



# **Consolidate Information Booklet**

**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)**



A group photo of the project steering committee members, standing in front of a banner that reads "The Second Meeting of the Project Steering Committee".

## **TRANS-BOUNDARY COOPERATION FOR BIODIVERSITY CONSERVATION AND MANAGEMENT :**

**The environmental security and social welfare depend upon the conservation and management of biological resources that span political borders. Trans-boundary reserves are defined as contiguous areas of protected natural habitat, extending nationally across two or more states or internationally across two or more countries.**

**The main aim is to increase the protection of biodiversity beyond the extent possible by any single state or country. Trans-boundary conservation across international borders requires cooperation from the participating countries, and often facilitating regional or international organization.**



# Management of the Emerald Triangle Protected Forests Complex to Promote Cooperation for Trans-boundary Biodiversity Conservation between Thailand, Cambodia and Laos (Phase II)



<i>Background</i>	2
<i>Project Area</i>	3
<i>Forest Classification</i>	4
<i>Distribution of Local Communities</i>	6
<i>ITTO Budget</i>	7
<i>Project Objectives</i>	8
<i>Target Beneficiaries</i>	9
<i>Activities Implementation</i>	10
<i>Achievements of the Project</i>	11
<i>Conclusions</i>	23
<i>General Conclusions / Lessons Learned</i>	24





International Tropical  
Timber Organization



RFD - Thailand

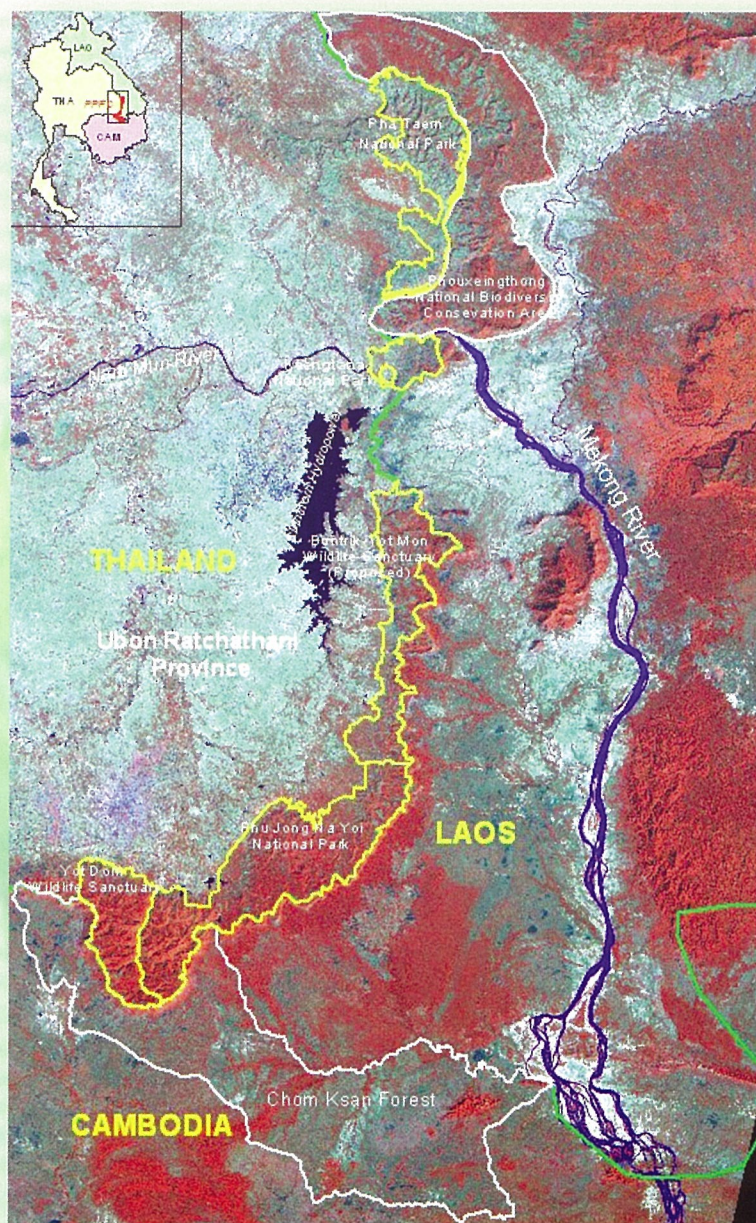


EA - Cambodia

ITTO Project PD 289/04 Rev.1 (F)

