INTERNATIONAL TROPICAL TIMBER ORGANIZATION

ITTO

PROJECT DOCUMENT

TITLE	MANAGEMENT OF THE EMERALD TRIANGLE PROTECTED FORESTS COMLEX TO PROMOTE COOPERATION FOR TRANSBOUNDARY BIODIVERSITY CONSERVATION BETWEEN THAILAND, CAMBODIA AND LAOS (PHASE III)
SERIAL NUMBER	PD 577/10 Rev.1 (F)
COMMITTEE	REFORESTATION AND FOREST MANAGEMENT
SUBMITTED BY	GOVERNMENTS OF THAILAND AND CAMBODIA
ORIGINAL LANGUAGE	ENGLISH

SUMMARY

The protected areas of the Emerald Triangle comprise habitats of a diversity of wildlife species. Large species, such as the wild elephant, banteng and tiger, are observed along the national borders and seasonally migrate across the tri-national boundaries. The Emerald Triangle has some of the most extensive unfragemented natural forests in Southeast Asia containing large numbers of globally threatened species as a last refuge for sixteen "critically Endangered" and "Endangered" species from the IUNC Red List.

The development objective of the phrase III project is to conserve trans-boundary biodiversity in the Emerald Triangle Protected Forests Complex situated between Thailand, Cambodia and Lao PDR in a framework of the trans-boundary biodiversity conservation area (TBCA). The specific objective of Phase III is to strengthen the protection of trans-boundary habitats of the protected wide-ranging wildlife species in the Emerald Triangle. Phase III will apply lessons learned in Phase II, as well as in Phase I, of the project and will address in a comprehensive manner those remaining limitations that impact the sustainability of biodiversity conservation and alternative livelihood impacts of project activities that will have been implemented through the project.

EXECUTING AGENCY	Royal Forest Department of Thailand & Forestry Administration of Cambodia
COOPERATING GOVERNMENTS	---
DURATION	36 MONTHS
APPROXIMATE STARTING DATE	TO BE DETERMINED

BUDGET AND PROPOSED SOURCES OF FINANCE

Source	Contribution in US$	Local Currency Equivalent
ITTO	**2,051,039**	
Gov't of Thailand	339,552	
Gov't of Cambodia	228,850	
TOTAL	**2,619,441**	

ABBREVIATIONS

ADB	:	Asian Development Bank
CALM		Establishing Conservation Areas through Landscape Management
CAT		Cat Action Treasury
CBD	:	Convention on Biological Diversity
CITES	:	Convention on International Trade in Endangered species of Wild Fauna and Flora
CLDP	:	Community Livelihood Development Program
CTA	:	Chief Technical Advisor
DNP	:	National Park, Wildlife and Plant Conservation Department
DWB		Department of Wildlife and Biodiversity
FA	:	Forestry Administration
FAO	:	Food and Agriculture Organization
GIS	:	Geographic Information System
GPS	:	Global Positioning System
HQ	:	Headquarters
ICDP	:	Integrated Conservation and Development Program
ITTA	:	International Tropical Timber Agreement
ITTO	:	International Tropical Timber Organization
IUCN	:	The World Conservation Union
MoE	:	Ministry of Environment
MAFF	:	Ministry of Agriculture, Forestry and Fishery
MIS	:	Management Information System
MRC	:	Me Kong River Commission
NBCA	:	National Biodiversity Conservation Area
NESDP		National Economic and Social Development Plan
NGOs	:	Non-Government Organizations
NP	:	National Park
PM	:	Project Manager
PAs	:	Protected Areas
PPFC	:	Phataem Protected Forests Complex
PSC	:	Project Steering Committee
PVPF	:	Preah Vihear Protected Forest
RFD	:	Royal Forest Department
RGC	:	Royal Government of Cambodia
SFM	:	Sustainable Forest Management
TA	:	Technical Advisor
TBC	:	Trans-boundary Biodiversity Conservation
TBCA	:	Trans-boundary Biodiversity Conservation Area
TFSMP		Thai Forestry Sector Master Plan
WEFCOM	:	Western Forest Complex Ecosystem Management Project
WS	:	Wildlife Sanctuary

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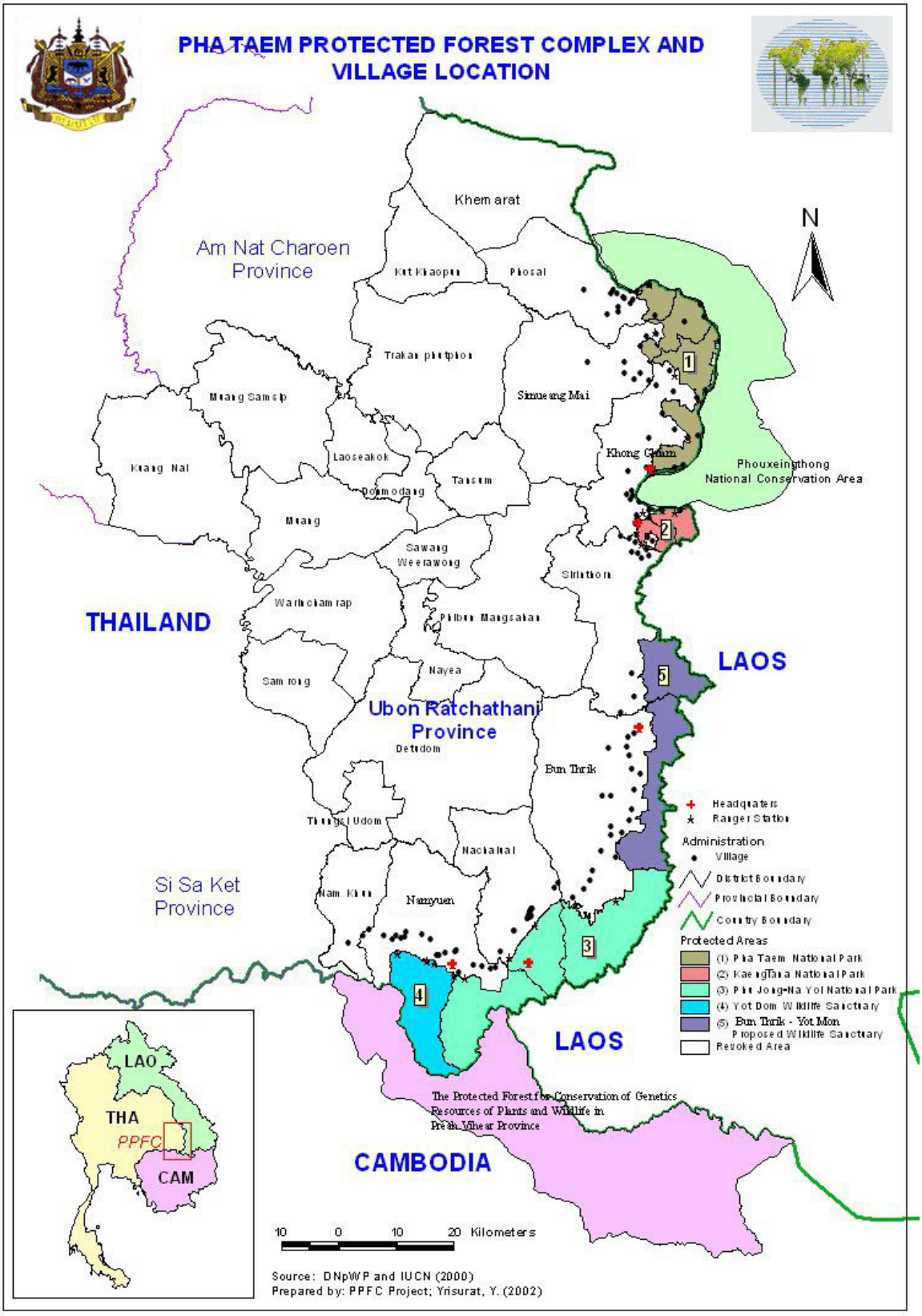


Map of the Emerald Triangle Protected Forests Complex and nearby conservation areas.

BRIEF OF THE PROJECT

Phase III will apply lessons learned in Phase II, as well as in Phase I, of the project and will address those remaining limitations that impact the sustainability of biodiversity conservation and alternative livelihood impacts of project activities. The development objective in Phase III is to contribute to the conservation of trans-boundary biodiversity in the Emerald Triangle Protected Forests Complex between Thailand, Cambodia and Laos. The specific objective will be to strengthen the protection of trans-boundary habitats of protected wide-ranging wildlife species in the Emerald Triangle. Those objectives will be achieved through the development and implementation of an effective joint task-force and international collaboration between the tri-national parties and the use a long-term management plan and integrated conservation and development program as a framework to secure and expand the permanent forest estate. Phase III project outputs will include (1) Management plans incorporating research results on wide-ranging species and ecological processes, which are compatible between countries, are established and implemented; (2) Capacity of multi-stakeholders in biodiversity conservation and monitoring is strengthened; and (3) Local communities are empowered to implement activities linking livelihoods improvement to reduced dependence on resources of protected areas.

Implementation strategies in Phase III will be directed to the harmonization between Thailand, Cambodia and Lao PDR of guidelines for management planning and the implementation of several joint ecological monitoring activities. It is expected that cooperation will be extended to include technical aspects (i.e., research, conservation and management), protection, information sharing, human resource development, the development of tourism packages, and joint efforts to reduce poaching and the illegal trade of endangered and rare species.

In responding to the critical concern in the Emerald Triangle Protected Forests Complex, which is the inadequate protection of trans-boundary habitats of protected wide-ranging wildlife species, project interventions will improve ecosystem management through the production of a series of wildlife distribution maps that were initiated during the first two phases of the project. Those will contribute to the establishment of a broad collaborative framework for integrating trans-boundary biodiversity conservation efforts among the three counties. Within that framework, research on wide-ranging species will continue in Thailand and Cambodia and will be extended to Lao PDR. The sharing of information will be institutionalized between the three countries as a basis for formulating sustainable management strategies to protect wildlife populations and reduce barriers to migratory wildlife movements along the tri-national borders.

Project interventions will also be extended to improve local community livelihoods that will be developed on the basis of the outcomes of planned Sustainable Livelihood Assessments that will be conducted in Thailand and Cambodia. There will also be an expansion of the most effective Integrated Conservation and Development Program and Community Livelihood Development Program activities that were introduced in Phase II of the project, including nature-based tourism interventions as well as other promising income-generating opportunities. Concerted efforts will be extended in both countries to strengthen the long-term viability of the livelihood initiatives which have been introduced by establishing closer program linkages with civil society, including non-governmental organizations (NGOs) and rural credit programs.

Project interventions will also ensure multi-stakeholder participation, especially in responding to the recognition that Lao PDR may continue to be reluctant to participate in phase III activities, through the development of several opportunities for participation in “soft” collaborative activities. Those will include as sub-contractors for the collection of baseline

information on wildlife distribution in the Phouxeingthong National Biodiversity Conservation Area and adjoining forest areas and as participants in research on wide-ranging species with the support of the project teams in Thailand and Cambodia. There is sufficient reason to believe that the use of this pro-active approach will result in steadily growing participation in project activities by Lao PDR as each of the primary stakeholder countries assumes increasing ownership of the project during Phase III.

Project efforts will continue, as well, to strengthen the capacity of project staff, rangers, border patrol police, and local communities through the provision of training initiated in Thailand and Cambodia in Phases I and II of the project. The provision of the training will be especially important in Cambodia, as well as in Lao PDR, where staff have little or limited access to training, budgets for management are very small, and there are very few rangers and facilities on the ground, especially in protected areas.

The capacity-building strategies in Phase III of the project will include hands-on-training and the sharing of lessons learned in the first two phases of the project from Thailand and Cambodia to Lao PDR. This approach will be reflected in joint research on wildlife distribution that will be conducted in each of the participating countries, which will provide a practical platform for not only strengthening trans-boundary cooperation, but also developing hands-on-training.

The situation at the completion of Phase III of the project is expected to be characterized by a secure trans--boundary biodiversity conservation area that facilitates migration and log-term survival of large mammals in the Emerald Triangle Protected Forests Complex. That target condition will be accomplished through the following actions:

- Thailand, Cambodia and Lao PDR will have coordinated planning to ensure the effective management of wide-ranging species in the Emerald Triangle. Baseline data will be available and shared to support joint research between the participating countries. The locations of important habitats for selected wide-ranging species and potential areas of risk will have been identified and used as a framework for coordinating activities to conserve trans-boundary biodiversity in the Emerald Triangle.
- In Thailand, twelve Integrated Community Development Program (ICDP) activities will have been implemented in the buffer zone and in Cambodia additional ICDP activities will have been developed and expanded on the basis of the results of a planned Sustainable Livelihoods Assessment. Local communities involved in the project will have gained additional knowledge of alternative income-generating activities. Their livelihoods will have been improved and they will be less dependent on forest resources in protected areas. They will be more aware of trans-boundary biodiversity conservation issues. Other funding sources to sustain ICDP activities will have been identified.
- Park rangers and management staff of protected areas will have been trained and will have learned to use more effective tools in patrolling and in collecting data. Skills and experience will be shared among Thailand, Cambodia and Laos through joint research projects and training workshops. Technical and professional staff at regional and central levels will have increased their understanding of how to use systematic baseline data for trans-boundary biodiversity conservation.
- Necessary tools for effective patrolling will have been provided to park officials to prevent encroachment and poaching in risk areas predicted from project.

PART I: CONTEXT

1. 1 Origin

The Government of Thailand established a trans-boundary biodiversity conservation area and selected the Phataem Protected Forests Complex (PPFC), comprised of five protected areas in Ubon Ratchathani Province in northeast Thailand, and received funding from the International Tropical Timber Organization (ITTO) to implement a pilot project, PD 15/00 Rev.2 (F), *"Management of the Phataem Protected Forests Complex to Promote Cooperation for Trans-boundary Biodiversity Conservation between Thailand, Cambodia and Laos (Phase I),"* in the period 2001-2003. This pilot phase was primarily aimed at initiating a management planning process for the PPFC in the framework of trans-boundary biodiversity conservation and establishing cooperation between Thailand, Cambodia, and Laos.

Upon completion of Phase I of the project, the Governments of Thailand and Cambodia received additional funding from ITTO to enable them to implement Phase II of the project under the title, PD 289/04 Rev.1 (F), *"Management of the Emerald Triangle Protected Forests Complex to Promote Cooperation for Trans-boundary Biodiversity Conservation between Thailand, Cambodia and Laos (Phase II),", in the period 2008-2010*. This phase was directed to strengthening tri-national cooperation and implementing biodiversity conservation activities through the involvement of local communities living in or close to the buffer zones of the protected forests. The results of Phase II, which was executed in two Components, i.e. a Thailand Component and a Cambodia Component, include a) conservation of Cambodia's protected forest for genetic resources of plants and wildlife in the TBCA, b) strengthened TBCA cooperation among the three countries to collaboration level 2 of 5, c) increased human resources capacity, and d) integration of a conservation and development program (ICDP) in Thailand and Cambodia in buffer zones and nature-based tourism interventions as a part of the efforts to increase livelihood opportunities for local residents (Trisurat, 2010).

In spite of the recognized critical importance of establishing and sustaining the impacts of project activities in promoting trans-boundary biodiversity conservation in the Emerald Triangle Protected Forests Complex, there were several constraints limiting the achievement and affecting the sustainability of project objectives that were identified in the final evaluation report for Phase II of the project (Gasana, 2010). These included project design limitations and limited scale of project interventions in the Cambodia component of the program, as well as incomplete application of the Sustainable Livelihoods Approach (SLA) and establishment of effective partnerships with civil society and development NGOs that would include rural credit institutions in both country components. These were overlaid by external constraints associated with the limited participation of Lao PDR in project activities and border disputes between Thailand and Cambodia which interrupted tri-national collaboration. In responding to those challenges and the results of the 3rd PSC meeting held in Bangkok on November 17, 2009, the Validation Workshop organized in Siem Reap, Cambodia on April 2-4, 2010, and the key interim recommendation of the independent terminal evaluation of the Project (Gasana, 2010), the Executing Agencies, the Royal Forest Department in Thailand and the Forestry Administration in Cambodia, jointly submitted a request to ITTO to formulate a Phase III project proposal and this request was officially endorsed on May 21, 2010.

1.2 Relevance

1.2.1 Conformity with ITTO's objectives and priorities

In supporting the strategies and mechanisms to ensure protection of trans-boundary protected forest areas, as well as promoting cooperation for trans-boundary biodiversity conservation

(TBC), the project is an effective contributor to the prevention of deforestation and the strengthening of biodiversity conservation, and it complies therefore with the International Tropical Timber Agreement (ITTA) 2006 by meeting the following objectives of its Article 1:

(a) Providing an effective framework for consultation, international cooperation and policy development among all members because the project will provide support to mechanisms of consultation, principally between Thailand and Cambodia on the implementation of TBC activities in the Emerald Triangle.

(c) Contributing to sustainable development and poverty alleviation because the project will provide support to activities directed to improving the livelihoods of local communities.

(m) Encouraging members to develop national policies aimed at sustainable utilization and conservation of timber producing forests and maintaining ecological balance because the experience from the Project will be used to improve the strategies for TBC in other trans-boundary protected areas.

(n) Strengthening the capacity of members to improve forest law enforcement and governance, and address illegal logging and related trade in tropical timber because the Project will contribute to strengthening the capacity of the RFD in Thailand and the FA in Cambodia to control illegal acts in their respective protected forests.

(q) Promoting better understanding of the contributions of non-timber forest products (NTFP) and environmental services to sustainable management because the Project will promote sustainable uses of NTFPs by local communities through activities aimed at improving livelihoods and incomes.

(r) Encouraging members to recognize the role of forest-dependent indigenous and local communities in achieving sustainable forest management and develop strategies to enhance the capacity of those communities because the Project will promote activities directed to sustainable management and use of the buffer zones.

The proposal is also in compliance with the priorities and operational activities specified in the current ITTO Action Plan 2008-2011 (ITTO, 2008), especially those associated with reforestation and forest management, as well as with expected outcomes 5 (tropical forest resource better secured) and 6 (tropical forest resources sustainably managed) as demonstrated in the accompanying table:

ITTO Actions	Proposed Actions by Thailand and Cambodia
Support studies and the exchange of lessons learned regarding the impacts and implications for the permanent forest estate of forest law enforcement and improved forest governance.	Develop and implement effective joint task-force and international collaboration between the tri-national parties and use a long-term management plan and integrated conservation and development program (ICDP) as a framework to secure and/or expand the permanent forest estate.
Assess opportunities for, and promote the development of, non-timber forest products and forest environmental services that can improve the economic attractiveness of maintaining the tropical timber resource base under sustainable forest management.	Identify opportunities and maintain on-going pilot activities and initiate new ICDP activities in buffer zones and enclave communities to capitalize on non-timber forest products and environmental services that further the security of the tropical timber resource base while accounting for the requirements of forest-dwelling indigenous and local communities.

ITTO Actions	Proposed Actions by Thailand and Cambodia
Support studies and other activities on the effective role of forest-dependent indigenous and local communities in securing the permanent forest estate as the tropical timber resource base and contributing to poverty alleviation.	Identify and implement innovative and socially sound interventions, including ecotourism, ICDP, and occupational training, which contribute to poverty alleviation and improved livelihoods for forest-dependent people while securing the tropical timber resource base.
Monitor the impacts of conservation and protection in the trans-boundary areas and their relationships to achieving sustainable forest management.	In close collaboration with other relevant organizations and bodies (e.g., ITTO, IUCN, the Greater Mekong sub-region), strengthen the Emerald Triangle Protected Forests Complex's dedication to biodiversity conservation in accordance with trans-boundary conservation areas.

1.2.2 Relevance to the submitting country's policies

The project is consistent with the conservation policies of Thailand and Cambodia as reflected in their national policies and legislation.

Thailand

The Constitution of the Kingdom of Thailand (2007)

Thailand's Constitution states that "the state shall promote and encourage public participation in the preservation, maintenance and balanced exploitation of natural resources and biological diversity and in the promotion, maintenance and protection of quality of the environment in accordance with the persistent development principle as well as the control and elimination of pollution affecting public health, sanitary condition, welfare and quality of life".

The 10th National Economic and Social Development Plan (NESDP) (2007-2011)

The Tenth NESDB Plan aims to conserve natural resources and biodiversity by maintaining forest at no less than 33% of total land area, with conservation forest no less than 18% of total land area. Three strategies are proposed to achieve these targets, including (1) to conserve the resource base and the ecological balance between conservation and utilization by developing databases and knowledge bases, and promoting community rights and participation in the management of resources; (2) to create a good environment for the sake of the quality of life and sustainable development; and (3) to develop the value of biodiversity and local wisdom, the Sufficiency Economy philosophy, to protect biodiversity resources from external threats (NESDB, 2008).

Thailand National Forest Policy

The Thailand National Forest Policy was adopted by the Cabinet on December 3, 1985. This policy has been used as the guidance for forest administration in Thailand. Key policy statements include the following:

- Long-term guidelines for forest management and development shall be established to maximize national social and economic benefits as well as national security.
- Forty percent of the country's area shall be kept under forests (25% Conservation Forest" and 15% "Production Forest").

Thai Forestry Sector Master Plan

The Thai Forestry Sector Master Plan (TFSMP), which was formulated in 1993 by the Royal Forest Department, was endorsed by the National Forest Policy Committee. The TFSMP provides general guidelines for long-term forest development. Long-term objectives are to conserve representative ecosystems and their biodiversity and to promote biodiversity conservation in land management practices.

Management Responsibilities of the National Park, Wildlife and Plant Conservation Department

The National Park, Wildlife and Plant Conservation Department (NDP) has direct responsibility to manage conservation forests, especially national parks and wildlife sanctuaries. The NDP's mission is to conserve the flora and fauna of conservation forests by protecting remaining forest cover, rehabilitating degraded areas of forests with the involvement of local communities and raising the awareness of forest conservation.

International Conventions

In the past two decades, the Kingdom of Thailand has ratified several international agreements and treaties related to the environment and natural resources, including the Convention on Biological Diversity, the Convention on International Trade in Endangered Species of Wild Fauna and Flora, and the United Framework Convention on Climate Change.

Biodiversity Conservation Projects

Thailand has upgraded its standards of environmental management and implemented several projects supporting biodiversity conservation. Some of those include 1) ITTO Project PD 16/97 Ref. 3 (F) on "Integrated Buffer Zone Development for Sustainable Management of Tropical Forest Resources in Thailand," which is implemented in the buffer zone of Kaeng Krachan National Park; 2) a European Union (EU) project in Phu Khieo Forest Complex, which also is directed at conserving biodiversity and promoting buffer zone management; 3) the "Western Forest Complex Ecosystem Management" project and the "Joint Management of Protected Areas" project funded by the Danish Government, which support capacity development for integrated ecosystem management and improved livelihoods of local communities; and 4) the "Biodiversity Conservation Corridors Initiatives" to link the WEFCOM with the Kaeng Krachan Complex in western Thailand, which is organized by the Greater Mekong Sub-region Environment Operations Center."

Cambodia

Current System of National Protected Areas

The Royal Government of Cambodia (RGC) established the country's current system of "National Protected Areas" in 1993 to conserve biodiversity. A decree was issued by His Majesty King Norodom Sihanouk designating twenty three protected areas covering 33,272 sq. km. These were divided into seven national parks, ten wildlife sanctuaries, three protected landscapes, and three multiple use areas. Subsequent to that Declaration, the RGC, from 2002 to 2010, established twelve protected forests with a total of 1.6 million ha, including the Preah Vihear Protected Forest with an area of 190,027 ha.

Forestry Law

A new Law on Forestry was enacted in 2002 and implementing regulations for enabling the Forestry Law are regularly developed. The Law on Forestry contains provisions on community forests, as well as the conservation of wildlife. A Protected Species List has also been issued by the Ministry of Agriculture, Forestry and Fisheries (MAFF).

Management Responsibilities of MAFF and the Ministry of Environment (MOE)

The Forestry Administration (FA) in MAFF is responsible for the management of forest areas outside of (MOE)-administered protected areas, including the management of the twelve protected forests that have been established, flooded forests and coastal mangrove areas. At the provincial level, there are forestry cantonments, divisions and triages.

The MOE administers its protected areas through its Department of Nature Conservation and Protection. The armed forces, military police and the police assist in law enforcement and international donors, as well as various NGO's, provide technical and financial support to MAFF and MOE conservation projects throughout the country.

Government Initiatives

Government initiatives directed to sustainable forest management and biodiversity conservation in Cambodia include the following:

- The passage of a Law on Environmental Protection and Natural Resources Management (December 1996).
- The Declaration on Forestry Sector Reform (October 22, 1998).
- The issuance of a Forest Concession and Community Forestry Management Sub-decree (February 2000).
- The adoption of Codes of Practice for forest harvesting (1999) and guidelines for sustainable forest management (2000).
- The cancellation of twelve forest concessions (1999) and the subsequent suspension of forest concession operations (December 2001).
- The adoption of a new Forestry Law (August 2002).
- The Statement of the RGC on National Forest Sector Policy (July 2002).
- The Adoption of a National Forest Program.

International Conventions

Cambodia has committed to five international conventions related to the environment, including the Convention on Biological diversity (1996), the United Framework Convention on Climate Change (1996), the Convention on Marine Pollution (1996), RAMSAR (1999) and the Convention on International Trade in Endangered Species (1997). Cambodia is party, as well, to the "ASEAN Agreement on the Conservation of Nature and Natural Resources."

