglefowl, Silver Pheasant, Common Iora, Black Drongo, Rufescent Prinia, Greater Cauca and Lineated Barbet still can be found in the park.</p> <p>This national park also provides important supply of water to Rayong Province. The Watershed forest originates Prasae River, lifeline of Rayong.</p>	National Parks Division, DNP	No. There was a plans but it expired approximately 5 years ago and never updated.	144,483
2. Doi Inthanon National Park (October 2, 1972)	Chiang Mai	48,240 ha (Forest Ecosystem, IUCN Category II)	<p>The mountain range is watershed that originates many rivers, as well as Ping River that fill up power generating Bhumipol Dam</p> <p>The park comprises many forest types including hill evergreen forest, deciduous dipterocarpp forest and mix deciduous forest. They are homes to important plants such as <i>Tectona grandis</i>, <i>Hopea odorata</i>, <i>Shorea obtusa</i>, <i>Dipterocarpus obtusifolius</i>, <i>Diospyros mollis</i>, <i>Pterocarpus macrocarpus</i>, <i>Terminalia alata</i> and <i>Michelia floribunda</i>. There are plenty of wild flowers such</p>	National Parks Division, DNP	Yes, but expired in 2008.	337,020

Protected Area (gazetted)	Location / Province	Hectares (Features)	Major Global Biodiversity	Authority	Management Plan in Place?	FY 2008 Budget
			<p>as <i>Vanda coerulea</i>, <i>Rhynchosstylis gigantea</i> and <i>Rhododendron moulmeinense</i>, spagnum Moss can be found at high elevation.</p> <p>The number of wildlife in the park such as Serow, Goral, Tiger, Chestnut-tailed Minla and Green-tailed sunbird.</p>			
3. Tarutao National Park (April 19, 1974)	Covers part of Thailand's Andaman Sea in Satun Province, Southern Thailand.	149,000 ha (Coastal and Marine ecosystem, an archipelago that consists of 51 islands, IUCN Category II)	<p>This area is rich in a variety of plant communities. Numerous plant species occupy different ecosystem such as <i>Hopea odorata</i>, <i>Intsia palembanica</i>, <i>Terminalia catappa</i>, <i>Thespesia populnea</i>, <i>Nypa fruticans</i> and <i>Rhizophora mucronata</i>.</p> <p>A number of wildlife are found in this area including Crab-eating Macaque, Spectacled langur, Squirrel and Island Flying Fox.</p> <p>Bird species such as Pied Hornbill, Brahminy Kite, Pacific Reef Egret, Sparrow Hawk, Pied Imperial Pigeon, Green Imperial Pigeon, Black-naped Oriole and White-bellied Sea-eagle. Many Cetaceans and nesting sea turtles, coral reef habitats.</p>	National Parks Division, DNP	Yes, a basic management plan exists but it is only being partially implemented because of funding constraints and management capacity.	275,060
4. Khlong Lan National Park (November 8, 1991)	Located in Kamphaeng Phet province.	30,000 ha (Forest Ecosystem, IUCN Category II)	<p>The park has many forest types including deciduous dipterocarp forest, mixed deciduous forest, dry evergreen forest and moist evergreen forest. Its major plants include <i>Tectona grandis</i>, <i>Shorea obtusa</i>, <i>S. siamensis</i>, <i>S. roxburghii</i>, <i>Pterocarpus macrocarpus</i>, <i>Lagerstroemia calyculata</i>, <i>Azelia xylocarpa</i>, <i>Hopea odorata</i>, <i>H. Ferrea</i>, <i>Tetrameles nudiflora</i>, <i>Toona ciliata</i>, <i>Terminalia bellirica</i> and <i>T. alata</i>. The wildlife include Sambar Deer, Common Muntjak, Common Wild Boar, Macaque, Giant Squirrel,</p>	National Parks Division, DNP	Yes, but not fully implemented due to lack of capacity and changes to Ministerial orders changing activities.	84,954

Protected Area (gazetted)	Location / Province	Hectares (Features)	Major Global Biodiversity	Authority	Management Plan in Place?	FY 2008 Budget
			Gibbon and great variety of birds such as Red-headed Trogon, Large Hawk-Cuckoo, Kalij Pheasant, Red Junglefowl, Hoopoe, Black-naped Oriole, Collared Scops-Owl and Large-tail Nightjar.			
5. Huai Kha Khaeng Wildlife Sanctuary (September 26, 1972) UNESCO Natural World Heritage site since on 13 December 1991.	This Wildlife Sanctuary lies mainly in Uthai Thani Province, but extends into Tak Province. It is located at the southern end of the Dawna Range, about 300 kilometers (km) north- west of Bangkok, Thailand.	278,000 ha (Forest Ecosystem, IUCN Category II)	Huai Kha Khaeng Wildlife Sanctuary is one of the most outstanding conservation areas in mainland Southeast Asia on account of its largely undisturbed primeval forest. It contains one of the last important areas of lowland riverine forest remaining in Thailand, which supports the last viable populations of several riparian bird species in the country. These include green peafowl, lesser fishing eagle, red-headed vulture and crested kingfisher. It is also the most important area in Thailand for banteng and gaur. The combined area may be the only conservation area in Thailand large enough to offer long-term prospects for the survival of many large mammal species. The site is biogeographically unique, capable of sustaining flora and fauna indefinitely, of exceptional natural beauty and scientific value, and includes very high biological diversity. Being located in a transition zone between the tropics and sub-tropics and, perhaps, because it was a Pleistocene refugium, a number of species of birds and mammals are found to be sympatric here. Few other areas of dry tropical forest in the region are as large, as well protected or as pristine. The complex also contains outstanding examples of the rock formations which distinguish the western edge of mainland Southeast Asia from the more stable continental core, and is probably one of the best modern examples of the impact of the Pleistocene epoch on the distribution and dispersal of Southeast Asian fauna. The impact of geological activity on an area of pristine dry tropical forest is	Wildlife Conservation Division, DNP	Yes.	339,816

Protected Area (gazetted)	Location / Province	Hectares (Features)	Major Global Biodiversity	Authority	Management Plan in Place?	FY 2008 Budget
			exemplified better than elsewhere.			

C. Selected Protected Area Management Effectiveness Tracking Tool Reports (2008)

ANNEX E: THAILAND METT SCORECARDS FOR 5 DEMONSTRATION SITES (2008)

Section One: Project General Information

1. Project Name: **Catalyzing Sustainability of Thailand’s Protected Area System**
2. Project Type (MSP or FSP): FSP
3. Project ID (GEF): 3825
4. Project ID (IA): UNDP
5. Implementing Agency: Department of National Parks, Wildlife, and Plant Conservation, Ministry of Natural Resources and Environment
6. Country(ies): Thailand

Name of reviewers completing tracking tool and completion dates:

7. Project duration:
Actual _____ years

8. Lead Project
- UNDP-Thailand
- National Park, Wildlife
Department
- Office of Natural
Environment Policy and Planning

	Name	Title	Agency
Work Program Inclusion			
Project Mid-term			
Final Evaluation/project completion			

Planned _____ years

Executing Agency (ies):
and Plant Conservation
Resources and

9. GEF Strategic Program:

- Sustainable Financing of Protected Area Systems at the National Level (SP 1)
- Increasing Representation of Effectively Managed Marine PAs in PA Systems (SP 2)
- Strengthening Terrestrial PA Networks (SP 3)

10. Project coverage in hectares

Targets and Timeframe	Foreseen at project start	Achievement at Mid-term Evaluation of Project	Achievement at Final Evaluation of Project
Total Extent in hectares of protected areas targeted by the project by biome type			
Forest ecosystems	513,608 hectares		
Coastal & Marine ecosystems	149,000 hectares		

Please complete the table below for the protected areas that are the target of the GEF intervention. Use NA for not applicable.

Name of Protected Area	Is this a new protected area? Please answer yes or no.	Area in Hectares— please specify biome type	Global designation or priority lists (E.g., Biosphere Reserve, World Heritage site, Ramsar site, WWF Global 200, etc.)	Local Designation of Protected Area (E.g, indigenous reserve, private reserve, etc.)	IUCN Category for each Protected Area ⁴¹					
					I	II	III	IV	V	VI
1. Khao Chamao – Khao Wong National Park	No	8,368 ha --- Forest Ecosystem		National Park		✓				
2. Doi Inthanon National Park	No	48,240 ha --- Forest Ecosystem		National Park		✓				
3. Tarutao National Park	No	149,000 ha --- Coastal and Marine ecosystem, an archipelago that consists of 51 islands		National Park		✓				
4. Khlong Lan National Park	No	30,000 ha --- Forest Ecosystem		National Park		✓				
5. Huai Kha Khaeng Wildlife Sanctuary	No	278,000 ha --- Forest Ecosystem	UNESCO designated as a Natural World Heritage site since on 13 December 1991	Wildlife Sanctuary		✓				

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- I. Strict Nature Reserve/Wilderness Area: managed mainly for science or wilderness protection
- II. National Park: managed mainly for ecosystem protection and recreation
- III. Natural Monument: managed mainly for conservation of specific natural features
- IV. Habitat/Species Management Area: managed mainly for conservation through management intervention
- V. Protected Landscape/Seascape: managed mainly for landscape/seascape protection and recreation
- VI. Managed Resource Protected Area: managed mainly for the sustainable use of natural ecosystems

Section Two: Management Effectiveness Tracking Tool for Protected Areas

Site : Khao Chaomao – Khao Wong National Park

Reporting Progress at Protected Area Sites: Data Sheet 1

Name, affiliation and contact details for person responsible for completing the METT (email etc.)		Hirason Horuodono (hirason@starlingresources.com) Sitanon Jesdapipat (jsitanon@yahoo.com) Sermpan Sathima		
Date assessment carried out	November 2008			
Name of protected area	Khao Chaomao – Khao Wong National Park			
WDPA site code (these codes can be found on www.unep-wcmc.org/wdpa/)				
Designations	National SEPA	IUCN Category ✓(Category 2)	International (please also complete sheet overleaf)	
Country	Thailand			
Location of protected area (province and if possible map reference)		Protected area located in the area of Khao Chamao Sub-district in Rayong Province and Hang Meaw District in Chanthaburi Province, Thailand		
Date of establishment	Gazetted on December 31, 1975			
Ownership details (please tick)	State ✓	Private	Community	Other
Management Authority	Khao Chamao-Khao Wong National Park - Department of National Park ,Wildlife and Plant Conservation (DNP)			
Size of protected area (ha)	8,368 ha			
Number of staff	Permanent 15		Temporary 75	
Annual budget (US\$) – excluding civil servant salary costs	Recurrent (operational) funds 5,102,172 baht		Project or other supplementary funds	
What are the main values for which the area is designated	<p>Tropical rain forest in Khao Chamao-Khao Wong National Park is a perfect home to many major plants including <i>Irvingia malayana</i>, <i>Chukasia tabularis</i>, <i>Lagerstroemia calyculata</i>, <i>Peltophorum dasyrachis</i>, <i>Markhania stipulata</i> and <i>Syzygium</i> spp. as well as wild orchids. The plants growing in dense shrub layer include <i>Calamus</i> spp., <i>Bambusa bambos</i> and different kind of fern.</p> <p>Forest habitat within the Khao Chamao-Khao Wong National Park are used by many wildlife species including Asian Elephant, Guar, Southern Serow, Bear, Common Wild Boar, Common Muntjak, Sambar Deer and Pileated Gibbon. Some bird species such as Hill Myna, red Junglefowl, Silver Pheasant, Common Iora, Black Drongo, Rufescent Prinia, Greater Cauca and Lineated Barbet still can be found in the park.</p> <p>This national park also provides important supply of water to Rayong Province. The Watershed forest originates Prasae River, lifeline of Rayong.</p>			

List the two primary protected area management objectives				
Management objective 1		Nature Conservation/protection		
Management objective 2		Recreation and Tourism		
No. of people involved in completing assessment				4
Including: (tick boxes)	PA manager <input checked="" type="checkbox"/>	PA staff <input checked="" type="checkbox"/>	Other PA agency staff <input type="checkbox"/>	NGO <input type="checkbox"/>
	Local community <input type="checkbox"/>	Donors <input type="checkbox"/>	External experts <input checked="" type="checkbox"/>	Other <input type="checkbox"/>
Please note if assessment was carried out in association with a particular project, on behalf of an organisation or donor.			The assessment was carried out in association with Project Preparation Phase - Catalyzing Sustainability of Thailand's Protected Area System	

Information on International Designations			
UNESCO World Heritage site (see: whc.unesco.org/en/list)			
Date listed	Site name	Site area	Geographical co-ordinates
Criteria for designation (i.e. criteria i to x)			
Statement of Outstanding Universal Value			
Ramsar site (see: www.wetlands.org/RSDB/)			
Date listed	Site name	Site area	Geographical number
Reason for Designation (see Ramsar Information Sheet)			
UNESCO Man and Biosphere Reserves (see: www.unesco.org/mab/wnbrs.shtml)			
Date listed	Site name	Site area Total: Core: Buffer: Transition:	Geographical co-ordinates
Criteria for designation			
Fulfilment of three functions of MAB (conservation, development and logistic support.)			

Please list other designations (i.e. ASEAN Heritage, Natura 2000) and any supporting information below: Not applicable

Name:

Detail:

Protected Areas Threats: Data Sheet 2

Please tick all relevant existing threats as either of high, medium or low significance. Threats ranked as of **high** significance are those which are seriously degrading values; **medium** are those threats having some negative impact and those characterised as **low** are threats which are present but not seriously impacting values or **N/A** where the threat is not present or not applicable in the protected area.

1. Residential and commercial development within a protected area

Threats from human settlements or other non-agricultural land uses with a substantial footprint

High	Medium	Low	N/A	
			✓	1.1 Housing and settlement
			✓	1.2 Commercial and industrial areas
		✓		1.3 Tourism and recreation infrastructure

2. Agriculture and aquaculture within a protected area

Threats from farming and grazing as a result of agricultural expansion and intensification, including silviculture, mariculture and aquaculture

High	Medium	Low	N/A	
		✓		2.1 Annual and perennial non-timber crop cultivation
			✓	2.1a Drug cultivation
		✓		2.2 Wood and pulp plantations
		✓		2.3 Livestock farming and grazing
			✓	2.4 Marine and freshwater aquaculture

3. Energy production and mining within a protected area

Threats from production of non-biological resources

High	Medium	Low	N/A	
			✓	3.1 Oil and gas drilling
			✓	3.2 Mining and quarrying
			✓	3.3 Energy generation, including from hydropower dams

4. Transportation and service corridors within a protected area

Threats from long narrow transport corridors and the vehicles that use them including associated wildlife mortality

High	Medium	Low	N/A	
		✓		4.1 Roads and railroads (include road-killed animals)
		✓		4.2 Utility and service lines (e.g. electricity cables, telephone lines,)
			✓	4.3 Shipping lanes and canals
			✓	4.4 Flight paths

5. Biological resource use and harm within a protected area

Threats from consumptive use of "wild" biological resources including both deliberate and unintentional harvesting effects; also persecution or control of specific species (note this includes hunting and killing of animals)

High	Medium	Low	N/A	
		✓		5.1 Hunting, killing and collecting terrestrial animals (including killing of animals as a result of human/wildlife conflict)
		✓		5.2 Gathering terrestrial plants or plant products (non-timber)
		✓		5.3 Logging and wood harvesting
			✓	5.4 Fishing, killing and harvesting aquatic resources

6. Human intrusions and disturbance within a protected area

Threats from human activities that alter, destroy or disturb habitats and species associated with non-consumptive uses of biological resources

High	Medium	Low	N/A	
	✓			6.1 Recreational activities and tourism
			✓	6.2 War, civil unrest and military exercises
			✓	6.3 Research, education and other work-related activities in protected areas
			✓	6.4 Activities of protected area managers (e.g. construction or vehicle use, artificial watering points and dams)
			✓	6.5 Deliberate vandalism, destructive activities or threats to protected area staff and visitors

7. Natural system modifications

Threats from other actions that convert or degrade habitat or change the way the ecosystem functions

High	Medium	Low	N/A	
		✓		7.1 Fire and fire suppression (including arson)
			✓	7.2 Dams, hydrological modification and water management/use
			✓	7.3a Increased fragmentation within protected area
			✓	7.3b Isolation from other natural habitat (e.g. deforestation, dams without effective aquatic wildlife passages)
			✓	7.3c Other 'edge effects' on park values
		✓		7.3d Loss of keystone species (e.g. top predators, pollinators etc)

8. Invasive and other problematic species and genes

Threats from terrestrial and aquatic non-native and native plants, animals, pathogens/microbes or genetic materials that have or are predicted to have harmful effects on biodiversity following introduction, spread and/or increase

High	Medium	Low	N/A	
		✓		8.1 Invasive non-native/alien plants (weeds)
		✓		8.1a Invasive non-native/alien animals
			✓	8.1b Pathogens (non-native or native but creating new/increased problems)
			✓	8.2 Introduced genetic material (e.g. genetically modified organisms)

9. Pollution entering or generated within protected area

Threats from introduction of exotic and/or excess materials or energy from point and non-point sources

High	Medium	Low	N/A	
			✓	9.1 Household sewage and urban waste water
		✓		9.1a Sewage and waste water from protected area facilities (e.g. toilets, hotels etc)
			✓	9.2 Industrial, mining and military effluents and discharges (e.g. poor water quality discharge from dams, e.g. unnatural temperatures, de-oxygenated, other pollution)
			✓	9.3 Agricultural and forestry effluents (e.g. excess fertilizers or pesticides)
	✓			9.4 Garbage and solid waste
			✓	9.5 Air-borne pollutants
			✓	9.6 Excess energy (e.g. heat pollution, lights etc)

10. Geological events

Geological events may be part of natural disturbance regimes in many ecosystems. But they can be a threat if a species or habitat is damaged and has lost its resilience and is vulnerable to disturbance. Management capacity to respond to some of these changes may be limited.

High	Medium	Low	N/A	
			✓	10.1 Volcanoes
			✓	10.2 Earthquakes/Tsunamis
			✓	10.3 Avalanches/ Landslides
			✓	10.4 Erosion and siltation/ deposition (e.g. shoreline or riverbed changes)

11. Climate change and severe weather

Threats from long-term climatic changes which may be linked to global warming and other severe climatic/weather events outside of the natural range of variation

High	Medium	Low	N/A	
		✓		11.1 Habitat shifting and alteration
		✓		11.2 Droughts
		✓		11.3 Temperature extremes
			✓	11.4 Storms and flooding

12. Specific cultural and social threats

High	Medium	Low	N/A	
			✓	12.1 Loss of cultural links, traditional knowledge and/or management practices
			✓	12.2 Natural deterioration of important cultural site values
			✓	12.3 Destruction of cultural heritage buildings, gardens, sites etc

Assessment Form

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
1. Legal status Does the protected area have legal status (or in the case of private reserves is covered by a covenant or similar)? <i>Context</i>	The protected area is not gazetted/covenanted	0		1. This PA was declared as a National Park in December 31, 1975 and becoming Thailand's 13th National Park. This park covers an area of 8,368 ha.	
	There is agreement that the protected area should be gazetted/covenanted but the process has not yet begun	1			
	The protected area is in the process of being gazetted/covenanted but the process is still incomplete (includes sites designated under international conventions, such as Ramsar, or local/traditional law such as community conserved areas, which do not yet have national legal status or covenant)	2			
	The protected area has been formally gazetted/covenanted	3	✓		
2. Protected area regulations Are appropriate regulations in place to control land use and activities (e.g. hunting)? <i>Planning</i>	There are no regulations for controlling land use and activities in the protected area	0		1. The National Park Regulation does not allow logging and clearing, residence, hunting, collecting forest product, mining within the park. People only are allowed entering the park as a visitor/tourism. 2. There are some agricultures encroached the park boundaries, but that was happen before demarcation. These agricultures keep exist but not allowed to be expanded anymore. 3. Collecting mushroom by local people for subsistence within the park actually is not allowed by the law but still allowed as long as the local people reported to the ranger.	1. Ranger in the 7 Stations will keep controlling inappropriate land use and activities in the park. 2. No more additional agriculture allowed in the park.
	Some regulations for controlling land use and activities in the protected area exist but these are major weaknesses	1			
	Regulations for controlling land use and activities in the protected area exist but there are some weaknesses or gaps	2	✓		
	Regulations for controlling inappropriate land use and activities in the protected area exist and provide an excellent basis for management	3			
3. Law enforcement Can staff (i.e. those with responsibility for managing the site) enforce protected area	The staff have no effective capacity/resources to enforce protected area legislation and regulations	0		1. Rangers hired will get training on the Job. There is no specific level of education required to become a ranger, however the contractor rangers must be passed the exam to become a civil servant.	1. The capacity of ranger's is maintained continuously through regular exercise / training.
	There are major deficiencies in staff capacity/resources to enforce protected area legislation and regulations (e.g. lack of skills, no patrol budget, lack of institutional support)	1			
	The staff have acceptable capacity/resources to enforce protected area legislation and regulations but some deficiencies remain	2	✓		

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
rules well enough? <i>Input</i>	The staff have excellent capacity/resources to enforce protected area legislation and regulations	3		2. If there are people arrested, they will be transferred to the police, and the police will process them.	
4. Protected area objectives Is management undertaken according to agreed objectives? <i>Planning</i>	No firm objectives have been agreed for the protected area	0		1. The main objectives are nature protection, researches and education. 2. Current activities are mainly for protecting the forest and tourism.	
	The protected area has agreed objectives, but is not managed according to these objectives	1			
	The protected area has agreed objectives, but is only partially managed according to these objectives	2	✓		
	The protected area has agreed objectives and is managed to meet these objectives	3			
5. Protected area design Is the protected area the right size and shape to protect species, habitats, ecological processes and water catchments of key conservation concern? <i>Planning</i>	Inadequacies in protected area design mean achieving the major objectives of the protected area is very difficult	0		1. There is no zonation inside the park. Zoning exist on the Master Plan but not implemented. 2. Big wildlife mammals migrate in and out the park. There are some people stay and create farming in the elephant migration area, thus conflict between human and elephant arise when elephant migrate.	1. Elephant migration corridors consired to be conserved as well.
	Inadequacies in protected area design mean that achievement of major objectives is difficult but some mitigating actions are being taken (e.g. agreements with adjacent land owners for wildlife corridors or introduction of appropriate catchment management)	1			
	Protected area design is not significantly constraining achievement of objectives, but could be improved (e.g. with respect to larger scale ecological processes)	2	✓		
	Protected area design helps achievement of objectives; it is appropriate for species and habitat conservation; and maintains ecological processes such as surface and groundwater flows at a catchment scale, natural disturbance patterns etc	3			
6. Protected area boundary demarcation Is the boundary known and demarcated? <i>Process</i>	The boundary of the protected area is not known by the management authority or local residents/neighbouring land users	0		1. The Park is demarcated well using milestones and well known by local residents.	1. The milestones need to be maintained, but that's not urgent for now because there is a better understanding already among stakeholder about the boundaries of the park.
	The boundary of the protected area is known by the management authority but is not known by local residents/neighbouring land users	1			
	The boundary of the protected area is known by both the management authority and local residents/neighbouring land users but is not appropriately demarcated	2			
	The boundary of the protected area is known by the management authority and local residents/neighbouring land users and is appropriately demarcated	3	✓		
7. Management plan Is there a management plan and is it being	There is no management plan for the protected area	0	✓	1. There is no management plan at the moment. There was a management plans for this park in the past but has been expired for several years and	1. A new management plan is needed.
	A management plan is being prepared or has been prepared but is not being implemented	1			