## Background

The Royal Forest Department (RFD) of Thailand has initiated trans-boundary biodiversity conservation area (TBCA) and selected the Phatam Protected Forests Complex, with the financial assistance from the International Tropical Timber Organization (ITTO), as a pilot project. The *“Management of the Phatam Protected Forests Complex to Promote Cooperation for Trans-boundary Biodiversity Conservation between Thailand, Cambodia and Laos (Phase I)”* was operated for three years during 2001-2003. The objectives were to start a management planning process for the area in a framework of trans-boundary biodiversity conservation and to initiate cooperation between Thailand, Cambodia, and Laos.



The Project Phase II was jointly proposed for 2 years by the participating countries after completion of Phase I. The objective was to conserve trans-boundary biodiversity in the Emerald Triangle Protected Forests Complex situated between Thailand, Cambodia and Lao PDR in a framework of trans-boundary biodiversity conservation area. Specific objectives are to strengthen cooperation for biodiversity conservation in trans-boundary conservation areas, to enhance protection and monitoring of the biological resources along tri-national borders, and to strengthen the involvement of local communities and stakeholders in sustainable uses and management of natural resources.





# The Project area:

## North:

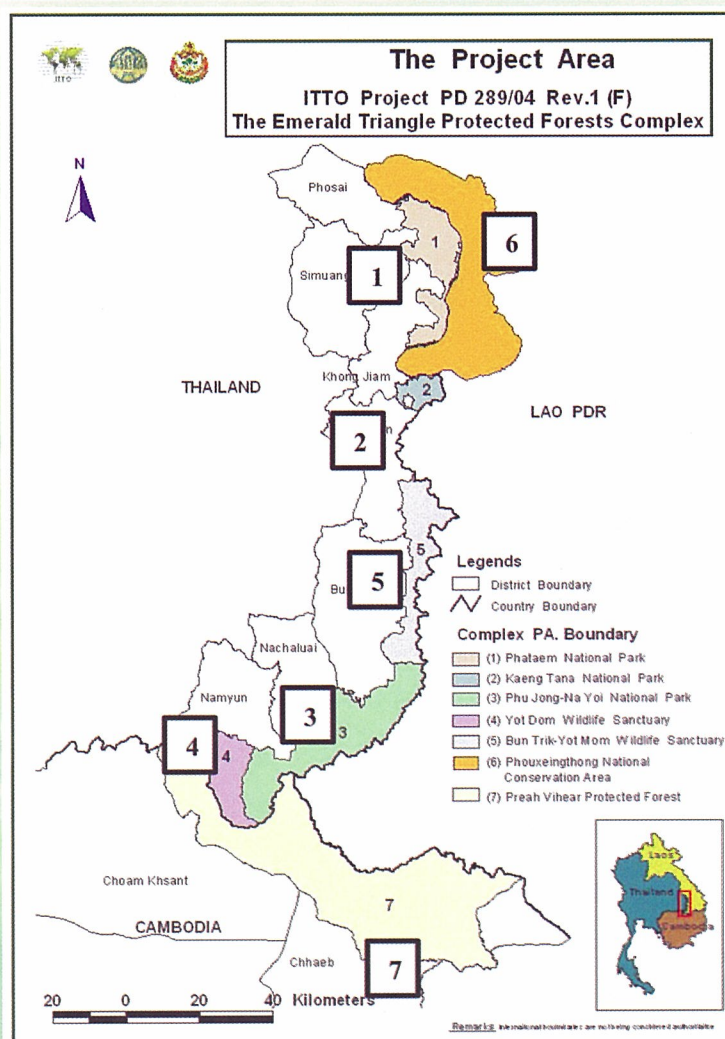
Thailand, Ubon Ratchathani Province, comprise of five protected areas which are the Phatam National Park, Kaeng Tana National Park, Phu Jong-Na Yoi National Park, Yot Dom Wildlife Sanctuary and Bun Thrik-Yot Mon Wildlife Sanctuary.