1.3 Target area

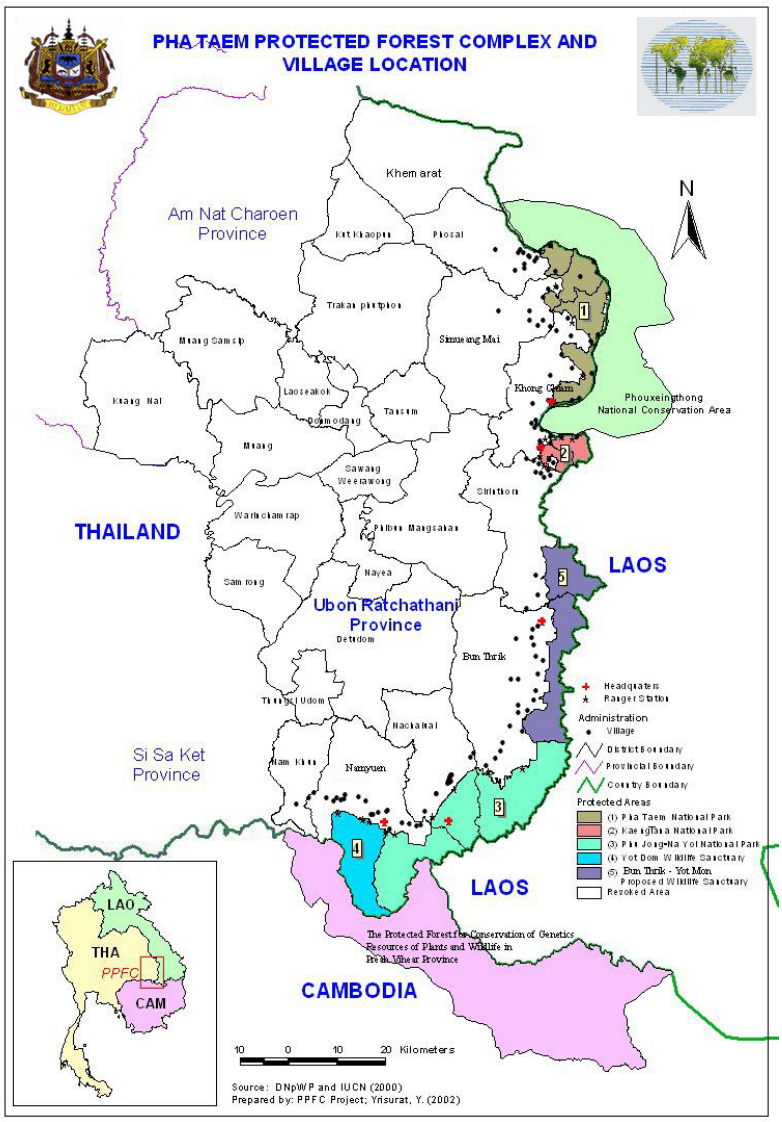
1.3.1 Geographical location

The Phataem Protected Forests Complex (PPFC) is located between latitudes 14° 12.5′ and 15° 13.9′ North and longitudes 104° 58.5′ and 105° 8.5′ East in northeast Thailand (Map 1). The protected area complex is comprised of the Phataem National Park, Kaeng Tana National Park, Phu Jong-Na Yoi National Park and Yot Dom and Bun Thrik-Yot Mon Wildlife

Sanctuary. The collective area of the complex is 174,100 ha with a perimeter of 73,000 ha. Some 317 km, or 43% of its total border, adjoins Lao PDR (298 km, or 40.96%) and Cambodia (18 km, or 2.5%).

The Preah Vihear Protected Forest for the Conservation of Genetic Resources of Plants and Wildlife is located in Preah Vihear Province in the Northern Plains of Cambodia west of the Mekong River. It is situated south of the Yot Dom Wildlife Sanctuary between latitudes 13º51'19" and 14º25'01" North and longitudes 104º51'42" and 105º47'04" East and has an area of approximately 190,000 ha. It borders on both Thailand and Lao PDR.

The Phouxeingthong National Biodiversity Conservation Area, which is located east of the PPFC in Lao PDR, has an area of approximately 120,000 ha.



Map 1. Location of the Emerald Triangle Protected Forests Complex and nearby conservation areas.

1.3.2 Social, cultural, economic and environmental aspects

Social and cultural aspects

Thailand

There are more than 80 villages situated within three kilometers of the boundaries of the PPFC in Thailand with a total estimated population of approximately 89,000. The livelihood choices of local people often impact biodiversity conservation through potential conflicts of interest between those livelihood choices and the conservation of protected forest areas. This may lead to forest encroachment to support unsustainable agriculture practices, the introduction of cows and buffalo into protected forest areas, and wildlife poaching.

The majority of local households (70%) are engaged in agriculture as their primary occupation, followed by fisheries (10%). The average annual household income of local communities is US$ 1,070, which is only about one-third of that in Ubon Rachathani city. Sixty-four percent of the local population believes that their incomes are insufficient (Tanakajana, 2003) to cover expenses for food and basic services. Less than half of local populations (40%) have received a primary school education, while only 30% have received a secondary school education.

Currently, there are four communities situated inside the Phataem National Park. Those communities settled there long before the establishment of the National Park. There have been no substantive reports of conflicts between local people and park rangers, however, since local people agreed to curtail their practice of shifting cultivation. Considering the political situation and the relationship between the local people and park rangers, no resettlement programs have been planned.

Cambodia

While social conditions inside protected areas and in the buffer zone in Lao PDR are apparently difficult, reliable statistics are currently unavailable. In Cambodia, the province of Preah Vihear is sparsely populated with about 130,000 primarily poor, rural residents. Until 1998, it was primarily accessible only by air because of its remoteness and since large areas were still insecure and most roads remained mined. As a consequence, the province has not generally benefited to the extent elsewhere from the economic development that has been occurring throughout the country. There are seven districts in the province, but four of those are cut off in the wet season by the Steung Sen River. Security concerns, as well as access to most parts of the province, have improved (Royal Government of Cambodia, 2000), but while some socio-economic information is available, it has yet to be completely assessed, especially with regard to those living in and around the Preah Vihear Protected Forest (PVPF).

Within and surrounding the PVPF are 3,042 families with a collective population of 14,189. Some 3% of that population consists of minority ethnic groups. Life expectancy is increasing and is now 58 years for women and 54 years for men (SCW, 2006). The low population density, less than 8 persons/km^2, in the project area is primarily due to the inaccessibility that results from flooding in the wet season, the lack of water in the dry season, undeveloped roads and other infrastructure, and the relatively little land that is suitable for intensive agriculture, although some irrigated agriculture is practiced in areas that are inundated in the rainy season. There is, as a result, a low level of development with very few employment opportunities. While no specific surveys on family income generation within the PVPF have been conducted, an estimate of average domestic income per person (GDP) in 2001 was about USD$259 (Forest

Administration, 2010). Indeed, a large segment of the population in Preah Vihear province lives under the poverty line.

On the basis of statistics compiled by the Seila rural development program in 2004, the percentage of the population between 6-17 years of age attending school in the project area in Preah Vihear was 21%. The percentage of those 14-15 years old attending school was 5%. Moreover, illiteracy in the project area is high, especially for women. Female illiteracy at age 15 included 8,442 of 17,208 women (49%), while the comparable figure for males at age 15 was 6,630 of 16,237 men (41%).

Economic aspects

Protected areas can generate economic benefits at both local and national levels. This is exemplified by statistics that were compiled in 2002 indicating that in the previous fiscal year there were approximately 314,000 Thai and 5,500 foreign tourists visiting the PPFC. Those tourists generated revenues of US$ 210,000 (Tanakajana, 2003). In 2008, the number of tourists had decreased somewhat because of higher gasoline prices, but park revenues still rose to approximately US$288,000. With appropriate management of protected areas, improvement of recreation facilities and good collaboration between the three countries, it is expected that the number of local and foreign tourists will increase and provide additional income to local communities.

Environmental aspects

Thailand

The terrain of the PPFC is flat to undulating with elevations ranging from 100 m to 732 m above sea level. The terrain in the west and northwest is relatively low and then rises to the east and south before declining to the Mekong River (Trisurat, 2003a). The rivers and streams that have their origin in the PPFC provide the primary water resources for two hydro-power reservoirs.

Three main vegetation types have been described based on the interpretation of satellite imagery in 2002 in the PPFC: dry evergreen forest, mixed deciduous forest, and dry dipterocarp forest. More than 288 tree species have been identified (Marod, 2003) and at least 49 mammal, 145 bird, 30 reptile and 13 amphibian species have been recorded, but large wildlife species such as the wild elephant, banteng, freshwater crocodile and tiger have only been observed along the tri-national borders (Bhumpakphan, 2003).

Cambodia

The Preah Vihear Protected Forest (PVPF) in Cambodia is situated within the Indo-Burma Biodiversity Hotspot, which is one of twenty five Hotspots that are recognized globally. According to Forest Cover Assessments that were conducted in 2002 and 2006, forest land represents 96.78% of the total surface area of the PVPF, with dry deciduous forest the dominant forest type, representing almost 67% of its total surface area. There are two primary rivers, the Mekong and the Ro Pov, which are located to the northeast of the PVPF, which assume an important role in the region, not only for transportation, but also in the social and economic sectors.

The area is home to 57 mammal species and about 255 species of birds, 58 species of reptiles and numerous species of amphibians, including several globally-threatened species. It is probably the most important site globally for the critically-endangered Giant Ibis (*Pseudibis gigantean)* and the most important site in south-east Asia for three critically-endangered

vultures. It also has important populations of the Asian Elephant (*Elephas maximus)*, Banteng (*Bos javanicus)*, Eld's Deer (*Rucervus eldii)*, Fishing Cat *(Prionailurus viverrinus)*, Dhole (*Cuon alpinus)* and White-winged Duck (*Cairinia scutata)*, all of which are endangered. Other threatened species that may be seen in the PVPF include the Gaur (*Bos gaurus)*, the Bengal Slow Loris *(Nycticebus bengalensis)*, the Northern Pig-tailed Macaque (*Macaca leonine)*, the Malayan Sun Bear *(Helarctos malayanus)*, the Green Peafowl (*Pavo muticus)* and the Sarus Crane (*Grus antigone)*. The primary biodiversity value of the PVPF resides in its populations and unique assemblages of large mammals and water birds.

Since 1998, the Forestry Administration, in cooperation with Cat Action Treasury and with the Wildlife Conservation Society since 1999 have conducted biodiversity conservation surveys in Preah Vihear. The results of those surveys have documented an impressive list of fauna, which is probably unique in south-east Asia for its representation of species from dry dipterocarp forests and related habitats, many of which are in rapid decline elsewhere.

The Emerald Triangle

The Emerald Triangle is part of the Southeastern Indochina Dry Evergreen Forests eco-region, which is recognized as a globally outstanding source of the large vertebrate fauna which are harbored within its landscape. While estimates suggest that about two-thirds of the original forest of this eco-region has been cleared or seriously degraded (Wikramanayake et al., 2000), a few large forest blocks remain. A recent study on land-use change between 2002-2008 indicated that deforestation was continuing, however, especially outside protected areas. On the basis of a continuation of current land-use trends, the existing forest cover of 46% of the PPFC landscape in 2008 is expected to decrease to 37% by 2030 unless strict protection measures are enforced (Trisurat, 2010). Indeed, an extensive loss of forest cover is expected in the buffer zones of the PPFC and inside Kaeng Tana National Park and Bunthrik Yot Mon Wildlife Sanctuary because of the ease of accessibility to those areas by local people. Para rubber plantations have also greatly expanded in the area, at an average annual rate of 35%. Indeed, the primary cause of deforestation in Thailand in the past several decades has been encroachment for agriculture, especially rubber plantations, which have been established in response to increasing demand from international markets.

These conditions are similar to those that characterize conditions in Lao PDR and Cambodia. The primary causes of forest degradation and forest land use change in the Preah Vihear Protected Forest in Cambodia have included at various periods of time several different factors, the most prominent of which has been the clearing of forest land for agriculture (paddy, cash crop and fruit tree orchards) by local communities who live in and around the PVPF. Small scale illegal logging by villagers for domestic uses and for the repair of local bridges and community buildings has also been prevalent. One of the most important drivers of land use change in Cambodia has been road construction to stimulate economic development along the border with Thailand and Laos through the PVPF. That construction has not only resulted in forest degradation, but also in habitat fragmentation that hinders wildlife movement. Moreover, the development of roads is likely to open access to forest clearings for rice fields and land encroachment along the roads.

The PVPF contains one of the largest intact blocks of natural dry deciduous forest on the Asian mainland. The results of Phase I and Phase II project activities indicate that several species seasonally migrate across the Emerald Triangle landscape, however, and the viability of those wide-ranging species will continue to depend to a considerable extent on the integrity of remaining habitats and a mutual understanding of cross-boundary issues among the three

countries through international collaboration, effective management and local livelihood improvement.

1.4 Expected outcomes and project completion

The expected situation after the completion of Phase III of the project is characterized by a secure trans-boundary biodiversity conservation area that facilitates migration and log-term survival of large mammals in the Emerald Triangle. This target condition will be accomplished through the following actions:

- Thailand, Cambodia and Lao PDR will have coordinated planning to ensure the effective management of wide-ranging species in the Emerald Triangle. Baseline data will be available and shared to support joint research between the participating countries. The locations of important habitats for selected wide-ranging species and potential areas of risk will have been identified and used as a framework for coordinating activities to conserve trans-boundary biodiversity in the Emerald Triangle.
- In Thailand, twelve ICDP activities will have been implemented in the buffer zone and in Cambodia additional ICDP activities will have been developed and expanded on the basis of the results of a planned Sustainable Livelihoods Assessment. Local communities involved in the project will have gained additional knowledge of alternative income-generating activities. Their livelihoods will have been improved and they will be less dependent on forest resources in protected areas. They will be more aware of trans-boundary biodiversity conservation issues. Other funding sources to sustain ICDP activities will have been identified.
- Park rangers and management staff of protected areas will have been trained and will have learned to use more effective tools in patrolling and in collecting data. Skills and experience from Thailand will be disseminated to Cambodia and Laos through joint research projects and training workshops. Technical and professional staff at regional and central levels will have increased their understanding of how to use systematic baseline data for trans-boundary biodiversity conservation.
- Necessary tools for effective patrolling will have been provided to park officials to prevent encroachment and poaching in risk areas predicted from project models.

PART II: PROJECT RATIONALE AND OBJECTIVES

2.1 Rationale

2.1.1 Institutional set-up and organizational issues

The original project vision was that activities that were directed to trans-boundary biodiversity conservation in the Emerald Triangle Protected Forests Complex would be jointly implemented by the RFD in Thailand, the FA in Cambodia and the DoF in Lao PDR. While this vision has been only partially satisfied because Lao PDR has yet to join the initiative as planned and is not yet a member of ITTO, it has assigned representatives to participate in several PSC and Joint-Task Force meetings. Moreover, in Phase I, but more especially in Phase II, of the project, Thailand and Cambodia have demonstrated a mutual trust and understanding through meetings and capacity building activities, as well as through their joint submission of the Phase II project proposal during a period when border disputes between the two countries had resurfaced. Their continued commitment to cooperate is reflected in their joint submission of this Phase III proposal to ITTO and planned implementation of collaborative activities in the Emerald Triangle for trans-boundary biodiversity conservation.

In Thailand, the previous organizational structure was essentially under the control of the RFD even though projects were primarily located in protected areas under the jurisdiction of the NDP. This was because the RFD had been assigned as the official focal point of ITTO in Thailand. Since the government reform program in 2002, however, the RFD has been sub-divided into three departments, the Royal Forest Department (RFD), the National Park, Wildlife and Plant Conservation Department (NPD), and the Department of Marine and Coastal Resources. Protected areas (i.e., national parks and wildlife sanctuaries) are currently under the administration of the NDP, while the remaining forests not legally established as protected areas are under the jurisdiction of the RFD and managed as economic forests for sustainable uses.

In Cambodia, the final Phase II evaluation report (Gasana, 2010) suggested that the deployment of human resources with limited technical capacity to implement the project might not be sufficient. One of the most important challenges for the FA in Phase III of the project will be to develop effective partnerships with development partners and specialized NGOs, so that they may collaborate with government services in managing some project activities and contribute to technical capacity-building in closing the gap between project design and implementation.

2.1.2 Stakeholder analysis

Community involvement will continue to be essential to support trans-boundary biodiversity conservation activities in the Emerald Triangle. Most of the local communities living near the tri-national borders have suffered as a result of cross-border movements. Moreover, those communities residing in the buffer zones of the Emerald Triangle suffer disproportionately from poverty and inequitable access to ecosystem services in protected areas (Sandwith *et al.*, 2001). The support of decision-makers from participating countries, as well as other stakeholders, as well, will be important elements affecting the long-term success of trans-boundary biodiversity conservation activities. A more complete assessment of potential stakeholders that may influence project planning and implementation is presented in Table 1.

Table 1. Key Stakeholders in the Management of the Emerald Triangle Protected Forests Complex.

Thailand

Stakeholder	Characteristics	Problems, Needs, Interests	Potential	Involvement in project
Primary stakeholders				
Local communities	Livelihoods depend on natural resources as a primary source of income (e.g. water, non-wood forest products, land for agriculture).	Insufficient economic options; lack of capacity; lack of awareness.	Raising conservation awareness and improving local livelihoods through ICDP.	Benefit from livelihood improvements and support conservation activities (ICDP, eco-tourism, etc), Involve in activities and project field implementation by improving the economic livelihoods of local communities to ensure the effective conservation of the PPFC, Involve in the monitoring of biological biodiversity and the conservation. of wildlife
Sub-districts and village administrations	Responsible for making and implementing community development plans. Focus on economic development with limited recognition of forest conservation requirements.	Limited capacity for ICDP planning. Lack of awareness of and compliance with national policies.	Authority to influence local development, Familiar with local conditions and local leaders.	Receive project support to strengthen planning capacity. Involve in awareness training to local stakeholders in reducing deforestation and forest degradation.
Secondary stakeholders				
Protected area superintendents and forestry officials	Responsibilities on the ground to manage and conserve biodiversity in protected areas	Limited capacity and skills to manage protected areas in a framework of trans-boundary	Authority to conserve trans-boundary biodiversity in the Emerald Triangle.	Primary participants responsible for management and conservation on the

Stakeholder	Characteristics	Problems, Needs, Interests	Potential	Involvement in project
	and buffer zones.	biodiversity conservation.		ground.
Regional and provincial forestry, protected area and agricultural offices	Provide services and advice to protected areas and field management units and control the illegal trade of wild flora and fauna; provide incentives to local communities.	Insufficient financial means and capacity to advise on effective management; lack of awareness of biodiversity conservation.	Mobilize staff to support project implementation; proper land use planning.	Direct involvement in project implementation.
RFD, NDP	Responsible agencies that formulate policies and make decisions on trans-boundary issues and tri-national cooperation in the Emerald Triangle.	Limited awareness and political disputes interrupt international collaboration.	Authority to make decisions affecting international collaboration.	Responsible for ensuring that project activities are executed as planned.
Border patrol police (Thailand)	Responsible for securing borders and controlling illegal trade.	Limited skills to use geo-spatial tools and information for patrolling.	Reduce poaching and illegal trade and provide information on wildlife movements along borders.	Direct involvement in project implementation.
Development NGOs (Nature Care and Dong Natham Community Forest Network in Thailand)	Active involvement in rural development activities, conservation, and community forests.	Limited involvement in previous phases of the project and insufficient financial means.	Possess skills to support local communities in ICDP and conservation activities.	Collaborate in implementing project activities, especially ICDP and buffer zone management.
Tertiary stakeholders				
Educational and research institutes	Possess educational and research skills and experience.	Limited means and/or limited resources for research collaboration and capacity building.	Competence in research, training and biodiversity surveys.	Collaborate in implementing project activities.
National finance and rural credit institutions	Finance local development activities.	Limited means to finance collaboration.	Experience in providing development loans/grants.	Involve in local credit/grant programs.
ITTO and international donors.	Provide financial support for project implementation.	Limited financial support to sustain the project.	Provide financial support for Phase III and advice on sustaining the project at the close of Phase III.	Involve in the PSC.

Cambodia

Institution	Characteristics	Constraints	Potential and proposed involvement
Local communities living in and around the Preah Vihear Protected Forest	Dependent on natural resources as primary source of income.	Lack of alternative sources of income; lack of capacity.	Involve in activities and project field implementation by improving the economic livelihoods of local communities to ensure the effective conservation of the Preah Vihear Protected Forest in partnership with local communities. Encourage local communities in the sustainable use of forest resources in the PVPF and the management and conservation of the PVPF Provide training to local communities in livelihood development and on natural resource management, as well as share information related to forest and wildlife crime. Involve local communities in the monitoring of biological biodiversity and the conservation of wildlife.
Local government	Focus is on economic development with limited recognition of forest conservation requirements.	Lack of awareness of and compliance with national policies.	Conduct awareness training to obtain support from local government stakeholders in reducing deforestation, forest degradation, and greenhouse gas emissions. Coordinate infrastructure development by local government to avoid duplication and unnecessary deforestation and plan roads to minimize establishment of human settlements inside the Preah Vihear Protected Forest. Involve local government in the demarcation of the PVPF and Permanent Forest Reserve in the buffer zone. Conduct training and strengthen partnerships with local authorities in assisting in combating forest and wildlife crime. Partner with commune councils to integrate management and conservation of forest and wildlife in commune development planning. Collaborate with district and commune authorities in resolving land conflicts.
Border police and military	Assist in combating forest and wildlife crime along the borders and check points as border police and military are responsible for national security and defense.	Lack of training and limited involvement in the management and conservation of forest resources.	Conduct training on the implementation of law enforcement and increase information exchange and communication. Involve border police, military police and the military in the implementation of law enforcement by recruiting them to collaborate with FA enforcement officers. Collaborate with border police and military in the demarcation of the PVPF and Permanent Forest Estate and in conflict resolution activities. Collaborate in the crack down on forest and wildlife crime.

Institution	Characteristics	Constraints	Potential and proposed involvement
Preah Vihear Forestry Administration Cantonment	Critical element in the management of the Preah Vihear Permanent Forest Estate.	Weak institutional capacity, limited resources and lax enforcement of rules.	Involve in operational activities in the project area. Provide information required for project implementation and facilitate the collection of data and the monitoring of operational activities. Strengthen involvement of local forestry officers in the implementation and management of the PVPF and the buffer zone. Collaborate in the strengthening of law enforcement and the demarcation of the Permanent Forest Reserve. Improve the capacity of local forestry officers in the sustainable management and conservation of the PVPF.
Forestry Administration	Primary government organization responsible for the management of forests, including Conservation Forests, in Cambodia.	Limited coordination, human resource capacity and infrastructure; limited application of technology; and weak law enforcement.	Facilitate the discussion, preparation and formulation of project proposals. Provide general guidelines for management. Take the lead in the dissemination of project findings as lessons learned and in operational activities, as well as in the management of the Preah Vihear Administration Cantonment.
ITTO and international donors.	Provide financial support for project implementation.	Limited financial support to sustain the project.	Provide financial support for Phase III and advise on sustaining the project at the close of Phase III. Involve in the PSC.
Private sector	Potential for encroachment into the Preah Vihear Protected Forest beyond agreed boundaries.	Clearing of forests without maps or engineering layouts. Workers clearing parts of the Preah Vihear Permanent Forest Estate for private use.	Facilitate meetings to improve coordination between the FA, private companies and relevant government agencies. Build awareness. Monitor sites, especially commercial plantations, including fast growing trees, rubber, and commercial crops. Collaborate with micro-finance institutions to improve the livelihoods of local communities through credit provision. Collaborate with the private sector to explore sustainable financing through REDD.
NGOs	Primary roles are in monitoring, community development and	Lack of facilities and access to formal institutions and resources.	Involve in forest monitoring, community development and income-generating activities, coordinating between development projects, buffer zone management and expanding current initiatives.

Institution	Characteristics	Constraints	Potential and proposed involvement
	coordinating project activities.		Assist in providing training to local communities, FA officers and other stakeholders to improve capacities in the sustainable use of forest resources, biodiversity conservation and the monitoring of biodiversity. Assist in the provision of training on sustainable livelihoods of local communities. Empower local communities in the management and conservation of forest resources.
Provincial Department of Education, Youth and Sports	Responsible for education.	Environmental education is limited. especially related to the value of wildlife and biodiversity.	Forge partnerships with the Department of Education, Youth and Sports in mainstreaming environment safeguards. Establish partnerships with schools to provide environmental education to school children. Provide training to school teachers regarding the importance of environmental protection. Provide environmental awareness raising to school children through trained teachers. Integrate environmental education in school programs.
Local media	Information dissemination.	Environmental dissemination .through media is limited.	Improve partnerships with media. Focus communications with media agencies on the dissemination of environmental education through: - Radio - TV - Newspapers - Internet - Workshops and seminars - Conservation events

2.1.3 Problem analysis

The protected areas of the Emerald Triangle comprise habitats of a diversity of wildlife species. Large species, such as the wild elephant, banteng, and tiger, are observed along the national borders and seasonally migrate across the tri-national boundaries (Bhumpakphan, 2003). Cambodia has some of the most extensive unfragmented natural forests in Southeast Asia and the northern plains contain large numbers of globally threatened species. Indeed, the area is either a last refuge for – or maintains a key population of – sixteen "Critically Endangered" and "Endangered" species from the IUCN Red List.

As a result of the highly seasonal nature of the environment, key species are dependent on strictly limited resources, including permanent waterbodies and upland forest patches, that are small, localized and especially vulnerable to disturbance. In this context, the critical problem in the Emerald Triangle is the inadequate protection of trans-boundary habitats of protected wide-ranging wildlife species, which may have as critical negative impacts the endangered long–term conservation of protected wide-ranging wildlife species or landscape species and the increased threat to ecosystem functions at the landscape level. The root causes of this problem, which are outlined in the Problem Tree, are the (a) limited capacity to implement TBC compatible management plans; (b) weak tri-national TBC cooperation; and (c) unsustainable harvesting of natural resources by local communities (Figure 1).

Limited capacity to implement TBC compatible management plans

There is, in general, a significant gap associated with the skills and capacity required to manage protected areas between Thailand and its neighboring countries. Cambodia, but more especially Lao PDR, lack sufficient capacity to manage and plan biodiversity conservation effectively at all levels, but especially at local levels. Protected area staff at central, but especially local, levels, have limited access to training; management budgets are often constrained; and there are few rangers in the field. These obstacles impact the effectiveness of patrolling and law enforcement to reduce forest encroachment, illegal poaching and the illegal trade in wildlife along protected area borders. As a result, capacity building is an issue of importance that will be effectively addressed in Phase III of the project.

In order to strengthen capacity at the local level, there will continue to be coordination between central offices and field offices to support effective implementation of Phase III project activities, especially in Cambodia. There will also be efforts to increase the involvement of decision-makers in NPD, which has the primary mandate in Thailand to manage protected areas, in project implementation.