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
implemented? <i>Planning</i>	A management plan exists but it is only being partially implemented because of funding constraints or other problems	2		that plan was also not effectively implemented. Many thing still need to do refer to that expired management plan. 2. So far, the superintendent create a strategic plan that used as a guidance in managing the park but it also does not efectively implemented.	
	A management plan exists and is being implemented	3			
Additional points: <i>Planning</i>					
7a. Planning process	The planning process allows adequate opportunity for key stakeholders to influence the management plan	+1			
7b. Planning process	There is an established schedule and process for periodic review and updating of the management plan	+1			
7c. Planning process	The results of monitoring, research and evaluation are routinely incorporated into planning	+1			
8. Regular work plan Is there a regular work plan and is it being implemented <i>Planning/Outputs</i>	No regular work plan exists	0		1. Regular Workplan is yearly basis. 2. Currently, regular workplan design based on potential budget and budget criteria received from Central DNP. Budget is designed for office operational, ecotourism and protection. The park potentially proposes project/activities that will be funded from tourism revenue. 3. All activities usually are implemented.	1. Create regular workplan based on management plan
	A regular work plan exists but few of the activities are implemented	1			
	A regular work plan exists and many activities are implemented	2			
	A regular work plan exists and all activities are implemented	3	✓		
9. Resource inventory Do you have enough information to manage the area?	There is little or no information available on the critical habitats, species and cultural values of the protected area	0		1. A comprehensive reasearch has been done once when the old management plan was made. There is no survey/research done after that.	1. Collecting information concerning on the critical habitats, species and cultural values of the protected area.
	Information on the critical habitats, species, ecological processes and cultural values of the protected area is not sufficient to support planning and decision making	1			

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
<i>Input</i>	Information on the critical habitats, species, ecological processes and cultural values of the protected area is sufficient for most key areas of planning and decision making	2	✓		2. Do resources survey (but this could be happen if there is outsource can help to do and fund it. The park does not have enough resources to do it and that's not park priority at the moment).
	Information on the critical habitats, species, ecological processes and cultural values of the protected area is sufficient to support all areas of planning and decision making	3			
10. Protection systems	Protection systems (patrols, permits etc) do not exist or are not effective in controlling access/resource use	0		1. The authority is under the Khao Chamao-Khao Wong National Park. 2. Regular patrol conducted by rangers twice a month.	1. Continue the regular patrol.
Are systems in place to control access/resource use in the protected area? <i>Process/Outcome</i>	Protection systems are only partially effective in controlling access/resource use	1			
	Protection systems are moderately effective in controlling access/resource use	2			
	Protection systems are largely or wholly effective in controlling access/resource use	3	✓		
11. Research	There is no survey or research work taking place in the protected area	0	✓	1. There is no survey or research work taking place in the protected area at the moment. Inventory assessment is doing by rangers during patrol along the boundaries, but that's not the real survey.	1. Survey/Monitoring activities (But this could be happen if there is outsource can help to do and fund it. The park does not have enough resources to do it and that's not park priority at the moment)
Is there a programme of management-orientated survey and research work? <i>Process</i>	There is a small amount of survey and research work but it is not directed towards the needs of protected area management	1			
	There is considerable survey and research work but it is not directed towards the needs of protected area management	2			
	There is a comprehensive, integrated programme of survey and research work, which is relevant to management needs	3			
12. Resource management	Active resource management is not being undertaken	0		1. There is a case where people can release wildlife animal into the park even that species probably originally from out this area (No screening).	1. Capacity building for active management of resource use.
Is active resource management being undertaken? <i>Process</i>	Very few of the requirements for active management of critical habitats, species, ecological processes and cultural values are being implemented	1			
	Many of the requirements for active management of critical habitats, species, ecological processes and, cultural values are being implemented but some key issues are not being addressed	2	✓		
	Requirements for active management of critical habitats, species, ecological processes and, cultural values are being substantially or fully implemented	3			
13. Staff numbers	There are no staff	0		1. For the current task and responsibilities, the number of staff	1. Need additional 7 to 10 staffs and also additional
	Staff numbers are inadequate for critical management activities	1			

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
Are there enough people employed to manage the protected area? <i>Inputs</i>	Staff numbers are below optimum level for critical management activities	2	✓	at the moment is enough. But for more effective management, the park still needs more staffs.	budget
	Staff numbers are adequate for the management needs of the protected area	3			
14. Staff training Are staff adequately trained to fulfill management objectives? <i>Inputs/Process</i>	Staff lack the skills needed for protected area management	0		1. New staff will get training on the job. 2. Training such as cooking, room services, other related tourism services sometimes provided by Central DNP.	1. Capacity building of the staffs
	Staff training and skills are low relative to the needs of the protected area	1			
	Staff training and skills are adequate, but could be further improved to fully achieve the objectives of management	2	✓		
	Staff training and skills are aligned with the management needs of the protected area	3			
15. Current budget Is the current budget sufficient? <i>Inputs</i>	There is no budget for management of the protected area	0		1. The budget is limited 2. Fiscal year start on October to September, but disbursement usually on December and this create the cash flow problem. The gaps personally cover by manager by getting loan from the credit union.	1. Propose budget base on actual need.
	The available budget is inadequate for basic management needs and presents a serious constraint to the capacity to manage	1	✓		
	The available budget is acceptable but could be further improved to fully achieve effective management	2			
	The available budget is sufficient and meets the full management needs of the protected area	3			
16. Security of budget Is the budget secure? <i>Inputs</i>	There is no secure budget for the protected area and management is wholly reliant on outside or highly variable funding	0		1. Government allocate budget for National Park every year.	
	There is very little secure budget and the protected area could not function adequately without outside funding	1	✓		
	There is a reasonably secure core budget for regular operation of the protected area but many innovations and initiatives are reliant on outside funding	2			
	There is a secure budget for the protected area and its management needs	3			
17. Management of budget Is the budget managed	Budget management is very poor and significantly undermines effectiveness (e.g. late release of budget in financial year)	0		1. Budget managed by the park itself.	1. Prepare budget according to management needs.
	Budget management is poor and constrains effectiveness	1			
	Budget management is adequate but could be improved	2	✓		

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
to meet critical management needs? <i>Process</i>	Budget management is excellent and meets management needs	3			
18. Equipment Is equipment sufficient for management needs? <i>Input</i>	There are little or no equipment and facilities for management needs	0		1. Need more GPS, the park only have one GPS.	1. Reguest GPS to Central DNP
	There are some equipment and facilities but these are inadequate for most management needs	1			
	There are equipment and facilities, but still some gaps that constrain management	2	✓		
	There are adequate equipment and facilities	3			
19. Maintenance of equipment Is equipment adequately maintained? <i>Process</i>	There is little or no maintenance of equipment and facilities	0		1. There is budget for maintenance of equipments.	
	There is some <i>ad hoc</i> maintenance of equipment and facilities	1			
	There is basic maintenance of equipment and facilities	2			
	Equipment and facilities are well maintained	3	✓		
20. Education and awareness Is there a planned education programme linked to the objectives and needs? <i>Process</i>	There is no education and awareness programme	0		1. There is no regular education and awareness activities done by the park. 2. The park eventually collaborates with corporate company in providing education and awareness for youth/student. This activity as a part of corporate social responsibility programmed by the company.	1. Develop education and awareness programme. 2. There is an idea to develop learning center.
	There is a limited and <i>ad hoc</i> education and awareness programme	1	✓		
	There is an education and awareness programme but it only partly meets needs and could be improved	2			
	There is an appropriate and fully implemented education and awareness programme	3			
21. Planning for land and water use Does land and water use planning recognise the protected area and	Adjacent land and water use planning does not take into account the needs of the protected area and activities/policies are detrimental to the survival of the area	0		1. Land and water use planning takes into account long term development in Khao Chaomao – Khao Wong National Park.	
	Adjacent land and water use planning does not takes into account the long term needs of the protected area, but activities are not detrimental the area	1			

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
aid the achievement of objectives? <i>Planning</i>	Adjacent land and water use planning partially takes into account the long term needs of the protected area	2			
	Adjacent land and water use planning fully takes into account the long term needs of the protected area	3	✓		
Additional points: Land and water planning					
21a: Land and water planning for habitat conservation	Planning and management in the catchment or landscape containing the protected area incorporates provision for adequate environmental conditions (e.g. volume, quality and timing of water flow, air pollution levels etc) to sustain relevant habitats.	+1			
21b: Land and water planning for connectivity	Management of corridors linking the protected area provides for wildlife passage to key habitats outside the protected area (e.g. to allow migratory fish to travel between freshwater spawning sites and the sea, or to allow animal migration).	+1			
21c: Land and water planning for ecosystem services & species conservation	"Planning addresses ecosystem-specific needs and/or the needs of particular species of concern at an ecosystem scale (e.g. volume, quality and timing of freshwater flow to sustain particular species, fire management to maintain savannah habitats etc.)"	+1			
22. State and commercial neighbours	There is no contact between managers and neighbouring official or corporate land and water users	0		1. There is no regular and formal contact/communication between the park with the stakeholders, but informal communication done by superintendent with stakeholders. 2. PAC (Protected Area Advisory Committee) that establish with representative from stakeholders actually exists for this park but unfortunately its not functioning. No activities at all.	1. Improvement of communication to stakeholders. 2. Activated the PAC
Is there co-operation with adjacent land and water users? <i>Process</i>	There is contact between managers and neighbouring official or corporate land and water users but little or no cooperation	1	✓		
	There is contact between managers and neighbouring official or corporate land and water users, but only some co-operation	2			
	There is regular contact between managers and neighbouring official or corporate land and water users, and substantial co-operation on management	3			
23. Indigenous people	Indigenous and traditional peoples have no input into decisions relating to the management of the protected area	0	✓	1. There is indigenous people who used to well known having skill in handling the elephant, but now have becoming common local people.	
Do indigenous and traditional peoples resident or regularly using the protected area have input to	Indigenous and traditional peoples have some input into discussions relating to management but no direct role in management	1			
	Indigenous and traditional peoples directly contribute to some relevant decisions relating to management but their involvement could be improved	2			

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
management decisions? <i>Process</i>	Indigenous and traditional peoples directly participate in all relevant decisions relating to management, e.g. co-management	3			
24. Local communities Do local communities resident or near the protected area have input to management decisions? <i>Process</i>	Local communities have no input into decisions relating to the management of the protected area	0	✓	1. Community representatives are also members of PAC that suppose to provide input to management. But PAC doesn't work.	1. Considered input from local communities.
	Local communities have some input into discussions relating to management but no direct role in management	1			
	Local communities directly contribute to some relevant decisions relating to management but their involvement could be improved	2			
	Local communities directly participate in all relevant decisions relating to management, e.g. co-management	3			
Additional points <i>Local communities/indigenous people</i>					
24 a. Impact on communities	There is open communication and trust between local and/or indigenous people, stakeholders and protected area managers	+1			
24b. Impact on communities	Programmes to enhance community welfare, while conserving protected area resources, are being implemented	+1			
24c. Impact on communities	Local and/or indigenous people actively support the protected area	+1			
25. Economic benefit Is the protected area providing economic benefits to local communities, e.g. income, employment, payment for environmental services? <i>Outcomes</i>	The protected area does not deliver any economic benefits to local communities	0		1. Local communities could sell their product to the tourists who come to this national park. Its realized local government that increasing number of tourism in this park also increase the income of some local community.	1. Community development to increase economic benefit.
	Potential economic benefits are recognised and plans to realise these are being developed	1			
	There is some flow of economic benefits to local communities	2	✓		
	There is a major flow of economic benefits to local communities from activities associated with the protected area	3			
26. Monitoring and evaluation Are management activities monitored against performance?	There is no monitoring and evaluation in the protected area	0	✓	1. The regional office should do evaluation to this park, but that's not happen.	1. Conduct monitoring and evaluation for management activities.
	There is some <i>ad hoc</i> monitoring and evaluation, but no overall strategy and/or no regular collection of results	1			
	There is an agreed and implemented monitoring and evaluation system but results do not feed back into management	2			

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
<i>Planning/Process</i>	A good monitoring and evaluation system exists, is well implemented and used in adaptive management	3			
27. Visitor facilities	There are no visitor facilities and services despite an identified need	0		1. Visitor facilities are adequate regarding infrastructure and accommodation.	1. There is an idea to develop learning center for tourist and other stakeholders.
Are visitor facilities adequate?	Visitor facilities and services are inappropriate for current levels of visitation	1			
<i>Outputs</i>	Visitor facilities and services are adequate for current levels of visitation but could be improved	2	✓		
	Visitor facilities and services are excellent for current levels of visitation	3			
28. Commercial tourism operators	There is little or no contact between managers and tourism operators using the protected area	0		1. Limited contact between park staffs to commercial tourism operator.	1. Collaborate with tourism operator to improve tourism and conservation.
Do commercial tour operators contribute to protected area management?	There is contact between managers and tourism operators but this is largely confined to administrative or regulatory matters	1	✓		
	There is limited co-operation between managers and tourism operators to enhance visitor experiences and maintain protected area values	2			
	There is good co-operation between managers and tourism operators to enhance visitor experiences, and maintain protected area values	3			
<i>Process</i>					
29. Fees	Although fees are theoretically applied, they are not collected	0		1. Entrance fee, fine and services fee are implemented. 2. All fee revenue go to the Central DNP in Bangkok	1. Entrance fee, fine and services fee are will be keep implemented. 2. Request more revenue go back to this park.
If fees (i.e. entry fees or fines) are applied, do they help protected area management?	Fees are collected, but make no contribution to the protected area or its environs	1			
	Fees are collected, and make some contribution to the protected area and its environs	2			
	Fees are collected and make a substantial contribution to the protected area and its environs	3	✓		
<i>Inputs/Process</i>					
30. Condition of values	Many important biodiversity, ecological or cultural values are being severely degraded	0		1. It's believed that there is no degradation on biological diversity. Moreover the forest seems better than before. 2. It's realized that solid waste from tourism could be a problem for ecosystem in the future when the	
What is the condition of the important values of the protected area as compared to when it was first designated?	Some biodiversity, ecological or cultural values are being severely degraded	1			
	Some biodiversity, ecological and cultural values are being partially degraded but the most important values have not been significantly impacted	2			

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
<i>Outcomes</i>	Biodiversity, ecological and cultural values are predominantly intact	3	✓	number of tourism increase.	
<i>Additional Points: Condition of values</i>					
30a: Condition of values	The assessment of the condition of values is based on research and/or monitoring	+1			
30b: Condition of values	Specific management programmes are being implemented to address threats to biodiversity, ecological and cultural values	+1			
30c: Condition of values	Activities to maintain key biodiversity, ecological and cultural values are a routine part of park management	+1			
TOTAL SCORE			53		

Site : Doi Inthanon National Park

Reporting Progress at Protected Area Sites: Data Sheet 1

Name, affiliation and contact details for person responsible for completing the METT (email etc.)		Hirason Horuodono (hirason@starlingresources.com) Man Khanthong (Vice Superintendent Doi Inthanon NP)		
Date assessment carried out		November 2008		
Name of protected area		Doi Inthanon National Park		
WDPA site code (these codes can be found on www.unep-wcmc.org/wdpa/)				
Designations	National SEPA	IUCN Category ✓(Category 2)	International (please also complete sheet overleaf)	
Country	Thailand			
Location of protected area (province and if possible map reference)		Chiang Mai, Thailand		
Date of establishment	Thailand Government has decided to declare as a National Park on October 7, 1959, and gazetted on October 2, 1972			
Ownership details (please tick)	State ✓	Private	Community	Other
Management Authority	Doi Inthanon National Park - Department of National Park ,Wildlife and Plant Conservation (DNP)			
Size of protected area (ha)	48,240 ha			
Number of staff	Permanent 74		Temporary 124	
Annual budget (US\$) – excluding civil servant staff salary costs	Recurrent (operational) funds 11,901,250 baht (In fiscal year 2008, this park get 6,435,950 baht for operational, 1,951,100 baht for ecotourism, 214,200 baht for forest improvement and 3,300,000 baht which come from 10 % total revenue from this park)		Project or other supplementary funds	
What are the main values for which the area is designated	<p>1. The mountain range is watershed that originates many rivers, as well as Ping River that fill up power generating Bhumipol Dam</p> <p>2. The park comprises many forest types including hill evergreen forest, deciduous dipterocarpp forest and mix deciduous forest. They are homes to important plants such as <i>Tectona grandis</i>, <i>Hopea odorata</i>, <i>Shorea obtusa</i>, <i>Dipterocarpus obtusifolius</i>, <i>Diospyros mollis</i>, <i>Pterocarpus macrocarpus</i>, <i>Terminalia alata</i> and <i>Michelia floribunda</i>. There are plenty of wild flowers such as <i>Vanda coerulea</i>, <i>Rhynchosyilis gigantea</i> and <i>Rhododendron moulmeinense</i>, spagnum Moss can be found at high elevation.</p> <p>3. The number of wildlife in the park such as Serow, Goral, Tiger, Chestnut-tailed Minla and Green-tailed sunbird.</p>			

List the two primary protected area management objectives				
Management objective 1	Forest Conservation			
Management objective 2	Recreation and Tourism			
No. of people involved in completing assessment			4	
Including: (tick boxes)	PA manager <input type="checkbox"/>	PA staff <input checked="" type="checkbox"/>	Other PA agency staff <input type="checkbox"/>	NGO <input type="checkbox"/>
	Local community <input type="checkbox"/>	Donors <input type="checkbox"/>	External experts <input type="checkbox"/>	Other <input checked="" type="checkbox"/>
Please note if assessment was carried out in association with a particular project, on behalf of an organisation or donor.			The assessment was carried out in association with Project Preparation Phase - Catalyzing Sustainability of Thailand's Protected Area System	

Information on International Designations			
UNESCO World Heritage site (see: whc.unesco.org/en/list)			
Date listed	Site name	Site area	Geographical co-ordinates
Criteria for designation (i.e. criteria i to x)			
Statement of Outstanding Universal Value			
Ramsar site (see: www.wetlands.org/RSDB/)			
Date listed	Site name	Site area	Geographical number
Reason for Designation (see Ramsar Information Sheet)			
UNESCO Man and Biosphere Reserves (see: www.unesco.org/mab/wnbrs.shtml)			
Date listed	Site name	Site area Total: Core: Buffer: Transition:	Geographical co-ordinates
Criteria for designation			
Fulfilment of three functions of MAB (conservation, development and logistic support.)			

Please list other designations (i.e. ASEAN Heritage, Natura 2000) and any supporting information below: Not Applicable

Name:

Detail:

Protected Areas Threats: Data Sheet 2

Please tick all relevant existing threats as either of high, medium or low significance. Threats ranked as of **high** significance are those which are seriously degrading values; **medium** are those threats having some negative impact and those characterised as **low** are threats which are present but not seriously impacting values or **N/A** where the threat is not present or not applicable in the protected area.

2. Residential and commercial development within a protected area

Threats from human settlements or other non-agricultural land uses with a substantial footprint

High	Medium	Low	N/A	
	✓			1.1 Housing and settlement
	✓			1.2 Commercial and industrial areas
	✓			1.3 Tourism and recreation infrastructure

2. Agriculture and aquaculture within a protected area

Threats from farming and grazing as a result of agricultural expansion and intensification, including silviculture, mariculture and aquaculture

High	Medium	Low	N/A	
	✓			2.1 Annual and perennial non-timber crop cultivation
		✓		2.1a Drug cultivation
		✓		2.2 Wood and pulp plantations
		✓		2.3 Livestock farming and grazing
			✓	2.4 Marine and freshwater aquaculture

3. Energy production and mining within a protected area

Threats from production of non-biological resources

High	Medium	Low	N/A	
			✓	3.1 Oil and gas drilling
			✓	3.2 Mining and quarrying
		✓		3.3 Energy generation, including from hydropower dams

4. Transportation and service corridors within a protected area

Threats from long narrow transport corridors and the vehicles that use them including associated wildlife mortality

High	Medium	Low	N/A	
		✓		4.1 Roads and railroads (include road-killed animals)
		✓		4.2 Utility and service lines (e.g. electricity cables, telephone lines,)
			✓	4.3 Shipping lanes and canals
			✓	4.4 Flight paths

5. Biological resource use and harm within a protected area

Threats from consumptive use of "wild" biological resources including both deliberate and unintentional harvesting effects; also persecution or control of specific species (note this includes hunting and killing of animals)

High	Medium	Low	N/A	
		✓		5.1 Hunting, killing and collecting terrestrial animals (including killing of animals as a result of human/wildlife conflict)
		✓		5.2 Gathering terrestrial plants or plant products (non-timber)
		✓		5.3 Logging and wood harvesting
		✓		5.4 Fishing, killing and harvesting aquatic resources

6. Human intrusions and disturbance within a protected area

Threats from human activities that alter, destroy or disturb habitats and species associated with non-consumptive uses of biological resources

High	Medium	Low	N/A	
	✓			6.1 Recreational activities and tourism
			✓	6.2 War, civil unrest and military exercises
		✓		6.3 Research, education and other work-related activities in protected areas
		✓		6.4 Activities of protected area managers (e.g. construction or vehicle use, artificial watering points and dams)
			✓	6.5 Deliberate vandalism, destructive activities or threats to protected area staff and visitors

7. Natural system modifications

Threats from other actions that convert or degrade habitat or change the way the ecosystem functions

High	Medium	Low	N/A	
		✓		7.1 Fire and fire suppression (including arson)
		✓		7.2 Dams, hydrological modification and water management/use
		✓		7.3a Increased fragmentation within protected area
		✓		7.3b Isolation from other natural habitat (e.g. deforestation, dams without effective aquatic wildlife passages)
		✓		7.3c Other 'edge effects' on park values
		✓		7.3d Loss of keystone species (e.g. top predators, pollinators etc)

8. Invasive and other problematic species and genes

Threats from terrestrial and aquatic non-native and native plants, animals, pathogens/microbes or genetic materials that have or are predicted to have harmful effects on biodiversity following introduction, spread and/or increase

High	Medium	Low	N/A	
		✓		8.1 Invasive non-native/alien plants (weeds)
		✓		8.1a Invasive non-native/alien animals
		✓		8.1b Pathogens (non-native or native but creating new/increased problems)
		✓		8.2 Introduced genetic material (e.g. genetically modified organisms)

9. Pollution entering or generated within protected area

Threats from introduction of exotic and/or excess materials or energy from point and non-point sources

High	Medium	Low	N/A	
		✓		9.1 Household sewage and urban waste water
		✓		9.1a Sewage and waste water from protected area facilities (e.g. toilets, hotels etc)
		✓		9.2 Industrial, mining and military effluents and discharges (e.g. poor water quality discharge from dams, e.g. unnatural temperatures, de-oxygenated, other pollution)
✓				9.3 Agricultural and forestry effluents (e.g. excess fertilizers or pesticides)
	✓			9.4 Garbage and solid waste
			✓	9.5 Air-borne pollutants
		✓		9.6 Excess energy (e.g. heat pollution, lights etc)

10. Geological events

Geological events may be part of natural disturbance regimes in many ecosystems. But they can be a threat if a species or habitat is damaged and has lost its resilience and is vulnerable to disturbance. Management capacity to respond to some of these changes may be limited.