## East:

Lao PDR, the Mekong River and Phouxeingthong National Biodiversity Conservation Area.

## South:

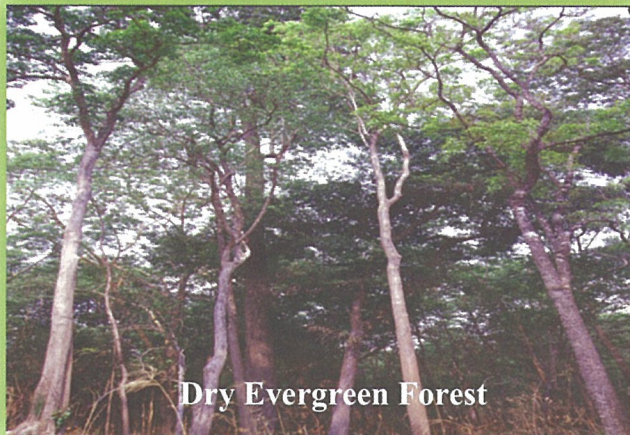
Cambodia, Preah Vihear Province, the Preah Vihear Protected Forest.



Name	Area (km <sup>2</sup> )	Description
1. Pha Taem NP-Thailand	353	Established as the 74 <sup>th</sup> NP of Thailand on 31/12/1991, situated between latitudes 15° 22.9' - 15° 45.9' N, longitudes 105° 28.2' - 105° 38.5' E. Its border is connected to the Mekong River and 73% is adjacent to villages.
2. Kaengtana NP-Thailand	84	Kaeng Tana was gazetted as the 33 <sup>rd</sup> NP of Thailand on 13/6/1981, situated between latitudes 15° 13.9' - 15° 13.19.4' N, longitudes 105° 28' - 105° 35.8' E. 52% of the boundary is adjacent to local communities, 48% is attached to country boundaries, including the Mekong River to the north.
3. Phu Jong Na Yoi NP-Thailand	697	The 53 <sup>rd</sup> NP of Thailand, declared on 1/6/1987, situated between 14° 12.9' - 14° 37' N and 105° 04.4' - 105° 32.6' E. To the north is the Bun Thrik-Yot Mon WS, to the south is Yot Dom WS, to the east is Lao PDR. The perimeter is 215.88 km length and its shape is relatively long.
4. Yot Dom WS-Thailand	235	Established as the 13 <sup>th</sup> WS of Thailand on 11/10/1977, located between latitudes 14° 12.5' - 14° 27.4' N, longitudes 104° 58.5' - 105° 07' E. To the west is attached to Cambodian border and to the right it adjoins the Phu Jong-Na Yoi NP. About 29 km or 32.76% is connected to human settlements.
5. Buntrik-Yot Mon WS-Thailand	365	A new WS, located to the north of the Phu Jong-Na Yoi National Park, latitudes 14° 37.7' - 15° 04.9' N, longitudes 104° 25.7' - 105° 37.7' E. To the right is Lao PDR border and to the west are agricultural area and human settlements.
6. Phou Xieng Thong NBCA-Laos	1,200	Established by PM Decree 164, 29 October 1993, Latitude: 15° 19' - 15° 52' N, Longitude: 105° 23.5' - 105° 47'. In the east its edge is well defined by a steeply rising escarpment to a low sandstone plateau. Rocky flats and flat top conical hills are a dominant terrain feature. Vertical cliff faces similar to those found in Pha Taem on the other side of the Mekong river. Soils are acid and shallow and unsuited for permanent agriculture.
7. Preah Vihear Protected Forest -Cambodia.	1,900	In July 2002, the RGC established the Preah Vihear Protected Forest. The Preah Vihear Protected Forest is located between 13° 51' 19" and 14° 25' 01" of latitude north, 104° 51' 42" and 105° 47' 04" of longitude east, in Preah Vihear province in the Northern Plains of Cambodia, west of the Mekong River, and borders both Thailand and Laos.