Weak tri-national TBC cooperation

The effective management of cross-border forest reserves requires a considerable degree of international cooperation. The extent of that cooperation progressed rather steadily from its early stages in Phase I of the project, in which Thailand initiated a scoping process to encourage international cooperation, through Phase II, in which international cooperation on trans-boundary conservation issues between Thailand and Cambodia was initiated. The final Phase II evaluation (Gasana, 2010) indicated there still remain two especially difficult challenges that will have to be overcome, though, if the complete development of the project vision of international cooperation is to be realized in Phase III.

The first of those involves the participation of Lao PDR in the project. While its representatives have attended several project meetings, Lao PDR has yet to officially join the

project as originally planned. The importance of the active engagement of Lao PDR in the conservation of the Emerald Triangle Forests Complex has been underscored by the PSC. Indeed, seasonal migratory patterns of landscape species, such as the Asian elephant, gaur, banteng and tiger, suggest that their long-term survival depends on the cooperation and commitment of each of the three countries to conserve trans-boundary biodiversity. Project efforts will therefore be redoubled in Phase III of the project to enlist the participation of Lao PDR in more activities to conserve the Emerald Triangle Protected Forests Complex.

The second challenge involves the irregular border disputes between Thailand and Cambodia, which has heightened political tensions and interrupted tri-national collaboration at the policy-making level. Notwithstanding these tensions, it is expected that there will continue to be strong engagement at the technical and management levels to stimulate better cooperation and commitment among the three countries to apply the lessons learned from the first two phases of the project to conserve trans-boundary biodiversity.

Unsustainable harvesting of natural resources by local communities

Most of the communities in the Emerald Triangle live under the poverty level and rely on natural resources for their subsistence. This is reflected in wildlife poaching, which has been reported in Lao PDR and to a lesser extent in Thailand and Cambodia. The primary impetus for this poaching is derived from the demand for bush meat, which is an important source of protein for rural households (Trisurat, 2003a; 2003b).

The illegal trade of wild animals and plants has also been observed at border check-points between Thailand and Lao PDR. Local people who collect edible plants often burn areas of dry dipterocarp forests to stimulate young shoot rejuvenation and the application of scientific research is essential to raise local awareness of the relationships between forest fires and the sustainable management of deciduous tropical forests.

These problems are likely to continue throughout the Emerald Triangle Forests Complex because local people have been using forest resources for many generations unless the project ensures there are alternative activities available to supplement their income and strict protection measures and proper land-use planning are enforced (Trisurat, 2007).

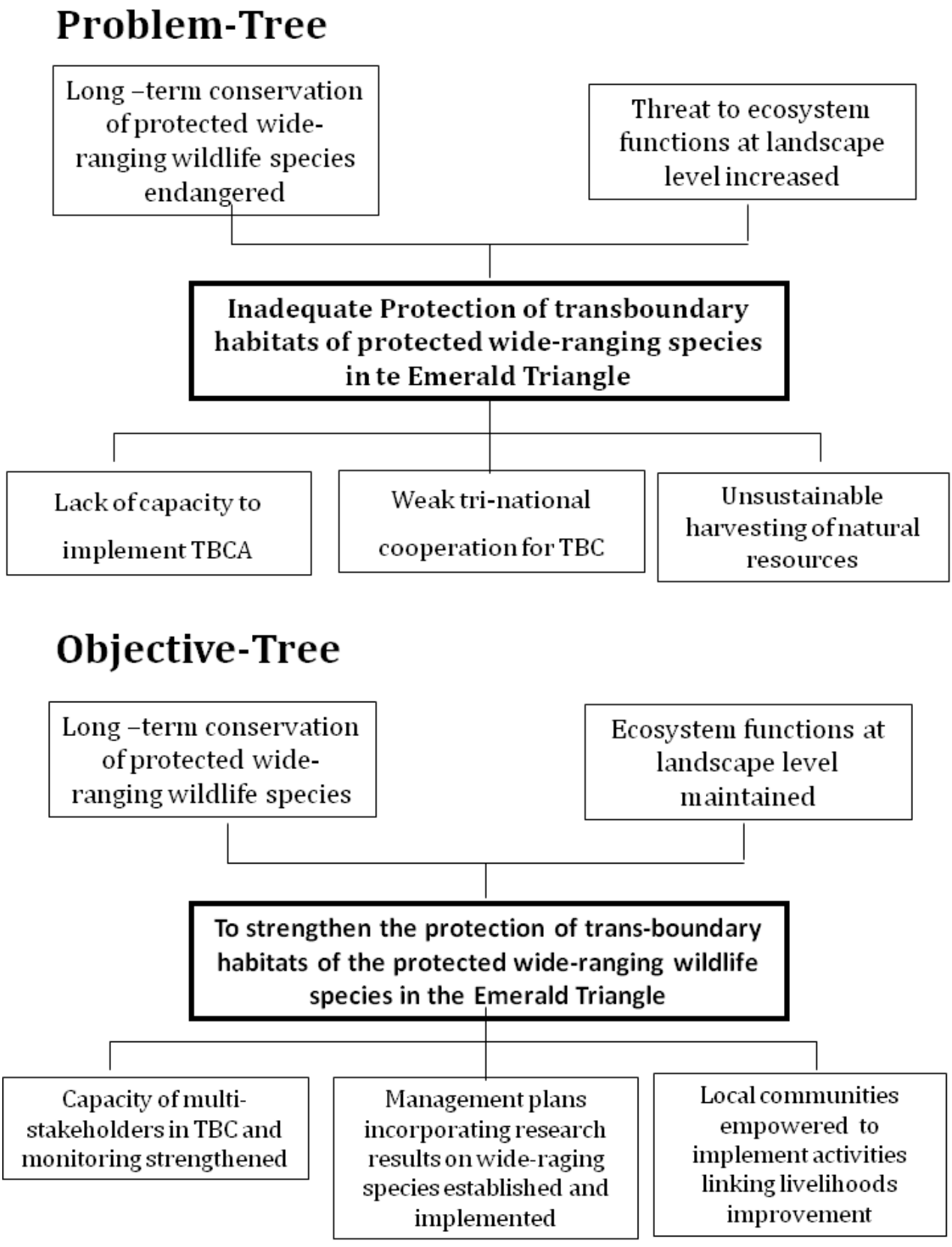


Figure 1. Problem Tree and Objective-Tree of trans-boundary biodiversity conservation in the Emerald Triangle.

2.1.4 Logical framework matrix

Strategy of intervention	Measurable indicators	Means of verification	Key assumptions
Development Objective To contribute to the conservation of trans-boundary biodiversity in the Emerald Triangle Protected Forests Complex between Thailand, Cambodia and Laos.	• Areas of critical habitat available to sustain viable populations of wide-ranging species in the Emerald Triangle are maintained or enhanced. (The baseline areas of critical habitat will be determined using the target areas of five landscape species after the completion of habitat maps at the start of Phase III of the project). • Management measures to protect wide-ranging species, especially five key landscape species, are formulated, adopted and implemented by participating countries. (There are a series of baseline measures that have previously been formulated for the Western Forest Complex using the Action Plan Approach).	• Project reports. • Minutes of PSC meetings. • Integrated tri-national Protected Areas maps.	• Political will and continued commitment of participating countries to support trans-boundary cooperation. • Border disputes are either minimal or are resolved. • Lao PDR maintains interest in participating in Phase III activities.
Specific Objectives: To strengthen the protection of trans-boundary habitats of protected wide-ranging wildlife species in the Emerald Triangle.	• Information is collected and exchanged between the three countries on wildlife distribution and applied in joint research activities. (The baseline measure is based on the understanding while some information has been collected and exchanged between Thailand and Cambodia during project phase I and II, it has not yet been applied in joint research activities; moreover, information has not yet been collected and exchanged between all three countries).	• Project reports and minutes of meetings. • Project maps. • Training reports.	• Continued political support of Thailand and Cambodia despite potential border disputes. • Lao PDR maintains interest in participating in

Strategy of intervention	Measurable indicators	Means of verification	Key assumptions
	• Maps indicating the habitats of five key wide-ranging landscape species in the Emerald Triangle landscape are produced. (The baseline measure is that the production of the maps, which was initiated in Phase II, has been completed only in Thailand). • Capacity of park officials and management staff in the TBCA is increased. (Baseline measures will be determined on the basis of surveys that are administered at the start of Phase III of the project).	• Surveys of local communities.	Phase III activities.
Outputs			
1. Management plans incorporating research results on wide-ranging species and ecological processes, which are compatible between countries, are established and implemented. .	• Two joint activities on the distribution of key wide-ranging landscape species, and forestland use, are planned and implemented by the three countries**.** (The baseline measure is that there was initial discussion, but no joint activities have yet been planned or implemented by the three countries). • Scientists and professional staff from the three countries actively participate in coordinated research activities. (The baseline measure is that scientists and professional staff from the three countries have yet to participate in coordinated research activities). • Research results on five key landscape species are incorporated into joint management plans	• Wildlife survey report. • Current and projected land use/land cover maps. • Final project report.	• Qualified staff from the three countries participate in joint research activities. • Adequate funds are available to fund facilities and equipment.

Strategy of intervention	Measurable indicators	Means of verification	Key assumptions
	for each country in the Emerald Triangle**.** (The baseline measure is that no research results on the five key landscape species have yet been incorporated into joint management plans of any two, or all three, countries).		
2. Capacity of multi-stakeholders in biodiversity conservation and monitoring is strengthened.	• A Regional Advisory Committee of implementing agencies and stakeholder network is established and meets on a regular basis. (The baseline measure is that a Regional Advisory Committee of stakeholders has yet to be established. Previously, it was the Regional Technical Advisory Committee). • Facilities and equipment are sufficient to ensure the effective implementation of conservation activities in the Emerald Triangle. (The baseline measure is that there is a list of facilities and equipment that was available to implement conservation activities in the Emerald Triangle at the start of Phase III of the project). • Numbers of training courses and participants in each country are sufficient to strengthen resource management capacity in each country. (The baseline measure is that there is a list that summarizes the numbers of training courses and participants provided in each country since the start of Phase I of the project).	• Minutes of Regional Advisory Committee (implementing agencies & stakeholder networking) meetings. • Project progress reports. • Training reports and evaluations.	• The NPD and the FA assign committed staff to participate in the project at both national and local levels. • Knowledgeable instructors and staff are available for training. • Adequate funds are available to fund facilities and equipment.

Strategy of intervention	Measurable indicators	Means of verification	Key assumptions
3. Local communities are empowered to implement activities linking livelihoods improvement to reduce dependence on resources of protected areas.	• Twelve ICDP activities are implemented in Thailand and, in Cambodia**,** numbers of families participate in ICDP activities that are established and expanded. (The baseline measure is that none of those activities in Cambodia will have been implemented prior to the Sustainable Livelihoods Assessments that will be conducted at the start of Phase III of the project, while six ICDP activities have previously been initiated in Thailand). • Five eco-tourism activities are maintained or enhanced. (The baseline measure is that there are five eco-tourism activities that have previously been initiated in Thailand).	• Project progress reports. • ICDP pilot program evaluations. • Assessments of forest cover changes (Forest-land use change assessment) 2002, 2006, 2010).	• ICDP projects are recognized and approved by officials and local communities as planned. • Selected local communities are interested in participating in ICDP activities. • Development NGOs and rural finance institutions collaborate in implementing ICDP activities. • Cloud free remotely sensed data are available and obtained. .

2.2 Objectives

Objectives and outputs of Phase III of the project were developed in accordance with the Final Evaluation Report for Phase II (Gasana, 2010) and the recommendations derived from the 3rd PSC meeting and Validation Workshop.

2.2.1 Development objectives and impact indicators

The project will contribute to the conservation of trans-boundary biodiversity in the Emerald Triangle Protected Forests Complex between Thailand, Cambodia and Laos. The experiences and lessons learned from this project will be used as a model for other potential trans-boundary conservation areas in participating countries and in the Greater Mekong Sub-region.

The long-term impact indicators are:

- Areas of critical habitat available to sustain viable populations of wide-ranging species in the Emerald Triangle are maintained or enhanced.

- Management measures to protect wide-ranging species are formulated, adopted and implemented by participating countries.

2.2.2 Specific Objectives and outcome indicators

The specific objective of Phase III of the project is to strengthen the protection of trans-boundary habitats of protected wide-ranging wildlife species in the Emerald Triangle.

The outcome indicators are:

- Information is collected and exchanged between the three countries on wildlife distribution and applied in joint research activities.

- Maps indicating the habitats of wide-ranging species are produced.

- Capacity of park officials and management staff in the TBCA is increased.

- Livelihoods of local communities are increased.

PART III: DESCRIPTION OF PROJECT INTERVENTIONS

3. 1 Outputs and activities

The implementing agencies have developed the following outputs and activities to achieve the Phase III Specific Objective to strengthen the protection of trans-boundary habitats of protected wide-ranging wildlife species in the Emerald Triangle.

3.1.1 Outputs

Output 1: Management plans incorporating research results on wide-ranging species and ecological processes, which are compatible between countries, are established and implemented.

Output 2: Capacity of multi-stakeholders in biodiversity conservation and monitoring is strengthened.

Output 3: Local communities are empowered to implement activities linking livelihoods improvement to reduced dependence on resources of protected areas.

3.1.2 Activities

The proposed activities under their respective outputs are shown in Tables 2 (Thailand) and 3 (Cambodia).

Table 2. List of activities under their respective specific objectives and outputs *(Thailand Component).*

Output/ Activity	**Description**
Output 1	**Management plans incorporating research results on wide-ranging species and ecological processes, which are compatible between countries, are established and implemented.**
A 1.1	Revise and establish Project Steering Committee (PSC) and other coordination structures for the TBCA in accordance with ITTO rules.
A 1.2	Conduct PSC and other meetings in accordance with ITTO rules.
A 1.3	Gather wildlife distribution data in the PPFC by NDP scientists and park officials.
A 1.4	Strengthen GIS capacity for Cambodian and Laotian officials on GIS for modeling land-use and species distribution.
A 1.5	Conduct joint research by the three countries on wide-ranging species distribution in the Emerald Triangle.
A 1.6	Conduct joint research by the three countries on land use changes in the Emerald Triangle.
A 1.7	Publish the results of joint research findings.
Output 2	**Capacity of multi-stakeholders in biodiversity conservation and monitoring is strengthened.**
A 2.1	Update and maintain information system.
A 2.2	Collaborate with forest protection unit to prevent wildlife poaching, illegal

Output/ Activity	Description
	logging, illegal trading and the collection of wild plants.
A 2.3	Collaborate with universities and NGOs to conduct training on buffer zone management.
A 2.4	Provide necessary equipment and facilities to protected areas and protection units for effective patrolling and protection.
A 2.5	Organize Joint Task Force and stakeholder meetings for trans-boundary biodiversity conservation cooperation and resolving future land use changes derived from Phase II of the project, as well as proposed adjustments as may be required.
A 2.6	Organize stakeholders meetings on TBCA and project sustainability.
A 2.7	Conduct training for forest protection units, park rangers and border patrol police on GIS and effective patrolling.
Output 3	**Local communities are empowered to implement activities linking livelihoods improvement to reduced dependence on resources of protected areas.**
A 3.1	Strengthen local community fora and networks to facilitate biodiversity conservation.
A 3.2	Conduct outreach programs to local schools and local communities to raise awareness on conservation benefits associated with TBCA.
A 3.3	Maintain existing ICDP and provide additional funding for domesticated wild flora and fauna pilot program to improve the livelihoods of local communities in accordance with criteria jointly approved by the project and the local community network.
A 3.4	Concerned parties develop and approve eco-tourism packages.
A 3.5	Organize fund raising meetings for potential donors and NGOs to sustain ICDP activities.
A 3.6	Monitor and evaluate on a regular basis the implementation of ICDP activities in terms of sustainability and consistency with the TBCA concept.

Table 3. List of activities under their respective specific objectives and outputs *(Cambodia Component).*

Output/ Activity	Description
Output 1	**Management plans incorporating research results on wide-ranging species and ecological processes, which are compatible between countries, are established and implemented.**
A 1.1	Revise and establish a Project Steering Committee (PSC) and strengthen the National Coordinating Office (NCO) and Project Management Team (PMT) for the TBCA in accordance with ITTO rules.
A 1.2	Organize Project Steering Committee and Joint Task Force workshops and stakeholder meetings to provide practical means for harmonizing trans-boundary management plans and activities in the PVPF.
A 1.3	Conduct analyses of land use and land cover changes in the PVPF Forest and on the basis of those analyses develop preliminary estimates of changes in carbon stocks in the PVPF.

Output/ Activity	Description
A 1.4	Conduct a feasibility study for amending the suitable/appropriate boundaries of PVPF and land-use mapping and demarcation of community use areas within and around the PVPF.
A 1.5	Gather wildlife distribution information and conduct botanical studies in and around the PVPF.
A 1.6	Publish the results of research findings.
A 1.7	Organize Regional Conference on Biodiversity Conservation in Tropical Forests
Output 2	**Capacity of multi-stakeholders in biodiversity conservation and monitoring is strengthened.**
A 2.1	Conduct law enforcement patrols in target sites on a regular basis.
A 2.2	Coordinate quarterly meetings and workshops with relevant stakeholders and regular consultations, with stakeholders on trans-boundary biodiversity conservation.
A 2.3	Provide training to the staff of the PVPF in biodiversity conservation, GIS mapping, land-use planning, forest management planning and habitat suitability analysis.
A 2.4	Organize training programs on forest conservation, forest climate change mitigation, REDD, and law enforcement for relevant stakeholders and organize and conduct workshops to disseminate information on law enforcement and international conventions related to biodiversity conservation, such as CITES and CBD.
A 2.5	Organize stakeholder meetings for trans-boundary biodiversity conservation cooperation and mitigating future land use change, as well as proposed adjustments as may be required.
A 2.6	Strengthen Protected Forest management by allocating more equipment and staff to resource management and monitoring activities.
A 2.7	Organize training on domestication of wild flora and fauna for local FA and local communities.
A 2.8	Organize training on land-use planning, demarcation and GIS mapping for local FA and local communities.
Output 3	**Local communities are empowered to implement activities linking livelihoods improvement to reduced dependence on resources of protected areas.**
A 3.1	Plan and conduct a comprehensive sustainable livelihoods assessment, potential eco-tourism development assessment and scale up local community fora and networks.
A 3.2	Organize reciprocal visits between staff of the PVPF and local communities' networks to share experiences with other projects in Cambodia for promoting trans-boundary biodiversity conservation.
A 3.3	Maintain existing ICDP and provide additional funding for domesticated wild flora and fauna pilot program to improve the livelihoods of local communities in accordance with criteria jointly approved by the project and the local community network.
A 3.4	Increase economic opportunities for local communities through sustainable agriculture and agro-forestry practices and community-based ecotourism in the buffer zones of the PVPF.
A 3.5	Raise awareness of local communities through meetings and consultations to

Output/ Activity	Description
	discuss the purposes of the establishment of the PVPF and the regulations of the Forestry Law.
A 3.6	Provide training in eco-tourism, community-based eco-tourism, sustainable agro-forestry, and agricultural practices
A 3.7	Strengthen local community fora and networks to facilitate biodiversity conservation.

3.2 Implementation approaches and methods

Implementation strategies for Phase III of the project were developed on the basis of an assessment of the accomplishments of the previous two phases of the project, as well as consideration of the remaining issues to be addressed to achieve the original project vision of sustainable trans-boundary biodiversity conservation, In Phase III, Thailand, Cambodia and Lao PDR will harmonize the guidelines for management planning and implement several joint ecological monitoring activities. It is expected that full cooperation (Sandwith *et al*., 2001; ITTO/RFD, 2000) will include technical aspects (i.e., research, conservation and management), protection, information sharing, human resource development, the development of tourism packages, and joint efforts to reduce poaching and the illegal trade of endangered and rare species.

Ecosystem management: Sustainable management of the ecosystem management zones of the Emerald Triangle Protected Forests Complex will require the completion of a series of wildlife distribution maps that were initiated during the first two phases of the project. These will contribute to the establishment of a broad collaborative framework for integrating trans-boundary biodiversity conservation efforts among the three counties. Within that framework, research on wide-ranging species will continue in Thailand and Cambodia and will be extended to Lao PDR. Potential land-use changes will be anticipated throughout the region and the impacts of such changes on landscape species will be evaluated. The results of habitat modeling will highlight biodiversity hotspots and seasonal migratory patterns. The sharing of the information resulting from those efforts, which will support biodiversity conservation efforts throughout the Emerald Triangle Protected Forests Complex, will be institutionalized between the three countries during Phase III as a basis for formulating sustainable management strategies to protect wildlife populations and reduce barriers to migratory wildlife movements along the tri-national borders.

Local livelihood improvement: Local communities residing in enclaves and buffer zones of the Emerald Triangle Protected Forests Complex have been using forest resources to support their subsistence over many years (Tanakajana, 2003). The ICDP program in Thailand and the CDLP program in Cambodia were initiated, and nature-based tourism interventions were introduced, in Phase II of the project to increase livelihood opportunities for local residents in order to reduce pressures on the use of forests to support subsistence agricultural practices (Trisurat, 2007).

The most effective ICDP and CDLP activities introduced in Phase II of the project, including nature-based tourism interventions as well as other promising income-generating opportunities, will be expanded in Phase III of the project on the basis of the outcomes of Sustainable Livelihood Assessments that will be conducted in each of the participating

countries. This will maximize contributions to livelihood improvements of local communities over the long term. In Cambodia, where elements of the design stage of Phase II of the project, particularly those involving scoping exercises, were more constrained, this will especially be the case, while in Thailand, there will be some preliminary efforts directed through the ICDP to the establishment of a demonstration farm for domesticated wild flora and fauna initiatives. Concerted efforts will be extended in both countries to strengthen the long-term viability of the livelihood initiatives which have been introduced by establishing closer program linkages with civil society, including non-governmental organizations (NGOs) and rural credit programs

Multi-stakeholder participation at all levels: In addition to encouraging NGOs to share development experiences and provide support to ICDP activities in Thailand and Cambodia through Phase III of the project, it is expected that NPD, as well as academic, researchers at regional and national levels will be involved with providing some capacity building training and that border patrol police will actively participate with rangers in conducting patrols. Moreover, in recognizing that Lao PDR may still continue to be somewhat reluctant to participate in phase III activities, the project teams will provide several opportunities for them to participate in "soft" collaborative activities. These will include as sub-contractors for collecting baseline information on wildlife distribution in the Phouxeingthong National Biodiversity Conservation Area and adjoining forest areas and as participants in ***research on wide-ranging species*** with the support of the project teams in Thailand and Cambodia. There is sufficient reason to believe that the use of this pro-active approach will result in steadily growing participation in project activities by Lao PDR as each of the primary stakeholder countries assumes increasing ownership of the project during Phase III.

Capacity building and sharing lessons learned: In Phases I and II of the project, several training sessions were conducted in Thailand and Cambodia to increase the capacity of project staff, rangers, border patrol police, and local communities. Those efforts will continue tin Phase III of the project. The provision of the training will be especially important in Cambodia, as well as in Lao PDR, where staff have little or no access to training, budgets for management are very small, and there are very few rangers and facilities on the ground, especially in protected areas.

The capacity-building strategies in Phase III of the project will include hands-on-training and the sharing of lessons learned in the first two phases of the project from Thailand and Cambodia to Lao PDR. This approach will be reflected in the joint research on wildlife distribution that will be conducted in each of the participating countries, which will provide a practical platform for not only strengthening trans-boundary cooperation, but also developing hands-on-training.