High	Medium	Low	N/A	
			✓	10.1 Volcanoes
			✓	10.2 Earthquakes/Tsunamis
			✓	10.3 Avalanches/ Landslides
			✓	10.4 Erosion and siltation/ deposition (e.g. shoreline or riverbed changes)

11. Climate change and severe weather

Threats from long-term climatic changes which may be linked to global warming and other severe climatic/weather events outside of the natural range of variation

High	Medium	Low	N/A	
		✓		11.1 Habitat shifting and alteration
		✓		11.2 Droughts
		✓		11.3 Temperature extremes
			✓	11.4 Storms and flooding

12. Specific cultural and social threats

High	Medium	Low	N/A	
			✓	12.1 Loss of cultural links, traditional knowledge and/or management practices
			✓	12.2 Natural deterioration of important cultural site values
			✓	12.3 Destruction of cultural heritage buildings, gardens, sites etc

Assessment Form

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
1. Legal status Does the protected area have legal status (or in the case of private reserves is covered by a covenant or similar)? <i>Context</i>	The protected area is not gazetted/covenanted	0		1. This PA was declared as a National Park in October 2, 1972. The park covers an area of 48,240 ha.	
	There is agreement that the protected area should be gazetted/covenanted but the process has not yet begun	1			
	The protected area is in the process of being gazetted/covenanted but the process is still incomplete (includes sites designated under international conventions, such as Ramsar, or local/traditional law such as community conserved areas, which do not yet have national legal status or covenant)	2			
	The protected area has been formally gazetted/covenanted	3	✓		
2. Protected area regulations Are appropriate regulations in place to control land use and activities (e.g. hunting)? <i>Planning</i>	There are no regulations for controlling land use and activities in the protected area	0		1. Regulation of National PA in Thailand is clear: no logging and no clearing, no residence, no hunting, no collecting forest product, no mining within the park, but impossible to be implemented if there is communities have been staying inside the park. However, the land use inside this PA has been identified and controlled.	1.The land use and activities in the park will be keep in control
	Some regulations for controlling land use and activities in the protected area exist but these are major weaknesses	1			
	Regulations for controlling land use and activities in the protected area exist but there are some weaknesses or gaps	2	✓		
	Regulations for controlling inappropriate land use and activities in the protected area exist and provide an excellent basis for management	3			
3. Law enforcement Can staff (i.e. those with responsibility for managing the site) enforce protected area rules well enough? <i>Input</i>	The staff have no effective capacity/resources to enforce protected area legislation and regulations	0		1. New hired staff will get training on the job. 2. If there are people arrested, they will be tranfered to the police, and the police will process them.	1. Capacity building for staff to do law enforcement efectively (depending on available budget).
	There are major deficiencies in staff capacity/resources to enforce protected area legislation and regulations (e.g. lack of skills, no patrol budget, lack of institutional support)	1			
	The staff have acceptable capacity/resources to enforce protected area legislation and regulations but some deficiencies remain	2	✓		
	The staff have excellent capacity/resources to enforce protected area legislation and regulations	3			
4. Protected area objectives Is management undertaken according	No firm objectives have been agreed for the protected area	0		1. The objectives of this PA are for 1) conservation, 2) education and research, and 3) recreation and tourism.	
	The protected area has agreed objectives, but is not managed according to these objectives	1			
	The protected area has agreed objectives, but is only partially managed according to these objectives	2			

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
to agreed objectives? <i>Planning</i>	The protected area has agreed objectives and is managed to meet these objectives	3	✓	2. There is no research activity conducted by PA Authority, but they get support from 2 University from Chiang Mai who doing research inside the Park. The Royal Project Research Center also exists inside the Park.	
5. Protected area design	Inadequacies in protected area design mean achieving the major objectives of the protected area is very difficult	0		1. There is no clear zonation in the park, however the land used has been identified and will be controlled continuously. 2. The neighbor areas are also conservation area.	
Is the protected area the right size and shape to protect species, habitats, ecological processes and water catchments of key conservation concern? <i>Planning</i>	Inadequacies in protected area design mean that achievement of major objectives is difficult but some mitigating actions are being taken (e.g. agreements with adjacent land owners for wildlife corridors or introduction of appropriate catchment management)	1			
	Protected area design is not significantly constraining achievement of objectives, but could be improved (e.g. with respect to larger scale ecological processes)	2			
	Protected area design helps achievement of objectives; it is appropriate for species and habitat conservation; and maintains ecological processes such as surface and groundwater flows at a catchment scale, natural disturbance patterns etc	3	✓		
6. Protected area boundary demarcation	The boundary of the protected area is not known by the management authority or local residents/neighbouring land users	0		1. Protected area boundary is demarcated well using milestones, and well known by the stakeholders. 2. Resident and farming area have been identified but not demarcated yet. However, there is understanding between the local resident and the park staff about the borders of resident and farming area	1. Maintain the existing milestones
Is the boundary known and demarcated? <i>Process</i>	The boundary of the protected area is known by the management authority but is not known by local residents/neighbouring land users	1			
	The boundary of the protected area is known by both the management authority and local residents/neighbouring land users but is not appropriately demarcated	2			
	The boundary of the protected area is known by the management authority and local residents/neighbouring land users and is appropriately demarcated	3	✓		
7. Management plan	There is no management plan for the protected area	0		1. The Management Plan exists but expires in this year.	1. Crete a new management plan
Is there a management plan and is it being implemented?	A management plan is being prepared or has been prepared but is not being implemented	1			
	A management plan exists but it is only being partially implemented because of funding constraints or other problems	2			

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
<i>Planning</i>	A management plan exists and is being implemented	3	✓		
Additional points: <i>Planning</i>					
7a. Planning process	The planning process allows adequate opportunity for key stakeholders to influence the management plan	+1	✓	1. The planning process allow the stakeholders to provide input.	1. The new management plan will be made with consideration of stakeholders input.
7b. Planning process	There is an established schedule and process for periodic review and updating of the management plan	+1	✓	1. The management plan is reviewed every year	1. The new management plan planned to be reviewed every year as well.
7c. Planning process	The results of monitoring, research and evaluation are routinely incorporated into planning	+1	✓		
8. Regular work plan	No regular work plan exists	0		1. Regular Workplan is yearly basis. 2. All activities usually are implemented, and if there is an activities which not finish on the current fiscal year will be continued on the next year.	1. Create workplan according to management plan.
Is there a regular work plan and is it being implemented	A regular work plan exists but few of the activities are implemented	1			
	A regular work plan exists and many activities are implemented	2			
	A regular work plan exists and all activities are implemented	3	✓		
<i>Planning/Outputs</i>					
9. Resource inventory	There is little or no information available on the critical habitats, species and cultural values of the protected area	0		1. The park collects all resource information and use it for planning and decision making.	1. keep collect resource information for planning and decision making.
Do you have enough information to manage the area?	Information on the critical habitats, species, ecological processes and cultural values of the protected area is not sufficient to support planning and decision making	1			
	Information on the critical habitats, species, ecological processes and cultural values of the protected area is sufficient for most key areas of planning and decision making	2			
	Information on the critical habitats, species, ecological processes and cultural values of the protected area is sufficient to support all areas of planning and decision making	3	✓		
<i>Input</i>					
10. Protection systems	Protection systems (patrols, permits etc) do not exist or are not effective in controlling access/resource use	0		1. The park staffs have authority and take responsibilities to control all resource use in this park.	1. The park staffs will keep collonging the resource use.
Are systems in place	Protection systems are only partially effective in controlling access/resource use	1			

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
to control access/resource use in the protected area? <i>Process/Outcome</i>	Protection systems are moderately effective in controlling access/resource use	2	✓		
	Protection systems are largely or wholly effective in controlling access/resource use	3			
11. Research	There is no survey or research work taking place in the protected area	0	✓	1. Basically there is no survey or research work belong to the park authority, but they get result of researches which conducted by 2 university from Chiang Mai and Royal Project Research Center.	1. Keep collaborate with the 2 universities and Royal Project Research Center.
Is there a programme of management-orientated survey and research work? <i>Process</i>	There is a small amount of survey and research work but it is not directed towards the needs of protected area management	1			
	There is considerable survey and research work but it is not directed towards the needs of protected area management	2			
	There is a comprehensive, integrated programme of survey and research work, which is relevant to management needs	3			
12. Resource management	Active resource management is not being undertaken	0		1. Pesticide problem from agriculture need to be solved 2. Smoke from vehicle during the high tourism season kill the tree <i>Querkas kerri</i> . The critical zone is about 5 km from the highest spot.	1. Appropriate action need to be taken to solve the problem. 2. Capacity building for active management of resources use
Is active resource management being undertaken? <i>Process</i>	Very few of the requirements for active management of critical habitats, species, ecological processes and cultural values are being implemented	1			
	Many of the requirements for active management of critical habitats, species, ecological processes and, cultural values are being implemented but some key issues are not being addressed	2	✓		
	Requirements for active management of critical habitats, species, ecological processes and, cultural values are being substantially or fully implemented	3			
13. Staff numbers	There are no staff			1. There are 74 permanent staffs and 124 contractors. The contractors can be fluktuative depending on the need.	1. Hire more contractors if its needed (if budget available)
Are there enough people employed to manage the protected area? <i>Inputs</i>	Staff numbers are inadequate for critical management activities	1			
	Staff numbers are below optimum level for critical management activities	2	✓		
	Staff numbers are adequate for the management needs of the protected area	3			
14. Staff training	Staff lack the skills needed for protected area management	0		1. New staff will get training on the job. 2. Training such as cooking, room services, other related tourism services sometimes provided by Central DNP.	1. Capacity building of the staffs according to their position.
Are staff adequately trained to fulfill management objectives? <i>Inputs/Process</i>	Staff training and skills are low relative to the needs of the protected area	1			
	Staff training and skills are adequate, but could be further improved to fully achieve the objectives of management	2	✓		
	Staff training and skills are aligned with the management needs of the protected area	3			

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
15. Current budget	There is no budget for management of the protected area	0		1. The Current budget is acceptable. 2. This PA generate bigger revenue than the costs. However, only 10 % of tourism revenue return to this PA.	1. Request more budget based on actual need.
Is the current budget sufficient?	The available budget is inadequate for basic management needs and presents a serious constraint to the capacity to manage	1			
<i>Inputs</i>	The available budget is acceptable but could be further improved to fully achieve effective management	2	✓		
	The available budget is sufficient and meets the full management needs of the protected area	3			
16. Security of budget	There is no secure budget for the protected area and management is wholly reliant on outside or highly variable funding	0		1. Government allocate budget for National Park every year. This park generate revenue bigger than the expenditure, however the revenue should go to the central DNP office and usually only 10% return to this park.	
Is the budget secure?	There is very little secure budget and the protected area could not function adequately without outside funding	1	✓		
<i>Inputs</i>	There is a reasonably secure core budget for regular operation of the protected area but many innovations and initiatives are reliant on outside funding	2			
	There is a secure budget for the protected area and its management needs	3			
17. Management of budget	Budget management is very poor and significantly undermines effectiveness (e.g. late release of budget in financial year)	0		1. Budget managed by the park itself.	1. Prepare the budget according to management plan
Is the budget managed to meet critical management needs?	Budget management is poor and constrains effectiveness	1			
	Budget management is adequate but could be improved	2	✓		
	Budget management is excellent and meets management needs	3			
<i>Process</i>					
18. Equipment	There are little or no equipment and facilities for management needs	0		1. Need more GPS, the park only have one GPS.	1. Proposed to Central DNP to buy some GPS.
Is equipment sufficient for management needs?	There are some equipment and facilities but these are inadequate for most management needs	1			
<i>Input</i>	There are equipment and facilities, but still some gaps that constrain management	2	✓		
	There are adequate equipment and facilities	3			
19. Maintenance of equipment	There is little or no maintenance of equipment and facilities	0		1. There is budget for maintenance of equipments, but not enough to maintain all equipment.	1. Report to Central DNP for broken equipment that support for maintenance.
Is equipment	There is some <i>ad hoc</i> maintenance of equipment and facilities	1			

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
adequately maintained? <i>Process</i>	There is basic maintenance of equipment and facilities	2	✓		
	Equipment and facilities are well maintained	3			
20. Education and awareness Is there a planned education programme linked to the objectives and needs? <i>Process</i>	There is no education and awareness programme	0		1. The park get fund from local government to educate the youth on this year. 2. There is no regular program on education and awareness	1. Own regular education and awareness program (If agreed by the Central DNP).
	There is a limited and <i>ad hoc</i> education and awareness programme	1	✓		
	There is an education and awareness programme but it only partly meets needs and could be improved	2			
	There is an appropriate and fully implemented education and awareness programme	3			
21. Planning for land and water use Does land and water use planning recognise the protected area and aid the achievement of objectives? <i>Planning</i>	Adjacent land and water use planning does not take into account the needs of the protected area and activities/policies are detrimental to the survival of the area	0		1. Land and water use planning takes into account long term development in Doi Inthanon National Park.	
	Adjacent land and water use planning does not takes into account the long term needs of the protected area, but activities are not detrimental the area	1			
	Adjacent land and water use planning partially takes into account the long term needs of the protected area	2			
	Adjacent land and water use planning fully takes into account the long term needs of the protected area	3	✓		
21a: Land and water planning for habitat conservation	Planning and management in the catchment or landscape containing the protected area incorporates provision for adequate environmental conditions (e.g. volume, quality and timing of water flow, air pollution levels etc) to sustain relevant habitats.	+1			
21b: Land and water planning for connectivity	Management of corridors linking the protected area provides for wildlife passage to key habitats outside the protected area (e.g. to allow migratory fish to travel between freshwater spawning sites and the sea, or to allow animal migration).	+1			
21c: Land and water planning for ecosystem services & species conservation	"Planning addresses ecosystem-specific needs and/or the needs of particular species of concern at an ecosystem scale (e.g. volume, quality and timing of freshwater flow to sustain particular species, fire management to maintain savannah habitats etc.)"	+1			
22. State and commercial	There is no contact between managers and neighbouring official or corporate land and water users	0		1. There is a regular stakeholder meeting every month.	1. Use the regular meeting as a way to communicate

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
neighbours Is there co-operation with adjacent land and water users? <i>Process</i>	There is contact between managers and neighbouring official or corporate land and water users but little or no cooperation	1			and collaborate with stakeholders.
	There is contact between managers and neighbouring official or corporate land and water users, but only some co-operation	2			
	There is regular contact between managers and neighbouring official or corporate land and water users, and substantial co-operation on management	3	✓		
23. Indigenous people Do indigenous and traditional peoples resident or regularly using the protected area have input to management decisions? <i>Process</i>	Indigenous and traditional peoples have no input into decisions relating to the management of the protected area	0		1. There is a regular stakeholder meeting every month	1. Use the regular meeting as a way to communicate and collaborate with stakeholders.
	Indigenous and traditional peoples have some input into discussions relating to management but no direct role in management	1			
	Indigenous and traditional peoples directly contribute to some relevant decisions relating to management but their involvement could be improved	2			
	Indigenous and traditional peoples directly participate in all relevant decisions relating to management, e.g. co-management	3	✓		
24. Local communities Do local communities resident or near the protected area have input to management decisions? <i>Process</i>	Local communities have no input into decisions relating to the management of the protected area	0		1. There is a regular stakeholder meeting every month	1. Use the regular meeting as a way to communicate and collaborate with stakeholders.
	Local communities have some input into discussions relating to management but no direct role in management	1			
	Local communities directly contribute to some relevant decisions relating to management but their involvement could be improved	2			
	Local communities directly participate in all relevant decisions relating to management, e.g. co-management	3	✓		
<i>Additional points Local communities/indigenous people</i>					
24 a. Impact on communities	There is open communication and trust between local and/or indigenous people, stakeholders and protected area managers	+1	✓	1. There is a regular stakeholder meeting every month	1. Maintain open communication and trust between local and/or indigenous people, stakeholders and protected area staffs

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
24b. Impact on communities	Programmes to enhance community welfare, while conserving protected area resources, are being implemented	+1	✓	1. The Park don't have programs to enhance local community, but Royal project in this park do community livelihood and it always communicated with the park.	1. Collaborate with Royal project and other stakeholders to enhance community welfare.
24c. Impact on communities	Local and/or indigenous people actively support the protected area	+1	✓	1. The farming of local communities are not moving to a new area after harvest. In the past the farming location is always move.	
25. Economic benefit Is the protected area providing economic benefits to local communities, e.g. income, employment, payment for environmental services? <i>Outcomes</i>	The protected area does not deliver any economic benefits to local communities	0		1. There are 7,000 people (2,000 households) living in the park and depend their live to this park. Mainly they work as farmer, but some people provide tourism services such as homestay, shop, guide, etc.	
	Potential economic benefits are recognised and plans to realise these are being developed	1			
	There is some flow of economic benefits to local communities	2			
	There is a major flow of economic benefits to local communities from activities associated with the protected area	3	✓		
26. Monitoring and evaluation Are management activities monitored against performance? <i>Planning/Process</i>	There is no monitoring and evaluation in the protected area	0		1. This park is monitored and evaluated by regional office.	1. Use the result of evaluation to improve the management.
	There is some <i>ad hoc</i> monitoring and evaluation, but no overall strategy and/or no regular collection of results	1			
	There is an agreed and implemented monitoring and evaluation system but results do not feed back into management	2			
	A good monitoring and evaluation system exists, is well implemented and used in adaptive management	3	✓		
27. Visitor facilities Are visitor facilities adequate?	There are no visitor facilities and services despite an identified need	0		1. Visitors facilities and services is excelent for current levels of visitation.	1. Maintain the facilities 2. Improve services
	Visitor facilities and services are inappropriate for current levels of visitation	1			
	Visitor facilities and services are adequate for current levels of visitation but could be improved	2			

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
<i>Outputs</i>	Visitor facilities and services are excellent for current levels of visitation	3	✓		
28. Commercial tourism operators	There is little or no contact between managers and tourism operators using the protected area	0		1. The commercial tourism operators provide information about the importance of conserving the park.	1. Involved commercial tourism operators to increase tourist awareness.
Do commercial tour operators contribute to protected area management?	There is contact between managers and tourism operators but this is largely confined to administrative or regulatory matters	1			
	There is limited co-operation between managers and tourism operators to enhance visitor experiences and maintain protected area values	2	✓		
	There is good co-operation between managers and tourism operators to enhance visitor experiences, and maintain protected area values	3			
<i>Process</i>					
29. Fees	Although fees are theoretically applied, they are not collected	0		1. Entrance fee, fine and services fee are implemented. 2. All fee revenue go to the Central DNP in Bangkok	1. Entrance fee, fine and services fee are will be keep implemented. 2. Request more revenue go back to this park.
If fees (i.e. entry fees or fines) are applied, do they help protected area management?	Fees are collected, but make no contribution to the protected area or its environs	1			
	Fees are collected, and make some contribution to the protected area and its environs	2			
	Fees are collected and make a substantial contribution to the protected area and its environs	3	✓		
<i>Inputs/Process</i>					
30. Condition of values	Many important biodiversity, ecological or cultural values are being severely degraded	0		1. The forest cover is better than a few years before. 2. Pesticide problem from agriculture is believed has impact to the ecosystem. 2. The critical zone is about 5 km from the highest spot. Smoke from vehicle during the high tourism season has been killing of some the tree <i>Querkas kerri</i> .	1. Appropriate action will be taken to improve the conditions, such as reducing the number of vehicle that going to the highest spot, etc.
What is the condition of the important values of the protected area as compared to when it was first designated?	Some biodiversity, ecological or cultural values are being severely degraded	1			
	Some biodiversity, ecological and cultural values are being partially degraded but the most important values have not been significantly impacted	2	✓		
	Biodiversity, ecological and cultural values are predominantly intact	3			
<i>Outcomes</i>					
<i>Additional Points: Condition of values</i>					
30a: Condition of values	The assessment of the condition of values is based on research and/or monitoring	+1			
30b: Condition of values	Specific management programmes are being implemented to address threats to biodiversity, ecological and cultural values	+1			

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
30c: Condition of values	Activities to maintain key biodiversity, ecological and cultural values are a routine part of park management	+1			
TOTAL SCORE		77			

Site : Tarutao National Park

Reporting Progress at Protected Area Sites: Data Sheet 1

Name, affiliation and contact details for person responsible for completing the METT (email etc.)		Sitanon Jesdapipat (jsitanon@yahoo.com)		
Date assessment carried out	January 18, 2009			
Name of protected area	Tarutao National Park			
WDPA site code (these codes can be found on www.unep-wcmc.org/wdpa/)				
Designations	National SEPA	IUCN Category ✓(Category 2)	International (please also complete sheet overleaf)	
Country	Thailand			
Location of protected area (province and if possible map reference)		It covers the bottom part of Thailand's Andaman Sea in Satun Province, Southern Thailand.		
Date of establishment	Gazetted on April 19, 1974			
Ownership details (please tick)	State ✓	Private	Community	Other
Management Authority	Tarutao National Park - Department of National Park ,Wildlife and Plant Conservation (DNP)			
Size of protected area (ha)	149,000 ha			
Number of staff	Permanent 105 staffs		Temporary 60 Staffs	

<p>Annual budget (US\$) – excluding staff salary costs</p>	<p>Recurrent (operational) funds Total is THB 9,713,263</p> <ul style="list-style-type: none"> - Conservation, Rehabilitation, Research, and Development is THB 4,061,750 - Projects to promote public participation for sustainable management of the National Park is THB 482,860 - Plan for the expenditure of additional incomes (services) is THB 488,430 - Plan for Eco-tourism is THB 1,857,140 - Plan for the income expenditures for the maintenance of the National Park at 10% is THB 415,832.92 - Plan for increase effectiveness of forest fire protection is THB 1,261,490 - Project to monitor the affects to the coastal natural resources of Tarutao National Park is THB 1,145,760 	<p>Project or other supplementary funds</p>		
<p>What are the main values for which the area is designated</p>	<ol style="list-style-type: none"> 1. This area is rich in variety of plant communities. Numerous plant species occupy different ecosystem such as <i>Hopea odorata</i>, <i>Intsia palembanica</i>, <i>Terminalia catappa</i>, <i>Thespesia populnea</i>, <i>Nypa fruticans</i> and <i>Rhizophora mucronata</i>. 2. A number of wildlife are found in this area including Crab-eating Macaque, Spectacled langur, Squirrel and Island Flying Fox. 3. Bird species such as Pied Hornbill, Brahminy Kite, Pacific Reef Egret, Sparrow Hawk, Pied Imperial Pigeon, Green Imperial Pigeon, Black-naped Oriole and White-bellied Sea-eagle. 4. Its sea is home to abundant marine life like Dolphin and Whale. 5. The clean lonely beaches of Ko Khai is a favoured venue for the Sea Turtle to nest. 6. Coral reef around the archipelago are ideal sanctuary for abundant of beautiful marine life such as Sea Fan, Clown Anemone Fish, Parrotfish and Butterflyfish. 7. Without religion, the sea gypsies believes in ancestral spirits and natural spirits. Twice a year, they organize a spiritual ceremony to float away the boat, which is believed to carry bad luck away. 			
<p>List the two primary protected area management objectives</p>				
<p>Management objective 1</p>	<p>Forest and marine resources protection</p>			
<p>Management objective 2</p>	<p>Biodiversity protection</p>			
<p>No. of people involved in completing assessment</p>				
<p>Including: (tick boxes)</p>	<p>PA manager <input type="checkbox"/></p>	<p>PA staff <input type="checkbox"/></p>	<p>Other PA agency staff <input type="checkbox"/></p>	<p>NGO <input type="checkbox"/></p>
	<p>Local community <input type="checkbox"/></p>	<p>Donors <input type="checkbox"/></p>	<p>External experts <input type="checkbox"/></p>	<p>Other <input type="checkbox"/></p>

Please note if assessment was carried out in association with a particular project, on behalf of an organisation or donor.	The assessment was carried out in association with Project Preparation Phase - Catalyzing Sustainability of Thailand's Protected Area System
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Information on International Designations			
UNESCO World Heritage site (see: whc.unesco.org/en/list)			
Date listed	Site name	Site area	Geographical co-ordinates
Criteria for designation (i.e. criteria i to x)			
Statement of Outstanding Universal Value			
Ramsar site (see: www.wetlands.org/RSDB/)			
Date listed	Site name	Site area	Geographical number
Reason for Designation (see Ramsar Information Sheet)			
UNESCO Man and Biosphere Reserves (see: www.unesco.org/mab/wnbrs.shtml)			
Date listed	Site name	Site area Total: Core: Buffer: Transition:	Geographical co-ordinates
Criteria for designation			
Fulfillment of three functions of MAB (conservation, development and logistic support.)			
Please list other designations (i.e. ASEAN Heritage, Natura 2000) and any supporting information below: Not Applicable			
Name:	Detail:		

Protected Areas Threats: Data Sheet 2

Please tick all relevant existing threats as either of high, medium or low significance. Threats ranked as of **high** significance are those which are seriously degrading values; **medium** are those threats having some negative impact and those characterised as **low** are threats which are present but not seriously impacting values or **N/A** where the threat is not present or not applicable in the protected area.