# The Forest Classification of the Project Areas



Dry Evergreen Forest

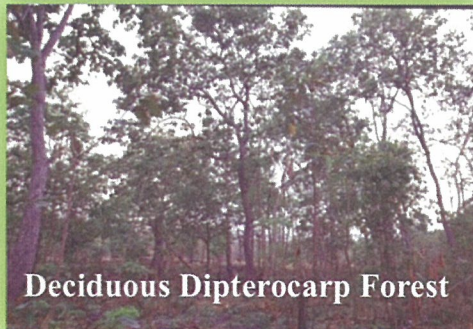
## Vegetation types

- Dry Evergreen Forest
- Mixed Deciduous Forest
- Deciduous Dipterocarp Forest
- Shrub (or degraded forest)
- Agriculture
- Para rubber plantation
- Eucalyptus plantation
- Build-up and village
- Rock and bare soil
- Water body

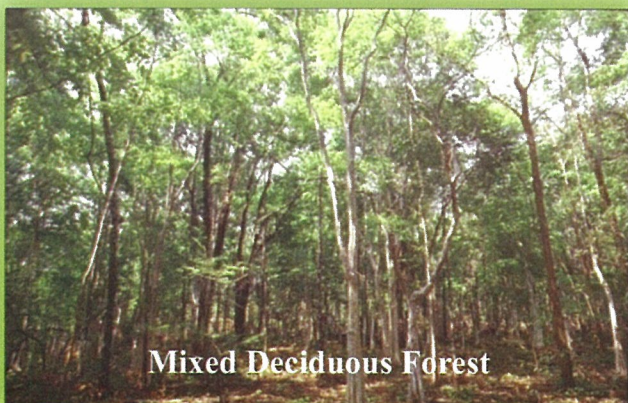
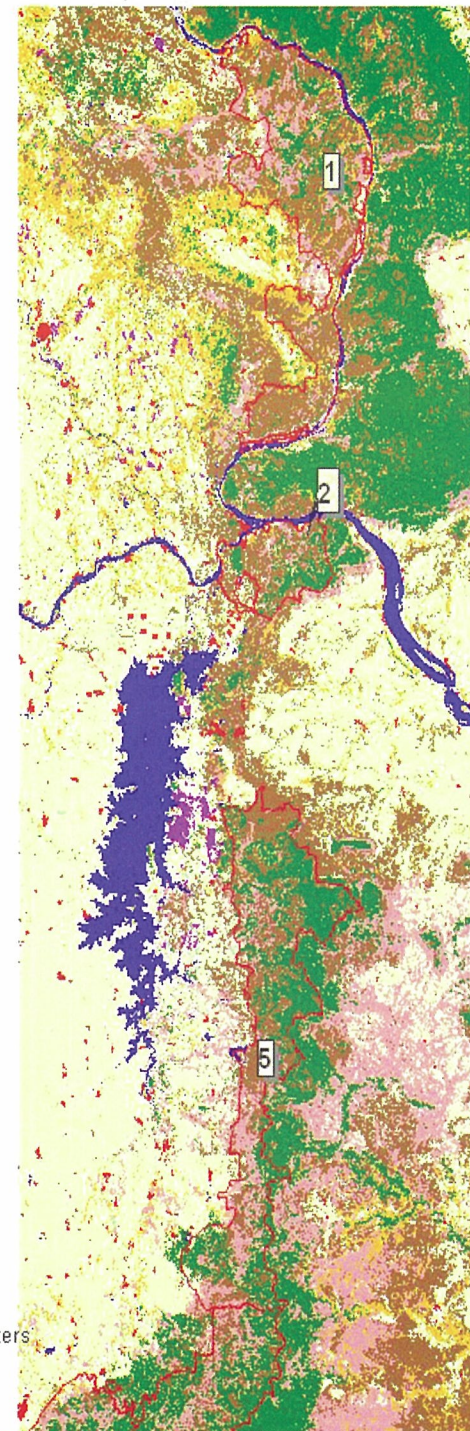
## Protected area boundary

- (1) Pha Taem National Park
- (2) Kaeng Tana National Park
- (3) Phu Jong - Na Yoi National Park
- (4) Yot Dom Wildlife Sanctuary
- (5) Bun Thrik-Yot Mon Proposed Wildlife Sanctuary