3.3 Work plan

3.3.1 Thailand component

Outputs/ activities	Description	Responsible parties	Year 1				Year 2				Year 3			
			Quarter				Quarter				Quarter			
			1	2	3	4	1	2	3	4	1	2	3	4
Output 1: Management plans incorporating research results on wide-ranging species and ecological processes, which are compatible between countries, are established and implemented														
A 1.1	Revise and establish Project Steering Committee (PSC) and other coordination structures for the TBCA in accordance with ITTO rules	RFD NPD PM												
A 1.2	Conduct PSC and other meetings in accordance with ITTO rules	RFD NPD PM												
A 1.3	Gather wildlife distribution data in the PPFC by NDP scientists and park officials	RFD NPD PM PS Staff Consultant												
A 1.4	Strengthen GIS capacity for Cambodian and Laotian officials on GIS for modeling land-use and species distribution	RFD PM Consultant												
A 1.5	Conduct joint research by the three countries on wide-ranging species distribution in the Emerald Triangle	RFD NPD PM Staff Consultant												
A 1.6	Conduct joint research by the three countries on land use changes in the Emerald Triangle	RFD NPD PM Staff Consultant												
A 1.7	Publish the results of joint research findings	RFD PM PS												
Output 2: Capacity of multi-stakeholders in biodiversity conservation and monitoring is strengthened														
A 2.1	Update and maintain information system	RFD NPD PM PS Staff												
A 2.2	Collaborate with forest protection unit to prevent wildlife poaching, illegal logging, illegal trading and the collection of wild plants	RFD PM												
A 2.3	Collaborate with universities and NGOs to conduct training on buffer zone management	RFD PM PS												
A 2.4	Provide necessary equipment and facilities to protected areas and protection units for effective patrolling and protection	RFD PM												
A 2.5	Organize Joint Task Force and stakeholder meetings for trans-boundary biodiversity conservation cooperation and resolving future land use changes derived from Phase II of the project, as well as proposed adjustments as may be required	RFD NPD PM												
A 2.6	Organize stakeholders meetings on TBCA and project sustainability	RFD NPD PM PS Staff												
A 2.7	Conduct training for forest protection units, park rangers and border patrol police on GIS and effective patrolling	RFD NPD PM PS Staff Consultant												

Outputs/ activities	Description	Responsible parties	Year 1				Year 2				Year 3			
			Quarter				Quarter				Quarter			
			1	2	3	4	1	2	3	4	1	2	3	4
Output 3: Local communities are empowered to implement activities linking livelihoods improvement to reduced dependence on resources of protected areas														
A 3.1	Strengthen local community fora and networks to facilitate biodiversity conservation	RFD NPD PM PS Staff												
A 3.2	Conduct outreach programs to local schools and local communities to raise awareness on conservation benefits associated with TBCA	RFD NPD PM PS Staff												
A 3.3	Maintain existing ICDP and provide additional funding for domesticated wild flora and fauna pilot program to improve the livelihoods of local communities in accordance with criteria jointly approved by the project and the local community network	RFD NPD PM PS Staff												
A 3.4	Concerned parties develop and approve eco-tourism packages	RFD PM PS Staff												
A 3.5	Organize fund raising meetings for potential donors and NGOs to sustain ICDP activities	RFD PM PS Staff												
A 3.6	Monitor and evaluate on a regular basis the implementation of ICDP activities in terms of sustainability and consistency with the TBCA concept	RFD NPD PM PS Staff												

3.3.2 Cambodia component

Outputs/ activities	Description	Responsible parties	Year 1 Quarter				Year 2 Quarter				Year 3 Quarter			
			1	2	3	4	1	2	3	4	1	2	3	4
Output 1: Management plans incorporating research results on wide-ranging species and ecological processes, which are compatible between countries, are established and implemented														
A 1.1	Revise and establish a Project Steering Committee (PSC) and strengthen the National Coordinating Office (NCO) and Project Management Team (PMT) for the TBCA in accordance with ITTO rules	FA, DWB												
A 1.2	Organize PSC and Joint Task Force workshops and stakeholder meetings to provide practical means for harmonizing trans-boundary management plans and activities in the PVPF	FA, DWB, PM, TA, Staff												
A 1.3	Conduct analyses of land use and land cover changes in the PVPF and on the basis of those analyses develop preliminary estimates of changes in carbon stocks in the PVPF	FA, DWB, PM, TA, Staff, Sub-contract												
A 1.4	Conduct a feasibility study for amending the suitable/appropriate boundaries of the PVPF and land-use mapping and demarcation of community use areas within and around the PVPF	FA, DWB, PM, TA, Staff												
A 1.5	Gather wildlife distribution information and conduct botanical studies in and around the PVPF	FA, DWB, PM, TA, Staff												
A 1.6	Publish the results of research findings	FA, DWB, PM, TA, Staff												
A 1.7	Organize Regional Conference on Biodiversity Conservation in Tropical Forests	FA, DWB, PM, TA, Staff,												
Output 2: Capacity of multi-stakeholders in biodiversity conservation and monitoring is strengthened														
A 2.1	Conduct law enforcement patrols in target sites on a regular basis	FA, DWB, PM, TA, Staff												
A 2.2	Coordinate quarterly meetings and workshops with relevant stakeholders and regular consultations with stakeholders on trans-boundary biodiversity conservation	FA, DWB, PM, TA, Staff												
A 2.3	Provide training to the staff of the PVPF in biodiversity conservation, GIS mapping, land-use planning, forest management planning and habitat suitability analysis	FA, DWB, PM, TA, Staff, Resource persons												
A 2.4	Organize training programs on forest conservation, forest climate change mitigation, REDD, and law enforcement for relevant stakeholders and organize and conduct workshops to disseminate information on law enforcement and international conventions related to biodiversity	FA, DWB, PM, TA, Staff, Resources person												

Outputs/ activities	Description	Responsible parties	Year 1 Quarter				Year 2 Quarter				Year 3 Quarter			
			1	2	3	4	1	2	3	4	1	2	3	4
	conservation, such as CITES and CBD													
A 2.5	Organize stakeholder meetings for trans-boundary biodiversity conservation cooperation and mitigating future land use change, as well as proposed adjustments as may be required	FA, DWB, PM, TA, Staff												
A 2.6	Strengthen Protected Forest management by allocating more equipment and staff to resource management and monitoring activities	FA, DWB, PM, TA, Staff												
A 2.7	Organize training on domestication of wild flora and fauna for local FA and local communities	FA, DWB, PM, TA,Staff, Resources person												
A 2.8	Organize training on land-use planning, demarcation, and GIS mapping for local FA and local communities	FA, DWB, PM, TA,Staff, Resources person												
Output 3: Local communities are empowered to implement activities linking livelihoods improvement to reduced dependence on resources of protected areas														
A 3.1	Plan and conduct a comprehensive sustainable livelihoods assessment, potential eco-tourism development assessment and scale up local community fora and networks	FA, DWB, PM, TA, Staff												
A 3.2	Organize reciprocal visits between staff of the PVPF and local communities' networks to share experiences with other projects in Cambodia for promoting trans-boundary biodiversity conservation	FA, DWB, PM, TA, Staff												
A 3.3	Maintain existing ICDP and provide additional funding for domesticated wild flora and fauna pilot program to improve the livelihoods of local communities in accordance with criteria jointly approved by the project and the local community network	FA, DWB, PM, TA, Staff												
A 3.4	Increase economic opportunities for local communities through sustainable agriculture and agro-forestry practices and community-based ecotourism in the buffer zones of the PVPF	FA, DWB, PM, TA, Staff												
A 3.5	Raise awareness of local communities through meetings and consultations to discuss the purposes of the establishment of the PVPF and the regulations of the Forestry Law	FA, DWB, PM, TA, Staff												
A 3.6	Provide training in eco-tourism, community-based eco-tourism, sustainable agro-forestry, and agricultural practices	FA, DWB, PM, TA, Staff, Resources person												
A 3.7	Strengthen local community fora and networks to facilitate biodiversity conservation	FA, DWB, PM, TA, Staff,												

3.4 Budget

3.4.1 ITTO Master Budget Table (Thailand Component)

Outputs/ activity	Description	Budget Component	Quantity			Units	Unit cost US$	Total cost US$	ITTO		
			Year 1	Year 2	Year 3				Year 1	Year 2	Year 3
Output 1 Capacity of national institution to design and implement TBC compatible protected areas Management plans incorporating research results on wide-ranging species and ecological processes is strengthened											
A 1.1	Revise and establish Project Steering Committee (PSC) and other coordination structures for the TBCA in accordance with ITTO rules										
	Project Manager	111	1	1	1	Year	2,500	90,000	30,000	30,000	30,000
	Project Secretary	112	1	1	1	Year	800	28,800	9,600	9,600	9,600
	Field Assistance (5), at US$ 300 per m	121	5	5	5	Person-Year	300	54,000	18,000	18,000	18,000
	Assistance at RFD (for Coordinator), at US$ 500 per m	122	1	1	1	Person-Year	500	18,000	6,000	6,000	6,000
	GIS Consultant	131	1	1	1	Year	6,000	18,000	6,000	6,000	6,000
	Auditor	62	1	1	1	Year	1,500	4,500	1,500	1,500	1,500
	National Expert(s)/consultant(s), to Cam and Lao, at US$ 100/day 8 days/year	311	1	1	1	Person-year	800	2,400	800	800	800
	National Expert(s)/consultant(s) to Cam and Lao, 6 Air-tickets (1 trips/year)	321	6	6	6	Person-Year	500	9,000	3,000	3,000	3,000
A 1.2	Conduct PSC meeting and others in accordance with ITTO rules										
	PSC meetings (3 x US$ 1,000)	612	1	1	1	Year	1,000	3,000	1,000	1,000	1,000
	Taskforce meeting (3 x US$ 1,000)	613	1	1	1	Year	1,000	3,000	1,000	1,000	1,000
A 1.3	Gather wildlife distribution in the PPFC by NDP scientist and park officials										
	Others (4 Staff) 4 days/m, US$30/day	312	2	2	2	Person-year	1,440	8,640	2,880	2,880	2,880
	Petrol and maintenance (2 x US$ 2,400/year)	611	1	1	1	Vehicle-Year	2,400	7,200	2,400	2,400	2,400
A 1.4	Strengthen GIS capacity for Cambodian and Laotian officials on GIS for modeling land use and species distribution										
	National Expert(s)/consultant(s), to Cam and Lao, at US$ 100/day 8 days/year	311	2	2	2	Person-year	800	4,800	1,600	1,600	1,600
	Others to Cam and Lao, 4 Air-tickets (2 trips/year)	322	4	4		Person-Year	500	4,000	2,000	2,000	
A 1.5	Jointly conduct joint research on wide-ranging species distribution in the Emerald Triangle area by three countries										
	Sub-contract (Laos Scientist), at US$	21		1		Year	7,500	7,500		7,500	
A 1.6	Jointly conduct joint research on land use change in the Emerald Triangle area by three countries										
	Sub-contract (Laos Scientist), at US$	21		1		Year	7,500	7,500		7,500	
	Others (4 Staff) 4 days/m, US$30/day	312	2	2	2	Person-year	1,440	8,640	2,880	2,880	2,880
A 1.7	Publish the results of joint research findings										
	Information, media, publications	616		1	1	Year	1,400	14,000		5,000	9,000
	Sub-total -Output 1							**292,980**			
Output 2 Appropriate institutional mechanisms in support of the TBC approach are put in place											

Outputs/ activity	Description	Budget Component	Quantity			Units	Unit cost US$	Total cost US$	ITTO		
			Year 1	Year 2	Year 3				Year 1	Year 2	Year 3
A 2.1	Update and maintain information system										
	Information, media, publications	616		1		Year	500	5,000		5,000	
A 2.2	Collaborate with forest protection unit to prevent wildlife poaching, illegal logging, trading and collection of wild plants										
	Meeting, training, workshops for 400 participants US$30/participant/day	615	10	10	10	Participant-day	30	900	300	300	300
A 2.3	Collaborate with universities and NGOs to conduct training on buffer zone management										
	Others (resource persons)	331	1	1	1	Year	1,540	4,620	1,540	1,540	1,540
A 2.4	Provide necessary equipment and facilities to protected areas ((e.g., Bun Thrik-Yod Mon) for effective patrolling and protection										
	2-Project Vehicles (4 Doors Pickup)	411	2			Unit	32,000	64,000	64,000		
	1-Project Vehicles (Pickup Van)	412	1			Unit	43,000	43,000	43,000		
	2-Notebook	413	2			Unit	1,500	3,000	3,000		
	8-GPS	414	8			Unit	1,000	8,000	8,000		
	Satellite Imaginaries	415	1			Unit	26,500	26,500	26,500		
	3-Camara	416	3			Unit	2,667	8,000	8,000		
	2-Projector	417	2			Unit	2,500	5,000	5,000		
	2-Printer Laser Monochrome	418	2			Unit	400	800	800		
	2-Printer Laser color	419	2			Unit	500	1,000	1,000		
	2-Computer	4110	2			Unit	1,500	3,000	3,000		
	4-Air Condition	4113	4			Unit	1,600	6,400	6,400		
	20-Tabel for meeting rooms	4114	20			Unit	100	2,000	2,000		
	60-Chairs for meeting rooms	4115	60			Unit	30	1,800	1,800		
	1-Photocopy Machine	4116	1			Unit	4,000	4,000	4,000		
	Petrol and maintenance (2 x US$ 2,400/year)	611	1	1	1	Year	2,400	7,200	2,400	2,400	2,400
A 2.5	Organize Joint Task Force and stakeholder meetings for trans-boundary biodiversity conservation cooperation and resolving future land use change derived from project phase II, as well as proposed adjustments if needed										
	Meeting, training, workshops for 400 participants US$30/participant/day	615	15	15	15	Participant-day	30	1,350	450	450	450
A 2.6	Organize stakeholders meetings on TBCA and project sustainability										
	Meeting, training, workshops for 400 participants US$30/participant/day	615		30	30	Participant-day	30	1,800		900	900
A 2.7	Conduct training for forest protection units, park rangers and border patrol police on GIS and effective patrolling										
	Meeting, training, workshops for 400 participants US$30/participant/day	615	15	15	15	Participant-day	30	1,350	450	450	450
	Sub-total -Output 2							**198,720**			
Output 3 Local communities are empowered to implement activities linking livelihoods improvement to reduction of dependence on resources of protected areas											
A 3.1	Strengthen local community fora and network to facilitate biodiversity conservation										

Outputs/ activity	Description	Budget Component	Quantity			Units	Unit cost US$	Total cost US$	ITTO		
			Year 1	Year 2	Year 3				Year 1	Year 2	Year 3
	Nursery supplies	51		1		Year	1,200	1,200		1,200	
	Meeting, training, workshops for 400 participants US$30/participant/day	615	15	15	15	Participant-day	30	1,350	450	450	450
A 3.2	Conduct outreach programs to local schools and local communities to raise awareness on conservation and benefits on TBCA										
	Nursery supplies	51	1		1	Year	1,200	2,400	1,200		1,200
	Meeting, training, workshops for 400 participants US$30/participant/day	615	15	15	15	Participant-day	30	1,350	450	450	450
A 3.3	Maintain existing ICDP and provide additional fund on domesticated wild flora & fauna to improve livelihoods of local communities in accordance with criteria jointly approved by the Project and the local community network										
	6 ICDP pilot activities	614		6		Project	1,500	9,000		9,000	
	2-Tissue Culture Lab equipment	4111	2			Unit	45,000	90,000	90,000		
	3-Nursery for Seedling	4112	3			Unit	40,000	120,000	120,000		
A 3.4	Eco-tourism packages developed and approved by concerned parties										
	Office supplies	52			1	Year	1,200	1,200			1,200
	Meeting, training, workshops for 400 participants US$30/participant/day	615	30	30		Participant-day	30	1,800	900	900	
A 3.5	Organize fund raising meetings for potential donors and NGOs to sustain the ICDP projects										
	Office supplies	52		1		Year	1,200	1,200		1,200	
	Meeting, training, workshops for 400 participants US$30/participant/day	615		20	20	Participant-day	30	1,200		600	600
A 3.6	Regular monitor and evaluate the implementation of ICDP activities in terms of sustainability and consistent with TBCA concept										
	Office supplies	52	1			Year	1,200	1,200	1,200		
	Meeting, training, workshops for 400 participants US$30/participant/day	615	10	10	10	Participant-day	30	900	300	300	300
	Sub-total -Output 3							**232,800**			
	Project monitoring & administration										
	ITTO monitoring and review							9,000			
	ITTO midterm evaluation							7,500			
	Sub-total (Output 1-3 + ITTO M&E, MiE)							**741,000**			
	ITTO program support costs (8% on items 10-82 above)							59,280			
	GRAND TOTAL							**800,280**			

3.4.2 Consolidate budget by component (Thailand Component)

Category	Description	Total	Year 1	Year 2	Year 3
10	***Personnel***				
111	Project Manager	90,000	30,000	30,000	30,000
112	Project Secretary	28,800	9,600	9,600	9,600
113	Project Director/Coordinator	15,000	5,000	5,000	5,000
114	2 x Deputy Project Director	24,000	8,000	8,000	8,000
115	Head of Technical Section	22,500	7,500	7,500	7,500
116-118	Head of biodiversity conservation, information, administration section (3)	67,500	22,500	22,500	22,500
119	5 Pas Superintendents	21,000	7,000	7,000	7,000
120	3 Technicians	54,000	18,000	18,000	18,000
121	Assistance (5), at US$ 300 per m	54,000	18,000	18,000	18,000
122	Assistance at RFD (for Coordinator), at US$ 500 per m	18,000	6,000	6,000	6,000
131	Consultant on GIS, at US$1,500 per m	18,000	6,000	6,000	6,000
19	**Subtotal**	**412,800**	**137,600**	**137,600**	**137,600**
20	***Sub-contract***				
21	Sub-contract (Laos Scientist)	15,000	-	15,000	-
29	**Subtotal**	**15,000**	**-**	**15,000**	**-**
30	***Travel***				
311	National Expert(s)/consultant(s), to Cam and Lao	7,200	2,400	2,400	2,400
312	Others (4 Staff) 4 days/m	17,280	5,760	5,760	5,760
313	Travel cost	13,500	4,500	4,500	4,500
321	National Expert(s)/consultant(s) to Cam and Lao	9,000	3,000	3,000	3,000
322	Others to Cam and Lao	4,000	2,000	2,000	-
331	Others (resource persons)	4,620	1,540	1,540	1,540
39	**Subtotal**	**55,600**	**19,200**	**19,200**	**17,200**
40	***Capital Items***				
411	2-Project Vehicles (4 Doors Pickup)	64,000	64,000	-	-
412	1-Project Vehicles (Pickup Van)	43,000	43,000	-	-
413	2-Notebook	3,000	3,000	-	-
414	8-GPS	8,000	8,000	-	-
415	Satellite Imaginaries	26,500	26,500	-	-
416	3-Camara	8,000	8,000	-	-
417	2-Projector	5,000	5,000	-	-
418	2-Printer Laser Monochrome	800	800	-	-
419	2-Printer Laser color	1,000	1,000	-	-
4110	2-Computer	3,000	3,000	-	-
4111	2-Tissue Culture Lab equipment	90,000	90,000	-	-
4112	3-Nursery for Seedling	120,000	120,000	-	-
4113	4-Air Condition	6,400	6,400	-	-
4117	20-Table for meeting rooms	2,000	2,000	-	-
4115	60-Chairs for meeting rooms	1,800	1,800	-	-
4116	1-Photocopy Machine	4,000	4,000	-	-
4117	Project offices	22,500	7,500	7,500	7,500
4118	2 4x4 vehicles	2,400	800	800	800
4119	Capital equipment	7,500	2,500	2,500	2,500
49	**Subtotal**	**418,900**	**397,300**	**10,800**	**10,800**
50	***Consumable items***				

Category	Description	Total	Year 1	Year 2	Year 3
51	Nursery supplies	3,600	1,200	1,200	1,200
52	Office supplies	3,600	1,200	1,200	1,200
53	Gas and lubricants	13,500	4,500	4,500	4,500
54	Spares	9,000	3,000	3,000	3,000
55	Utilities	18,000	6,000	6,000	6,000
56	Office supplies	15,000	5,000	5,000	5,000
59	**Subtotal**	**62,700**	**20,900**	**20,900**	**20,900**
60	***Miscellaneous***				
611	Petrol and maintenance	14,400	4,800	4,800	4,800
612	PSC meetings	3,000	1,000	1,000	1,000
613	Taskforce meeting	3,000	1,000	1,000	1,000
614	6 ICDP pilot activities	9,000	-	9,000	-
615	Meeting, training, workshops	12,000	6,000	3,000	3,000
616	Information, media, publications	19,000	-	10,000	9,000
617	Phone, fax	9,000	3,000	3,000	3,000
621	Audit cost	4,500	1,500	1,500	1,500
69	**Subtotal**	**73,900**	**17,300**	**33,300**	**23,300**
70	***National Management cost***	***25,152***			
80	***Project monitoring & administration***				
81	ITTO monitoring and review	9,000			
82	ITTO midterm evaluation	7,500			
	Sub-total (10-82)	**1,080,552**			
83	ITTO program support costs	59,280			
	Sub-total (81-83)	**75,780**			
100	***GRAND TOTAL***	***1,139,832***			

3.4.3 ITTO Yearly Budget (Thailand Component)

Category	Description			Total	Year 1	Year 2	Year 3
10	***Project Personnel***						
	11	National Experts (Long-term)					
		11.1	Project Manager, at US$ 2,500 per m	90,000	30,000	30,000	30,000
		11.2	Project Secretary, at US$ 800 per m	28,800	9,600	9,600	9,600
	12	Other Personnel					
		12.1	Field Assistance (5), at US$ 300 per m	54,000	18,000	18,000	18,000
		12.2	Assistance at RFD (for Coordinator), at US$500 per m	18,000	6,000	6,000	6,000
	13	13.1	Consultant on GIS, at USD 1,500 per m	18,000	6,000	6,000	6,000
	19	**Component Total**		**2 08,800**	**69,600**	**69,600**	**69,600**
20	***Sub-contract***						
	21	Sub-contract (Laos Scientist), lump sum		15,000	-	15,000	-
	29	**Component Total**		**15,000**	**-**	**15,000**	**-**
30	***Travel***						
	31	Daily subsistence allowance					
		31.1	National Expert(s)/consultant(s), to Cam and Lao, at US$ 100/day 8 days/year	7,200	2,400	2,400	2,400
		31.2	Others (4 Staff) 4 days/m, US$30/day	17,280	5,760	5,760	5,760
	32	International travel					
		32.1	National Expert(s)/consultant(s) to Cam and Lao, 6 Air-tickets (1 trips/year)	9,000	3,000	3,000	3,000
		32.2	Others to Cam and Lao, 4 Air-tickets (2 trips/year)	4,000	2,000	2,000	-
	33	Local transport costs					
		33.1	Others (resource persons)	4,620	1,540	1,540	1,540
	39	**Component Total**		**42,100**	**14,700**	**14,700**	**12,700**
40	***Capital Items***						
	41	Capital equipments					
		41.1	2-Project Vehicles (4 Doors Pickup)	64,000	64,000	-	-
		41.2	1-Project Vehicles (Pickup Van)	43,000	43,000	-	-
		41.3	2-Notebook	3,000	3,000	-	-
		41.4	8-GPS	8,000	8,000	-	-
		41.5	Satellite Images	26,500	26,500	-	-
		41.6	3-Camera	8,000	8,000	-	-
		41.7	2-Projector	5,000	5,000	-	-
		41.8	2-Printer Laser Monochrome	800	800	-	-
		41.9	2-Printer Laser color	1,000	1,000	-	-
		41.10	2-Computer	3,000	3,000	-	-
		41.11	2-Tissue Culture Lab equipment	90,000	90,000	-	-
		41.12	3-Nursery for Seedling	120,000	120,000	-	-
		41.13	4-Air Condition	6,400	6,400	-	-
		41.14	20-Table for meeting rooms	2,000	2,000	-	-
		41.15	60-Chairs for meeting rooms	1,800	1,800	-	-
		41.16	1-Photocopy Machine	4,000	4,000	-	-
	49	**Component Total**		**386,500**	**386,500**	**-**	**-**
50	***Consumable items***						
	51	Nursery supplies		3,600	1,200	1,200	1,200
	52	Office supplies		3,600	1,200	1,200	1,200
	59	**Component Total**		**7,200**	**2,400**	**2,400**	**2,400**

Category	Description			Total	Year 1	Year 2	Year 3
60	***Miscellaneous***						
	61	Sundry					
		61.1	Petrol and maintenance (2 x US$ 2,400/year)	14,400	4,800	4,800	4,800
		61.2	PSC meetings (3 x US$ 1,000)	3,000	1,000	1,000	1,000
		61.3	Taskforce meeting (3 x US$ 1,000)	3,000	1,000	1,000	1,000
		61.4	6 ICDP pilot activities	9,000	-	9,000	-
		61.5	Meeting, training, workshops for 400 participants US$30/participant/day	12,000	6,000	3,000	3,000
		61.6	Information, media, publications	19,000	-	10,000	9,000
	62	Audit cost (3 x US$1,500)		4,500	1,500	1,500	1,500
	69	**Component Total**		**64,900**	**14,300**	**30,300**	**20,300**
80	***Project monitoring & administration***						
	81	ITTO monitoring and review		9,000			
	82	ITTO midterm evaluation		7,500			
	Sub-total (10-82)			**741,000**			
	83	ITTO program support costs (8% on items 10-82)		59,280			
	89	**Component Total (81-83)**		**75,780**			
100	***GRAND TOTAL***			**800,280**			

3.4.4 Executing agency budget by component (Thailand Component)

Category	Description	Total	Year 1	Year 2	Year 3
10	***Personnel***				
113	Project Director/Coordinator	15,000	5,000	5,000	5,000
114	2 x Deputy Project Director	24,000	8,000	8,000	8,000
115	Head of Technical Section	22,500	7,500	7,500	7,500
116	Head of biodiversity conservation section	22,500	7,500	7,500	7,500
117	Head of information section	22,500	7,500	7,500	7,500
118	Head of administration section	22,500	7,500	7,500	7,500
119	5 Pas Superintendents	21,000	7,000	7,000	7,000
120	3 Technicians	54,000	18,000	18,000	18,000
19	**Subtotal**	**204,000**	**68,000**	**68,000**	**68,000**
30	***Duty travel***				
313	Travel cost	13,500	4,500	4,500	4,500
39	**Subtotal**	**13,500**	**4,500**	**4,500**	**4,500**
40	***Capital items***				
4117	Project offices	22,500	7,500	7,500	7,500
4118	2 4x4 vehicles	2,400	800	800	800
4119	Capital equipment	7,500	2,500	2,500	2,500
49	**Subtotal**	**32,400**	**10,800**	**10,800**	**10,800**
50	***Consumable Items***				
53	Gas and lubricants	13,500	4,500	4,500	4,500
54	Spares	9,000	3,000	3,000	3,000
55	Utilities	18,000	6,000	6,000	6,000
56	Office supplies	15,000	5,000	5,000	5,000
59	**Subtotal**	**55,500**	**18,500**	**18,500**	**18,500**
60	***Miscellaneous***				
617	Phone, fax	9,000	3,000	3,000	3,000
69	**Subtotal**	**9,000**	**3,000**	**3,000**	**3,000**
	SUBTOTAL all categories	**314,400**	**104,800**	**104,800**	**104,800**
	Management cost (8%)	25,152			
Grand Total		**339,552**			

~~3.4.5~~3.4.5 ITTO Master Budget Table (Cambodia Component)