1. Residential and commercial development within a protected area

Threats from human settlements or other non-agricultural land uses with a substantial footprint

High	Medium	Low	N/A	
		✓		1.1 Housing and settlement
			✓	1.2 Commercial and industrial areas
		✓		1.3 Tourism and recreation infrastructure

2. Agriculture and aquaculture within a protected area

Threats from farming and grazing as a result of agricultural expansion and intensification, including silviculture, mariculture and aquaculture

High	Medium	Low	N/A	
			✓	2.1 Annual and perennial non-timber crop cultivation
			✓	2.1a Drug cultivation
			✓	2.2 Wood and pulp plantations
			✓	2.3 Livestock farming and grazing
		✓		2.4 Marine and freshwater aquaculture

3. Energy production and mining within a protected area

Threats from production of non-biological resources

High	Medium	Low	N/A	
			✓	3.1 Oil and gas drilling
			✓	3.2 Mining and quarrying
			✓	3.3 Energy generation, including from hydropower dams

4. Transportation and service corridors within a protected area

Threats from long narrow transport corridors and the vehicles that use them including associated wildlife mortality

High	Medium	Low	N/A	
			✓	4.1 Roads and railroads (include road-killed animals)
			✓	4.2 Utility and service lines (e.g. electricity cables, telephone lines,)
		✓		4.3 Shipping lanes and canals
			✓	4.4 Flight paths

5. Biological resource use and harm within a protected area

Threats from consumptive use of "wild" biological resources including both deliberate and unintentional harvesting effects; also persecution or control of specific species (note this includes hunting and killing of animals)

High	Medium	Low	N/A	
		✓		5.1 Hunting, killing and collecting terrestrial animals (including killing of animals as a result of human/wildlife conflict)
		✓		5.2 Gathering terrestrial plants or plant products (non-timber)
		✓		5.3 Logging and wood harvesting
	✓			5.4 Fishing, killing and harvesting aquatic resources

6. Human intrusions and disturbance within a protected area

Threats from human activities that alter, destroy or disturb habitats and species associated with non-consumptive uses of biological resources

High	Medium	Low	N/A	
		✓		6.1 Recreational activities and tourism
			✓	6.2 War, civil unrest and military exercises
		✓		6.3 Research, education and other work-related activities in protected areas
		✓		6.4 Activities of protected area managers (e.g. construction or vehicle use, artificial watering points and dams)
		✓		6.5 Deliberate vandalism, destructive activities or threats to protected area staff and visitors

7. Natural system modifications

Threats from other actions that convert or degrade habitat or change the way the ecosystem functions

High	Medium	Low	N/A	
		✓		7.1 Fire and fire suppression (including arson)
			✓	7.2 Dams, hydrological modification and water management/use
			✓	7.3a Increased fragmentation within protected area
			✓	7.3b Isolation from other natural habitat (e.g. deforestation, dams without effective aquatic wildlife passages)
			✓	7.3c Other 'edge effects' on park values
		✓		7.3d Loss of keystone species (e.g. top predators, pollinators etc)

8. Invasive and other problematic species and genes

Threats from terrestrial and aquatic non-native and native plants, animals, pathogens/microbes or genetic materials that have or are predicted to have harmful effects on biodiversity following introduction, spread and/or increase

High	Medium	Low	N/A	
		✓		8.1 Invasive non-native/alien plants (weeds)
		✓		8.1a Invasive non-native/alien animals
			✓	8.1b Pathogens (non-native or native but creating new/increased problems)
			✓	8.2 Introduced genetic material (e.g. genetically modified organisms)

9. Pollution entering or generated within protected area

Threats from introduction of exotic and/or excess materials or energy from point and non-point sources

High	Medium	Low	N/A	
		✓		9.1 Household sewage and urban waste water
		✓		9.1a Sewage and waste water from protected area facilities (e.g. toilets, hotels etc)
			✓	9.2 Industrial, mining and military effluents and discharges (e.g. poor water quality discharge from dams, e.g. unnatural temperatures, de-oxygenated, other pollution)
			✓	9.3 Agricultural and forestry effluents (e.g. excess fertilizers or pesticides)
		✓		9.4 Garbage and solid waste
			✓	9.5 Air-borne pollutants
		✓		9.6 Excess energy (e.g. heat pollution, lights etc)

10. Geological events

Geological events may be part of natural disturbance regimes in many ecosystems. But they can be a threat if a species or habitat is damaged and has lost its resilience and is vulnerable to disturbance. Management capacity to respond to some of these changes may be limited.

High	Medium	Low	N/A	
			✓	10.1 Volcanoes
		✓		10.2 Earthquakes/Tsunamis
			✓	10.3 Avalanches/ Landslides
		✓		10.4 Erosion and siltation/ deposition (e.g. shoreline or riverbed changes)

11. Climate change and severe weather

Threats from long-term climatic changes which may be linked to global warming and other severe climatic/weather events outside of the natural range of variation

High	Medium	Low	N/A	
		✓		11.1 Habitat shifting and alteration
		✓		11.2 Droughts
		✓		11.3 Temperature extremes
			✓	11.4 Storms and flooding

12. Specific cultural and social threats

High	Medium	Low	N/A	
			✓	12.1 Loss of cultural links, traditional knowledge and/or management practices
			✓	12.2 Natural deterioration of important cultural site values
			✓	12.3 Destruction of cultural heritage buildings, gardens, sites etc

Assessment Form

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
1. Legal status Does the protected area have legal status (or in the case of private reserves is covered by a covenant or similar)? <i>Context</i>	The protected area is not gazetted/covenanted	0			
	There is agreement that the protected area should be gazetted/covenanted but the process has not yet begun	1			
	The protected area is in the process of being gazetted/covenanted but the process is still incomplete (includes sites designated under international conventions, such as Ramsar, or local/traditional law such as community conserved areas, which do not yet have national legal status or covenant)	2			
	The protected area has been formally gazetted/covenanted	3	✓		
2. Protected area regulations Are appropriate regulations in place to control land use and activities (e.g. hunting)? <i>Planning</i>	There are no regulations for controlling land use and activities in the protected area	0			
	Some regulations for controlling land use and activities in the protected area exist but these are major weaknesses	1			
	Regulations for controlling land use and activities in the protected area exist but there are some weaknesses or gaps	2			
	Regulations for controlling inappropriate land use and activities in the protected area exist and provide an excellent basis for management	3	✓		
3. Law enforcement Can staff (i.e. those with responsibility for managing the site) enforce protected area rules well enough? <i>Input</i>	The staff have no effective capacity/resources to enforce protected area legislation and regulations	0		need more staff to cover the areas	
	There are major deficiencies in staff capacity/resources to enforce protected area legislation and regulations (e.g. lack of skills, no patrol budget, lack of institutional support)	1			
	The staff have acceptable capacity/resources to enforce protected area legislation and regulations but some deficiencies remain	2	✓		
	The staff have excellent capacity/resources to enforce protected area legislation and regulations	3			
4. Protected area objectives Is management undertaken according to agreed objectives? <i>Planning</i>	No firm objectives have been agreed for the protected area	0			
	The protected area has agreed objectives, but is not managed according to these objectives	1			
	The protected area has agreed objectives, but is only partially managed according to these objectives	2			
	The protected area has agreed objectives and is managed to meet these objectives	3	✓		

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
5. Protected area design Is the protected area the right size and shape to protect species, habitats, ecological processes and water catchments of key conservation concern? <i>Planning</i>	Inadequacies in protected area design mean achieving the major objectives of the protected area is very difficult	0			
	Inadequacies in protected area design mean that achievement of major objectives is difficult but some mitigating actions are being taken (e.g. agreements with adjacent land owners for wildlife corridors or introduction of appropriate catchment management)	1			
	Protected area design is not significantly constraining achievement of objectives, but could be improved (e.g. with respect to larger scale ecological processes)	2			
	Protected area design helps achievement of objectives; it is appropriate for species and habitat conservation; and maintains ecological processes such as surface and groundwater flows at a catchment scale, natural disturbance patterns etc	3	✓		
6. Protected area boundary demarcation Is the boundary known and demarcated? <i>Process</i>	The boundary of the protected area is not known by the management authority or local residents/neighbouring land users	0			
	The boundary of the protected area is known by the management authority but is not known by local residents/neighbouring land users	1			
	The boundary of the protected area is known by both the management authority and local residents/neighbouring land users but is not appropriately demarcated	2			
	The boundary of the protected area is known by the management authority and local residents/neighbouring land users and is appropriately demarcated	3	✓		
7. Management plan Is there a management plan and is it being implemented? <i>Planning</i>	There is no management plan for the protected area	0		yes, but often ministerial order changes the situation, making it difficult to implement the plan	
	A management plan is being prepared or has been prepared but is not being implemented	1			
	A management plan exists but it is only being partially implemented because of funding constraints or other problems	2	✓		
	A management plan exists and is being implemented	3			
<i>Additional points: Planning</i>					
7a. Planning process	The planning process allows adequate opportunity for key stakeholders to influence the management plan	+1			
7b. Planning process	There is an established schedule and process for periodic review and updating of the management plan	+1			

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
7c. Planning process	The results of monitoring, research and evaluation are routinely incorporated into planning	+1			
8. Regular work plan	No regular work plan exists	0		Regular workplan design based on potential budget received.	
Is there a regular work plan and is it being implemented	A regular work plan exists but few of the activities are implemented	1			
	A regular work plan exists and many activities are implemented	2			
<i>Planning/Outputs</i>	A regular work plan exists and all activities are implemented	3	✓		
9. Resource inventory	There is little or no information available on the critical habitats, species and cultural values of the protected area	0		a large number of research and inventory on biodiversity resources	
Do you have enough information to manage the area?	Information on the critical habitats, species, ecological processes and cultural values of the protected area is not sufficient to support planning and decision making	1			
	Information on the critical habitats, species, ecological processes and cultural values of the protected area is sufficient for most key areas of planning and decision making	2	✓		
<i>Input</i>	Information on the critical habitats, species, ecological processes and cultural values of the protected area is sufficient to support all areas of planning and decision making	3			
10. Protection systems	Protection systems (patrols, permits etc) do not exist or are not effective in controlling access/resource use	0			
Are systems in place to control access/resource use in the protected area?	Protection systems are only partially effective in controlling access/resource use	1			
	Protection systems are moderately effective in controlling access/resource use	2			
<i>Process/Outcome</i>	Protection systems are largely or wholly effective in controlling access/ resource use	3	✓		
11. Research	There is no survey or research work taking place in the protected area	0		yes, but need more	
Is there a programme of management-orientated survey and research work?	There is a small amount of survey and research work but it is not directed towards the needs of protected area management	1			
	There is considerable survey and research work but it is not directed towards the needs of protected area management	2	✓		
<i>Process</i>	There is a comprehensive, integrated programme of survey and research work, which is relevant to management needs	3			

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
12. Resource management Is active resource management being undertaken? <i>Process</i>	Active resource management is not being undertaken	0		fairly well intact	
	Very few of the requirements for active management of critical habitats, species, ecological processes and cultural values are being implemented	1			
	Many of the requirements for active management of critical habitats, species, ecological processes and, cultural values are being implemented but some key issues are not being addressed	2	✓		
	Requirements for active management of critical habitats, species, ecological processes and, cultural values are being substantially or fully implemented	3			
13. Staff numbers Are there enough people employed to manage the protected area? <i>Inputs</i>	There are no staff	0		Need more, a lot more, double	
	Staff numbers are inadequate for critical management activities	1			
	Staff numbers are below optimum level for critical management activities	2	✓		
	Staff numbers are adequate for the management needs of the protected area	3			
14. Staff training Are staff adequately trained to fulfill management objectives? <i>Inputs/Process</i>	Staff lack the skills needed for protected area management	0	✓	Rotation of staff helps maintain acceptable level of knowledge and experience for the management of the park head quarter and its periphery islands; need to help itself	
	Staff training and skills are low relative to the needs of the protected area	1			
	Staff training and skills are adequate, but could be further improved to fully achieve the objectives of management	2			
	Staff training and skills are aligned with the management needs of the protected area	3			
15. Current budget Is the current budget sufficient? <i>Inputs</i>	There is no budget for management of the protected area	0		Need more, may be at least 50% more	
	The available budget is inadequate for basic management needs and presents a serious constraint to the capacity to manage	1	✓		
	The available budget is acceptable but could be further improved to fully achieve effective management	2			
	The available budget is sufficient and meets the full management needs of the protected area	3			
16. Security of budget	There is no secure budget for the protected area and management is wholly reliant on outside or highly variable funding	0		yes, but not enough	

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
Is the budget secure? <i>Inputs</i>	There is very little secure budget and the protected area could not function adequately without outside funding	1			
	There is a reasonably secure core budget for regular operation of the protected area but many innovations and initiatives are reliant on outside funding	2	✓		
	There is a secure budget for the protected area and its management needs	3			
17. Management of budget Is the budget managed to meet critical management needs? <i>Process</i>	Budget management is very poor and significantly undermines effectiveness (e.g. late release of budget in financial year)	0		yes, if not changed by the intervention from outside the department	
	Budget management is poor and constrains effectiveness	1			
	Budget management is adequate but could be improved	2	✓		
	Budget management is excellent and meets management needs	3			
18. Equipment Is equipment sufficient for management needs? <i>Input</i>	There are little or no equipment and facilities for management needs	0		GPS, firearms, radios are needed	
	There are some equipment and facilities but these are inadequate for most management needs	1	✓		
	There are equipment and facilities, but still some gaps that constrain management	2			
	There are adequate equipment and facilities	3			
19. Maintenance of equipment Is equipment adequately maintained? <i>Process</i>	There is little or no maintenance of equipment and facilities	0			
	There is some <i>ad hoc</i> maintenance of equipment and facilities	1			
	There is basic maintenance of equipment and facilities	2	✓		
	Equipment and facilities are well maintained	3			
20. Education and awareness Is there a planned education programme linked to the objectives and needs? <i>Process</i>	There is no education and awareness programme	0	✓	its proximity raises the cost of travel, and safety make it difficult to implementation of projects	
	There is a limited and <i>ad hoc</i> education and awareness programme	1			
	There is an education and awareness programme but it only partly meets needs and could be improved	2			
	There is an appropriate and fully implemented education and awareness programme	3			

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
21. Planning for land and water use Does land and water use planning recognise the protected area and aid the achievement of objectives? <i>Planning</i>	Adjacent land and water use planning does not take into account the needs of the protected area and activities/policies are detrimental to the survival of the area	0	✓		
	Adjacent land and water use planning does not takes into account the long term needs of the protected area, but activities are not detrimental the area	1			
	Adjacent land and water use planning partially takes into account the long term needs of the protected area	2			
	Adjacent land and water use planning fully takes into account the long term needs of the protected area	3			
Additional points: Land and water planning					
21a: Land and water planning for habitat conservation	Planning and management in the catchment or landscape containing the protected area incorporates provision for adequate environmental conditions (e.g. volume, quality and timing of water flow, air pollution levels etc) to sustain relevant habitats.	+1			
21b: Land and water planning for connectivity	Management of corridors linking the protected area provides for wildlife passage to key habitats outside the protected area (e.g. to allow migratory fish to travel between freshwater spawning sites and the sea, or to allow animal migration).	+1			
21c: Land and water planning for ecosystem services & species conservation	"Planning addresses ecosystem-specific needs and/or the needs of particular species of concern at an ecosystem scale (e.g. volume, quality and timing of freshwater flow to sustain particular species, fire management to maintain savannah habitats etc.)"	+1			
22. State and commercial neighbours Is there co-operation with adjacent land and water users? <i>Process</i>	There is no contact between managers and neighbouring official or corporate land and water users	0		Too many meetings for head, and seasonal demand on the staff	
	There is contact between managers and neighbouring official or corporate land and water users but little or no cooperation	1			
	There is contact between managers and neighbouring official or corporate land and water users, but only some co-operation	2	✓		
	There is regular contact between managers and neighbouring official or corporate land and water users, and substantial co-operation on management	3			
23. Indigenous people Do indigenous and traditional peoples resident or regularly using the protected area	Indigenous and traditional peoples have no input into decisions relating to the management of the protected area	0		Sea gypseas on the Lhi Pae island is an exception for park management, due to historical permit (in 1909). The management by DNP on Lhi Pae is not considered priority,	
	Indigenous and traditional peoples have some input into discussions relating to management but no direct role in management	1	✓		

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
have input to management decisions? <i>Process</i>	Indigenous and traditional peoples directly contribute to some relevant decisions relating to management but their involvement could be improved	2		due to the permit (which gives mandate to the Ministry of Interior)	
	Indigenous and traditional peoples directly participate in all relevant decisions relating to management, e.g. co-management	3			
24. Local communities Do local communities resident or near the protected area have input to management decisions? <i>Process</i>	Local communities have no input into decisions relating to the management of the protected area	0	✓	the process of PAC is being revised and will be activated again. (The present Head took office for nearly two years, now waiting to revise the structure of PAC)	
	Local communities have some input into discussions relating to management but no direct role in management	1			
	Local communities directly contribute to some relevant decisions relating to management but their involvement could be improved	2			
	Local communities directly participate in all relevant decisions relating to management, e.g. co-management	3			
Additional points <i>Local communities/indigenous people</i>					
24 a. Impact on communities	There is open communication and trust between local and/or indigenous people, stakeholders and protected area managers	+1	✓		
24b. Impact on communities	Programmes to enhance community welfare, while conserving protected area resources, are being implemented	+1			
24c. Impact on communities	Local and/or indigenous people actively support the protected area	+1			
25. Economic benefit Is the protected area providing economic benefits to local communities, e.g. income, employment, payment for environmental services? <i>Outcomes</i>	The protected area does not deliver any economic benefits to local communities	0		commercial long-tailed boats come to operate freely, but the fee is too high	
	Potential economic benefits are recognised and plans to realise these are being developed	1			
	There is some flow of economic benefits to local communities	2	✓		
	There is a major flow of economic benefits to local communities from activities associated with the protected area	3			
26. Monitoring and evaluation	There is no monitoring and evaluation in the protected area	0		I am with the DNP monitoring and evaluation team on this trip.	