Outputs/activity	Description	Budget Component	Quantity			Units	Unit cost US$	Total cost US$	ITTO		
			Year 1	Year 2	Year 3				Year 1	Year 2	Year 3
Output 1: Management plans incorporating research results on wide-ranging species and ecological processes, which are compatible between countries, established and implemented											
A 1.1	Revise and establish Project Steering Committee (PSC), strengthen the National Coordinating Office (NCO) and Project Management Team (PMT) for the TBCA in accordance with ITTO rules										
	Project Manager	112	12	12	12	Months	1,450	52,200	17,400	17,400	17,400
	Community Outreach and Participatory Land Use Planning Coordinator	113	12	12	12	Months	650	23,400	7,800	7,800	7,800
	Forest Land Use Planning and Biodiversity Conservation Specialist	114	12	12	12	Months	700	25,200	8,400	8,400	8,400
	GIS Specialist	115	12	12	12	Months	600	21,600	7,200	7,200	7,200
	Project Accountant	116	12	12	12	Months	650	23,400	7,800	7,800	7,800
	TA	117	10	10	10	Months	2,000	60,000	20,000	20,000	20,000
	Community Livelihood Development Officer	118	12	12	12	Months	350	12,600	4,200	4,200	4,200
	Field Assistance (5), at US$ 300 per m	119	5	5	5	Person-Years	300	54,000	18,000	18,000	18,000
	PM, TA, National Specialist(s)/ consultant (s), to Thai and Lao, at US$ 100/day 15days/year	311	1	1	1	Person-years	1,500	4,500	1,500	1,500	1,500
	PM, TA, National Specialist(s)/consultant (s) to Thai and Lao, 6 Air-tickets (1 trips/year)	321	6	6	6	Person-Years	500	9,000	3,000	3,000	3,000
	Field subsistence allowance and accommodation	322	12	12	12	Months	1000	36,000	12,000	12,000	12,000
	Petrol and maintenance (3 x US$ 6,000/year)	611	1	1	1	Years	6,000	18,000	6,000	6,000	6,000
	Auditor	621	1	1	1	Years	3,000	9,000	3,000	3,000	3,000
	Sub-total							**348,900**			
A 1.2	Organize a Project Steering Committee, joint task force workshops, and stakeholder meetings to provide practical means for harmonizing trans-boundary management plans and activities in the PVPF										
	Office supplies	521	1	1	1	Years	1,800	5,400	1,800	1,800	1,800
	PSC meetings (3 x US$ 4,000)	612	1	1	1	Years	4,000	12,000	4,000	4,000	4,000
	Taskforce and stakeholder meeting (3 x US$ 1,500)	613	1	1	1	Years	1,500	4,500	1,500	1,500	1,500
	Sub-total							**21,900**			
A 1.3	Conduct analyses of land use and land cover changes in the Preah Vihear Protected Forest and on the basis of those analyses develop preliminary estimates of changes in carbon stocks in the PVPF										
	Sub-contract (Laos Scientist)	21		1		Years	6,000	6,000		6,000	
	Others (3 Staff) 10days/m, US$30/day; 3m/year	312	90	60		Person-years	30	4,500	2,700	1,800	
	Assessment of changes in Carbon stocks in the PVPF	315	1			Study	4,500	4,500	4,500		
	Sub-total							**15,000**			
A 1.4	Conduct a feasibility study for amending the suitable/appropriate boundary of PVPF and land-use mapping and demarcation of community uses areas within and around PVPF										
	Others (3 Staff) 10days/m, US$30/day; 3m/year	312	90	60		Person-years	30	4,500	2,700	1,800	
	Sub-total							**4,500**			
A 1.5	Gather wildlife distribution and botanical study in and around the PVPF										
	Others (3 Staff) 10days/m, US$30/day; 3m/year	312	90			Person-years	2,700	2,700	2,700		
	Sub-total							**2,700**			

Outputs/activity	Description	Budget Component	Quantity			Units	Unit cost US$	Total cost US$	ITTO		
			Year 1	Year 2	Year 3				Year 1	Year 2	Year 3
A 1.6	Publish the results of research findings										
	Information, research finding publications	616	1	1	1	Years	16,500	16,500	5,500	5,500	5,500
	Sub-total							**16,500**			
A 1.7	Organize Regional Conference on Biodiversity Conservation in Tropical Forests										
	Regional Conference on Biodiversity Conservation in Tropical Forests	617			1	Conference	70,000	70,000			70,000
	Sub-total							**70,000**			
	Sub-total for Output 1							**479,500**			
Output 2: Capacity of multi-stakeholders in biodiversity conservation and monitoring strengthened											
A 2.1	Conduct law enforcement patrols in target sites on a regular, consistent basis.										
	Law enforcement patrols (Reduce Emissions associated with Illegal Forest Activities)	314	10	12	10	Months	2,550	81,600	25,500	30,600	25,500
	Sub-total							**81,600**			
A 2.2	Coordinate quarterly meetings and workshops with relevant stakeholders, and regular consultations, with stakeholders on trans-boundary biodiversity conservation.										
	National Conference on Biodiversity Conservation and the Conservation of Carbon Stocks in the Permanent Forest Estate	618		1		Conference	40,000	40,000		40,000	
	Project Launching Stakeholders Workshop	619	1			Workshop	5,000	5,000	5,000		
	Meetings, training, workshops for 1,440 participants at US$30/participant/day	615	30	30	30	Participant-days	30	2,700	900	900	900
	Sub-total							**47,700**			
A 2.3	Provide training to the staff of the PVPF in biodiversity conservation, GIS mapping, land-use planning, forest management planning and habitat suitability analysis.										
	Others (resource persons)	331	1	1	1	Year	750	2,250	750	750	750
	Meetings, training, workshops for 1,440 participants at US$30/participant/day	615	45	45	45	Participant-days	30	4,050	1,350	1,350	1,350
	Sub-total							**6,300**			
A 2.4	Organize training programs on forest conservation, forest climate change mitigation, REDD, and law enforcement for relevant stakeholders and organize and conduct workshops to disseminate information on law enforcement and international conventions related to biodiversity conservation, such as CITES and CBD,										
	Others (resource persons)	331	1	1	1	Year	750	2,250	750	750	750
	Meetings, training, workshops for 1,440 participants at US$30/participant/day	615	45	45	45	Participant-days	30	4,050	1,350	1,350	1,350
	Sub-total							**6,300**			
A 2.5	Organize stakeholder meetings for trans-boundary biodiversity conservation cooperation and mitigating future land use change, as well as proposed adjustments if needed										
	Meetings, training, workshops for 1,440 participants at US$30/participant/day	615	45	45	45	Participant-days	30	4,050	1,350	1,350	1,350
	Sub-total							**4,050**			
A 2.6	Strengthen Protected Forest management by allocating more equipment and staff to resource management and monitoring activities.										
	4WD Pick-up Trucks Double Cab	44.1	3			Units	28,000	84,000	84,000		
	Motorbikes	44.2	6			Units	1,500	9,000	9,000		

Outputs/activity	Description	Budget Component	Quantity			Units	Unit cost US$	Total cost US$	ITTO		
			Year 1	Year 2	Year 3				Year 1	Year 2	Year 3
	Protected Forest Head Quarters	44.3	1			Units	100,000	100,000	100,000		
	Air Conditioners	44.4	6			Units	1,600	9,600	9,600		
	Tables for Meeting Rooms	44.5	20			Units	100	2,000	2,000		
	Solar Battery Panels and Deep Cycle Batteries	44.6	10			Units	1,500	15,000	15,000		
	Photocopier	44.7	1			Units	2,500	2,500	2,500		
	Printer color A3	44.8	1			Units	2,000	2,000	2,000		
	Monochrome Laser Printer	44.9	1			Units	2,000	2,000	2,000		
	LCD Projectors	44.10	2			Units	1,500	3,000	3,000		
	Laser Printers	44.11	3			Units	500	1,500	1,500		
	Laptop Computers with Microsoft Office	44.12	3			Units	1,600	4,800	4,800		
	Hand-held Digital Cameras	44.13	5			Units	500	2,500	2,500		
	GPS 60csx	44.14	6			Units	600	3,600	3,600		
	Generators	44.15	2			Units	2,000	4,000	4,000		
	Field Equipment and Camping Gear	44.16	20			Units	200	4,000	4,000		
	External Hard Disks	44.17	2			Units	350	700	700		
	Computer (Database and MIST)	44.18	5			Units	1,500	7,500	7,500		
	Communication devices	44.19	20			Units	150	3,000	3,000		
	Chairs for Meeting Rooms	44.20	60			Units	30	1,800	1,800		
	Pumping Wells	44.21	10			Units	1,500	15,000	15,000		
	Scanner A3	44.22	1			Units	3,000	3,000	3,000		
	ArcGIS 3D Analyst	44.25	1			Units	6,830	6,830	6,830		
	ArcGIS Spatial Analyst	44.26	1			Units	6,830	6,830	6,830		
	Satellite imagery - ALOS(AVNIR-2)	44.27	10			Units	300	3,000	3,000		
	Satellite imagery - ALOS(Prism)	44.28	5			Units	300	1,500	1,500		
	Satellite imagery - ALOS(Palsar)	44.29	4			Units	300	1,200	1,200		
	Satellite imagery - Landsat	44.30	3			Units	800	2,400	2,400		
	Specialist for Establishing Plant Nursery	22	8			Months	600	4,800	4,800		
	Specialist for Establishing Tissue Culture Lab	23	8			Months	600	4,800	4,800		
	Sub-total							**311,860**			
A 2.7	Organize training on domestication of wild flora and fauna for local FA and local community people.										
	Others (resource persons)	331	1	1	1	Years	750	2,250	750	750	750
	Meetings, training, workshops for 1,440 participants at US$30/participant/day	615	45	45	45	Participant-days	30	4,050	1,350	1,350	1,350
	Sub-total							**6,300**			
A 2.8	Organize training on land-use planning, demarcation, GIS mapping for local FA and local community										
	Others (resource persons)	331	1	1	1	Years	750	2,250	750	750	750
	Meetings, training, workshops for 1,440 participants at	615	45	45	45	Participant-	30	4,050	1,350	1,350	1,350

Outputs/activity	Description	Budget Component	Quantity			Units	Unit cost US$	Total cost US$	ITTO		
			Year 1	Year 2	Year 3				Year 1	Year 2	Year 3
	US$30/participant/day					days					
	Sub-total							**6,300**			
	Sub-total for Output 2							**470,410**			
Output 3: Local communities are empowered to implement activities linking livelihoods improvement to reduction of dependence on resources of protected areas											
A 3.1	Plan and conduct a comprehensive sustainable livelihood development, potential eco-tourism development assessment and scale up local community fora and networks.										
	Others (3 Staff) 10days/m, US$30/day; 3m/year	312	90			Person-years	30	2,700	2,700		
	Sub-total							**2,700**			
A 3.2	Organize reciprocal visits between staff of the PVPF and local communities network to gain experience from other projects in Cambodia for promoting trans-boundary biodiversity conservation.										
	Meetings, training, workshops for 1,440 participants at US$30/participant/day	615	45	45	45	Participant-days	30	4,050	1,350	1,350	1,350
	Sub-total							**4,050**			
A 3.3	Maintain existing ICDP and provide additional fund on domesticated wild flora & fauna to improve livelihoods of local communities in accordance with criteria jointly approved by the Project and the local community network.										
	Maintain existing ICDP	614	1	1	1	Years	1,000	3,000	1000	1,000	1,000
	Nursery for Seedlings	44.23	1			Units	52,500	52,500	52,500		
	Tissue Culture Lab Equipment	44.24	1			Units	45,000	45,000	45,000		
	Sub-total							**100,500**			
A 3.4	Increase economic opportunities for local communities through sustainable agriculture and agro-forestry practices and community base-ecotourism in the buffer zones of the PVPF										
	Seedling Production (fast growing trees & fruit trees) 80,000 seedlings/year*3years	511	1	1	1	Years	15,000	45,000	15,000	15,000	15,000
	Meetings, training, workshops for 1,440 participants at US$30/participant/day	615	45	45	45	Participant-days	30	4,050	1,350	1,350	1,350
	6 ICDP pilot activities	614	2	4		Activity	3,500	21,000	7,000	14,000	
	Sub-total							**70,050**			
A 3.5	Raise awareness of local communities through meetings and consultations to discuss the purposes of the establishment of the PVPF and the regulations of the Forestry Law.										
	Meetings, training, workshops for 1,440 participants at US$30/participant/day	615	45	45	45	Participant-days	30	4,050	1,350	1,350	1,350
	Sub-total							**4,050**			
A 3.6	Provide training in eco-tourism, community-based eco-tourism, sustainable agro-forestry, agriculture practices										
	Others (resource persons)	331	1	1	1	Years	750	2,250	750	750	750
	Meetings, training, workshops for 1,440 participants at US$30/participant/day	615	45	45	45	Participant-days	30	4,050	2,250	2,250	1,350
	Sub-total							**6,300**			
A 3.7	Strengthen local community fora and network to facilitate biodiversity conservation										
	Meetings, training, workshops for 1,440 participants at US$30/participant/day	615	45	45	45	Participant-days	30	4,050	1,350	1,350	1,350
	Sub-total							**4,050**			

Outputs/activity	Description	Budget Component	Quantity			Units	Unit cost US$	Total cost US$	ITTO		
			Year 1	Year 2	Year 3				Year 1	Year 2	Year 3
	Sub-total for Output 3							**191,700**			
	Project monitoring & administration										
	ITTO monitoring and review							9,000			
	ITTO midterm evaluation							7,500			
	Sub-total (Output 1-3 + ITTO M&E, MiE)							**1,158,110**			
	ITTO program support costs (8% on items 10-82 above)							92,649			
	GRAND TOTAL							**1,250,759**			

3.4.6 Consolidated budget by component (Cambodia Component)

Category	Description	Total	Year 1	Year 2	Year 3
10	**Personnel**				
111	Project Director	15,000	5,000	5,000	5,000
112	Project Manager	52,200	17,400	17,400	17,400
113	Community Outreach and Participatory Land Use Planning Coordinator	23,400	7,800	7,800	7,800
114	Forest Land Use Planning and Biodiversity Conservation Specialist	27,000	9,000	9,000	9,000
115	GIS specialist	21,600	7,200	7,200	7,200
116	Project accountant	23,400	7,800	7,800	7,800
117	TA Livelihood and Natural Resource Management	60,000	20,000	20,000	20,000
118	Community Livelihood Development Officer	12,600	4,200	4,200	4,200
119	Field Assistance (5) at US$ 300 per m	54,000	18,000	18,000	18,000
120	Technical staffs	18,000	6,000	6,000	6,000
19	**Subtotal**	**307,200**	**102,400**	**102,400**	**102,400**
20	**Sub-contract**				
21	Sub-contract (Laos scientist)	6,000		6,000	
22	Specialist for Establishing Plant Nursery	4,800	4,800		
23	Specialist for Establishing Tissue Culture Lab	4,800	4,800		
29	**Subtotal**	**6,000**	**0**	**6,000**	**0**
30	**Travel**				
311	National Expert(s)/consultant(s), to Thai and Lao	4,500	1,500	1,500	1,500
312	Others (3 Staff) 10days/m	14,400	10,800	3,600	0
313	Travel cost	3,600	1,200	1,200	1,200
314	Law enforcement patrols (Reduce Emissions associated with Illegal Forest Activities)	81,600	25,500	30,600	25,500
321	National Expert(s)/consultant(s) to Thai and Lao	9,000	3,000	3,000	3,000
322	Field subsistence allowance and accommodation	36,000	12,000	12,000	12,000
331	Others (resource persons)	11,250	3,750	3,750	3,750
39	**Subtotal**	**160,350**	**57,750**	**55,650**	**46,950**
40	**Capital Items**				
411	Project offices	22,500	7,500	7,500	7,500
421	1 4x4 vehicles	10,800	3,600	3,600	3,600
431	Capital Equipment	7,500	2,500	2,500.00	2,500.00
44.1	3-4WD Pick-up Trucks Double Cab	84,000	84,000		
44.2	6-Motorbikes	9,000	9,000		
44.3	1-Protected Forest Head Quarters	100,000	100,000		
44.4	6-Air Conditioners	9,600	9,600		
44.5	20-Tables for Meeting Rooms	2,000	2,000		
44.6	10-Solar Battery Panels and Deep Cycle Batteries	15,000	15,000		
44.7	1-Photocopier	2,500	2,500		
44.8	1-Color Printer A3	2,000	2,000		
44.9	1-Monochrome Laser Printer	2,000	2,000		
44.10	2-LCD Projectors	3,000	3,000		
44.11	3-Laser Printers	1,500	1,500		
44.12	3-Laptop Computers with Microsoft Office	4,800	4,800		
44.13	5-Hand-held Digital Cameras	2,500	2,500		
44.14	6-GPS 60csx	3,600	3,600		
44.15	2-Generators	4,000	4,000		
44.16	20-Field Equipment and Camping Gear	4,000	4,000		

Category	Description	Total	Year 1	Year 2	Year 3
44.17	2-External Hard Disks	700	700		
44.18	5-Computers (Database and MIST)	7,500	7,500		
44.19	20-Communication devices	3,000	3,000		
44.20	60-Chairs for Meeting Rooms	1,800	1,800		
44.21	10-Pumping Wells	15,000	15,000		
44.22	1-Scanner A3	3,000	3,000		
44.23	1-Nursery for Seedlings	52,500	52,500		
44.24	1-Tissue Culture Lab Equipment	45,000	45,000		
44.25	1-ArcGIS 3D Analyst	6,830	6,830		
44.26	1-ArcGIS Spatial Analyst	6,830	6,830		
44.27	10-Satellite imagery - ALOS(AVNIR-2)	3,000	3,000		
44.28	5-Satellite imagery - ALOS(Prism)	1,500	1,500		
44.29	4-Satellite imagery - ALOS(Palsar)	1,200	1,200		
44.30	3-Satellite imagery - Landsat	2,400	2,400		
451	Land for Protected Forest HQ, Ranger Station and Nursery	100,000	100,000		
49	**Subtotal**	**540,560**	**513,360**	**13,600**	**13,600**
50	***Consumable items***				
511	Seedling Production (fast growing trees &fruits trees) 80,000 seedling/year*3years	49,500	16,500	16,500	16,500
521	Office supplies	3,600	1,200	1,200	1,200
531	Utilities	18,000	6,000	6,000	6,000
59	**Subtotal**	**71,100**	**23,700**	**23,700**	**23,700**
60	***Miscellaneous***				
611	Petrol and maintenance	18,000	6,000	6,000	6,000
612	PSC meetings	12,000	4,000	4,000	4,000
613	Taskforce and stakeholder meetings	4,500	1,500	1,500	1,500
614	6 ICDP pilot activities	24,000	8,000	15,000	1,000
615	Meetings, training, workshops	43,200	14,400	14,400	14,400
616	Information, publications	16,500	5,500	5,500	5,500
617	Regional Conference on Biodiversity Conservation in Tropical Forests	70,000			70,000
618	National Conference on Biodiversity Conservation and the Conservation of Carbon Stocks in the Permanent Forest Estate	40,000		40,000	
619	Project Launching Stakeholders Workshop	5,000	5,000		
620	Phone, fax, email, Internet	3,600	1,200	1,200	1,200
621	Audit cost	9,000	3,000	3,000	3,000
69	**Subtotal**	**245,800**	**48,600**	**90,600**	**106,600**
70	**National Management cost**	**29,850**			
80	**Project monitoring & administration**				
81	ITTO monitoring and review	9,000			
82	ITTO midterm evaluation	7,500			
	Sub-total (11-82, Excluded EA Contribution)	**1,158,110**			
83	ITTO program support costs (8% on items 10-82 above)	92,649			
	Sub-total ITTO (Excluded EA Contribution)	**1,250,759**			
100	**GRAND TOTAL (Included EA Contribution)**	**1,479,609**			

3.4.7 ITTO yearly budget (Cambodia Component)

Category	Description	Total	Year 1	Year 2	Year 3
10	**Personnel**				
112	Project Manager	52,200	17,400	17,400	17,400
113	Community Outreach and Participatory Land Use Planning Coordinator	23,400	7,800	7,800	7,800
114	Forest Land Use Planning and Biodiversity Conservation Specialist	25,200	8,400	8,400	8,400
115	GIS specialist	21,600	7,200	7,200	7,200
116	Project accountant	23,400	7,800	7,800	7,800
117	TA Livelihood and Natural Resource Management	60,000	20,000	20,000	20,000
118	Community Livelihood Development Officer	12,600	4,200	4,200	4,200
119	Field Assistance (5) at US$ 300 per month	54,000	18,000	18,000	18,000
19	**Subtotal**	**272,400**	**90,800**	**90,800**	**90,800**
20	**Sub-contract**				
21	Sub-contract (Laos scientist)	6,000	0	6,000	0
22	Specialist for Establishing Plant Nursery	4,800	4,800		
23	Specialist for Establishing Tissue Culture Lab	4,800	4,800		
29	**Subtotal**	**15,600**	**9,600**	**6,000**	**0**
30	**Travel**				
311	National Expert(s)/consultant(s) to Thai and Lao	4,500	1,500	1,500	1,500
312	Others (3 Staff) 10days/month	14,400	10,800	3,600	0
314	Law enforcement patrols (Reduce Emissions associated with Illegal Forest Activities)	81,600	25,500	30,600	25,500
315	Assessments of changes in carbon stocks in the PVPF	4,500	4,500		
321	National Expert(s)/consultant(s) to Thai and Lao	9,000	3,000	3,000	3,000
322	Field subsistence allowance and accommodation	36,000	12,000	12,000	12,000
331	Others (resource persons)	11,250	3,750	3,750	3,750
39	**Subtotal**	**161,250**	**61,050**	**54,450**	**45,750**
40	**Capital Items**				
44.1	3-4WD Pick-up Trucks Double Cab	84,000	84,000		
44.2	6-Motorbikes	9,000	9,000		
44.3	1-Protected Forest Head Quarters	100,000	100,000		
44.4	6-Air Conditioners	9,600	9,600		
44.5	20-Tables for Meeting Rooms	2,000	2,000		
44.6	10-Solar Battery Panels and Deep Cycle Batteries	15,000	15,000		
44.7	1-Photocopier	2,500	2,500		
44.8	1-Color Printer A3	2,000	2,000		
44.9	1-Monochrome Laser Printer	2,000	2,000		
44.10	2-LCD Projectors	3,000	3,000		
44.11	3-Laser Printers	1,500	1,500		
44.12	3-Laptop Computers with Microsoft Office	4,800	4,800		
44.13	5-Hand-held Digital Cameras	2,500	2,500		
44.14	6-GPS 60csx	3,600	3,600		
44.15	2-Generators	4,000	4,000		
44.16	20-Field Equipment and Camping Gear	4,000	4,000		
44.17	2-External Hard Disks	700	700		
44.18	5-Computers (Database and MIST)	7,500	7,500		
44.19	20-Communication devices	3,000	3,000		
44.20	60-Chairs for Meeting Rooms	1,800	1,800		

Category	Description	Total	Year 1	Year 2	Year 3
44.21	10-Pumping Wells	15,000	15,000		
44.22	1-Scanner A3	3,000	3,000		
44.23	1-Nursery for Seedlings	52,500	52,500		
44.24	1-Tissue Culture Lab Equipment	45,000	45,000		
44.25	1-ArcGIS 3D Analyst	6,830	6,830		
44.26	1-ArcGIS Spatial Analyst	6,830	6,830		
44.27	10-Satellite images - ALOS(AVNIR-2)	3,000	3,000		
44.28	5-Satellite images - ALOS(Prism)	1,500	1,500		
44.29	4-Satellite images - ALOS(Palsar)	1,200	1,200		
44.30	3-Satellite images - Landsat	2,400	2,400		
49	**Subtotal**	**399,760**	**399,760**	**-**	**-**
50	**Consumable items**				
511	Seedling Production (fast growing trees &fruits trees) 80,000 seedling/year*3years	45,000	15,000	15,000	15,000
521	Office supplies	5,400	1,800	1,800	1,800
59	**Subtotal**	**50,400**	**16,800**	**16,800**	**16,800**
60	**Miscellaneous**				
611	Petrol and maintenance	18,000	6,000	6,000	6,000
612	PSC meetings	12,000	4,000	4,000	4,000
613	Taskforce and stakeholder meetings	4,500	1,500	1,500	1,500
614	6 ICDP pilot activities	24,000	8,000	15,000	1,000
615	Meetings, training, workshops	43,200	14,400	14,400	14,400
616	Information, publications	16,500	5,500	5,500	5,500
617	Regional Conference on Biodiversity Conservation in Tropical Forests	70,000			70,000
618	National Conference on Biodiversity Conservation and the Conservation of Carbon Stocks in the Permanent Forest Estate	40,000		40,000	
619	Project Launching Stakeholders Workshop	5,000	5,000		
621	Audit cost	9,000	3,000	3,000	3,000
69	**Subtotal**	**242,200**	**45,900**	**91,900**	**105,900**
80	**Project monitoring & administration**				
81	ITTO monitoring and review	9,000			
82	ITTO midterm evaluation	7,500			
	Sub-total (10-82)	**1,158,110**			
83	ITTO program support costs (8% on items 10-82 above)	92,649			
	Sub-total (81-83)	**109,149**			
100	**GRAND TOTAL**	**1,250,759**			

3.4.8 Executing agency budget by component (Cambodia Component)

Category	Description	Total	Year 1	Year 2	Year 3
10	***Personnel***				
111	Project Director	15,000	5,000	5,000	5,000
120	Technical staffs	18,000	6,000	6,000	6,000
19	**Subtotal**	**33,000**	**11,000**	**11,000**	**11,000**
30	***Duty travel***				
313	Travel cost	3,600	1,200	1,200	1,200
39	**Subtotal**	**3,600**	**1,200**	**1,200**	**1,200**
40	***Capital items***				
411	Project offices	22,500	7,500	7,500	7,500
421	1 4x4 vehicles	10,800	3,600	3,600	3,600
431	Capital equipment	7,500	2,500	2,500	2,500
451	Land for Protected Forest HQ, Ranger Station and Nursery	100,000	100,000		
49	**Subtotal**	**140,800**	**113,600**	**13,600**	**13,600**
50	***Consumable Items***				
531	Utilities	18,000	6,000	6,000	6,000
59	**Subtotal**	**18,000**	**6,000**	**6,000**	**6,000**
60	***Miscellaneous***				
620	Phone, Fax, Email, Internet	3,600	1,200	1,200	1,200
69	**Subtotal**	**3,600**	**1,200**	**1,200**	**1,200**
	SUBTOTAL all categories	**199,000**	**133,000**	**33,000**	**33,000**
	Management cost (15%)	29,850			
Grand Total		**228,850**			

3.4.9 ITTO Budget Table-Output Based (Thailand Component)

Outputs /activity	Description	Total US$
Output 1 Capacity of national institution to design and implement TBC compatible protected areas Management plans incorporating research results on wide-ranging species and ecological processes is strengthened		
A 1.1	Revise and establish Project Steering Committee (PSC) and other coordination structures for the TBCA in accordance with ITTO rules	224,700
A 1.2	Conduct PSC meeting and others in accordance with ITTO rules	6,000
A 1.3	Gather wildlife distribution in the PPFC by NDP scientist and park officials	15,840
A 1.4	Strengthen GIS capacity for Cambodian and Laotian officials on GIS for modeling land use and species distribution	8,800
A 1.5	Jointly conduct joint research on wide-ranging species distribution in the Emerald Triangle area by three countries	7,500
A 1.6	Jointly conduct joint research on land use change in the Emerald Triangle area by three countries	16,140
A 1.7	Publish the results of joint research findings	14,000
Sub-total		**292,980**
Output 2 Appropriate institutional mechanisms in support of the TBC approach are put in place		
A 2.1	Update and maintain information system	5,000
A 2.2	Collaborate with forest protection unit to prevent wildlife poaching, illegal logging, trading and collection of wild plants	900
A 2.3	Collaborate with universities and NGOs to conduct training on buffer zone management	4,620
A 2.4	Provide necessary equipment and facilities to protected areas (e.g., Bun Thrik-Yod Mon) for effective patrolling and protection	183,700
A 2.5	Organize Joint Task Force and stakeholder meetings for trans-boundary biodiversity conservation cooperation and resolving future land use change derived from project phase II, as well as proposed adjustments if needed	1,350
A 2.6	Organize stakeholders meetings on TBCA and project sustainability	1,800
A 2.7	Conduct training for forest protection units, park rangers and border patrol police on GIS and effective patrolling	1,350
Sub-total		**198,720**
Output 3 Local communities are empowered to implement activities linking livelihoods improvement to reduction of dependence on resources of protected areas		
A 3.1	Strengthen local community fora and network to facilitate biodiversity conservation	2,550
A 3.2	Conduct outreach programs to local schools and local communities to raise awareness on conservation and benefits on TBCA	3,750
A 3.3	Maintain existing ICDP and provide additional fund on domesticated wild flora & fauna to improve livelihoods of local communities in accordance with criteria jointly approved by the Project and the local community network	219,000
A 3.4	Eco-tourism packages developed and approved by concerned parties	3,000
A 3.5	Organize fund raising meetings for potential donors and NGOs to sustain the ICDP projects	2,400
A 3.6	Regular monitor and evaluate the implementation of ICDP activities in terms of sustainability and consistent with TBCA concept	2,100
Sub-total		**232,800**
Others and ITTO costs		
ITTO monitoring and review		9,000
ITTO midterm evaluation		7,500
ITTO program support cost		59,280
Sub-total		**75,780**
Grand-total		**800,280**

3.4.10 ITTO Budget Table-Output Based (Cambodia Component)

Outputs /activity	Description	Total US$
Output 1: Management plans incorporating research results on wide-ranging species and ecological processes, which are compatible between countries, are established and implemented.		
A 1.1	Revise and establish Project Steering Committee (PSC), strengthen the National Coordinating Office (NCO) and Project Management Team (PMT) for the TBCA in accordance with ITTO rules	348,900
A 1.2	Organize a Project Steering Committee, joint task force workshops, and stakeholder meetings to provide practical means for harmonizing trans-boundary management plans and activities in the PVPF	21,900
A 1.3	Conduct analyses of land use and land cover changes in the Preah Vihear Protected Forest and on the basis of those analyses develop preliminary estimates of changes in carbon stocks in the PVPF	15,000
A 1.4	Conduct a feasibility study for amending the suitable/appropriate boundary of PVPF and land-use mapping and demarcation of community uses areas within and around PVPF	4,500
A 1.5	Gather wildlife distribution and botanical study in and around the PVPF	2,700
A 1.6	Publish the results of research findings	16,500
A 1.7	Organize Regional Conference on Biodiversity Conservation in Tropical Forests	70,000
Sub-total		**479,500**
Output 2: Capacity of multi-stakeholders in biodiversity conservation and monitoring is strengthened.		
A 2.1	Conduct law enforcement patrols in target sites on a regular, consistent basis.	81,600
A 2.2	Coordinate quarterly meetings and workshops with relevant stakeholders, and regular consultations, with stakeholders on trans-boundary biodiversity conservation.	47,700
A 2.3	Provide training to the staff of the PVPF in biodiversity conservation, GIS mapping, land-use planning, forest management planning and habitat suitability analysis.	6,300
A 2.4	Organize training programs on forest conservation, forest climate change mitigation, REDD, and law enforcement for relevant stakeholders and organize and conduct workshops to disseminate information on law enforcement and international conventions related to biodiversity conservation, such as CITES and CBD,	6,300
A 2.5	Organize stakeholder meetings for trans-boundary biodiversity conservation cooperation and mitigating future land use change, as well as proposed adjustments if needed	4,050
A 2.6	Strengthen Protected Forest management by allocating more equipment and staff to resource management and monitoring activities.	311,860
A 2.7	Organize training on domestication of wild flora and fauna for local FA and local community people.	6,300
A 2.8	Organize training on land-use planning, demarcation, GIS mapping for local FA and local community	6,300
Sub-Total		**470,410**
Output 3: Local communities are empowered to implement activities linking livelihoods improvement to reduced dependence on resources of protected areas.		
A 3.1	Plan and conduct a comprehensive sustainable livelihood development, potential eco-tourism development assessment and scale up local community fora and networks.	2,700
A 3.2	Organize reciprocal visits between staff of the PVPF and local communities network to gain experience from other projects in Cambodia for promoting trans-boundary biodiversity conservation.	4,050
A 3.3	Maintain existing ICDP and provide additional fund on domesticated wild flora & fauna to improve livelihoods of local communities in accordance with criteria jointly approved by the Project and the local community network.	100,500
A 3.4	Increase economic opportunities for local communities through sustainable agriculture and agro-forestry practices and community base-ecotourism in the buffer zones of the PVPF	70,050
A 3.5	Raise awareness of local communities through meetings and consultations to discuss the purposes of the establishment of the PVPF and the regulations of the Forestry Law.	4,050
A 3.6	Provide training in eco-tourism, community-based eco-tourism, sustainable agro-forestry, agriculture practices	6,300
A 3.7	Strengthen local community fora and network to facilitate biodiversity conservation	4,050
Sub-total		**191,700**
Others and ITTO costs		
	ITTO monitoring and review	9,000
	ITTO midterm evaluation	7,500
	ITTO program support cost	92,649
Sub-total		**109,149**
Grand-total		**1,250,759**

3.4.11 Justification of funding for capital expenditures

The achievement of the objectives of Phase III of the project would be facilitated by several infrastructure and capital equipment expenditures, most notably the construction of a Preah Vihear Protected Forest Headquarters and Ranger Station, nurseries for fast growing trees and fruit tree seedlings, a tissue culture lab, and several four-wheel drive vehicles and motor bikes. The Headquarters and Ranger Station would form the focal point for the development of baseline data on forest resources of the Emerald Triangle Protected Forest Complex, as well as ensure effective use of the infrastructure and range of capital equipment that would be provided through the project. That infrastructure and equipment would strengthen the foundation for sustainable forest resources management, increase indigenous and fast growing tree planting in and around targeted local communities, provide alternative sources of fuelwood, support food security through fruit tree planting, encourage income generation though propagation of ornamental plants, including orchids as well as other species, and strengthen on-the-ground monitoring. Park rangers and management staff would be trained to use more effective tools to prevent encroachment and poaching in high risk areas, in conducting patrols, and in collecting resource information. The Headquarters and Ranger Station would also be used a center for establishing and maintaining a system for measuring, reporting, and verifying the mitigation of carbon emissions associated with reduced deforestation and forest degradation and the enhancement of forest carbon stocks in the Emerald Triangle Protected Forest Complex.

The infrastructure, capital equipment, and other resources currently available to the Cambodian Forestry Administration and the Thailand Royal Forest Department at the project site are considered to be inadequate to withstand increased pressures on forests and forest resources. Those limitations are especially reflected in requirements for geo-referenced information, including satellite interpretative hardware and software that would be provided in tandem with expanded GIS training. Conservation efforts have been rendered especially difficult in the Emerald Triangle Protected Forest Complex because there have been too many sites to inspect with limited means to support such inspections. In order to effectively address such challenges, it has become an urgent matter to secure those resources. Deforestation will be substantively mitigated only if the forests of the Emerald Triangle Protected Forest Complex are monitored in real time and rapid-response interventions are rapidly mobilized. The limitations on current on-the-ground monitoring activities have been important factors affecting deforestation rates. These have provided incentives that, in essence, have supported the establishment of illegal settlements inside the Emerald Triangle Protected Forest Complex which are outside of agreed communes and villages development zones. Without an organized program of frequent field monitoring, forest clearings will continue to be subject to settlement and the establishment of commercial plantations.

3.4.12 List of Capital Items (Thailand Component)

No.	Capital Items	Units	Cost / Unit	Total	Use in Output			Spec.	Remarks
					1	2	3		
1	Project Vehicles (4 Door Pick-ups)	2	32,000	64,000.00	√	√	√	Pick-up diesel engine 3,000 cc, 4 wheels drive, 4 doors, equipped with air conditioner and communication radio, fiber roof and seats at the rear section	2 existing pickup bought from Phase I, in 2002, are now not in good conditions, cost too much to repair and unsafe to use.
2	Project Vehicles (Pickup Van)	1	43,000	43,000.00	√	√	√	Pick-up diesel engine 3,000 cc, 4 wheels drive, 4 doors, equipped with air conditioner and communication radio, fiber roof and seats at the rear section	
3	Notebook Computers	2	1,500	3,000.00	√	√		HDD: 200GB or more Memory: 2GB or more CPU: Intel Core i7 or equivalent Optical Drive: DVD/RW Read & Write Display: Color LCD, 15.6 inch or more Interface USB, Serial, Parallel Wireless LAN: 802.11a/b/g/n Software: MS Office 2007 Pro, Windows 7 Pro	Provide necessary equipment and facilities to protected areas (e.g., Bun Thrik-Yod Mon) for effective patrolling and protection
4	GPS units	8	1,000	8,000.00	√	√		Garmen GPS e60csx or higher	Provide necessary equipment and facilities to protected areas ((e.g., Bun Thrik-Yod Mon) for effective patrolling and protection
5	Satellite Imagery	1	26,500	26,500.00	√	√		ArcGIS 3D Analyst, ArcGIS Spatial, Analyst, Satellite imagery- ALOS(AVNIR-2)Satellite imagery- ALOS(Prism), Satellite imagery-ALOS(Palsar), Satellite imagery-Landsat, other software-to be discussed with GIS Consultant	Upgrade GIS information
6	Cameras	3	2,667	8,000.00	√	√		SLR Resolution 4288x2848 Image Ratio 3:02 12.3 million effective pixel, Image stabilization, with extra lens	Provide necessary equipment and facilities to protected areas ((e.g., Bun

No.	Capital Items	Units	Cost / Unit	Total	Use in Output			Spec.	Remarks
					1	2	3		
									Thrik-Yod Mon) for effective patrolling and protection
7	Projectors	2	2,500	5,000.00		√	√	One set for meeting room, same spec. as of Panasonic Projector Model PT-F300E, one set for field visit-same spec. as of Panasonic Projector Model PT-LB1EA	
8	Printer Laser Monochrome	2	400	800.00	√	√	√	A4 Multi-function black and white laser printer	Office, meetings, workshops
9	Printers Laser color	2	500	1,000.00	√	√	√	A4 Color laser printer	Office, meetings, workshops
10	Computer	2	1,500	3,000.00	√	√	√	Intel Core 2 Quad processor Q8400 (2.66GH, 4MB L2 Cache, 1333MHz FSB)NVIDIA GeForce GT220 Graphic4GB DDR3 / 1000GB HDDDVD±RW/±R Super multiDrive with Lightscribe Technology, Double Layer Windows- 7 Home Premium 64-bitMemory 19"LCD Monitor	GIS Server
11	Tissue Culture Lab equipment	2	45,000	90,000.00			√	Lab Supplies; beakers, flask, cylinder, dish pipet, thermometer, hormones, etc. Media preparation: water purification, balance, pH meter, hot plate/stirrer cleaning equipment, media dispenser, refrigerator labeler gas stove, Sterilizing equipment. transfer chamber Culture Growing: shelves, light	2 ICDP Projects, at school and community, to propagate the wild orchids for commercial
12	Nursery for Seedlings	3	40,000	120,000.00			√	Nursery of 40x40 meters with concrete poles and iron pipe as roof material, cover with shade net, sprinkler watering system with pressure tank and high pressure pump, push carts, pickaxe, plastic bags, fertilizer	2 bamboo nurseries for ICDP handicraft communities, 1 fruit tree/edible spp. for ICDP Food Bank community
13	Air Conditioners	4	1,600	6,400.00			√	2,200 BTU split type with Silver Nano Filter และ Silver Nano Evaporator	For 2 Tissue Culture Labs
14	Tables for meeting	20	100	2,000.00		√	√	50x200 cm collapsible table-vinyl top, stainless steel frame	Office, meetings,

No.	Capital Items	Units	Cost / Unit	Total	Use in Output			Spec.	Remarks
					1	2	3		
	rooms								workshops
15	Chairs for meeting rooms	60	30	1,800.00		√	√	Standard meeting room chairs with soft seat and back	Office, meetings, workshops
16	Photocopy Machine	1	4,000	4,000.00	√	√	√	A3 size, Black & White 2 drawers	Office, meetings, workshops
	TOTAL			**386,500.00**					

3.4.13 List of Capital Items (Cambodia Component)

No.	Capital Items	Units	Cost/Unit	Total	Use in Outputs			Specification
					1	2	3	
1	4WD Pick-up trucks Double Cab	3	28,000	84,000	√	√	√	Pick-up diesel engine 3,000 cc, 4 wheels drive, 4 doors, equipped with air conditioner and communication radio, fiber roof and seats at the rear section, 2011 model
2	Motorbikes	6	1,500	9,000	√	√	√	125cc, Honda Dream
3	Protected Forest Head Quarters	1	100,000	100,000	√	√	√	Cement concrete, 2 storey, roof tile, 160 m^2 working space, sewage, hygiene WC, electricity wire, Used for forestry management and biodiversity conservation.
4	Air conditioners	6	1,600	9,600	√	√		2,200 BTU split type with Silver Nano Filter, Silver Nano Evaporator
5	Table for meeting room	20	100	2,000	√	√		50x200 cm collapsible table-vinyl top, stainless steel frame
6	Solar Battery Panel and Deep Cycle batteries	10	1,500	15,000	√	√		Solar battery Panel (SHARP NT-84L5H), Deep Cycle Batteries (CONCORDE GPL-24)
7	Photocopier	1	2,500	2,500	√	√		A3 size, Black & White Copy/print speed: 35 sheets/m Resolution: 1,200 X 1,200 dpi (writing), 600 X 600 dpi (reading) 2 drawers (A4 & A3), ADF is not necessary
8	Printer color A3	1	2,000	2,000	√	√		A3 size Resolution: 1,200 X 1,200 dpi Function: Copy, Scanning, Fax Printing Speed: 30 sheets/min, Canon IRC 3200/3220
9	Monochrome Laser Printer	1	2,000	2,000	√	√		A3 size Printing speed: 25 sheets/min Paper Cassette: 1 (250 sheets), Canon Laser LBP 3500
10	LCD projectors	2	1,500	3,000	√	√		3,000 lx 1.2X zoom lens Canon/Sony
11	Laser Printers	3	500	1,500	√	√		A4 size Printing speed: 16 sheets/min Paper Tray: 1 (150 sheets) Canon Laser LBP 3100

No.	Capital Items	Units	Cost/Unit	Total	Use in Outputs			Specification
					1	2	3	
12	Laptop computers with Microsoft Office	3	1,600	4,800	√	√	√	HDD: 200GB or more Memory: 2GB or more CPU: Intel Core i7 or equivalent Optical Drive: DVD/RW Read & Write Display: Color LCD, 15.6 inch or more Interface USB, Serial, Parallel Wireless LAN: 802.11a/b/g/n Software: MS Office 2007 Pro, Windows 7 Pro
13	Handheld compact digital cameras	5	500	2,500	√	√	√	14.1 Megapixel, 1/2.3-inch CCD Digital zoom: 4x LCD Panel: 3.5-inch, Canon Power Shot SD 3500IS 14.1 MP
14	GPS units 60csx	6	600	3,600	√	√		Garmin, GPS 60csx
15	Generators	2	2,000	4,000		√		Output: 5kVA Fuel: Diesel single-phase three wire Water-cooling DENYO DA-6000SS
16	Field Equipment and Camping Gear	20	200	4,000		√		Hammocks, tents, backpacks, field shoes
17	External Hard disks	2	350	700		√		4TB 1000BASE-T/100BASE-TX/10BASE-T, Buffalo TeraStation Pro II
18	Computers (Database and MIST)	5	1,500	7,500	√	√		HDD: 500GB or more Memory: 8GB or more CPU: Intel Core i7 or equivalent Optical Drive: DVD/RW Read & Write External Hard Disk: 500GB Pocket Media Drive Display: Color LCD, 22 inch or more Interface USBX4, SerialX1, ParallelX1 Integrated: 10/100/1000 Ethernet Software: MS Office 2007 Pro, Windows 7 Pro, Avast Internet Security (for 1 year)
19	Communication devices	20	150	3,000		√		Walky-talky icom
20	Chairs for Meeting rooms	60	30	1,800	√	√		Standard meeting room chairs with soft seat and back

No.	Capital Items	Units	Cost/Unit	Total	Use in Outputs			Specification
					1	2	3	
21	Pumping wells	10	1,500	15,000		√	√	Water pumping well 12cm diameter pipe, drill 12-20 m deep, cement concrete reinforce on the surface
22	Scanner A3	1	3,000	3,000	√	√		A3 size Desktop Type Document feeding: Automatic or manual (No flatbed) Resolution: 600 X 600 dpi Scanning Speed: 50 sheets/min, Canon SR5010C
23	Nursery for seedlings	1	52,500	52,500		√	√	Nursery of 60x60 meters with concrete poles and iron pipe as roof material, cover with shade net, sprinkler watering system with pressure tank and high pressure pump, push carts, pickaxe, plastic bags, fertilizer
24	Tissue culture lab equipment	1	45,000	45,000		√	√	Lab Supplies; beakers, flask, cylinder, dish pipet, thermometer, hormones, etc. Media preparation: water purification, balance, pH meter, hot plate/stirrer cleaning equipment, media dispenser, refrigerator labeler gas stove, Sterilizing equipment. Transfer: transfer chamber Culture Growing: shelves, light
25	ArcGIS 3D Analyst	1	6,830	6,830	√	√		Software, GIS Extension, ArcGIS 3D Analyst
26	ArcGIS Spatial Analyst	1	6,830	6,830	√	√		Software, GIS Extension, ArcGIS Spatial Analyst
27	Satellite imagery- ALOS(AVNIR-2)	10	300	3,000	√	√		10m, ALOS(AVNIR-2) 2010
28	Satellite imagery- ALOS(Prism)	5	300	1,500	√	√		2.5m, ALOS(Prism) 2010
29	Satellite imagery-ALOS(Palsar)	4	300	1,200	√	√		10m, ALOS(Palsar) 2010
30	Satellite imagery-Landsat	3	800	2,400	√	√		6 month interpretation, Landsat 1990
	TOTAL			**399,760**				

3.5 Assumptions, risks and sustainability

3.5.1 Assumptions and risks

The ultimate success of the project depends on the continued shared commitment and political will of the three countries and its associated stakeholders to trans-boundary biodiversity conservation. That commitment and political will is reflected in several international and regional mechanisms, including the Greater Mekong Subregion (GMS) Working Group on Environment (WGE), the ASEAN Blueprint 2015, and the Mekong River Commission. Those mechanisms lessen the risk of weakening that commitment and political will by providing a catalytic mechanism to guide the establishment of an appropriate policy environment for the planning and execution of trans-boundary agreements. Moreover, the participating countries have ratified a number of international conventions related to biodiversity and the environment and each of the countries is committed to the United Nations Millennium Development Goals to eradicate poverty and ensure environmental sustainability, as well as to the 2010 biodiversity target to significantly reduce the current rate of biodiversity loss at global, regional and national levels.

One of the critical underlying assumptions of Phase III of the project is that the executing agencies (RFD, FA and DoF) will provide qualified staff to participate in project activities, both at national and local levels, especially with regard to the collaborative research that is planned to be conducted on wide-ranging wildlife species distribution. It is also assumed that in Thailand the NPD, which has direct responsibility to manage protected areas, will assume greater leadership in project implementation. It is anticipated, as well, that the involvement of development NGOs and other donors to sustain ICDP activities in Thailand and Cambodia will increase the livelihoods of local communities and reduce their dependence on natural resources.

The most significant risks that might impact effective project implementation, as well as mitigating actions to counteract those risks, include the following:

- Lao PDR may still not be compelled to participate in project activities. This is an external risk that is essentially beyond the control of the project, but concerted efforts will be made in Phase III to mitigate its potential impacts by providing several opportunities for Lao PDR to participate in "soft" collaborative activities. These will be intended to smooth the pathway for their eventual full participation in Emerald Triangle Protected Forests Complex trans-boundary conservation activities subsequent to their securing official membership in ITTO.
- Military tensions along the tri-national borders, or contagious diseases such as SARS or bird flu, might arise so that tourists, local and foreign, are too alarmed to visit project sites. These are also external risks over which the project has little or no control, but their impacts might be mitigated to some extent by understanding that their occurrences are irregular and oftentimes transitory and redoubling project efforts during those periods that they are inactive.
- The government agencies responsible for executing Phase III of the project in Thailand and Cambodia (RFD, NPD, FA) might be unable to provide sufficient incentives for staff to commit themselves to the project or the NPD might be unable to provide adequate resources to Bun Tharik-Yod Mon, the recently-established wildlife sanctuary in Thailand, to ensure its effective protection and management. These are also external risks over which the project would have little or no control. Its impacts might be mitigated to some extent, however, by ensuring that the most industrious, responsible and committed staff of those agencies are assigned to the project.

- Significant infrastructure may be developed under the GMS Economic Corridor Development program, which would fragment and damage critical ecosystems in the Emerald Triangle Protected Forests Complex. This is also an external risk over which the project would have little control, but its impacts might be mitigated to some extent by efforts to influence the location of infrastructure development and restrict such development to the greatest extent possible to less critical areas of wildlife habitat that are located outside of primary animal migration paths.
- Some local communities might choose to not actively participate in either ICDP or CLPD livelihood activities, but rather cling to clearing forest to support unsustainable agricultural practices. The impacts of this risk will be mitigated by screening procedures intended to exclude more disinterested communities as part of the Sustainable Livelihood Assessments that will be conducted in both Thailand and Cambodia.
- Market incentives might be too strong for local communities to abstain from forest encroachment and unsustainable agriculture practices. The impacts of this risk would be mitigated by ensuring that the ICDP activities respond to local communities' income requirements as reflected in the Sustainable Livelihoods Assessments that are conducted in Thailand and Cambodia to the greatest extent possible.
- Project activities might not be implemented as scheduled in the work plan because of delayed funding or the complexities of administrative procedures and regulations. The impacts of these risks would be mitigated by recognizing that impediments such as those are not necessarily uncommon, anticipating the timing of their potential occurrences, and redoubling efforts during more productive periods of project implementation to ensure that the activities that are described in the work plan are implemented as envisioned to the greatest extent possible by the close of Phase III of the project.

3.5.2 Sustainability

The long-term sustainable institutional structures and financing mechanisms that are expected to support the continuation of post-project activities after the close of Phase III are summarized in the following discussion of sustainability.

Thailand

Prior to the institutional restructuring that was introduced in Thailand in 2002, there were several redundancies associated with the responsibilities of the RFD and DNP to manage the country's forest resources. In the aftermath of that restructuring, however, project collaboration between the two government agencies has improved to a considerable extent. Staff, as well as equipment, has been shared and several project activities have been jointly implemented, including wildlife surveys, patrols, and the demarcation of boundaries of protected areas. In the application of the landscape approach to ecosystem management, the NPD is responsible for protecting biodiversity in the core zones of protected areas, while the RFD is responsible for managing remaining forest and forest lands in buffer zones in a sustainable manner, as well as for initiating ICDP activities to improve the livelihoods of local communities in an effort to provide incentives for those communities that will make them less dependent on forest resources. More recent restructuring, especially within the RFD, has streamlined lines of authority and further defined responsibilities to improve the effectiveness of forest resource management that will support the continuance of Phase III project activities after the close of the project.

Project implementation in Thailand in Phases I and II was primarily co-financed by the annual government budget and recurrent budget support from ITTO, as well as partially from the on-

going Government Policy on One Tambom One Product (OTOP) project, which is implemented in every village nationwide. While annual government allocations and other related funding may be insufficient to sustain effective implementation of biodiversity conservation and community livelihood activities after the close of Phase III, there are several promising opportunities to support sustainable financing. These include the following:

- The RFD and the NPD have agreed to provide budgets for maintaining accommodations and equipment and employing staff affiliated with field offices.
- Since the trans-boundary biodiversity conservation initiative is proving to be a model for forest resources management and its vision is consistent with government policies, the initiative will be integrated into other government programs, which will provide several other possible funding sources to sustain the project.
- It is expected that several community livelihood activities supported through the ICDP, as well as the CLDP Cambodia, programs, especially those associated with ecotourism and perhaps the domestication of wild flora and fauna, will be able to achieve self-sufficiency and will naturally spread to other communities by the close of Phase III of the project. The project team will regularly monitor the status of livelihood activities and explore other potential sources of funding, including the private sector through corporate social responsibility programs, to sustain those activities until they are able to become self-sufficient.
- International development programs will be introduced into local communities where eco-tourism and home-stay activities are launched. Funding to support those programs and strengthen their sustainability will be requested from the Small Grants Program (SGP) under the United Nations Development Program (UNDP). The RFD and DNP will assist local communities in preparing those proposals

Cambodia

In Cambodia, the CALM project will ensure that several of the project's continuing activities will be funded for several years beyond the close of Phase III. Significant efforts have been made to underscore the sustainability of that project and the primary factors impacting that sustainability reflect a strong potential for sustaining the on-going activities of this project

Since many of the interventions of Phase II of the project were institutional and consisted of capacity building, training and awareness raising, the continuation of post-project activities through Phase III of the project is expected to be sustainable. The largest share of interventions that required significant start-up investments are expected to have been completed by the close of Phase III and this will facilitate continuing many of the activities which are relatively low-cost beyond the life of the project.

Contributing, as well, to the sustainability of project activities will be the collective contributions of Phase II and Phase III to strengthening the capacity of government staff at national and local levels to manage project activities. So, too, will be the project's contributions by the close of Phase III that are associated with (1) the establishment of inter-institutional coordination among relevant government agencies, which provided support for consultative and participatory processes that were introduced in Phase II and will be strengthened in Phase III; (2) the increased understanding among local communities of conservation priorities; and (3) the promotion of trust and respect for the voices of various national stakeholders.