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
Are management activities monitored against performance? <i>Planning/Process</i>	There is some <i>ad hoc</i> monitoring and evaluation, but no overall strategy and/or no regular collection of results	1		They came to check on the entry fee collection and new buildings	
	There is an agreed and implemented monitoring and evaluation system but results do not feed back into management	2	✓		
	A good monitoring and evaluation system exists, is well implemented and used in adaptive management	3			
27. Visitor facilities Are visitor facilities adequate? <i>Outputs</i>	There are no visitor facilities and services despite an identified need	0		yes, but perhaps not well designed, and the sitting does not seem proper (too close to the shore)	
	Visitor facilities and services are inappropriate for current levels of visitation	1			
	Visitor facilities and services are adequate for current levels of visitation but could be improved	2			
	Visitor facilities and services are excellent for current levels of visitation	3	✓		
28. Commercial tourism operators Do commercial tour operators contribute to protected area management? <i>Process</i>	There is little or no contact between managers and tourism operators using the protected area	0		too much commercial interest, too little on conservation or nature, except foreign tourists	
	There is contact between managers and tourism operators but this is largely confined to administrative or regulatory matters	1	✓		
	There is limited co-operation between managers and tourism operators to enhance visitor experiences and maintain protected area values	2			
	There is good co-operation between managers and tourism operators to enhance visitor experiences, and maintain protected area values	3			
29. Fees If fees (i.e. entry fees or fines) are applied, do they help protected area management? <i>Inputs/Process</i>	Although fees are theoretically applied, they are not collected	0		All fee revenue go to DNP in Bangkok	
	Fees are collected, but make no contribution to the protected area or its environs	1			
	Fees are collected, and make some contribution to the protected area and its environs	2			
	Fees are collected and make a substantial contribution to the protected area and its environs	3	✓		
30. Condition of values What is the condition of the important values of the protected area as	Many important biodiversity, ecological or cultural values are being severely degraded	0			
	Some biodiversity, ecological or cultural values are being severely degraded	1			

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
compared to when it was first designated?	Some biodiversity, ecological and cultural values are being partially degraded but the most important values have not been significantly impacted	2			
<i>Outcomes</i>	Biodiversity, ecological and cultural values are predominantly intact	3	✓		
<i>Additional Points: Condition of values</i>					
30a: Condition of values	The assessment of the condition of values is based on research and/or monitoring	+1			
30b: Condition of values	Specific management programmes are being implemented to address threats to biodiversity, ecological and cultural values	+1			
30c: Condition of values	Activities to maintain key biodiversity, ecological and cultural values are a routine part of park management	+1			
TOTAL SCORE			59		

Site : Khlong Lan National Park

Reporting Progress at Protected Area Sites: Data Sheet 1

Name, affiliation and contact details for person responsible for completing the METT (email etc.)		Sitanon Jesdapipat (jsitanon@yahoo.com) Thawatchai Petcharaburanin (khonglan_np@hotmail.com)		
Date assessment carried out	February 01, 2009			
Name of protected area	Khlong Lan National Park			
WDPA site code (these codes can be found on www.unep-wcmc.org/wdpa/)				
Designations	National SEPA	IUCN Category ✓(Category 3)	International (please also complete sheet overleaf)	
Country	Thailand			
Location of protected area (province and if possible map reference)	Located in Kamphaeng Phet province			
Date of establishment	Established in 1982, become the Thailand's 44th National Park and gazetted on November 8, 1991			
Ownership details (please tick)	State ✓	Private	Community	Other
Management Authority	Khlong Lan National Park - Department of National Park ,Wildlife and Plant Conservation (DNP)			
Size of protected area (ha)	30,000 ha			
Number of staff	Permanent 53	Temporary 45		
Annual budget (US\$) – excluding staff salary costs	Recurrent (operational) funds THB 3 millions		Project or other supplementary funds	
What are the main values for which the area is designated	The park has many forest types including deciduous dipterocarp forest, mixed deciduous forest, dry evergreen forest and moist evergreen forest. Its major plants include <i>Tectona grandis</i> , <i>Shorea obtusa</i> , <i>S. Siamensis</i> , <i>S. Roxburghii</i> , <i>Pterocarpus macrocarpus</i> , <i>Lagerstroemia calyculata</i> , <i>Azelia xylocarpa</i> , <i>Hopea odorata</i> , <i>H. Ferrea</i> , <i>Tetrameles nudiflora</i> , <i>Toona ciliata</i> , <i>Terminalia bellirica</i> and <i>T. Alata</i> . The wildlife include Sambar Deer, Common Muntjak, Common Wild Boar, Macaque, Giant Squirrel, Gibbon and great variety of birds such as Red-headed Trogon, Large Hawk-Cuckoo, Kalij Pheasant, Red Junglefowl, Hoopoe, Black-naped Oriole, Collared Scops-Owl and Large-tail Nightjar.			
List the two primary protected area management objectives				
Management objective 1	Forest resources protection; research for conservation			
Management objective 2	Tourism			

No. of people involved in completing assessment		2		
Including: (tick boxes)	PA manager <input type="checkbox"/>	PA staff <input type="checkbox"/>	Other PA agency staff <input type="checkbox"/>	NGO <input type="checkbox"/>
	Local community <input type="checkbox"/>	Donors <input type="checkbox"/>	External experts <input type="checkbox"/>	Other <input type="checkbox"/>
Please note if assessment was carried out in association with a particular project, on behalf of an organisation or donor.		The assessment was carried out in association with Project Preparation Phase - Catalyzing Sustainability of Thailand's Protected Area System		

Information on International Designations			
UNESCO World Heritage site (see: whc.unesco.org/en/list)			
Date listed	Site name	Site area	Geographical co-ordinates
Criteria for designation (i.e. criteria i to x)			
Statement of Outstanding Universal Value			
Ramsar site (see: www.wetlands.org/RSDB/)			
Date listed	Site name	Site area	Geographical number
Reason for Designation (see Ramsar Information Sheet)			
UNESCO Man and Biosphere Reserves (see: www.unesco.org/mab/wnbrs.shtml)			
Date listed	Site name	Site area Total: Core: Buffer: Transition:	Geographical co-ordinates
Criteria for designation			
Fulfillment of three functions of MAB (conservation, development and logistic support.)			
Please list other designations (i.e. ASEAN Heritage, Natura 2000) and any supporting information below Not Applicable			
Name:	Detail:		

Protected Areas Threats: Data Sheet 2

Please tick all relevant existing threats as either of high, medium or low significance. Threats ranked as of **high** significance are those which are seriously degrading values; **medium** are those threats having some negative impact and those characterised as **low** are threats which are present but not seriously impacting values or **N/A** where the threat is not present or not applicable in the protected area.

1. Residential and commercial development within a protected area

Threats from human settlements or other non-agricultural land uses with a substantial footprint

High	Medium	Low	N/A	
			✓	1.1 Housing and settlement
			✓	1.2 Commercial and industrial areas
		✓		1.3 Tourism and recreation infrastructure

2. Agriculture and aquaculture within a protected area

Threats from farming and grazing as a result of agricultural expansion and intensification, including silviculture, mariculture and aquaculture

High	Medium	Low	N/A	
			✓	2.1 Annual and perennial non-timber crop cultivation
			✓	2.1a Drug cultivation
			✓	2.2 Wood and pulp plantations
			✓	2.3 Livestock farming and grazing
			✓	2.4 Marine and freshwater aquaculture

3. Energy production and mining within a protected area

Threats from production of non-biological resources

High	Medium	Low	N/A	
			✓	3.1 Oil and gas drilling
			✓	3.2 Mining and quarrying
			✓	3.3 Energy generation, including from hydropower dams

4. Transportation and service corridors within a protected area

Threats from long narrow transport corridors and the vehicles that use them including associated wildlife mortality

High	Medium	Low	N/A	
			✓	4.1 Roads and railroads (include road-killed animals)
			✓	4.2 Utility and service lines (e.g. electricity cables, telephone lines,)
			✓	4.3 Shipping lanes and canals
			✓	4.4 Flight paths

5. Biological resource use and harm within a protected area

Threats from consumptive use of "wild" biological resources including both deliberate and unintentional harvesting effects; also persecution or control of specific species (note this includes hunting and killing of animals)

High	Medium	Low	N/A	
		✓		5.1 Hunting, killing and collecting terrestrial animals (including killing of animals as a result of human/wildlife conflict)
		✓		5.2 Gathering terrestrial plants or plant products (non-timber)
		✓		5.3 Logging and wood harvesting
			✓	5.4 Fishing, killing and harvesting aquatic resources

6. Human intrusions and disturbance within a protected area

Threats from human activities that alter, destroy or disturb habitats and species associated with non-consumptive uses of biological resources

High	Medium	Low	N/A	
		✓		6.1 Recreational activities and tourism
			✓	6.2 War, civil unrest and military exercises
		✓		6.3 Research, education and other work-related activities in protected areas
		✓		6.4 Activities of protected area managers (e.g. construction or vehicle use, artificial watering points and dams)
		✓		6.5 Deliberate vandalism, destructive activities or threats to protected area staff and visitors

7. Natural system modifications

Threats from other actions that convert or degrade habitat or change the way the ecosystem functions

High	Medium	Low	N/A	
		✓		7.1 Fire and fire suppression (including arson)
			✓	7.2 Dams, hydrological modification and water management/use
			✓	7.3a Increased fragmentation within protected area
			✓	7.3b Isolation from other natural habitat (e.g. deforestation, dams without effective aquatic wildlife passages)
			✓	7.3c Other 'edge effects' on park values
		✓		7.3d Loss of keystone species (e.g. top predators, pollinators etc)

8. Invasive and other problematic species and genes

Threats from terrestrial and aquatic non-native and native plants, animals, pathogens/microbes or genetic materials that have or are predicted to have harmful effects on biodiversity following introduction, spread and/or increase

High	Medium	Low	N/A	
		✓		8.1 Invasive non-native/alien plants (weeds)
		✓		8.1a Invasive non-native/alien animals
			✓	8.1b Pathogens (non-native or native but creating new/increased problems)
			✓	8.2 Introduced genetic material (e.g. genetically modified organisms)

9. Pollution entering or generated within protected area

Threats from introduction of exotic and/or excess materials or energy from point and non-point sources

High	Medium	Low	N/A	
			✓	9.1 Household sewage and urban waste water
		✓		9.1a Sewage and waste water from protected area facilities (e.g. toilets, hotels etc)
			✓	9.2 Industrial, mining and military effluents and discharges (e.g. poor water quality discharge from dams, e.g. unnatural temperatures, de-oxygenated, other pollution)
			✓	9.3 Agricultural and forestry effluents (e.g. excess fertilizers or pesticides)
		✓		9.4 Garbage and solid waste
			✓	9.5 Air-borne pollutants
		✓		9.6 Excess energy (e.g. heat pollution, lights etc)

10. Geological events

Geological events may be part of natural disturbance regimes in many ecosystems. But they can be a threat if a species or habitat is damaged and has lost its resilience and is vulnerable to disturbance. Management capacity to respond to some of these changes may be limited.

High	Medium	Low	N/A	
			✓	10.1 Volcanoes
			✓	10.2 Earthquakes/Tsunamis
			✓	10.3 Avalanches/ Landslides
			✓	10.4 Erosion and siltation/ deposition (e.g. shoreline or riverbed changes)

11. Climate change and severe weather

Threats from long-term climatic changes which may be linked to global warming and other severe climatic/weather events outside of the natural range of variation

High	Medium	Low	N/A	
		✓		11.1 Habitat shifting and alteration
		✓		11.2 Droughts
		✓		11.3 Temperature extremes
			✓	11.4 Storms and flooding

12. Specific cultural and social threats

High	Medium	Low	N/A	
			✓	12.1 Loss of cultural links, traditional knowledge and/or management practices
			✓	12.2 Natural deterioration of important cultural site values
			✓	12.3 Destruction of cultural heritage buildings, gardens, sites etc

Assessment Form

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
1. Legal status Does the protected area have legal status (or in the case of private reserves is covered by a covenant or similar)? <i>Context</i>	The protected area is not gazetted/covenanted	0		1. Established in 1982, become the Thailand's 44th National Park and gazetted on November 8, 1991. The park covers an area of 30,000 ha.	
	There is agreement that the protected area should be gazetted/covenanted but the process has not yet begun	1			
	The protected area is in the process of being gazetted/covenanted but the process is still incomplete (includes sites designated under international conventions, such as Ramsar, or local/traditional law such as community conserved areas, which do not yet have national legal status or covenant)	2			
	The protected area has been formally gazetted/covenanted	3	✓		
2. Protected area regulations Are appropriate regulations in place to control land use and activities (e.g. hunting)? <i>Planning</i>	There are no regulations for controlling land use and activities in the protected area	0		1. old vehicles; understaff for effective patrol; more technology	
	Some regulations for controlling land use and activities in the protected area exist but these are major weaknesses	1			
	Regulations for controlling land use and activities in the protected area exist but there are some weaknesses or gaps	2	✓		
	Regulations for controlling inappropriate land use and activities in the protected area exist and provide an excellent basis for management	3			
3. Law enforcement Can staff (i.e. those with responsibility for managing the site) enforce protected area rules well enough? <i>Input</i>	The staff have no effective capacity/resources to enforce protected area legislation and regulations	0		1. need more staff to cover the areas; need more communication and encouragement for them to cooperate, e.g. in forest fire control	
	There are major deficiencies in staff capacity/resources to enforce protected area legislation and regulations (e.g. lack of skills, no patrol budget, lack of institutional support)	1			
	The staff have acceptable capacity/resources to enforce protected area legislation and regulations but some deficiencies remain	2	✓		
	The staff have excellent capacity/resources to enforce protected area legislation and regulations	3			
4. Protected area objectives Is management undertaken according	No firm objectives have been agreed for the protected area	0		1. strategic plan exist, but reality is dictated by funding and use of fund, and staff	
	The protected area has agreed objectives, but is not managed according to these objectives	1			
	The protected area has agreed objectives, but is only partially managed according to these objectives	2	✓		

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
to agreed objectives? <i>Planning</i>	The protected area has agreed objectives and is managed to meet these objectives	3			
5. Protected area design Is the protected area the right size and shape to protect species, habitats, ecological processes and water catchments of key conservation concern? <i>Planning</i>	Inadequacies in protected area design mean achieving the major objectives of the protected area is very difficult	0		1. need demarkation in 50 km length to the eastern part of the park, to create a buffer zone	
	Inadequacies in protected area design mean that achievement of major objectives is difficult but some mitigating actions are being taken (e.g. agreements with adjacent land owners for wildlife corridors or introduction of appropriate catchment management)	1			
	Protected area design is not significantly constraining achievement of objectives, but could be improved (e.g. with respect to larger scale ecological processes)	2	✓		
	Protected area design helps achievement of objectives; it is appropriate for species and habitat conservation; and maintains ecological processes such as surface and groundwater flows at a catchment scale, natural disturbance patterns etc	3			
6. Protected area boundary demarcation Is the boundary known and demarcated? <i>Process</i>	The boundary of the protected area is not known by the management authority or local residents/neighbouring land users	0		1. one large track needs to be clearly demarked	
	The boundary of the protected area is known by the management authority but is not known by local residents/neighbouring land users	1			
	The boundary of the protected area is known by both the management authority and local residents/neighbouring land users but is not appropriately demarcated	2	✓		
	The boundary of the protected area is known by the management authority and local residents/neighbouring land users and is appropriately demarcated	3			
7. Management plan Is there a management plan and is it being implemented? <i>Planning</i>	There is no management plan for the protected area	0		1. yes, but often ministerial order changes the situation, making it difficult to implement the plan	
	A management plan is being prepared or has been prepared but is not being implemented	1			
	A management plan exists but it is only being partially implemented because of funding constraints or other problems	2			
	A management plan exists and is being implemented	3	✓		
Additional points: <i>Planning</i>					
7a. Planning process	The planning process allows adequate opportunity for key stakeholders to influence the management plan	+1			

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
7b. Planning process	There is an established schedule and process for periodic review and updating of the management plan	+1	✓		
7c. Planning process	The results of monitoring, research and evaluation are routinely incorporated into planning	+1			
8. Regular work plan	No regular work plan exists	0		1. Regular workplan design based on potential budget received.	
Is there a regular work plan and is it being implemented	A regular work plan exists but few of the activities are implemented	1			
	A regular work plan exists and many activities are implemented	2			
	A regular work plan exists and all activities are implemented	3	✓		
<i>Planning/Outputs</i>					
9. Resource inventory	There is little or no information available on the critical habitats, species and cultural values of the protected area	0		1. need more structured information systems	
Do you have enough information to manage the area?	Information on the critical habitats, species, ecological processes and cultural values of the protected area is not sufficient to support planning and decision making	1	✓		
	Information on the critical habitats, species, ecological processes and cultural values of the protected area is sufficient for most key areas of planning and decision making	2			
	Information on the critical habitats, species, ecological processes and cultural values of the protected area is sufficient to support all areas of planning and decision making	3			
<i>Input</i>					
10. Protection systems	Protection systems (patrols, permits etc) do not exist or are not effective in controlling access/resource use	0		1. open access by all parties, thus some illegal immigrants from the Myanmar side	
Are systems in place to control access/resource use in the protected area?	Protection systems are only partially effective in controlling access/resource use	1			
	Protection systems are moderately effective in controlling access/resource use	2			
	Protection systems are largely or wholly effective in controlling access/resource use	3	✓		
<i>Process/Outcome</i>					
11. Research	There is no survey or research work taking place in the protected area	0		1. yes, but need more	
Is there a programme of management-orientated survey and research work?	There is a small amount of survey and research work but it is not directed towards the needs of protected area management	1	✓		
	There is considerable survey and research work but it is not directed towards the needs of protected area management	2			
	There is a comprehensive, integrated programme of survey and research work, which is relevant to management needs	3			
<i>Process</i>					

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
12. Resource management Is active resource management being undertaken? <i>Process</i>	Active resource management is not being undertaken	0		1. fairly well intact	
	Very few of the requirements for active management of critical habitats, species, ecological processes and cultural values are being implemented	1			
	Many of the requirements for active management of critical habitats, species, ecological processes and, cultural values are being implemented but some key issues are not being addressed	2	✓		
	Requirements for active management of critical habitats, species, ecological processes and, cultural values are being substantially or fully implemented	3			
13. Staff numbers Are there enough people employed to manage the protected area? <i>Inputs</i>	There are no staff	0		1. need more, a lot more, double	
	Staff numbers are inadequate for critical management activities	1			
	Staff numbers are below optimum level for critical management activities	2	✓		
	Staff numbers are adequate for the management needs of the protected area	3			
14. Staff training Are staff adequately trained to fulfill management objectives? <i>Inputs/Process</i>	Staff lack the skills needed for protected area management	0		1. the main groups of staff, except government officials, need more capacity building	
	Staff training and skills are low relative to the needs of the protected area	1	✓		
	Staff training and skills are adequate, but could be further improved to fully achieve the objectives of management	2			
	Staff training and skills are aligned with the management needs of the protected area	3			
15. Current budget Is the current budget sufficient? <i>Inputs</i>	There is no budget for management of the protected area	0		1. need more, perhaps in-kind, not cash budget	
	The available budget is inadequate for basic management needs and presents a serious constraint to the capacity to manage	1			
	The available budget is acceptable but could be further improved to fully achieve effective management	2	✓		
	The available budget is sufficient and meets the full management needs of the protected area	3			
16. Security of budget Is the budget secure?	There is no secure budget for the protected area and management is wholly reliant on outside or highly variable funding	0		1. revenue is major source of support; may be used as incentives to support operations	
	There is very little secure budget and the protected area could not function adequately without outside funding	1			

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
<i>Inputs</i>	There is a reasonably secure core budget for regular operation of the protected area but many innovations and initiatives are reliant on outside funding	2	✓		
	There is a secure budget for the protected area and its management needs	3			
17. Management of budget	Budget management is very poor and significantly undermines effectiveness (e.g. late release of budget in financial year)	0		1. yes, if not changed by the intervention from outside the department	
Is the budget managed to meet critical management needs?	Budget management is poor and constrains effectiveness	1			
	Budget management is adequate but could be improved	2	✓		
	Budget management is excellent and meets management needs	3			
<i>Process</i>					
18. Equipment	There are little or no equipment and facilities for management needs	0		1. GPS, firearms, radios, binoculars are needed	
Is equipment sufficient for management needs?	There are some equipment and facilities but these are inadequate for most management needs	1	✓		
	There are equipment and facilities, but still some gaps that constrain management	2			
	There are adequate equipment and facilities	3			
<i>Input</i>					
19. Maintenance of equipment	There is little or no maintenance of equipment and facilities	0		1. need clear budget support for maintenance	
Is equipment adequately maintained?	There is some <i>ad hoc</i> maintenance of equipment and facilities	1	✓		
	There is basic maintenance of equipment and facilities	2			
	Equipment and facilities are well maintained	3			
<i>Process</i>					
20. Education and awareness	There is no education and awareness programme	0		1. in the plan every year, but received no budget support	
Is there a planned education programme linked to the objectives and	There is a limited and <i>ad hoc</i> education and awareness programme	1			
	There is an education and awareness programme but it only partly meets needs and could be improved	2	✓		

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
needs? <i>Process</i>	There is an appropriate and fully implemented education and awareness programme	3			
21. Planning for land and water use	Adjacent land and water use planning does not take into account the needs of the protected area and activities/policies are detrimental to the survival of the area	0	✓		
Does land and water use planning recognise the protected area and aid the achievement of objectives? <i>Planning</i>	Adjacent land and water use planning does not takes into account the long term needs of the protected area, but activities are not detrimental the area	1			
	Adjacent land and water use planning partially takes into account the long term needs of the protected area	2			
	Adjacent land and water use planning fully takes into account the long term needs of the protected area	3			
Additional points: Land and water planning					
21a: Land and water planning for habitat conservation	Planning and management in the catchment or landscape containing the protected area incorporates provision for adequate environmental conditions (e.g. volume, quality and timing of water flow, air pollution levels etc) to sustain relevant habitats.	+1			
21b: Land and water planning for connectivity	Management of corridors linking the protected area provides for wildlife passage to key habitats outside the protected area (e.g. to allow migratory fish to travel between freshwater spawning sites and the sea, or to allow animal migration).	+1			
21c: Land and water planning for ecosystem services & species conservation	"Planning addresses ecosystem-specific needs and/or the needs of particular species of concern at an ecosystem scale (e.g. volume, quality and timing of freshwater flow to sustain particular species, fire management to maintain savannah habitats etc.)"	+1			
22. State and commercial neighbours	There is no contact between managers and neighbouring official or corporate land and water users	0		1. too many meetings for head, and seasonal demand on the staff	
Is there co-operation with adjacent land and water users? <i>Process</i>	There is contact between managers and neighbouring official or corporate land and water users but little or no cooperation	1			
	There is contact between managers and neighbouring official or corporate land and water users, but only some co-operation	2			
	There is regular contact between managers and neighbouring official or corporate land and water users, and substantial co-operation on management	3	✓		
23. Indigenous people	Indigenous and traditional peoples have no input into decisions relating to the management of the protected area	0	✓	1. consultation takes place only on NTFPs	

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
Do indigenous and traditional peoples resident or regularly using the protected area have input to management decisions? <i>Process</i>	Indigenous and traditional peoples have some input into discussions relating to management but no direct role in management	1			
	Indigenous and traditional peoples directly contribute to some relevant decisions relating to management but their involvement could be improved	2			
	Indigenous and traditional peoples directly participate in all relevant decisions relating to management, e.g. co-management	3			
24. Local communities	Local communities have no input into decisions relating to the management of the protected area	0		1. the process of PAC is active in all fronts	
Do local communities resident or near the protected area have input to management decisions? <i>Process</i>	Local communities have some input into discussions relating to management but no direct role in management	1			
	Local communities directly contribute to some relevant decisions relating to management but their involvement could be improved	2			
	Local communities directly participate in all relevant decisions relating to management, e.g. co-management	3	✓		
<i>Additional points Local communities/indigenous people</i>					
24 a. Impact on communities	There is open communication and trust between local and/or indigenous people, stakeholders and protected area managers	+1	✓		
24b. Impact on communities	Programmes to enhance community welfare, while conserving protected area resources, are being implemented	+1			
24c. Impact on communities	Local and/or indigenous people actively support the protected area	+1			
25. Economic benefit	The protected area does not deliver any economic benefits to local communities	0			
Is the protected area providing economic benefits to local communities, e.g.	Potential economic benefits are recognised and plans to realise these are being developed	1	✓		
	There is some flow of economic benefits to local communities	2			