The project has also promoted leadership among national staff who have been involved in planning, decision-making and coordination of project activities. Cambodian nationals with a

minimum of technical assistance will, by the close of Phase III of the project, be able to lead the implementation process. This will ensure that there will be a minimal amount of post-project dependency on external resources. The introduction of participatory land-use planning processes to local communities and stakeholders during Phase II and Phase III of the project, moveover, will have strengthened local capacity for land management and development planning, which will ease the transition to post-project implementation of continuing activities. The project has also assisted in the development of a landscape conservation plan that will be integrated into local, provincial and national planning processes, and encouraged the institutionalization of the principles of good governance so that improved accountability and transparency of decision-making processes will have been introduced to support the effective continuation of activities at the close of Phase III of the project.

The project has been designed through each of its phases to fund establishment costs and minimize long-term maintenance costs of sustainable project initiatives. While the initial costs of establishing those project initiatives were relatively high, operational and maintenance costs to continue those activities at the close of Phase III of the project are expected to be considerably lower. It is nevertheless recognized that sufficient financial sustainability must be established to account for operational and maintenance costs, especially those of the community incentives and monitoring programs over the long term. It is expected that several of the community livelihood activities, including those associated with ecotourism, will eventually achieve self-sufficiency. Indeed, opportunities for key-species ecotourism, which were evaluated in 2000-2004 and for which a framework was developed in Phase II of the project that benefits both biodiversity and local communities, suggest that there is potential for ecotourism revenues to finance continuing community livelihood activities. The feasibility of establishing a trust fund, or securing long-term additional government financial commitments, to fund continuing project activities will also be explored during Phase III.

Project initiatives have provided a sound structure for sustainable management of post-project activities at the close of Phase III. Site management staff who will be responsible for continuing project activities will be members of government authorities with appropriate jurisdictions. The use of project site managers will be based on a model that is currently used successfully by the Forestry Administration in other areas of the country. Under this structure, the Forestry Administration will employ project site managers to co-ordinate activities between Forest Administration jurisdictional units within landscapes of importance for biodiversity conservation. This will provide an effective means for recognizing important sites within landscapes. Other initiatives will provide infrastructure and procure equipment required for long-term management of those sites.

PART IV: IMPLEMENTATION ARRANGEMENTS

4.1 Organizational structure and stakeholder involvement mechanisms

4.1.1 Executing agency and partners

Upon signing the contract for Phase III of the project with ITTO, Project Steering Committees (PSCs) will be established to supervise project activities and synthesize management guidelines for the three participating countries managing the Emerald Triangle Protected Forests Complex. The primary executing agencies (EAs) that are expected to jointly implement Phase III will include the RFD of Thailand, the FA of Cambodia and the DoF of Lao PDR (Figure 2 and Figure 3). Profiles of each of the EAs are provided in Appendix 1. National Coordinating Offices will also be established in each country to coordinate with each of the other participating countries. In Thailand, the Project Management Office, which will continue to be located in Phataem National Park, will be composed of four sections, including Administration, Information, Biodiversity Conservation and Community Outreach, to strengthen collaborative activities on the ground.

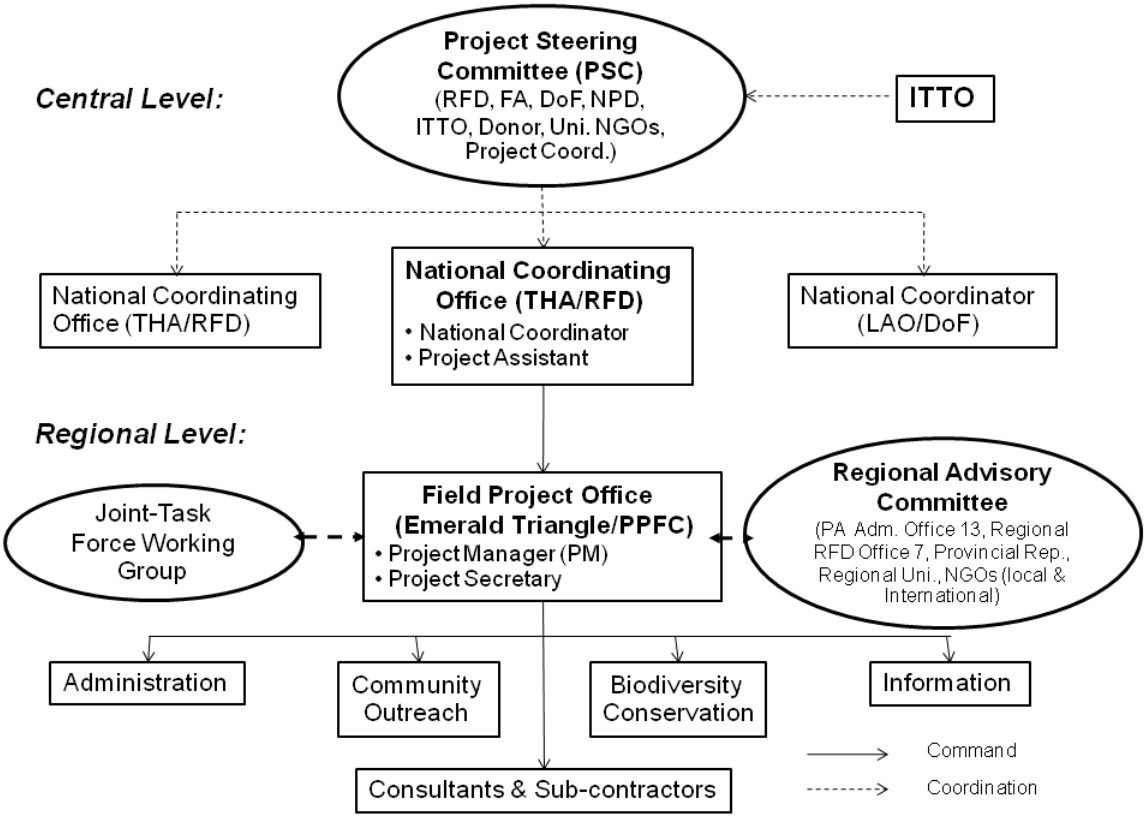


Figure 2. Organizational structure for Phase III of the Emerald Triangle Protected Forests Complex project (Thailand Component).

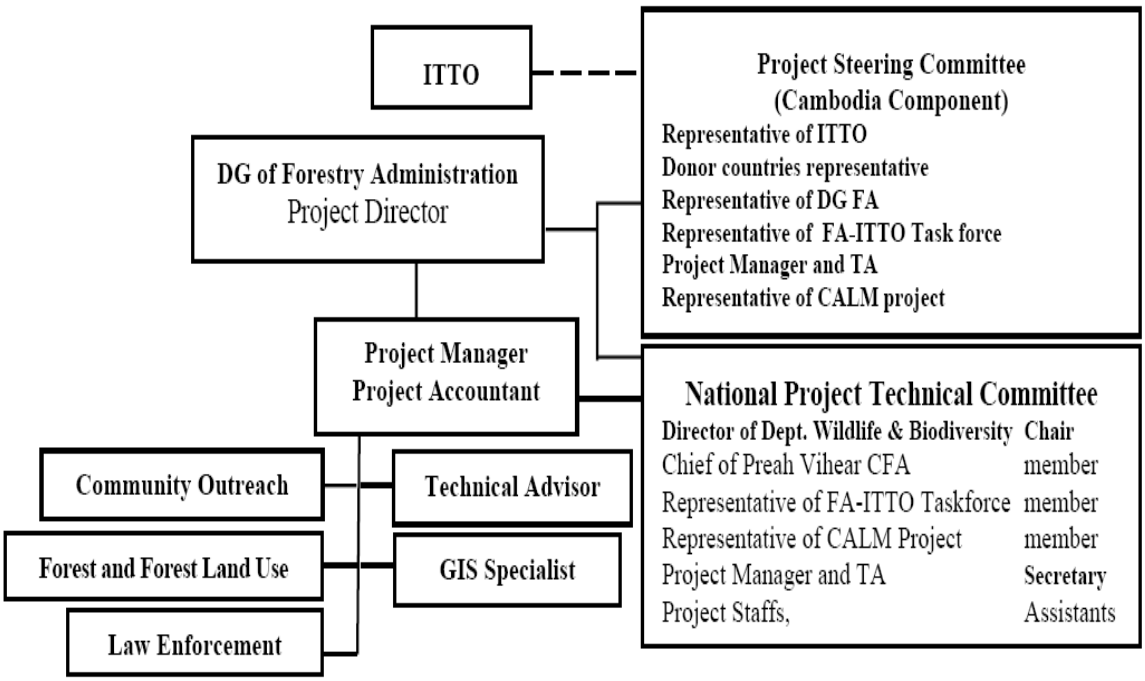


Figure 3 Organizational structure for Phase III of the Emerald Triangle Protected Forests Complex project (Cambodia Component).

4.1.2 Project management team

The Director-General of each EA will appoint a project management team consisting of a Project Manager (PM), Project Secretary, consultants and other support staff to execute project activities in accordance with the proposed organizational chart and the approval of ITTO. The proposed teams for Thailand and Cambodia will consist of the following members:

Thailand

- Project Manager (national, 36 mo.)
- Project Secretary (national, 36 mo.)
- GIS Consultant (national, 12 mo.)

Cambodia

- Project Manager (national, 36 mo.)
- Technical Advisor (30 mo.)
- GIS Specialist (national, 36 mo.)
- Community Outreach and Participatory Land Use Planning Coordinator (national, 36 mo.)
- Forest Land-use Planning and Biodiversity Conservation Specialist (national, 36 mo.)
- Project Accountant (national, 36 mo.)

The proposed organization of Thailand and Cambodia is attached in Annex E and the Terms of Reference for key staff members are provided in Appendix 2.

4.1.3 Project steering committee

Phase III PSC members will include Director-Generals of the three EAs, an NPD representative, a Project Coordinator, National Coordinators, and representatives of ITTO, donors and other organizations as might be agreed among the three participating countries.

The first PSC meeting will be organized no later than the end of the third month after the start of the project to approve the operational plan and the terms of reference for all consultants. The Chair of the PSC will be rotated among participating countries. Specific functions of the PSC will include the following duties:

- Meet at least once a year with venues and agendas to be drafted and discussed among the Country Coordinators of the three participating countries.
- Oversee project implementation and approve work plans and budgets.
- Review project progress and provide guidelines.
- Secure international collaborations of participating countries.

4.1.4 Stakeholder involvement mechanisms

In addition to the PSC and National Coordinating Offices, Phase III project teams will collaborate with multi-stakeholders at regional and local levels through participatory processes. A Regional Advisory Committee and a Joint Task Force Working Group will be appointed to strengthen collaborative activities on the ground and ensure smooth integration of those activities into government institutions upon completion of Phase III of the project. The Regional Advisory Committee will be co-chaired by the Director of the Protected Area Administration Office, the Director of the Regional Forestry Office, and provincial representatives and NGOs. The Joint Task Force Working Group will be established to concentrate efforts on specific issues, including protection, buffer zone management and research. The Regional Advisory Committee and Joint-Task Force Working Group may meet more than once a year.

4.2 Reporting, review, monitoring and evaluation

During the initial eight weeks of project implementation, project managers and coordinators from Thailand and Cambodia will jointly prepare an inception report for the first meeting of the PSC and the ITTO. Phase III progress reports will be submitted in accordance with the "ITTO Manual for Project Monitoring, Review and Evaluation." Progress reports will be produced bi-annually in February and August of each year of project implementation. Technical reports prepared by consultants will be produced and distributed according to those same guidelines as well. A mid-term evaluation, which is tentatively planned to be conducted in July-August 2012, will provide recommendations for the elaboration of the Phase III work plan. A final Phase III project report will be transmitted to the ITTO no latter than three months after the completion of Phase III.

An ITTO monitoring mission will be also be organized in September 2012 and the governments of Thailand and Cambodia will organize monitoring missions in accordance with their own rules and procedures.

4.3 Dissemination and mainstreaming of project learning

4.3.1 Dissemination of project results

The EAs and Project Management Teams will disseminate project results and lessons learned through hard copies and digital transmission via the internet through the following channels:

- Scientific publications in national and international journals and bulletins, such as the *ITTO Tropical Forest Update, ASEAN Biodiversity, Parks,* and *the International Journal of Tropical Ecology.*

- Dissemination of technical reports and Phase III project results sent to the ITTO, the IUCN, FAO, the Mekong River Commission, the ADB, the RFD, the NDP, the FA, the DoF and the Ministries of Environment in GMS countries.
- Dissemination of brochures and leaflets to provincial and local communities to increase awareness of the TBCA.

4.3.2 Mainstreaming of project learning

Prior to the completion of Phase III of the project, the Project Management Teams will organize a workshop for decision-makers and multi-stakeholders at which consultants and key Phase III project staff will have opportunities to share lessons learned from the implementation of Phase III project activities. There will be opportunities at that workshop to provide recommendations for extending Phase III activities into other potential sites.

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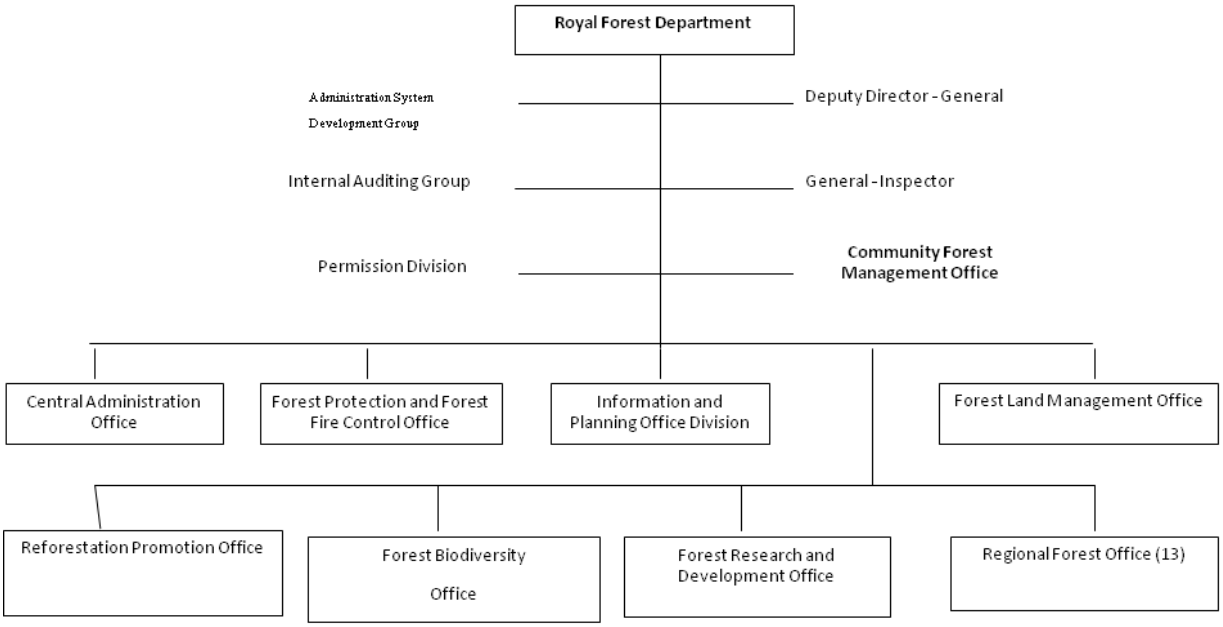
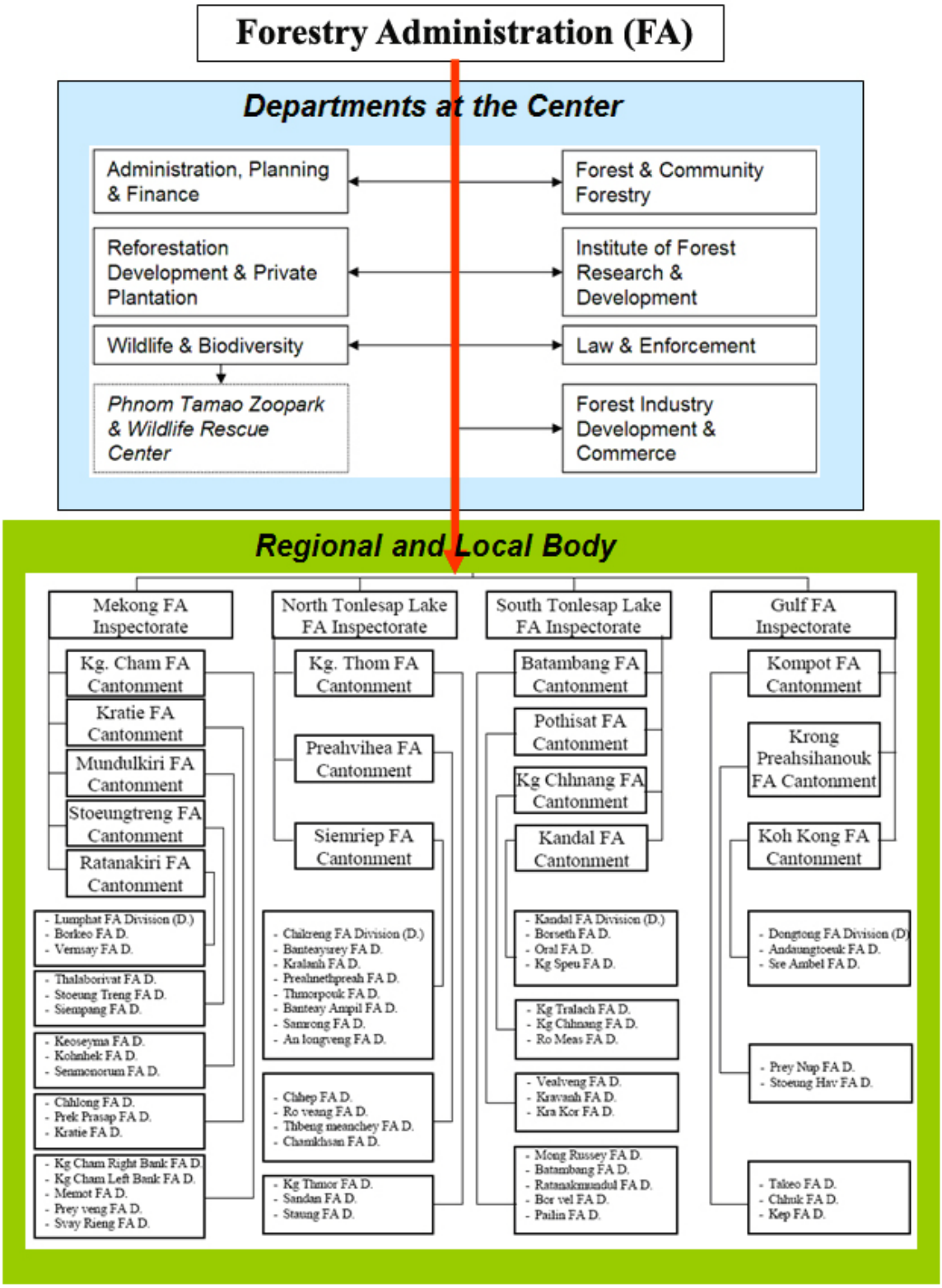
APPENDIX 1: PROFILES OF THE EXECUTING AND COLLABORATING AGENCIES IN THAILAND AND CAMBODIA.

Thailand



Cambodia


Forestry Administration (FA)
Departments at the Center
Administration, Planning & Finance
Forest & Community Forestry
Reforestation Development & Private Plantation
Institute of Forest Research & Development
Wildlife & Biodiversity
Law & Enforcement
Phnom Tamao Zoopark & Wildlife Rescue Center
Forest Industry Development & Commerce
Regional and Local Body
Mekong FA Inspectorate
Kg. Cham FA Cantonment
Kratie FA Cantonment
Mundulkiri FA Cantonment
Stoeungtreng FA Cantonment
Ratanakiri FA Cantonment
- Lumphat FA Division (D.)
- Borkeo FA D.
- Vernsay FA D.
- Thalaborivat FA D.
- Stoeung Treng FA D.
- Siempang FA D.
- Keoseyma FA D.
- Kohnhek FA D.
- Senmonorum FA D.
- Chhlong FA D.
- Prek Prasap FA D.
- Kratie FA D.
- Kg Cham Right Bank FA D.
- Kg Cham Left Bank FA D.
- Memot FA D.
- Prey veng FA D.
- Svay Rieng FA D.
North Tonlesap Lake FA Inspectorate
Kg. Thom FA Cantonment
Preahvihea FA Cantonment
Siemriep FA Cantonment
- Chikreng FA Division (D.)
- Banteayurey FA D.
- Kralanh FA D.
- Preahnethpreah FA D.
- Thmorpouk FA D.
- Banteay Ampil FA D.
- Samrong FA D.
- An longveng FA D.
- Chhep FA D.
- Ro veang FA D.
- Thbeng meanchey FA D.
- Chamkhsan FA D.
- Kg Thmor FA D.
- Sandan FA D.
- Staung FA D.
South Tonlesap Lake FA Inspectorate
Batambang FA Cantonment
Pothisat FA Cantonment
Kg Chhnang FA Cantonment
Kandal FA Cantonment
- Kandal FA Division (D.)
- Borseth FA D.
- Oral FA D.
- Kg Speu FA D.
- Kg Tralach FA D.
- Kg Chhnang FA D.
- Ro Meas FA D.
- Veal veng FA D.
- Kravanh FA D.
- Kra Kor FA D.
- Mong Russey FA D.
- Batambang FA D.
- Ratanakmundul FA D.
- Bor vel FA D.
- Pailin FA D.
Gulf FA Inspectorate
Kompot FA Cantonment
Krong Preahsihanouk FA Cantonment
Koh Kong FA Cantonment
- Dongtong FA Division (D)
- Andaungtoeuk FA D.
- Sre Ambel FA D.
- Prey Nup FA D.
- Stoeung Hav FA D.
- Takeo FA D.
- Chhuk FA D.
- Kep FA D.

Royal Forest Department Profile

The Royal Forest Department (RFD) was established on September 19, 1796. Previously, the Department was under the administration of Ministry of Interior and Ministry of Agriculture and Cooperatives. Based on the government reform in 1992, the RFD was subdivided into three departments, namely the Royal Forest Department, Department of National Park, Wildlife and Plant Conservation (DNP), and Department of Marine and Coastal Resources. All departments are under the Ministry of Natural Resources and Environment. The RFD comprises eight offices and one division at the central and 13 regional offices (Annex 1).

The Community Management Office is the main responsible agency for the Management of the Emerald Triangle Protected Forests Complex to Promote Cooperation for Trans-boundary Biodiversity Conservation between Thailand, Cambodia and Laos (Phase II) and most likely for phase III. Currently, the RFD has more than 3,000 employees, of which tens have PhD degrees, hundreds have Master's degrees, and the remaining has Bachelor's degrees. The general mandates of the RFD are to manage economic forest, forest resources, non-timber forest products and forest land according to the Forestry laws and the national forest policy.

Vision
To be the main responsible agency to wisely manage forest resources of the country.

To this end, the RFD is responsible for performing the following duties:

- To control and prevent forest encroachment, destruction and other illegal activities in the designated areas;
- To study, research, plan and collaborate reforestation activities;
- To promote forest plantation, community forest, commercial plantation conducted by either private sector, public sector or individuals, in addition to analyze and assess the situation of economic forest in Thailand and overseas;
- To conserve, protect, maintain and manage forest land, and to permit any forms of utilization of forest resources, forest industry, forest land and non-timber forest products;
- To study and conduct research related to forest, non-timber forest products, wood, etc.;
- To perform other duties as defined in forest laws or ministerial policies.

Cambodian Forestry Administration Profile

The Forestry Administration (FA) is a government authority under the Ministry of Agriculture, Forestry and Fisheries (MAFF) responsible for managing forests and forest resources according to the National Forestry Sector Policy and the Forestry Law.

The Forestry Administration has a unique vertical management and organizational structure throughout the country, which is divided into central, inspectorate, cantonment, division, and triage forestry administration levels. Currently, the FA has 1,495 employees, of which six have PhD degrees, 95 have Master's degrees, 531 have Bachelor's degrees, 284 technicians, and 578 have some type of certificate or are non-degree holders.

Vision
The FA viewed by the world community as a national agency of excellence for sustainable forest management, making a maximum contribution to Cambodia's socio-economic development.

Mission
The FA has the authority to manage the forest and forest resources of the Kingdom of Cambodia according to the National Forestry Sector Policy and the Forestry Law. The primary objective of the FA is to ensure the sustainable management of forests in the country. To this end, the FA is responsible for performing the following duties based on the Cambodian Forestry Law:

- To manage and develop the government officials of the FA for the whole country, from central, inspectorate, cantonment, and division levels, to the triage level.
- To ensure sustainable permanent forest estate management by regulating all forestry activities.
- To study and collect data on all forests regarding scientific, economic, social, and environmental factors in order to set a sustainable production rate.
- To assess forest boundaries and to classify and demarcate forestlands in order to develop a land use map of the permanent forest estate in coordination with the Ministry of Land & Urban Management and Construction, local authorities, and communities.
- To prepare and implement the national forest management plan at each level of the FA.
- To promote reforestation on degraded forest land and idle land.
- To promote the development of community forestry agreements and programs by providing financial and technical assistance to communities where feasible.
- To develop and implement programs for the research, protection and conservation of forest resources and wildlife.
- To take appropriate measures to investigate, prevent and suppress all forest destruction, forest fires and forest clearing by effectively ensuring law enforcement.
- To promote public education programs which demonstrate the importance of the management, protection and conservation of forest resources, as well as to take measures to rehabilitate natural ecosystems and conserve national forests.
- To promote international cooperation in order to strengthen the capacity of forest protection and development.
- To ensure the timely and complete assessment of all forest-related activities which may have significant social and environmental impacts prior to approval of such activities.

- To perform other duties provided by MAFF leaders. The Forestry Administration is directed by one chief, equivalent to a Director of a Department, and is assisted by deputy chiefs as might be required.

APPENDIX 2: TASKS AND RESPONSIBILITIES OF KEY EXPERTS PROVIDED BY THE EXECUTING AGENCY.

Thailand

Position	Responsibilities
Project Director/Coordinator	
Qualifications • Thai citizen • University degree in forestry or natural resources (M.Sc. degree advantage) • A minimum of 10 years working experience in natural resources management and proven to manage donor projects • Knowledge of institutional analysis and proven leadership in team work • Holding the position at least Director of Office in the RFD	• Overall responsibility of project implementation • Provide guidance for project implementation to ensure fruitful implementation as approved by Project Steering Committee • Coordinate with ITTO and representatives from Cambodia and Laos • Supervise Project Manager to prepare progress report and work plan as required by the ITTO and RFD
Deputy Project Director	
• Thai citizen (fluent in English advantage) • University degree in forestry or natural resources (M.Sc. degree advantage • A minimum 5 years working experience in manage natural resources and proven to manage donor projects • Written and oral communication skills in English • Demonstrated good team working and coordinating with international, national and local stakeholders	• Assist Project Director in overall responsibility of project • Supervise Project Manager to prepare progress report and work plan as required by the ITTO and RFD • Coordinate project technical& administrative activities • Work with counterparts in Cambodia and Laos to harmonize management guidelines • Monitor activities conducted by consultants • Coordinate other organizations (government, NGOs and local community network) to support project implementation
Head of Administration Section	
• Thai citizen • University degree • A minimum 3 years working experience in project management and budget system • Experience in project writing, oral communication and presentation • Good understanding of project monitoring and evaluation • Proven ability to work with teams and other specialists	• Assist Project Manager in Day-to-Day administration, and work with the project team and other consultants • Monitor overall project implementation • Assist Project Manager in procurement of equipment • Assist in monitoring progress of project activities • Assist in other activities assigned by Project Manager

Position	Responsibilities
Head of Technical Section	
• Thai citizen • University degree in forestry or natural resources • A minimum 3 years working experience in biodiversity and natural resources • Good understanding of interdisciplinary natural resources issues and project management • Proven ability to work with teams of local people and other specialists	• Work with the project team and other consultants Survey data on community network • Update socio-economic data in targeted communities • Strengthen community network, and other participatory mechanisms • Monitor the progress of ICDP and pilot activities • Assist in other activities assigned by Project Manager
Head of Biodiversity Conservation Section	
• Thai citizen • University degree in forestry or natural resources • A minimum 3 years working experience in biodiversity and forest sciences • Good understanding of transboundary biodiversity issues • Proven ability to work with teams of local people and other specialists	• Work with the project team and other consultants to gather biodiversity data • Continue updating biodiversity the data • Assist GIS consultants in Thailand, and counterparts in Cambodia and Laos to harmonize biodiversity conservation measures in the project area • Provide biodiversity to project teams, Superintendents for facilitating project implementation • Assist in other activities assigned by Project Manager
Head of Information Section	
• Thai citizen • University degree in forestry (GIS, remote sensing and information system advantage) • A minimum 3 years working experience in information management system for forestry and biodiversity applications • Good understanding of transboundary biodiversity issues • Proven ability to work with teams and other specialists	• Work with the project team and other consultants • Continue updating GIS data • Assist GIS consultants to develop GIS database • Provide information to project teams, Superintendents for facilitating project implementation • Assist in GIS/GPS training for PA staff and the site demarcation of selected communities • Assist in other activities assigned by Project Manager

Cambodia

Position	Responsibilities
Project Director	
Qualifications • Cambodian citizen • University degree in forestry or natural resources (M.Sc. degree an advantage) • A minimum of 12 years of professional experience in natural resources management and proven ability to manage donor projects • Knowledge of institutional analysis and proven leadership and team work • Holding the position of at least a Director of Office in the FA	• Overall responsibility for coordinating project implementation • Provide guidance for project implementation to ensure effective implementation as approved by the Project Steering Committee • Coordinate with ITTO and representatives from Thailand and Laos • Supervise the Project Manager in preparing progress reports and work plans as required by the ITTO and the FA
Project Coordinator	
• Cambodian citizen (fluent in English an advantage) • University degree in forestry or natural resources (M.Sc. degree preferred) • A minimum of 10 years professional experience in managing natural resources and a proven ability to manage donor projects • Written and oral communication skills in English • Demonstrated team work and ability to coordinate with international, national and local stakeholders	• Assist the Project Director in overall responsibility for the project • Supervise the Project Manager in the preparation of progress reports and work plans as required by the ITTO and the FA • Coordinate project technical & administrative activities • Collaborate with counterparts in Thailand and Laos to harmonize management guidelines • Monitor activities conducted by consultants • Coordinate with other organizations (government, development partners, NGOs and local community networks) in the support of project implementation
Technical Staff (Biodiversity Conservation)	
• Cambodian citizen • University degree in forestry or natural resources • A minimum 10 years professional experience in biodiversity and forest sciences • Comprehensive understanding of trans-boundary biodiversity issues • Proven ability to collaborate with teams of local people and other specialists	• Collaborate with the project team and other consultants to gather biodiversity data • Continue updating biodiversity data • Assist the GIS specialist in Cambodia and counterparts in Thailand and Laos to harmonize biodiversity conservation measures in the project area • Monitor the progress of ICDP and pilot activities • Provide information on biodiversity to project teams and local forestry offices to facilitate project implementation • Assist in other activities assigned by the

Position	Responsibilities
	Project Manager
Technical Staff (Information)	
• Cambodian citizen • University degree in forestry (GIS, remote sensing and information systems an advantage) • A minimum 10 years professional experience in information management systems for forestry and biodiversity applications • Comprehensive understanding of trans-boundary biodiversity issues • Proven ability to collaborate with teams and other specialists	• Collaborate with the project team and other specialists • Continue updating GIS data • Assist the GIS specialist to develop GIS database • Provide information to project teams and superintendents to facilitate project implementation • Assist in GIS/GPS training of local forestry staff and Protected Forest staff on site demarcation of selected communities • Assist in other activities assigned by the Project Manager

APPENDIX 3: TERMS OF REFERENCE FOR PERSONNEL AND CONSULTANTS AND SUB-CONTRACTS FUNDED BY ITTO.

Thailand

Position	Man-months and Rates (US$)
Project Manager	36 months; US$ 2,500/month
Qualifications • Thai citizen fluent in English (Laotian and Cambodian language skills an advantage). • University degree in forestry or natural resources (M.Sc. degree an advantage). • A minimum of 5 years experience in natural resources management and managing donor projects. • Knowledge of institutional analysis and proven leadership and team work.	Responsibilities • Overall responsibility for project implementation. • Day-to-day project administration. • Works closely with RFD and project staff to ensure effective implementation. • Equipment procurement. • Prepare progress reports and work plans as required by the ITTO and RFD. • Present results to the PSC. • Monitor the progress of project activities. • Seek other funding support nationally and internationally to sustain the project.
Project Secretary	36 months; US$ 800/month
Qualifications • Thai citizen (fluent in English an advantage). • University degree. • A minimum of 2 years experience in natural resources management. • Experience in logistics and meeting arrangements. • Good understanding of institutions. • Proven ability to work with teams of local people and other specialists.	Responsibilities • Overall responsibility for project logistics. • Assist the PM in day-to-day project administration. • Collaborate with consultants and contractors to ensure effective project implementation. • Assist the PM in arranging meetings and workshops. • Gather information on the progress of project activities and report to the PM.
GIS Consultant	12 months/US$ 1,500/month
Qualifications • Thai citizen fluent in English. • Advanced degree (M.Sc. or higher) in GIS and natural resources management). • A minimum of 5 years experience in GIS database development for biodiversity and protected areas. • Experience in report writing, oral communication and preparing presentations. • Good understanding of factors impeaching land-use changes	Responsibilities • Work with the project team and other consultants to develop additional GIS database as might be required. • Continue updating data. • Work with GIS consultants in Cambodia and Laos to ensure that both countries develop GIS using a standardized design. • Propose mechanism and guidelines for joint research activities among the three countries. • Conduct GIS training for scientists and professional staff of the three countries. • Assist in formulating protection measures

Position	Man-months and Rates (US$)
and biodiversity modeling. • Proven ability to work with teams and other specialists (experience with donor projects an advantage).	to prevent future land use changes. • Prepare reports.
Sub-contract Laotian Scientist	Lump sum US$ 15,000
Qualifications • Laotian citizen fluent in English. • Advanced degree (M.Sc. or higher) in wildlife ecology). • Affiliated with Laotian university or government institution. • A minimum 5 years experience in wildlife ecology and management (experience with donor projects an advantage). • Experience in field work, report writing, oral communication and preparing presentations. • Good understanding of wildlife monitoring techniques, especially for large mammal species. • Proven ability to work with teams and other specialists.	Responsibilities • Work with wildlife consultants in Cambodia and Laos to develop a systematic survey and conduct research on wide-ranging wildlife species. • Plan and conduct a wildlife survey in Phuxeingthong NBCA and adjoining area in Laos. • Supervise PA staff monitoring wildlife and habitat uses. • Actively participate in research on wide-ranging species. • Prepare a technical report on the wildlife distribution survey and prepare joint research report. • Disseminate research results to authorized agencies at local and national levels.

Cambodia

Position	Man-months and Rates (US$)
Project Manager	36 months/ US $ 1,450/month
Qualifications • Cambodian National fluent in English (Thai, Laotian or French language skills would be an advantage). • A minimum of 10 years experience in a relevant field, proven ability to manage donor projects and a good understanding of global and national environmental issues. • An advanced degree in natural resources management or in a related environmental sciences or development field. • Demonstrated leadership and project coordination skills. • Strong evaluation, analysis, report	Responsibilities • Overall responsibility for project implementation in accordance with the project document and project agreement. • Coordinate with concerned stakeholders in order to ensure that project activities are implemented efficiently as planned. • Serve as focal point for the FA, PSC and the NPCC and interact with Government institutions and relevant stakeholders, including donors, academic institutions and the private sector. • Procure equipment. • Prepare and submit progress reports, financial reports, work plans and technical reports, as required, by the ITTO, PSC and the FA. • Present project work plan progress to the FA,

Position	Man-months and Rates (US$)
writing and presentation skills. • Knowledge of institutional and individual capacity building issues and experience with broad-based stakeholder consultations. • Team player able to work under pressure and with little supervision.	PSC and the NPCC. • Collaborate with the TA, project specialists, consultants, the FA, local support staff and the CALM Project Management Team to prepare technical reports. • Day-to-day project administration and management and serve as Project Coordinator. • Other project-related duties as might be requested by ITTO, FA and the PSC.
Technical Advisor	30 months/ US $ 2,000/month
Qualifications • Very good command of English. • An advanced degree in natural resources management or in a related field associated with global environment issues or land use planning. • A minimum of 15 years experience in a relevant field, proven ability to manage donor projects and a broad-based understanding of global and national environmental issues. • Good understanding of policy and planning related to natural resources management. • Strong written and oral communication and computer skills, including the capacity to relate to both the internal and external constituencies of the project. • Demonstrated team player and ability to coordinate effectively with relevant stakeholders. • Extensive experience with technical report writing and preparing presentations.	Responsibilities • Coordinate project technical activities. • Collaborate with the PM, project specialists, consultants, local support staff and the CALM Project Management Team and provide strategies to strengthen coordination with the project teams of Thailand and Laos. • Assist in organizing workshops, meetings, training courses and study tours. • Coordinate with TA in Thailand and Laos to harmonize management guidelines. • Collaborate with the CALM Project Management Team to update the Preah Vihear Protected Forest (PVPF) Management Plan. • Advise the Joint-Task Force on formulating strategies and conducting research. • Seek additional project funding support nationally and internationally. • Support the tri-national project team in the preparation of project proposals for the Cambodia Phase III/Phase IV trans-boundary biodiversity conservation project.
GIS Specialist	36 months/US $ 600/month
Qualifications • Cambodian National with good command of English. • An advanced degree in GIS or in a related environmental sciences or development field. • A minimum of 5 years of experience in GIS, database management and other areas relevant to the project.	Responsibilities • Collaborate with the project team and other project specialists to improve GIS database management, as required, and develop the PVPF's GIS database. • Provide training on GIS applications for Biodiversity Conservation, GIS mapping and database management, and spatial analysis to the PVPF staff and relevant stakeholders. • Coordinate with GIS consultants in Thailand

Position	Man-months and Rates (US$)
• Good written and oral communication skills, including the capacity to relate to both the internal and external constituencies of the project. • Strong evaluation, analysis, report writing, presentation and computer skills. • Broad-based understanding of GIS, databank development and environmental issues in general. • Proven ability to work autonomously, as well as a member of a team, under pressure.	and Laos to ensure that all three countries develop a standard GIS database. • Propose a mechanism and guidelines for data sharing among the three countries. • Assist in site demarcation of selected local communities and ground demarcation of the PVPF boundaries. • Prepare thematic maps on the Emerald Triangle Protected Forests Complex. • Collaborate with the PM, the TA, local support staff, and the CALM Project Management Team to update the PVPF Management Plan.
Community Outreach and Participatory Land Use Planning Coordinator	36 mm/US $ 650/month
Qualifications • Cambodian National with good command of English. • University degree in a field related to environmental sciences and development. • A minimum of 8 years of experience in community forest livelihood development, participatory land use planning and in other areas relevant to the project. • Good written and oral communication and computer skills, including the capacity to relate to both the internal and external constituencies of the project. • Good evaluation, analysis, report writing and presentation skills. • Broad-based knowledge of community livelihood development, participatory land use planning and environmental issues in general. • Proven ability to work autonomously, as well as a member of a team, under pressure.	Responsibilities • Organize Sustainable Livelihood Assessments and develop community outreach, participatory land use planning and livelihood development activities. • Liaise with authorities at provincial, district and commune levels involved in local community development and assist in establishing community committees. • Collaborate with the PM, the TA, the project team and relevant stakeholders to develop awareness raising materials regarding the importance of biodiversity conservation in the PVPF. • Assess socio-economic conditions of local communities and select families for pilot livelihood improvement activities in targeted communities and conduct surveys on potential ecotourism sites. • Assist in organizing public forums to discuss the benefits of biodiversity conservation to livelihood development. • Provide training on Sustainable Livelihood Development and participatory land use planning to the PVPF staff and target groups of local communities. • Establish simple monitoring systems to facilitate the assessment of local project activities and prepare reports on the implementation of pilot livelihood initiatives and participatory land use planning.

Position	Man-months and Rates (US$)
Forest Land-use Planning and Biodiversity Conservation Specialist	36 months/US $ 700/month
Qualifications • University degree in a field relevant to forestry, environmental sciences or development. • A minimum of 8 years of experience in forest land management and in other areas relevant to the project. • Good written and oral communication skills, including the capacity to relate to both the internal and external constituencies of the project. • Good evaluation, analysis, report writing and presentation skills. • Broad-based knowledge of forest land use planning, biodiversity conservation and environmental issues in general. • Good English language and computer skills. • Proven ability to work autonomously, as well as a member of a team, under pressure.	Responsibilities • Support interactions with the CALM Project Management Team to understand activities and to discuss the shared data available to initiate the updating of the PVPF Management Plan. • Collaborate with the PM, the TA, the GIS specialist, and project officers to obtain available data for preparing a zonation plan for the PVPF. • Assist in assessing forest cover, biodiversity conservation, socio-economic aspects of local communities and threats to habitats and wildlife in the PVPF, particularly in those areas adjacent to Thailand and Lao PDR. • Assist in the development of the PVPF Management Plan in English and in Khmer. • Provide training on forest land use planning, biodiversity conservation, and Sustainable Forest Management practices to the PVPF staff, target groups of local communities and relevant stakeholders. • Assist in organizing consultative workshops on the updating of the PVPF Management Plan to incorporate recommendations from relevant stakeholders. • Coordinate publication and dissemination of the PVPF Management Plan.
Project Accountant	36 months/US $ 650/month
Qualifications • University degree in accounting and finance or in a management, environmental sciences or development field relevant to the project. • A minimum of 5 years of experience in management and in other areas relevant to the project. • Good written and oral communication skills, including the capacity to relate to both the internal and external constituencies of the project. • Good evaluation, analysis, report writing and presentation skills. • Good English language and computer skills.	Responsibilities • Create, update and execute policies and procedures to ensure sound project financial discipline and control. • Provide financial training on the proper recording of expenditures according to international and internal procedures as appropriate. • Coordinate and monitor financial control processes. • Control and monitor project disbursements and expenditures consistent with sound financial procedures. • Provide regular reports, recommendations, and interpretations to the PM. • Assist in organizing meetings, workshops, training, and study tours. • Oversee equipment and vehicle acquisition

Position	Man-months and Rates (US$)
• Proven ability to work autonomously, as well as a member of a team, under pressure.	and maintenance.
Community Livelihood Development Officer	36 months/US $ 350/month
Qualifications • Cambodian National with good command of English. • University degree in a field related to environmental sciences and development. • A minimum of 3 years of experience in community forest livelihood development and in other areas relevant to the project. • Good written and oral communication, presentation and computer skills, including the capacity to relate to both the internal and external constituencies of the project. • Broad-based knowledge of community sustainable livelihood development and environmental issues in general. • Proven ability to work autonomously, as well as a member of a team, under pressure.	Responsibilities • Assist in developing community sustainable livelihood development activities. • Liaise on a regular basis with authorities at provincial, district and commune levels involved in local community livelihood development and assist in establishing community committees. • Collaborate with the Community Outreach and Participatory Land Use Planning Coordinator and the TA to develop awareness raising materials related to the importance of biodiversity conservation in the PVPF. • Assess and analyze problems and identify families for pilot livelihood improvement in targeted communities and conduct surveys on potential ecotourism sites. • Assist in organizing public forums to share views on the value of biodiversity conservation to sustainable livelihoods. • Assist in organizing training on Sustainable Livelihood Development and participatory land use planning to the PVPF staff and target groups of local communities. • Assist in establishing simple monitoring systems, facilitate the oversight of local initiative progress and prepare reports on the implementation of pilot livelihood activities.
Sub-contract Laotian Scientist	Lump sum US$ 6,000
Qualifications • Laotian National fluent in English. • Advanced degree in forest land use. • Affiliated with a Laotian university or government institution. • A minimum 5 years experience in wildlife ecology and management (experience with donor projects would be an advantage). • Experience in field work, report writing, oral communication and	Responsibilities • Collaborate with the project team in Cambodia and Thailand to develop a systematic survey and conduct research on wide-ranging wildlife species. • Plan and conduct a forest land use change survey in adjoining areas of the Emerald Triangle. • Supervise PA staff monitoring wildlife and habitat uses. • Actively participate in research on forest land use planning. • Prepare a technical report on a survey of forest land use changes and prepare joint research report.

Position	Man-months and Rates (US$)
preparing presentations. • Good understanding of forest land use change assessment. • Proven ability to work with teams and other specialists.	• Disseminate research results to authorized agencies at local and national levels.
Specialist for Establishing Plant Nurseries	8 months/US $ 600/month
Qualifications • Cambodian National with good command of English. • University degree in a field related to environmental sciences and development. • A minimum of 5 years of experience in silviculture and plant nurseries. • Good written and oral communication, presentation and computer skills, including the capacity to relate to both the internal and external constituencies of the project. • Broad-based knowledge of community sustainable livelihood development and environmental issues in general. • Proven ability to work autonomously, as well as a member of a team, under pressure.	Responsibilities • Assist in developing and establishing plant nurseries. • Liaise with authorities at provincial, district and commune levels involved with local communities in supporting the establishment of fast growing trees and the planting of fruit trees. • Supervise the establishment of fast growing trees and fruit tree seedling production. • Assess conditions and identify families for pilot livelihood improvement in targeted communities and conduct surveys on fast growing trees and the distribution of fruit tree seedlings. • Provide training on silviculture, seedling production and planting techniques planning to the PVPF staff and target groups of local communities. • Assist in establishing simple monitoring systems, provide oversight of the progress of local initiatives and prepare reports.
Specialist for Establishing the Tissue Culture Lab	8 months/US $ 600/month
Qualifications • Cambodian National with good command of English. • University degree in a field related to environmental sciences and development. • A minimum of 5 years of experience in silviculture and tissue culture. • Good written and oral communication, presentation and computer skills, including the capacity to relate to both the internal and external constituencies of the project. • Good knowledge of community sustainable livelihood development and environmental issues in general.	Responsibilities • Assist in developing and establishing plant nurseries. • Liaise with authorities at provincial, district and commune levels involved with local communities in supporting the establishment of fast growing trees and the planting of fruit trees. • Supervise the establishment of fast growing trees and fruit trees and ornamental plant seedling production. • Assess conditions and identify families for pilot livelihood improvement in targeted communities and conduct surveys on fast growing trees and ornamental plants and the distribution of fruit tree seedlings. • Provide training on silviculture, seedling and ornamental production and planting techniques planning to the PVPF staff and

Position	Man-months and Rates (US$)
• Proven ability to work autonomously, as well as a member of a team, under pressure.	target groups of local communities. • Assist in establishing simple monitoring systems, provide oversight of the progress of local initiatives and prepare reports.

APPENDIX 4: OFFICIAL SUPPORTING LETTERS FROM THE GOVERNMENT OF THAILAND AND CAMBODIA

No. 16186.1/ 11605

Royal Forest Department
61 Paholyothin Rd., Chatuchak,
Bangkok 10900 THAILAND
Tel/Fax +66 2 9407134

11 June B.E. 2553 (2010)

Dear Sir,

SUBJECT: Project Phase III Proposal, ITTO Project PD 289/04 Rev.1 (F) "Management of the Emerald Triangle Protected Forests Complex to Promote Cooperation for Trans-boundary Biodiversity Conservation between Thailand, Cambodia and Laos (Phase II)"

Kindly refer to ITTO Facsimile Ref. No F. 10-0131, dated 21 May 2010, stated that ITTO had no objection to utilize the remaining funds to engage the consultants to formulate a Phase III project proposal.

We are pleased to inform you that the consultants have prepared and finalized the Phase III project proposal as attached herewith for your consideration.

We would like to thank you for your support for the project and your kind cooperation, and we look forward to receiving support for the project phase III in the future.

Best regards.

Sincerely yours,

(Mr. Somchai Pienstaporn)
Director General

Mr. Emmanuel Ze Meka
Executive Director
International Tropical Timber Organization (ITTO),
International Organizations Center,
5th Floor, Pacifico-Yokohama,
1-1-1, Minato-Mirai, Nishi-Ku,
Yokohama City, 220-0012 Japan

ព្រះរាជាណាចក្រកម្ពុជា
ជាតិ សាសនា ព្រះមហាក្សត្រ

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រាជធានីភ្នំពេញ, ថ្ងៃទី 11 ខែ June ឆ្នាំ ២០10

Dr. Emmanuel Ze Meka
Executive Director
International Tropical Timber Organization (ITTO)
Pacifico-Yokohama, 5th Floor
1-1-1, Minato-Mirai, Nishi-Ku
Yokohama City, 220-0012 Japan

Subject: *Submission of project proposal: Management of the Emerald Triangle Protected Forests Complex to Promote Cooperation for Trans-boundary Biodiversity Conservation between Thailand, Cambodia and Laos (Phase III).*

Dear Dr. Ze Meka:

The Forestry Administration, on behalf of the Royal Government of Cambodia, is pleased to inform you that the Phase III project proposal entitled, ***Management of the Emerald Triangle Protected Forests Complex to Promote Cooperation for Trans-boundary Biodiversity Conservation between Thailand, Cambodia and Laos. (Phase III)***, *has been jointly prepared by* the Forestry Administration of Cambodia and the Royal Forest Department of Thailand, the Executing Agencies for this project, with input from ITTO consultant, Dr. James Gasana.

We are submitting this proposal to ITTO for review and approval of funding to support the implementation of the ***Management of the Emerald Triangle Protected Forests Complex to Promote Cooperation for Trans-boundary Biodiversity Conservation between Thailand, Cambodia and Laos. (Phase III) project.***

Please accept the assurances of our highest consideration.

Yours sincerely,

Chheng Kim Sun
Delegate of Royal Government in charge as
Head of Forestry Administration

cc: Mr. Somchai Pienstaporn, Director General, Royal Forestry Department, Thailand

អាស័យដ្ឋានលេខ ៤០ មហាវិថីព្រះនរោត្តម សង្កាត់ផ្សារកណ្តាល២ ខ័ណ្ឌដូនពេញ រាជធានីភ្នំពេញ កម្ពុជា ទូរស័ព្ទ : (០២៣) ២១៤ ៦៥១ ទូរសារ : (៨៥៥) ២៣ ២១២
N° 40, Preah Norodom Blvd, Sangkat Phsar Kandal 2, Khan Daun Penh, Cambodia Phone : (023) 214 651 Fax : (855) 23 212 201

APPENDIX 5: SUMMARY RESPONSES TO THE RECOMMENDATIONS OF THE 40TH EXPERT PANEL.

No.	Recommendations of the 40th Expert panel of ITTO	Modifications	Pages
1	Provide a brief of the project.	A brief of the project has been provided.	1-2
2	Provide official supporting letters from the Government of Cambodia and Thailand as an Annex 4.	Official supporting letters from the Governments of Cambodia and Thailand have been included as Appendix 4.	88-89
3	Provide more information on forest degradation and its causes in the project area to increase understanding of land use and land cover changes in the Emerald Triangle Protected Forests Complex target area.	The information on forest degradation and its causes in the project area has been expanded.	11
4	Further improve the stakeholder analysis to ensure the effective engagement of local communities in the implementation of the project.	The stakeholder analysis has been further elaborated, especially for Cambodia.	14-18
5	Specify the expected roles of NGOs in conducting training on buffer zone management.	The expected roles of NGOs in conducting training on buffer zone management have been described.	15, 18
6	Improve the indicators in the logical framework matrix by including relevant baseline data to allow effective monitoring of the project.	Baseline data on Indicators in the logical framework matrix have been discussed.	22-25
7	Describe the profile of Executing Agencies in addition to the organization charts provided in Annex I.	Description profiles of the Executing Agencies have been provided.	75-77
8	Provide tasks and responsibilities for key experts along with their short CVs although they will be funded by the Executing Agencies in Annex II.	Tasks and responsibilities for key government-funded experts have been provided (Appendix 2). Their short CVs will be provided upon the official launching of Phase III of the project.	78-81
9	Include an annex that shows the recommendations of the 40th Expert panel and the respective modifications in tabular form. Modification should also be highlighted (bold and underline) in the text.	Appendix 5 summarizes the responses to the recommendations of the ITTO 40th expert panel.	92