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
income, employment, payment for environmental services? <i>Outcomes</i>	There is a major flow of economic benefits to local communities from activities associated with the protected area	3			
26. Monitoring and evaluation	There is no monitoring and evaluation in the protected area	0			
Are management activities monitored against performance? <i>Planning/Process</i>	There is some <i>ad hoc</i> monitoring and evaluation, but no overall strategy and/or no regular collection of results	1			
	There is an agreed and implemented monitoring and evaluation system but results do not feed back into management	2	✓		
	A good monitoring and evaluation system exists, is well implemented and used in adaptive management	3			
27. Visitor facilities	There are no visitor facilities and services despite an identified need	0		1. yes, always gain recognition from the province; there is wireless service for free in the office	
Are visitor facilities adequate? <i>Outputs</i>	Visitor facilities and services are inappropriate for current levels of visitation	1			
	Visitor facilities and services are adequate for current levels of visitation but could be improved	2			
	Visitor facilities and services are excellent for current levels of visitation	3	✓		
28. Commercial tourism operators	There is little or no contact between managers and tourism operators using the protected area	0	✓		
Do commercial tour operators contribute to protected area management? <i>Process</i>	There is contact between managers and tourism operators but this is largely confined to administrative or regulatory matters	1			
	There is limited co-operation between managers and tourism operators to enhance visitor experiences and maintain protected area values	2			
	There is good co-operation between managers and tourism operators to enhance visitor experiences, and maintain protected area values	3			
29. Fees	Although fees are theoretically applied, they are not collected	0		1. All fee revenue go to DNP in Bangkok	
If fees (i.e. entry fees or fines) are applied, do they help protected area	Fees are collected, but make no contribution to the protected area or its environs	1			
	Fees are collected, and make some contribution to the protected area and its environs	2			

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
management? <i>Inputs/Process</i>	Fees are collected and make a substantial contribution to the protected area and its environs	3	✓		
30. Condition of values What is the condition of the important values of the protected area as compared to when it was first designated? <i>Outcomes</i>	Many important biodiversity, ecological or cultural values are being severely degraded	0		1. threats remain in the area, esp. Hunting	
	Some biodiversity, ecological or cultural values are being severely degraded	1			
	Some biodiversity, ecological and cultural values are being partially degraded but the most important values have not been significantly impacted	2	✓		
	Biodiversity, ecological and cultural values are predominantly intact	3			
<i>Additional Points: Condition of values</i>					
30a: Condition of values	The assessment of the condition of values is based on research and/or monitoring	+1			
30b: Condition of values	Specific management programmes are being implemented to address threats to biodiversity, ecological and cultural values	+1	✓		
30c: Condition of values	Activities to maintain key biodiversity, ecological and cultural values are a routine part of park management	+1			
TOTAL SCORE			59		

Site : Huai Kha Khaeng Wildlife Sanctuary

Reporting Progress at Protected Area Sites: Data Sheet 1

Name, affiliation and contact details for person responsible for completing the METT (email etc.)		Sitanon Jesdapipat (jsitanon@yahoo.com) Sunthorn Chaywatana (st_watana@yahoo.com)		
Date assessment carried out	February 16, 2009			
Name of protected area	Huai Kha Khaeng Wildlife Sanctuary			
WDPA site code (these codes can be found on www.unep-wcmc.org/wdpa/)				
Designations	National SEPA	IUCN Category ✓ (Category 3)	International (please also complete sheet overleaf) ✓ (Natural World Heritage site)	
Country	Thailand			
Location of protected area (province and if possible map reference)		This Wildlife Sanctuary lies mainly in Uthai Thani Province, but extends into Tak Province. It is located at the southern end of the Dawna Range, about 300 kilometers (km) north-west of Bangkok, Thailand.		
Date of establishment	Gazetted on September 26, 1972 and UNESCO designated as a Natural World Heritage site since on 13 December 1991.			
Ownership details (please tick)	State ✓	Private	Community	Other
Management Authority	Huai Kha Khaeng Wildlife Sanctuary - Department of National Park ,Wildlife and Plant Conservation (DNP)			
Size of protected area (ha)	278,000 ha			
Number of staff	Permanent 100		Temporary 150	
Annual budget (US\$) – excluding staff salary costs	Recurrent (operational) funds 12 millions baht		Project or other supplementary funds	

What are the main values for which the area is designated	Huai Kha Khaeng Wildlife Sanctuary is one of the most outstanding conservation areas in mainland Southeast Asia on account of its largely undisturbed primeval forest. It contains one of the last important areas of lowland riverine forest remaining in Thailand, which supports the last viable populations of several riparian bird species in the country. These include green peafowl, lesser fishing eagle, red-headed vulture and crested kingfisher. It is also the most important area in Thailand for banteng and gaur. The combined area may be the only conservation area in Thailand large enough to offer long-term prospects for the survival of many large mammal species. The site is biogeographically unique, capable of sustaining flora and fauna indefinitely, of exceptional natural beauty and scientific value, and includes very high biological diversity. Being located in a transition zone between the tropics and sub-tropics and, perhaps, because it was a Pleistocene refugium, a number of species of birds and mammals are found to be sympatric here. Few other areas of dry tropical forest in the region are as large, as well protected or as pristine. The complex also contains outstanding examples of the rock formations which distinguish the western edge of mainland Southeast Asia from the more stable continental core, and is probably one of the best modern examples of the impact of the Pleistocene epoch on the distribution and dispersal of Southeast Asian fauna. The impact of geological activity on an area of pristine dry tropical forest is exemplified better than elsewhere.			
List the two primary protected area management objectives				
Management objective 1	Wildlife protection			
Management objective 2			
No. of people involved in completing assessment			2 people	
Including: (tick boxes)	PA manager <input type="checkbox"/>	PA staff <input type="checkbox"/>	Other PA agency staff <input checked="" type="checkbox"/>	NGO <input type="checkbox"/>
	Local community <input type="checkbox"/>	Donors <input type="checkbox"/>	External experts <input type="checkbox"/>	Other <input type="checkbox"/>
Please note if assessment was carried out in association with a particular project, on behalf of an organisation or donor.			The assessment was carried out in association with Project Preparation Phase - Catalyzing Sustainability of Thailand's Protected Area System	

Information on International Designations			
UNESCO World Heritage site (see: whc.unesco.org/en/list)			
Date listed December 13, 1991	Site name	Site area	Geographical co-ordinates 15°00'-15°50'N, 99°00'-99°28'E
Criteria for designation (i.e. criteria i to x)		
Statement of Outstanding Universal Value		

Ramsar site (see: www.wetlands.org/RSDB/)			
Date listed	Site name	Site area	Geographical number
Reason for Designation (see Ramsar Information Sheet)			
UNESCO Man and Biosphere Reserves (see: www.unesco.org/mab/wnbrs.shtml)			
Date listed	Site name	Site area Total: Core: Buffer: Transition:	Geographical co-ordinates
Criteria for designation			
Fulfillment of three functions of MAB (conservation, development and logistic support.)			
Please list other designations (i.e. ASEAN Heritage, Natura 2000) and any supporting information below Not Applciable			
Name:		Detail:	

Protected Areas Threats: Data Sheet 2

Please tick all relevant existing threats as either of high, medium or low significance. Threats ranked as of **high** significance are those which are seriously degrading values; **medium** are those threats having some negative impact and those characterised as **low** are threats which are present but not seriously impacting values or **N/A** where the threat is not present or not applicable in the protected area.

1. Residential and commercial development within a protected area

Threats from human settlements or other non-agricultural land uses with a substantial footprint

High	Medium	Low	N/A	
			✓	1.1 Housing and settlement
			✓	1.2 Commercial and industrial areas
		✓		1.3 Tourism and recreation infrastructure

2. Agriculture and aquaculture within a protected area

Threats from farming and grazing as a result of agricultural expansion and intensification, including silviculture, mariculture and aquaculture

High	Medium	Low	N/A	
			✓	2.1 Annual and perennial non-timber crop cultivation
			✓	2.1a Drug cultivation
			✓	2.2 Wood and pulp plantations
			✓	2.3 Livestock farming and grazing
			✓	2.4 Marine and freshwater aquaculture

3. Energy production and mining within a protected area

Threats from production of non-biological resources

High	Medium	Low	N/A	
			✓	3.1 Oil and gas drilling
			✓	3.2 Mining and quarrying
			✓	3.3 Energy generation, including from hydropower dams

4. Transportation and service corridors within a protected area

Threats from long narrow transport corridors and the vehicles that use them including associated wildlife mortality

High	Medium	Low	N/A	
			✓	4.1 Roads and railroads (include road-killed animals)
			✓	4.2 Utility and service lines (e.g. electricity cables, telephone lines,)
			✓	4.3 Shipping lanes and canals
			✓	4.4 Flight paths

5. Biological resource use and harm within a protected area

Threats from consumptive use of "wild" biological resources including both deliberate and unintentional harvesting effects; also persecution or control of specific species (note this includes hunting and killing of animals)

High	Medium	Low	N/A	
		✓		5.1 Hunting, killing and collecting terrestrial animals (including killing of animals as a result of human/wildlife conflict)
		✓		5.2 Gathering terrestrial plants or plant products (non-timber)
		✓		5.3 Logging and wood harvesting
			✓	5.4 Fishing, killing and harvesting aquatic resources

6. Human intrusions and disturbance within a protected area

Threats from human activities that alter, destroy or disturb habitats and species associated with non-consumptive uses of biological resources

High	Medium	Low	N/A	
		✓		6.1 Recreational activities and tourism
			✓	6.2 War, civil unrest and military exercises
		✓		6.3 Research, education and other work-related activities in protected areas
		✓		6.4 Activities of protected area managers (e.g. construction or vehicle use, artificial watering points and dams)
		✓		6.5 Deliberate vandalism, destructive activities or threats to protected area staff and visitors

7. Natural system modifications

Threats from other actions that convert or degrade habitat or change the way the ecosystem functions

High	Medium	Low	N/A	
		✓		7.1 Fire and fire suppression (including arson)
			✓	7.2 Dams, hydrological modification and water management/use
			✓	7.3a Increased fragmentation within protected area
			✓	7.3b Isolation from other natural habitat (e.g. deforestation, dams without effective aquatic wildlife passages)
			✓	7.3c Other 'edge effects' on park values
		✓		7.3d Loss of keystone species (e.g. top predators, pollinators etc)

8. Invasive and other problematic species and genes

Threats from terrestrial and aquatic non-native and native plants, animals, pathogens/microbes or genetic materials that have or are predicted to have harmful effects on biodiversity following introduction, spread and/or increase

High	Medium	Low	N/A	
		✓		8.1 Invasive non-native/alien plants (weeds)
		✓		8.1a Invasive non-native/alien animals
			✓	8.1b Pathogens (non-native or native but creating new/increased problems)
			✓	8.2 Introduced genetic material (e.g. genetically modified organisms)

9. Pollution entering or generated within protected area

Threats from introduction of exotic and/or excess materials or energy from point and non-point sources

High	Medium	Low	N/A	
			✓	9.1 Household sewage and urban waste water
		✓		9.1a Sewage and waste water from protected area facilities (e.g. toilets, hotels etc)
			✓	9.2 Industrial, mining and military effluents and discharges (e.g. poor water quality discharge from dams, e.g. unnatural temperatures, de-oxygenated, other pollution)
			✓	9.3 Agricultural and forestry effluents (e.g. excess fertilizers or pesticides)
		✓		9.4 Garbage and solid waste
			✓	9.5 Air-borne pollutants
		✓		9.6 Excess energy (e.g. heat pollution, lights etc)

10. Geological events

Geological events may be part of natural disturbance regimes in many ecosystems. But they can be a threat if a species or habitat is damaged and has lost its resilience and is vulnerable to disturbance. Management capacity to respond to some of these changes may be limited.

High	Medium	Low	N/A	
			✓	10.1 Volcanoes
			✓	10.2 Earthquakes/Tsunamis
			✓	10.3 Avalanches/ Landslides
			✓	10.4 Erosion and siltation/ deposition (e.g. shoreline or riverbed changes)

11. Climate change and severe weather

Threats from long-term climatic changes which may be linked to global warming and other severe climatic/weather events outside of the natural range of variation

High	Medium	Low	N/A	
		✓		11.1 Habitat shifting and alteration
		✓		11.2 Droughts
		✓		11.3 Temperature extremes
			✓	11.4 Storms and flooding

12. Specific cultural and social threats

High	Medium	Low	N/A	
			✓	12.1 Loss of cultural links, traditional knowledge and/or management practices
			✓	12.2 Natural deterioration of important cultural site values
			✓	12.3 Destruction of cultural heritage buildings, gardens, sites etc

Assessment Form

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
1. Legal status Does the protected area have legal status (or in the case of private reserves is covered by a covenant or similar)? <i>Context</i>	The protected area is not gazetted/covenanted	0		1. Gazetted on September 26, 1972 and covers an area of 278,000 ha 2. UNESCO designated as a Natural World Heritage site since on 13 December 1991.	
	There is agreement that the protected area should be gazetted/covenanted but the process has not yet begun	1			
	The protected area is in the process of being gazetted/covenanted but the process is still incomplete (includes sites designated under international conventions, such as Ramsar, or local/traditional law such as community conserved areas, which do not yet have national legal status or covenant)	2			
	The protected area has been formally gazetted/covenanted	3	✓		
2. Protected area regulations Are appropriate regulations in place to control land use and activities (e.g. hunting)? <i>Planning</i>	There are no regulations for controlling land use and activities in the protected area	0		1. Yes, by law. But number of staff below general standard	
	Some regulations for controlling land use and activities in the protected area exist but these are major weaknesses	1			
	Regulations for controlling land use and activities in the protected area exist but there are some weaknesses or gaps	2	✓		
	Regulations for controlling inappropriate land use and activities in the protected area exist and provide an excellent basis for management	3			
3. Law enforcement Can staff (i.e. those with responsibility for managing the site) enforce protected area rules well enough? <i>Input</i>	The staff have no effective capacity/resources to enforce protected area legislation and regulations	0		1. Active patrol to control activities; now start to register NTFPs collectors (informally done)	
	There are major deficiencies in staff capacity/resources to enforce protected area legislation and regulations (e.g. lack of skills, no patrol budget, lack of institutional support)	1			
	The staff have acceptable capacity/resources to enforce protected area legislation and regulations but some deficiencies remain	2	✓		
	The staff have excellent capacity/resources to enforce protected area legislation and regulations	3			
4. Protected area objectives Is management undertaken according	No firm objectives have been agreed for the protected area	0		1. Part of the annual planning exercise	
	The protected area has agreed objectives, but is not managed according to these objectives	1			
	The protected area has agreed objectives, but is only partially managed according to these objectives	2	✓		

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
to agreed objectives? <i>Planning</i>	The protected area has agreed objectives and is managed to meet these objectives	3			
5. Protected area design	Inadequacies in protected area design mean achieving the major objectives of the protected area is very difficult	0		1. Enough, for now. There is a buffer zone that is taken care of by the Royal Forest Department	
Is the protected area the right size and shape to protect species, habitats, ecological processes and water catchments of key conservation concern? <i>Planning</i>	Inadequacies in protected area design mean that achievement of major objectives is difficult but some mitigating actions are being taken (e.g. agreements with adjacent land owners for wildlife corridors or introduction of appropriate catchment management)	1			
	Protected area design is not significantly constraining achievement of objectives, but could be improved (e.g. with respect to larger scale ecological processes)	2	✓		
	Protected area design helps achievement of objectives; it is appropriate for species and habitat conservation; and maintains ecological processes such as surface and groundwater flows at a catchment scale, natural disturbance patterns etc	3			
6. Protected area boundary demarcation	The boundary of the protected area is not known by the management authority or local residents/neighbouring land users	0			
Is the boundary known and demarcated? <i>Process</i>	The boundary of the protected area is known by the management authority but is not known by local residents/neighbouring land users	1			
	The boundary of the protected area is known by both the management authority and local residents/neighbouring land users but is not appropriately demarcated	2			
	The boundary of the protected area is known by the management authority and local residents/neighbouring land users and is appropriately demarcated	3	✓		
7. Management plan	There is no management plan for the protected area	0			
Is there a management plan and is it being implemented? <i>Planning</i>	A management plan is being prepared or has been prepared but is not being implemented	1			
	A management plan exists but it is only being partially implemented because of funding constraints or other problems	2			
	A management plan exists and is being implemented	3	✓		
Additional points: <i>Planning</i>					
7a. Planning process	The planning process allows adequate opportunity for key stakeholders to influence the management plan	+1	✓		
7b. Planning process	There is an established schedule and process for periodic review and updating of the management plan	+1			

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
7c. Planning process	The results of monitoring, research and evaluation are routinely incorporated into planning	+1	✓		
8. Regular work plan	No regular work plan exists	0		1. This is required	
Is there a regular work plan and is it being implemented	A regular work plan exists but few of the activities are implemented	1			
	A regular work plan exists and many activities are implemented	2	✓		
	A regular work plan exists and all activities are implemented	3			
<i>Planning/Outputs</i>					
9. Resource inventory	There is little or no information available on the critical habitats, species and cultural values of the protected area	0		1. On-going and finished activities to survey and make use of the some of the information/ data collected	
Do you have enough information to manage the area?	Information on the critical habitats, species, ecological processes and cultural values of the protected area is not sufficient to support planning and decision making	1			
	Information on the critical habitats, species, ecological processes and cultural values of the protected area is sufficient for most key areas of planning and decision making	2			
	Information on the critical habitats, species, ecological processes and cultural values of the protected area is sufficient to support all areas of planning and decision making	3	✓		
<i>Input</i>					
10. Protection systems	Protection systems (patrols, permits etc) do not exist or are not effective in controlling access/resource use	0			
Are systems in place to control access/resource use in the protected area?	Protection systems are only partially effective in controlling access/resource use	1			
	Protection systems are moderately effective in controlling access/resource use	2			
	Protection systems are largely or wholly effective in controlling access/resource use	3	✓		
<i>Process/Outcome</i>					
11. Research	There is no survey or research work taking place in the protected area	0		1. Yes, there is a research unit within the park; some joint research also conducted	
Is there a programme of management-orientated survey and research work?	There is a small amount of survey and research work but it is not directed towards the needs of protected area management	1			
	There is considerable survey and research work but it is not directed towards the needs of protected area management	2			
	There is a comprehensive, integrated programme of survey and research work, which is relevant to management needs	3	✓		
<i>Process</i>					

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
12. Resource management Is active resource management being undertaken? <i>Process</i>	Active resource management is not being undertaken	0			
	Very few of the requirements for active management of critical habitats, species, ecological processes and cultural values are being implemented	1			
	Many of the requirements for active management of critical habitats, species, ecological processes and, cultural values are being implemented but some key issues are not being addressed	2			
	Requirements for active management of critical habitats, species, ecological processes and, cultural values are being substantially or fully implemented	3	✓		
13. Staff numbers Are there enough people employed to manage the protected area? <i>Inputs</i>	There are no staff	0		1. According to the manager, the unit only have half of what required	
	Staff numbers are inadequate for critical management activities	1			
	Staff numbers are below optimum level for critical management activities	2	✓		
	Staff numbers are adequate for the management needs of the protected area	3			
14. Staff training Are staff adequately trained to fulfill management objectives? <i>Inputs/Process</i>	Staff lack the skills needed for protected area management	0		1. No budget support. This has to be sought from other sources	
	Staff training and skills are low relative to the needs of the protected area	1	✓		
	Staff training and skills are adequate, but could be further improved to fully achieve the objectives of management	2			
	Staff training and skills are aligned with the management needs of the protected area	3			
15. Current budget Is the current budget sufficient?	There is no budget for management of the protected area	0		1. Much below what is required. But more budget has to be accompanied by planned activities. More budget alone does not help.	
	The available budget is inadequate for basic management needs and presents a serious constraint to the capacity to manage	1	✓		
	The available budget is acceptable but could be further improved to fully achieve effective management	2			

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
<i>Inputs</i>	The available budget is sufficient and meets the full management needs of the protected area	3			
16. Security of budget	There is no secure budget for the protected area and management is wholly reliant on outside or highly variable funding	0			
Is the budget secure?	There is very little secure budget and the protected area could not function adequately without outside funding	1			
<i>Inputs</i>	There is a reasonably secure core budget for regular operation of the protected area but many innovations and initiatives are reliant on outside funding	2	✓		
	There is a secure budget for the protected area and its management needs	3			
17. Management of budget	Budget management is very poor and significantly undermines effectiveness (e.g. late release of budget in financial year)	0		1. Make best use of available budget	
Is the budget managed to meet critical management needs?	Budget management is poor and constrains effectiveness	1			
	Budget management is adequate but could be improved	2	✓		
<i>Process</i>	Budget management is excellent and meets management needs	3			
18. Equipment	There are little or no equipment and facilities for management needs	0		1. Much better situation, with the support of WCS, in terms of equipments. The present government budget is not enough to support this. Red tape in budget request for this item.	
Is equipment sufficient for management needs?	There are some equipment and facilities but these are inadequate for most management needs	1			
	There are equipment and facilities, but still some gaps that constrain management	2	✓		
<i>Input</i>	There are adequate equipment and facilities	3			
19. Maintenance of equipment	There is little or no maintenance of equipment and facilities	0			
Is equipment adequately maintained?	There is some <i>ad hoc</i> maintenance of equipment and facilities	1			
	There is basic maintenance of equipment and facilities	2	✓		
<i>Process</i>	Equipment and facilities are well maintained	3			

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
20. Education and awareness Is there a planned education programme linked to the objectives and needs? <i>Process</i>	There is no education and awareness programme	0		1. rather ad hoc, upon request	
	There is a limited and <i>ad hoc</i> education and awareness programme	1			
	There is an education and awareness programme but it only partly meets needs and could be improved	2	✓		
	There is an appropriate and fully implemented education and awareness programme	3			
21. Planning for land and water use Does land and water use planning recognise the protected area and aid the achievement of objectives? <i>Planning</i>	Adjacent land and water use planning does not take into account the needs of the protected area and activities/policies are detrimental to the survival of the area	0	✓		
	Adjacent land and water use planning does not takes into account the long term needs of the protected area, but activities are not detrimental the area	1			
	Adjacent land and water use planning partially takes into account the long term needs of the protected area	2			
	Adjacent land and water use planning fully takes into account the long term needs of the protected area	3			
Additional points: Land and water planning					
21a: Land and water planning for habitat conservation	Planning and management in the catchment or landscape containing the protected area incorporates provision for adequate environmental conditions (e.g. volume, quality and timing of water flow, air pollution levels etc) to sustain relevant habitats.	+1			
21b: Land and water planning for connectivity	Management of corridors linking the protected area provides for wildlife passage to key habitats outside the protected area (e.g. to allow migratory fish to travel between freshwater spawning sites and the sea, or to allow animal migration).	+1			
21c: Land and water planning for ecosystem services & species conservation	"Planning adresses ecosystem-specific needs and/or the needs of particular species of concern at an ecosystem scale (e.g. volume, quality and timing of freshwater flow to sustain particular species, fire management to maintain savannah habitats etc.)"	+1			
22. State and commercial neighbours	There is no contact between managers and neighbouring official or corporate land and water users	0			
	There is contact between managers and neighbouring official or corporate land and water users but little or no cooperation	1			

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
Is there co-operation with adjacent land and water users? <i>Process</i>	There is contact between managers and neighbouring official or corporate land and water users, but only some co-operation	2	✓		
	There is regular contact between managers and neighbouring official or corporate land and water users, and substantial co-operation on management	3			
23. Indigenous people Do indigenous and traditional peoples resident or regularly using the protected area have input to management decisions? <i>Process</i>	Indigenous and traditional peoples have no input into decisions relating to the management of the protected area	0		1. Karen	
	Indigenous and traditional peoples have some input into discussions relating to management but no direct role in management	1	✓		
	Indigenous and traditional peoples directly contribute to some relevant decisions relating to management but their involvement could be improved	2			
	Indigenous and traditional peoples directly participate in all relevant decisions relating to management, e.g. co-management	3			
24. Local communities Do local communities resident or near the protected area have input to management decisions? <i>Process</i>	Local communities have no input into decisions relating to the management of the protected area	0		1. only consultation via PAC	
	Local communities have some input into discussions relating to management but no direct role in management	1	✓		
	Local communities directly contribute to some relevant decisions relating to management but their involvement could be improved	2			
	Local communities directly participate in all relevant decisions relating to management, e.g. co-management	3			
Additional points <i>Local communities/indigenous people</i>					
24 a. Impact on communities	There is open communication and trust between local and/or indigenous people, stakeholders and protected area managers	+1			
24b. Impact on communities	Programmes to enhance community welfare, while conserving protected area resources, are being implemented	+1			
24c. Impact on communities	Local and/or indigenous people actively support the protected area	+1			
25. Economic benefit Is the protected area providing economic benefits to local	The protected area does not deliver any economic benefits to local communities	0		1. Livelihoods and markets drive resource extraction of NTFPs. This is not easy to regulate. Though laws prohibit it, but in reality, it is not easy	
	Potential economic benefits are recognised and plans to realise these are being developed	1			

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
communities, e.g. income, employment, payment for environmental services? <i>Outcomes</i>	There is some flow of economic benefits to local communities	2		to prohibit.	
	There is a major flow of economic benefits to local communities from activities associated with the protected area	3	✓		
26. Monitoring and evaluation Are management activities monitored against performance? <i>Planning/Process</i>	There is no monitoring and evaluation in the protected area	0			
	There is some <i>ad hoc</i> monitoring and evaluation, but no overall strategy and/or no regular collection of results	1			
	There is an agreed and implemented monitoring and evaluation system but results do not feed back into management	2	✓		
	A good monitoring and evaluation system exists, is well implemented and used in adaptive management	3			
27. Visitor facilities Are visitor facilities adequate? <i>Outputs</i>	There are no visitor facilities and services despite an identified need	0		1. No formal tourism activity. Very limited rooms for guests of the DNP.	
	Visitor facilities and services are inappropriate for current levels of visitation	1	✓		
	Visitor facilities and services are adequate for current levels of visitation but could be improved	2			
	Visitor facilities and services are excellent for current levels of visitation	3			
28. Commercial tourism operators Do commercial tour operators contribute to protected area management? <i>Process</i>	There is little or no contact between managers and tourism operators using the protected area	0	✓		
	There is contact between managers and tourism operators but this is largely confined to administrative or regulatory matters	1			
	There is limited co-operation between managers and tourism operators to enhance visitor experiences and maintain protected area values	2			
	There is good co-operation between managers and tourism operators to enhance visitor experiences, and maintain protected area values	3			
29. Fees If fees (i.e. entry fees or fines) are applied, do they help protected area management? <i>Inputs/Process</i>	Although fees are theoretically applied, they are not collected	0			
	Fees are collected, but make no contribution to the protected area or its environs	1			
	Fees are collected, and make some contribution to the protected area and its environs	2			
	Fees are collected and make a substantial contribution to the protected area and its environs	3	✓		

Issue	Criteria	Score: Tick only one box per question		Comment/Explanation	Next steps
30. Condition of values	Many important biodiversity, ecological or cultural values are being severely degraded	0		1. some key species are monitored regularly: Tigers. This information is used in management.	
What is the condition of the important values of the protected area as compared to when it was first designated? <i>Outcomes</i>	Some biodiversity, ecological or cultural values are being severely degraded	1			
	Some biodiversity, ecological and cultural values are being partially degraded but the most important values have not been significantly impacted	2	✓		
	Biodiversity, ecological and cultural values are predominantly intact	3			
<i>Additional Points: Condition of values</i>					
30a: Condition of values	The assessment of the condition of values is based on research and/or monitoring	+1			
30b: Condition of values	Specific management programmes are being implemented to address threats to biodiversity, ecological and cultural values	+1	✓		
30c: Condition of values	Activities to maintain key biodiversity, ecological and cultural values are a routine part of park management	+1			
TOTAL SCORE			62		

D. Thailand UNDP Financial Scorecard 2008 (2008)

FINANCIAL SCORECARD - PART I – OVERALL FINANCIAL STATUS OF THE PROTECTED AREAS SYSTEM

Basic Protected Area System Information			
Describe the PA system and what it includes:			
<p>This could be defined by IUCN Categories I-VI. However, if a country defines its PA system differently or has multiple PA systems then insert a definition that best describes the system about which the Scorecard is presenting data. For example some PA systems have a mixture of public, private and mixed ownership protected areas. What is important is for each country to explain and state which types of protected areas are included in the defined system and financial analysis. Some countries have private reserves separate from the national PA system. In these cases it is optional to report these here in an additional category in the tables (under other) as they do not fall under the responsibility of the government.</p> <p>Also include any additional specific characteristics of the national PA system that might affect its financing.</p> <p>The Thailand UNDP Scorecard was completed in October and November 2008, focusing on the system of national protected areas in Thailand managed by Thailand's National Park, Wildlife and Plant Conservation Department (DNP). Specifically the scorecard focuses on two classifications of protected areas: National Park and Wildlife Sanctuaries which combined constitute approximately 95% of Thailand's national system of protected areas. Included in these two designations are Forest Parks and Non-hunting Areas, respectively. Management and financing issues for these two sub-categories are included in the full assessment of the national PA system.</p> <p>Other categories of protected areas (i.e. watershed areas, etc.) are not included in the UNDP scorecard assessment. Note also: in Thailand there is no sub-national system of protected areas.</p> <p>The baseline year is Fiscal year 2008 (October 2007 - September 2008). As this is the first time the scorecard is completed the scorecard only presents baseline year data.</p>			
Protected Areas System or sub-system	Number of sites	Total hectares	Comments
National protected areas	373	11,590,071.94	<p>PAs in Thailand are managed by the Department of National Parks, Wildlife and Plant Conservation (DNP) under the Ministry of Natural Resources and Environment (MONRE).</p> <p>The DNP Fiscal Year (FY) begins October 1 and finishes September 30. The total DNP budget in FY2007 was 8,817,445,600 baht.</p>
- National parks	148	7,290,890.00	<p>In 2008: 148 National Parks. 110 are gazetted (55,135.32 sq km) and 38 are planned (17,773.58 sq km)</p> <p>In 2007: 108 National Parks with a total area of 5,473,344 ha (34,208,398.61 rai).</p>
- Forest parks (managed under national parks)	112	123,879.10	<p>In 2008: 112 Forest Parks (based on interviews with Mr. Prasert Sornsathapornkul.)</p> <p>In 2007: 113 Forest Parks with a total area of 123,879 ha (774,244.35 rai).</p>
- Wildlife sanctuaries	60	3,689,929.84	<p>In 2008: 60 Wildlife sanctuaries (57 gazetted with total area 22,627,004.50 rai, and 3 planned with total area 435,057.00 rai)</p> <p>In 2007: 57 Wildlife sanctuaries with a total area of 3,620,537ha</p>

			(22,628,354.63 rai).
- Non hunting Area (managed under wildlife sanctuaries)	53	485,373.00	53 gazetted Non Hunting Area with total area 2,537,761.25 rai & 6 planned with total area 495,820.00 rai.
Sub-national (state/regional/municipal) protected areas	0	0.00	No sub-National PA system exists in Thailand and are therefore are not addressed in this scorecard.
Co-managed protected areas	0	0.00	No formal co-managed areas in Thailand and therefore they are not addressed in this scorecard. Some of the National Parks and Wildlife Sanctuaries have informal co-management structures with Royal projects, military and other partners, but these are not assessed here.
Others (define)	0	0.00	Not Applicable (NA)

Financial Analysis of the National Protected Area System	Baseline year ⁴² 2008 (US\$) ⁴³	Year X ⁴⁴ (US\$) ⁴⁵	Comments ⁴⁶
Available Finances⁴⁷			
(1) Total annual central government budget allocated to PA management (excluding donor funds and revenues generated for the PA system)			PAs in Thailand are managed by the Department of National Parks, Wildlife and Plant Conservation (DNP) under the Ministry of Natural Resources and Environment (MONRE).
- national protected areas	35,486,343.22		Does not include salary of permanent government Staff. However, the Cost & Financing needs inputs below also do not include Staff salary as costs so does not affect assessment. This information should, however, be included in the assessment/ scorecard beginning in year 2.
• National parks & Forest Park	24,811,380.89		The total budget for fiscal year 2008 was 876.2 million baht (NP Management, 625.4 million baht; Eco-tourism Management, 182.2 million baht; Special projects, 3.5 million baht; Forest Protection projects, 65.1 million baht).
• Wildlife sanctuaries & Non Hunting Area	10,674,962.33		The total budget for fiscal year 2008 was 377.0 million baht (Forest engineering services, 65.2 baht; Computer system development project, 10 million baht; PA protection, 62.4 million baht; wildlife

⁴² The baseline year refers to the year the Scorecard was completed for the first time and remains fixed. Insert year eg 2007.

⁴³ Insert in footnote the local currency and exchange rate to US\$ and date of rate (US\$1=35.31323 Baht, November 2008)

⁴⁴ X refers to the year the Scorecard is completed and should be inserted (eg 2008). For the first time the Scorecard is completed X will be the same as the baseline year. For subsequent years insert an additional column to present the data for each year the Scorecard is completed.

⁴⁵ Insert in footnote the local currency and exchange rate to US\$ and date of rate

⁴⁶ Comment should be made on robustness of the financial data presented (low, medium, high)

⁴⁷ This section unravels sources of funds available to PAs, categorized by (i) government core budget (line item 1), (ii) additional government funds (line item 2), and (iii) PA generated revenues (line item 3).

			CITES conservation, 13.3 baht; Wildlife conservation and protection program 207.4 baht; village activities for conservation and protection for forest 18.6 baht).
- sub-national (state/regional/municipal) protected areas	-		NA
- co-managed protected areas	-		NA
- others	-		NA
(2) Total annual government budget provided for PA management (including PA dedicated taxes ⁴⁸ , Trust Funds, donor funds, loans, donations, debt-for nature swaps and other financial mechanisms)			Specify sources of funds and US\$ amounts for each
- national protected areas	35,486,343.22		Central government (DNP).
• National parks & Forest Park	24,811,380.89		DNP does not track outside funds, however numerous donor projects exist and can be accounted for. It is recommended that these be tallied in future years to understand the true funding allocated to the PA system in Thailand.
• Wildlife sanctuaries & Non Hunting Area	10,674,962.33		DNP does not track outside funds, however numerous donor projects exist and can be accounted for. It is recommended that these be tallied in future years to understand the true funding allocated to the PA system in Thailand.
- sub-national (state/regional/municipal) protected areas	-		NA
- co-managed protected areas	-		NA
- others	-		NA
(3) Total annual site based revenue generation across all PAs broken down by source ⁴⁹			Indicate total economic value of PAs (if studies available) ⁵⁰
A. Tourism entrance fees			Specify the number of visitors to the protected areas in year X - international: - national: The DNP statistics/data provided to the PPG team did not break down actual number of visitors by international or national at the system level. Some of these detailed records are available at the individual site level and will be reflected in site specific GEF

⁴⁸ Such as a conservation departure tax or water fees re-invested in PAs

⁴⁹ This data should be the total for all the PA systems to indicate total revenues. If data is only available for a specific PA system specify which system

⁵⁰ Note this will include non monetary values and hence will differ (be greater) than revenues

			tracking tool reports where available. Specify fee levels: Since fiscal year 2007 the entrance fee for all PAs is 200 baht (\$5.67)/ person for adult foreign visitors; 100 baht (\$2.83)/ person for child foreign visitors; 40 baht(\$1.13)/ person for adult Thai visitors; 20 baht(\$0.57)/ person for Thai child visitors.
- national protected areas	11,863,162.62		
• National parks	11,327,199.47		<p>National Park visitor numbers: 2003 - 14,364,262 visitors 2004 - 13,433,057 visitors 2005 - 13,374,674 visitors 2006 - 14,201,767 visitors 2007 - 12,232,785 visitors 2008 - not yet compiled/available</p> <p>Total Revenue from tourism: 2004 - 386,033,406.83 baht 2005 - 329,755,865.86 baht 2006 - 363,532,578.04 baht 2007 - 468,791,405.12 baht 2008 - 375,846,301.50 baht (Only 9 months), but estimated at approx. 400 million baht.</p> <p>Entrance fees: In 2005 - 227,974,735.00 baht In 2006 - 237,236,454.00 baht In 2007 - 288,409,960.00 baht In 2008 - not yet compiled/available</p> <p>Accommodation fee: In 2005 - 65,235,283.92 baht In 2006 - 73,994,147.65 baht In 2007 - 81,683,637.13 baht In 2008 - not yet compiled/available</p> <p>Fine: In 2005 - 1,452,081.00 baht In 2006 - 1,686,440.00 baht In 2007 - 1,546,020.00 baht In 2008 - not yet compiled/available</p>

			<p>Service Charge: In 2005 - 25,864,472.00 baht In 2006 - 44,145,590.01 baht In 2007 - 89,697,765.00 baht In 2008 - not yet compiled/available</p> <p>Donation: In 2005 - 3,977,801.24 baht In 2006 - 2,094,341.00 baht In 2007 - 2,444,835.00 baht In 2008 - not yet compiled/available</p> <p>Other: In 2005 - 5,241,242.70 baht In 2006 - 4,375,605.38 baht In 2007 - 5,009,187.99 baht In 2008 - not yet compiled/available</p>
<ul style="list-style-type: none"> Wildlife sanctuaries 	535,963.15		<p>Total tourism revenue: In 2003 - 11,131,082 baht In 2004 - 16,631,710 baht In 2005 - 14,870,180 baht In 2006 - 17,876,120 baht In 2007 - 20,064,380 baht In 2008 - 18,926,590 baht</p>
- sub-national (state/regional/municipal) protected areas	-		NA
- co-managed protected areas	-		NA
- others	-		NA
B. Concessions			No formal allowance for concessions.
- national protected areas	-		The small amount of concession-raised revenue is included in the tourism revenue numbers. (i.e. a few concessions have been noted for National park home stays and some small restaurants, however these "concessions" are really no more than DNP "owned" hotels.)
<ul style="list-style-type: none"> National parks 	-		
<ul style="list-style-type: none"> Wildlife sanctuaries 	-		
- sub-national (state/regional/municipal) protected areas	-		NA
- co-managed protected areas	-		NA
- others	-		NA

C. Payments for ecosystem services (PES)			Provide examples: NA (none documented)
- national protected areas	-		
• National parks	-		
• Wildlife sanctuaries	-		
- sub-national (state/regional/municipal) protected areas	-		NA
- co-managed protected areas	-		NA
- others	-		NA
D. Other (specify each type of revenue generation mechanism ⁵¹)			NA
- national protected areas			
• National parks	-		
• Wildlife sanctuaries	-		
- sub-national (state/regional/municipal) protected areas	-		NA
- co-managed protected areas	-		NA
- others	-		NA
(4) Total annual revenues generated by PAs (total of (3))			Currently, almost all revenue is tourism-related.
- national protected areas	11,863,162.62		
• National Parks and Forest Park	11,327,199.47		
• Wildlife sanctuaries and Non Hunting Area	535,963.15		
- sub-national (state/regional/municipal) protected areas	-		NA
- co-managed protected areas	-		NA
- others	-		NA
(5) Percentage of PA generated revenues retained in the PA system for re-investment ⁵²			
	%		Specify whether PA generated revenues are retained directly in the PA system or are sent to government and then returned back to the PA system
- national protected areas			
• National Parks and Forest Park	95%		95% (up to 70% at PA). 5% is distributed directly to the district/local authorities. The balance is supposed to be distributed as

⁵¹ This could include fees for licenses, research etc

⁵² This includes funds to be shared by PAs with local stakeholders

			follows: - 15% to Tourism management and infrastructure at the PA - 50% made available to the PA based on project requests -10% is available for capacity building of the PA staff -25% reserved at the central DNP level
• Wildlife sanctuaries and Non Hunting Area	100%		100% (up to 80% at PA). Of the total entrance fees from individual PAs 20% goes to the actual Wildlife Sanctuary, 40% is intended for special projects proposed by the Wildlife sanctuary staff, and 40% is split with the PA and the central Wildlife sanctuary division (DNP).
- sub-national (state/regional/municipal) protected areas	-		NA
- co-managed protected areas	-		NA
- others	-		NA
(6) Total finances available to the PA system [line item 2]+ [line item 4 * line item 5]			
- national protected areas	46,783,145.86		
• National Parks and Forest Park	35,572,220.38		
• Wildlife sanctuaries and Non Hunting Area	11,210,925.48		
- sub-national (state/regional/municipal) protected areas	-		NA
- co-managed protected areas	-		NA
- others	-		NA
Costs and Financing Needs			
(7) Total annual expenditure for PAs (all PA operating and investment costs and system level expenses) ⁵³			State any extraordinary levels of capital investment in a given year State rate of disbursement – total annual expenditures as % of available finances (line item 6.) If this % is low, state reasons ⁵⁴ :
- national protected areas	44,743,600.86		Does not include salary of permanent government Staff. However, the Budget inputs above also do not include Staff salary as budget allocations so does not affect assessment. This information should, however, be included in the assessment/scorecard beginning in year 2.

⁵³ In some countries actual expenditure differs from planned expenditure due to disbursement difficulties. In this case actual expenditure should be presented and a note on disbursement rates and planned expenditures can be made in the Comments column.

⁵⁴ Low to be defined by country expectations and needs

• National Parks and Forest Park	33,306,780.49		In 2007 the total expenditures/spend was approximately 300 million baht (or approximately \$33.3 million USD). The final number for 2008 (ended in September 2008) is not yet available, so we use 2007 expenditures for the 2008 baseline.
• Wildlife sanctuaries and Non Hunting Area	11,436,820.37		Expenditures for fiscal year 2008 were 26,903,668.23 baht or approximately \$11.4 million USD.
- sub-national (state/regional/municipal) protected areas	-		NA
- co-managed protected areas	-		NA
- others	-		NA
(8) Estimation of financing needs ⁵⁵			NOTE: Estimating financial needs of the PA system has not yet been conducted in a comprehensive, need-based fashion. Management costs are made based on basic, annual assumptions which rarely change and are not based on actual costs from PA specific management plans. (The general protocol has been to use the previous year's budget as a baseline and add 5% across the board as the requested budget for the following year). IT IS HIGHLY RECOMMENDED THAT ACTUAL, MANAGEMENT PLAN/NEED-BASED BUDGETS BE PROJECTED AND SUBMITTED ACROSS THE DNP PAS SYSTEM GOING FORWARD.
A. Estimated financing needs for <i>basic</i> management costs (operational and investments) to be covered			
- national protected areas	54509315.63		Basic management costs for fiscal year 2009 are estimated (budgeted) as 1,925 million baht. The total budget approved for fiscal year 2009 for the PA system is 1,110.8 million baht, or approximately 60% of the estimated need.
• National Parks and Forest Park	?		It is not clear, yet, what percentage of the 1,925 million baht estimated financial need/budget reflected above was to be allocated to National parks, however the budget approved for National parks in Fiscal year 2009 is 683.3 million baht (NP Management 486.1 million baht; Eco-tourism 182.2 million baht; Forest Protection Project 15 million baht). This reflects a total budget decrease from 2008 is 22.1 %. This is unusual as the previous number of years saw an approximate 5% per year increase in the PA system budget.
• Wildlife sanctuaries and Non Hunting Area	?		It is not clear, yet, what percentage of the 1,925 million baht estimated financial need/budget reflected above was to be allocated to Wildlife sanctuaries, however the budget approved for Wildlife sanctuaries in Fiscal year 2009 is 427.5 million baht (Forest

⁵⁵ Complete this per PA system and add rows as necessary for each PA system for which needs are estimated

			engineering services, 41.6 million baht; PA survey activities, 39.2 million baht; Computer system project, 100 million baht; PA protection, 60.8 million baht; wildlife CITES conservation, 13.1 million baht; Wildlife conservation and protection program, 193 million baht; village activities 24.6 million baht; Wildlife and forest conservation project in 5 provinces in east Thailand, 45.3 million baht).
- sub-national (state/regional/municipal) protected areas	-		NA
- co-managed protected areas	-		NA
- others	-		NA
B. Estimated financing needs for <i>optimal</i> management costs (operational and investments) to be covered ⁵⁶	?		As noted above, the DNP does not currently use an actual management plan / needs-against-objectives budgeting system. In addition, the DNP does not differentiate between scenarios, or levels-of-intensity, such as "basic" and "optimal". We have assumed that the current, flawed financial needs projecting/budgeting system is reflective of a "basic" need, and that no comprehensive assessment of "optimal management" needs has been done for each PA and at the system level.
- national protected areas	?		See comments directly above.
• National Parks and Forest Park	?		
• Wildlife sanctuaries and Non Hunting Area	?		
- sub-national (state/regional/municipal) protected areas	-		NA
- co-managed protected areas	-		NA
- others	-		NA
(9) Annual financing gap (financial needs – available finances) ⁵⁷			
A. Net actual annual surplus/deficit ⁵⁸			
- national protected areas	-		
• National Parks and Forest Park			Last Year (2007) the DNP National park central office received ± 400 million baht in revenue and spent approximately 300 million baht (not taking into account staff salary and how the DNP covered these costs). There appears that there should be a surplus of 100 million baht, or \$2.9 million USD. It is not clear where the surplus went.

⁵⁶ Optimal scenarios should include costs of expanding the PA systems to be fully ecologically representative

⁵⁷ Financing needs as calculated in (8) minus available financing total in (6)

⁵⁸ This will likely be zero but some PAs may have undisbursed funds and some with autonomous budgets may have deficits

• Wildlife sanctuaries and Non Hunting Area			
- sub-national (state/regional/municipal) protected areas	-		NA
- co-managed protected areas	-		NA
- others	-		NA
B. Annual financing gap for basic expenditure scenarios	-		See above.
- national protected areas	-		
• National Parks and Forest Park			
• Wildlife sanctuaries and Non Hunting Area			
- sub-national (state/regional/municipal) protected areas	-		NA
- co-managed protected areas	-		NA
- others	-		NA
C. Annual financing gap for optimal expenditure scenarios	-		
- national protected areas	-		See notes above regarding "optimal management" scenario.
• National Parks and Forest Park	-		
• Wildlife sanctuaries and Non Hunting Area	-		
- sub-national (state/regional/municipal) protected areas	-		
- co-managed protected areas	-		
- others	-		
D. Projected annual financing gap for basic expenditure scenario in year X+5 ^{59,60}	-		The current budget/financial system is based on an annual, non-comprehensive budgeting process. No long-term financial needs projection/budgeting system is used (especially not a needs-driven one). While we could use a linear projection based on the current baseline year budget this would not provide an accurate snapshot of the annual need or financing gap so we have left this blank.
- national protected areas	NA		
• National Parks and Forest Park	NA		
• Wildlife sanctuaries and Non Hunting Area	NA		
- sub-national (state/regional/municipal) protected areas	-		NA
- co-managed protected areas	-		NA

⁵⁹ This data is useful to show the direction and pace of the PA system towards closing the finance gap. This line can only be completed if a long term financial analysis of the PA system has been undertaken for the country

⁶⁰ As future costs are projected, initial consideration should be given to upcoming needs of PA systems to adapt to climate change which may include incorporating new areas into the PA system to facilitate habitat changes and migration

- others	-		NA
(10) Financial data collection needs	<p>Specify main data gaps identified from this analysis:</p> <ul style="list-style-type: none"> • There is no attempt to derive a management/need-driven • This UNDP scorecard does not include the budgeted salaries of permanent government Staff – neither as a cost or a budget allocation from central government. Securing this level of detail will add to the full picture of the • DNP does not track outside funds from donors; however numerous donor projects exist and could be accounted for. It is recommended that these be tallied in future years to understand the true funding allocated to the PA system in Thailand. • The DNP statistics/data provided to the PPG team did not break down actual number of visitors by international or national at the system level. Some of these detailed records are available at the individual site level and will be reflected in site specific GEF tracking tool reports where available. • In 2007 the total expenditures/spend was approximately 300 million baht (or approximately \$33.3 million USD). The final number for 2008 (ended in September 2008) is not yet available, so we use 2007 expenditures for the 2008 baseline. • Estimating financial needs of the PA system has not yet been conducted in a comprehensive, need-based fashion. Management costs are made based on basic, annual assumptions which rarely change and are not based on actual costs from PA specific management plans. (The general protocol has been to use the previous year's budget as a baseline and add 5% across the board as the requested budget for the following year). • Basic management costs for fiscal year 2009 are estimated (budgeted) as 1,925 million baht. The total budget approved for fiscal year 2009 for the PA system is 1,110.8 million baht, or approximately 60% of the estimated need. It is not clear why the budget has been reduced. • The DNP does not differentiate between scenarios, or levels-of-intensity, such as "basic" and "optimal". We have assumed that the current, flawed financial needs projecting/budgeting system is reflective of a "basic" need, and that no comprehensive assessment of "optimal management" needs has been done for each PA and at the system level. • Last Year (2007) the DNP National park central office received ± 400 million baht in revenue and spent approximately 300 million baht (not taking into account staff salary and how the DNP covered these costs). There appears that there should be a surplus of 100 million baht, or \$2.9 million USD. It is not clear where the surplus went. • No long-term financial needs projection/budgeting system is used (especially not a needs-driven one). 		

	<ul style="list-style-type: none">• Specify actions to be taken to fill data gaps⁶¹:• Conduct PA costing on each PA based on real management plan (management plan need to be made first, because there is no real management plan on site) and feed it into PA national system.
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⁶¹ Actions may include (i) cost data based on site based management plans and extrapolation of site costs across a PA system and (ii) revenue and budget accounts and projections

FINANCIAL SCORECARD – PART II – ASSESSING ELEMENTS OF THE FINANCING SYSTEM

Component 1 – Legal, regulatory and institutional frameworks					COMMENT
<i>Element 1 – Legal, policy and regulatory support for revenue generation by PAs</i>	None (0)	A Few (1)	Several (2)	Fully (3)	
(i) Laws or policies are in place that facilitate PA revenue mechanisms				3	Specify the revenue generation mechanisms that are not permitted under the current legal framework In the National parks there are clear restrictions on the type of tourism activities. Most revenue is limited to basic entrance fees, hotels/guest lodges, and food and merchandise. Very little else has been demonstrated to develop financing for the PAs, although certain concessions and other PES can and should be explored, none have been developed in a meaningful way yet. Only entrance fees are currently used or permitted as a means of revenue generation within Wildlife sanctuaries.
(ii) Fiscal instruments such as taxes on tourism and water or tax breaks exist to promote PA financing	0				
<i>Element 2 - Legal, policy and regulatory support for revenue retention and sharing within the PA system</i>	No (0)	Under development (1)	Yes, but needs improvement (2)	Yes, satisfactory (3)	
(i) Laws or policies are in place for PA revenues to be retained by the PA system (central and site levels)				3	Specify % to be retained: The PA system retains approximately 95% of tourism revenue from National Parks and 100% of tourism revenue from Wildlife Sanctuaries.
(ii) Laws or policies are in place for PA revenues to be retained at the PA site level			2		Specify % to be retained: National parks: Laws stipulate 70% from the total revenue (after an initial deduction of 5% for the local government from the total revenues) can potentially be retained (returned, actually) at the PA site level. Evidence indicates this the amount is generally less and inconsistent. Wildlife santuaries: From 60-80% from the total entrance fee revenue potentially returns to the PA site level, although this is incosistently applied.

(iii) Laws or policies are in place for revenue sharing at the PA site level with local stakeholders		1			Specify % to be shared: 5 % of the total tourism revenue from National park (not Wildlife sanctuaries) goes directly to the district/ local (TAO) government.
<i>Element 3 - Legal and regulatory conditions for establishing Funds (endowment, sinking or revolving)</i> ⁶²					No Fund established yet by the government. Funds (not endowments) have been established for a limited number of PAs as part of termed projects.
	No (0)	Established (1)	Established with limited capital (2)	Established with adequate capital (3)	
(i) A Fund has been established and capitalized to finance the PA system	0				
	None (0)	A few (1)	Several (2)	Sufficient (3)	
(ii) Funds have been created to finance specific PAs		1			
	No (0)	Partially (1)	Quite well (2)	Fully (3)	
(iii) Fund expenditures are integrated with national PA financial planning and accounting	0				
<i>Element 4 - Legal, policy and regulatory support for alternative institutional arrangements for PA management to reduce cost burden to government</i>	None (0)	Under development (1)	Yes, but needs improvement (2)	Yes, Satisfactory (3)	
(i) There are laws or policies which allow and regulate concessions for PA services			2		While laws seem to address these there are no formal concessions issued that we could identify.
(ii) There are laws or policies which allow and regulate co-management of PAs		1			Nothing is yet formal, although there are opportunities to collaborate with NGOs, foundations and communities.
(iii) There are laws or policies which allow and regulate local government management of PAs		1			These laws or opportunities are not clear to PPG team.

⁶² This element can be omitted in countries where a PA system does not require a Trust Fund due to robust financing within government

(iv) There are laws which allow, promote and regulate private reserves	0				
<i>Element 5 - National PA financing policies and strategies</i>					
(i) There are key PA financing policies for:	No (0)	Yes, but needs improvement (2)	Yes, satisfactory (3)		
- Comprehensive, standardized and coordinated cost accounting systems (both input and activity based accounting)		2			Central systems; top-down.
- Revenue generation and fee levels across PAs		2			Specify the tariff levels for the PAs Since fiscal year 2007 the entrance fee for all PAs is 200 baht (\$5.67)/ person for adult foreign visitors; 100 baht (\$2.83)/ person for child foreign visitors; 40 baht (\$1.13)/ person for adult Thai visitors; 20 baht(\$0.57)/ person for Thai child visitors.
- Allocation of PA budgets to PA sites (criteria based on size, threats, business plans, performance etc)		2			List the budget allocation criteria List the budget allocation criteria. The budgets are allocated based on an unwritten but rather systematic approach considering size, number of staff, ranger station, etc. However even this is not the primary driver. It is clear that the only indicator is the amount allocated in the previous year. There is really no budgeting based on current management needs.
- Safeguards to ensure that revenue generation does not adversely affect conservation objectives of PAs	0				
- PA management plans to include financial data or associated business plans		2			
(ii) Degree of formulation, adoption and implementation of a national financing strategy ⁶³	Not begun (0)	In progress (1)	Completed (3)	Under implementation (5)	
	0				

⁶³ A national PA Financing Strategy will include targets, policies, tools and approaches

<i>Element 6 - Economic valuation of protected area systems</i> (ecosystem services, tourism based employment etc)	None (0)	Partial (1)	Satisfactory (2)	Full (3)	
(i) Economic valuation studies on the contribution of protected areas to local and national development are available		1			Provide summary data from studies No valuation studies have been made available to the PPG Team. Some donor projects have looked at this. The new Biodiversity-Based Economy Development Office (BEDO) office of MONRE is starting to design a few valuation studies for wildlife hunting/trade.
(ii) PA economic valuation influences government decision makers	0	(eg within Ministry of Environment)	(eg within other sectoral Ministries)	(eg within Ministry of Finance)	
<i>Element 7 - Improved government budgeting for PA systems</i>	No (0)	Partially (2)	Yes (3)		
(i) Government policy promotes budgeting for PAs based on financial need as determined by PA management plans		2			The policy requires that a budget based on the management plan be submitted, however the budgets are based on basic workplans and rarely linked to actual, functional management plans.
(ii) PA budgets includes funds to finance threat reduction strategies in buffer zones (eg livelihoods of communities living around the PA) ⁶⁴		2			Yes, however the effectiveness of these activities/strategies is not certain.
(iii) Administrative (eg procurement) procedures facilitate budget to be spent, reducing risk of future budget cuts due to low disbursement rates			3		Yes. Over the past few years it appears budgets/allocations to central and PA sites grew by up to 5% each year over the previous. In this latest fiscal year budget approval (2009) there will be a 22% reduction virtually across the board as the government restricts spending in almost all Ministries.
(iv) Ministry of Finance plans to increased budget, over the long term, to reduce the PA financing gap	0				It is not clear what the Ministry intends to do.

⁶⁴ This could include budgets for development agencies and local governments for local livelihoods

<i>Element 8 - Clearly defined institutional responsibilities for financial management of PAs</i>	None (0)	Partial (1)	Improving (2)	Full (3)	
(i) Mandates of public institutions regarding PA finances are clear and agreed		1			
<i>Element 9 - Well-defined staffing requirements, profiles and incentives at site and system level</i>	None (0)	Partial (1)	Almost there (2)	Full (3)	
(i) There is an organizational structure with a sufficient number of economists and financial planners in the PA authorities (central, regional and site levels) and sufficient authority to properly manage the finances of the PA system	0				Explain their roles: The DNP does have a Planning and Information Office and each division has staff focused on budget and effectiveness but nothing formally focused with sufficient authority to do anything about issues which exist.
(ii) PA site manager responsibilities include, financial management, cost-effectiveness and revenue generation ⁶⁵			2		They manage these issues with varying degrees of effectiveness. It is important to note that well managed and effective implementation is not necessarily encouraged or rewarded.
(iii) Budgetary incentives motivate PA managers to promote site level financial sustainability (eg sites generating revenues do not experience budget cuts)	0				
(iv) Performance assessment of PA site managers includes assessment of sound financial planning, revenue generation, fee collection and cost-effective management		1			It is not clear how this is, if at all, happening.
(v) There is auditing capacity for PA finances		1			In the technical and general sense the system is audited fiscally speaking.
(vi) PA managers have the possibility to budget and plan for the long-term (eg over 5 years)		1			It is not clear how this is, if at all, happening.
Total Score for Component 1					Actual score: 35 Total possible score: 95 #: 36.8%

⁶⁵ These responsibilities should be found in the Terms of Reference for the posts

Component 2 – Business planning and tools for cost-effective management					COMMENT
<i>Element 1 – PA site-level business planning</i>	Not begun (0)	Early stages (1)	Near complete (2)	Completed (3)	
(i) PA management plans includes conservation objectives, management needs and costs based on cost-effective analysis		1			The rating should be based on quality of management plans 68 of 108 (65%) already-designated National Parks have management plans (around 30 are not up to date). There is a standard structure (SWOT, staffing structure, zonation, etc.), however an effective level of functionality, activities or prioritization is not specified in the management plans. In addition there is no requirement for community awareness/ collaboration activities in the management plans. Wildlife sanctuaries do not currently have management plans (0% have plans). Note: 20 Wildlife sanctuaries, as part of Forest Complex areas, are in the process of developing management plans which reflect the National park plans.
(ii) PA management plans are used at PA sites across the PA system		1			Specify the percentage of PAs that have management plans
(iii) Business plans, based on standard formats and linked to PA management plans and conservation objectives, are developed across the PA system ⁶⁶	0				Development Agency for Sustainable Tourism conducts business plan in Koh Chang NP (for the entire island system) but this is for the overall island system and is not linked to the PA management plan, however it has ecotourism-related activities to generate revenues for the PA
(iv) Business plans are implemented across the PA system (degree of implementation measured by achievement of objectives)	0				
(v) Business plans for PAs contribute to system level planning and budgeting	0				

⁶⁶ A PA Business Plan is a plan that analyzes and identifies the financial gap in a PA's operations, and presents opportunities to mitigate that gap through operational cost efficiencies or revenue generation schemes. It does not refer to business plans for specific concession services within a PA. Each country may have its own definition and methodology for business plans or may only carry out financial analysis and hence may need to adapt the questions accordingly.

(vi) Costs of implementing management and business plans are monitored and contributes to cost-effective guidance and financial performance reporting		1			
<i>Element 2 - Operational, transparent and useful accounting and auditing systems</i>	None (0)	Partial (1)	Near complete (2)	Fully completed (3)	
(i) There is a transparent and coordinated cost (operational and investment) accounting system functioning for the PA system		1			
(ii) Revenue tracking systems for each PA in place and operational		1			As revenue is really limited to entrance fees which are generally collected directly by the central office this has not been difficult.
(iii) There is a system so that the accounting data contributes to system level planning and budgeting		1			The system could be better implemented / tracked across the full system.
<i>Element 3 - Systems for monitoring and reporting on financial management performance</i>	None (0)	Partial (1)	Near completed (2)	Complete and operational (3)	
(i) All PA revenues and expenditures are fully and accurately reported by PA authorities to stakeholders		1			Basic budget and revenue reports.
(ii) Financial returns on tourism related investments are measured and reported, where possible (eg track increase in visitor revenues before and after establishment of a visitor centre)		1			Each PA does provide data in simple form. But how the data is used and analyzed to direct decisions is unclear.
(iii) A monitoring and reporting system in place to show how and why funds are allocated across PA sites and the central PA authority		1			The PPG Team did not receive information on this.
(iv) A reporting and evaluation system is in place to show how effectively PAs use their available finances (ie disbursement rate and cost-effectiveness) to achieve management objectives		1			The PPG Team did not receive information on this.
<i>Element 4 - Methods for allocating funds across individual PA sites</i>	No (0)	Yes (2)			

(i) National PA budget is allocated to sites based on agreed and appropriate criteria (eg size, threats, needs, performance)		2			The budgets are allocated based on an unwritten but rather systematic approach considering size, number of staff, ranger station, etc. However even this is not the primary driver. It is clear that the only indicator is the amount allocated in the previous year. There is really no budgeting based on current management needs or performance.
(ii) Funds raised by co-managed PAs do not reduce government budget allocations where funding gaps still exist		2			
<i>Element 5 - Training and support networks to enable PA managers to operate more cost-effectively</i>	Absent (0)	Partially done (1)	Almost done (2)	Fully (3)	
(i) Guidance on cost-effective management developed and being used by PA managers	0				There is some training on how to prepare budget requests, but no training or guidance on cost effectiveness, etc.
(ii) Inter-PA site level network exist for PA managers to share information with each other on their costs, practices and impacts		1			Superintendents meet frequently in Bangkok and at various workshops.
(iii) Operational and investment cost comparisons between PA sites complete, available and being used to track PA manager performance		1			DNP central has access to integrated data if needed.
(iv) Monitoring and learning systems of cost-effectiveness are in place and feed into system management policy and planning		1			A new system of cost data compilation and specific staff within the Planning and Information Office within DNP Bangkok, but is not fully integrated with policy and planning.
(v) PA site managers are trained in financial management and cost-effective management	0				Limited.
(vi) PA financing system facilitates PAs to share costs of common practices with each other and with PA headquarters ⁶⁷	0				
Total Score for Component 2					Actual score:17 Total possible score: 61 :%:27.9%

⁶⁷ This might include aerial surveys, marine pollution monitoring, economic valuations etc.

Component 3 – Tools for revenue generation by PAs					COMMENT
<i>Element 1</i> - Number and variety of revenue sources used across the PA system	None (0)	Partially (1)	A fair amount (2)	Optimal (3)	
(i) An up-to-date analysis of revenue options for the country complete and available including feasibility studies;	0				Some older analysis on Tourism willingness to pay etc. exists (which was basis for fee changes in 2007).
(ii) There is a diverse set of sources and mechanisms, generating funds for the PA system		1			Entrance fees, some hotel and other tourism revenues. However, beyne tourism there is very little outside of fines, etc.
(iii) PAs are operating revenue mechanisms that generate positive net revenues (greater than annual operating costs and over long-term payback initial investment cost)		1			Some PAs have positive net revenues but not most. A system there is not positive net revenue from mechanisms (tourism). <i>Note: The PPG team does not necessarily agree with score of 2. Should be a 1. We recommend further analysis.</i>
(iv) PAs enable local communities to generate revenues, resulting in reduced threats to the PAs		1			Local communities, In some cases, benefit from tourist visits. It is not clear how much and whether there is a positive outcome in terms of threat reduction.
<i>Element 2</i> - Setting and establishment of user fees across the PA system	No (0)	Partially (1)	Satisfactory (2)	Fully (3)	
(i) A system wide strategy and action plan for user fees is complete and adopted by government			2		If PA sites have tariffs but there is no system strategies score as partial. There is a system wide strategy.
(ii) The national tourism industry and Ministry are supportive and are partners in the PA user fee system and programmes			2		

ii) Tourism related infrastructure investment is proposed and developed for PA sites across the network based on analysis of revenue potential and return on investment ⁶⁸		1			Tourism investments are a sensitive subject in Thailand, where tourism is not seen as compatible with conservation. Attempts have been made in the past to undertake tourism investment in more systematic cost-effective manner, however to be successful such attempts should better articulate the value (and necessity) of the tourism revenues to effective conservation.
(iv) Where tourism is promoted PA managers can demonstrate maximum revenue whilst not threatening PA conservation objectives		1			Yes, but varies - depends on the capability of the superintendent and staff and design of the management and work plans.
(v) Non tourism user fees are applied and generate additional revenue			2		Certain research and filming fees are charged consistently across the system.
<i>Element 3 - Effective fee collection systems</i>	None (0)	Partially (1)	Completed (2)	Operational (3)	
(i) System wide guidelines for fee collection are complete and approved by PA authorities		1			It is estimated by some within the DNP that they lose up to 50% of potential entrance revenues as a result of too many entry points, non compliance by tourism operators and leakage within the system, etc.
(ii) Fee collection systems are being implemented at PA sites in a cost-effective manner				3	Simple and effective where applied.
(iii) Fee collection systems are monitored, evaluated and acted upon		1			It is not clear exactly how they are evaluated and acted on, but systems and fee revenues are well monitored by central accounting.
(iv) PA visitors are satisfied with the professionalism of fee collection and the services provided			2	Not Applicable	This can be done through visitor surveys This is scored based on general impression of some DNP staff.
<i>Element 4 - Marketing and communication strategies for revenue generation mechanisms</i>	None (0)	Partially (1)	Satisfactory (2)	Fully (3)	
(i) Communication campaigns and marketing for the public about tourism fees, conservation taxes etc are widespread and high profile at national level		1			Fee information is not transparent.

⁶⁸ As tourism infrastructure increases within PAs and in turn increases visitor numbers and PA revenues the score for this item should be increased in proportion to its importance to funding the PA system.

(i) Communication campaigns and marketing for the public about PA fees are in place at PA site level				3	General marketing is solid.
<i>Element 5 - Operational PES schemes for PAs⁶⁹</i>	None (0)	Partially (1)	Progressing (2)	Fully (3)	
(i) A system wide strategy and action plan for PES is complete and adopted by government	0				No PES schemes are being pursued at the moment.
(ii) Pilot PES schemes at select PA sites developed	0				
(iii) Operational performance of pilots is monitored, evaluated and reported	0				
(iv) Scale up of PES across the PA system is underway	0				
<i>Element 6 - Concessions operating within PAs⁷⁰</i>	None (0)	Partially (1)	Progressing (2)	Fully (3)	
(i) A system wide strategy and implementation action plan is complete and adopted by government for concessions	0				Not clear how formal or what policies exist to encourage concessions.
(ii) Concession opportunities are operational at pilot PA sites		1			
(iii) Operational performance (environmental and financial) of pilots is monitored, evaluated, reported and acted upon		1			
(iv) Scale up of concessions across the PA system is underway	0				
<i>Element 7 - PA training programmes on revenue generation mechanisms</i>	None (0)	Limited (1)	Satisfactory (2)	Extensive (3)	
(i) Training courses run by the government and other competent organizations for PA managers on revenue mechanisms and financial administration		1			Very limited.
Total Score for Component 3					Actual score:25 Total possible score: 71 :%:35.2%

⁶⁹ Where PES is not appropriate or feasible for a PA system take 12 points off total possible score for the PA system

⁷⁰ Concessions will be mainly for tourism related services such as visitor centres, giftshops, restaurants, transportation etc

FINANCIAL SCORECARD – PART III – SCORING AND MEASURING PROGRESS

Total Score for PA System	77
Total Possible Score	227
Actual score as a percentage of the total possible score	33.9 %
Percentage scored in previous year⁷¹	NA

Signature⁷²: _____

Director of Protected Areas System

Date: _____

⁷¹ Insert NA if this is first year of completing scorecard.

⁷² In case a country does not have an official national Protected Areas system, the head of the authority with most responsibility for protected areas or the sub-system detailed in the Scorecard, should sign.