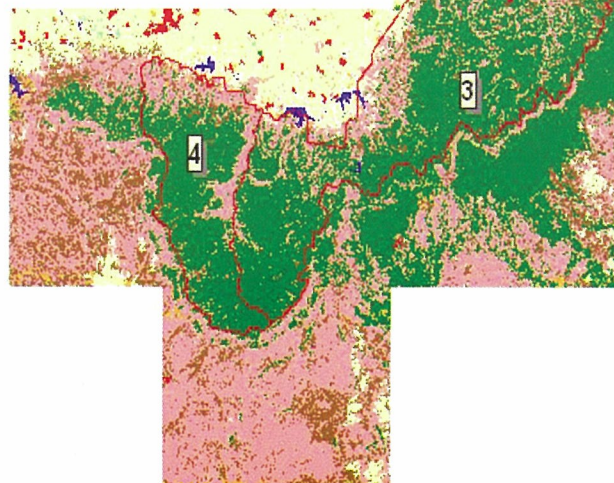
20 0 20 40 kilometers



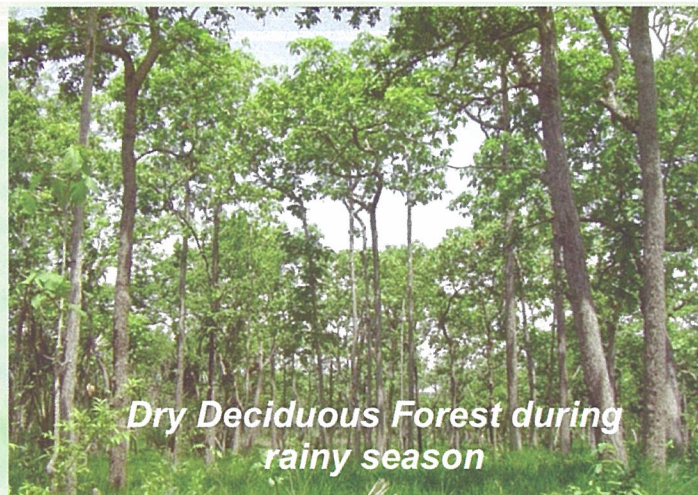
Deciduous Dipterocarp Forest



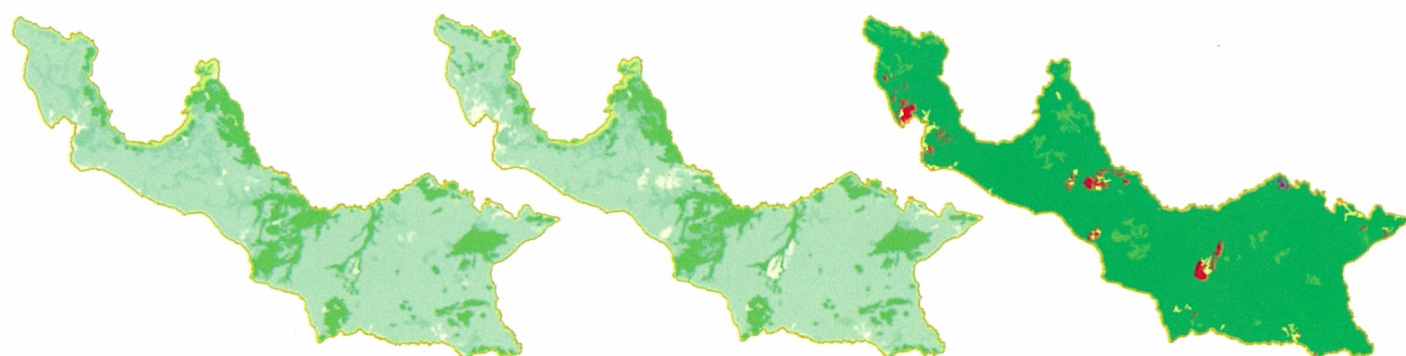
Mixed Deciduous Forest







## Forest Cover of Preah Vihear Protected Forest



Forest cover 2002

Forest cover 2006

Forest cover change 2002-2006

### Legend

- Evergreen Forest
- Semi-Evergreen Forest
- Deciduous Forest
- Other Forest
- Wood & Shrub land Evergreen
- Wood & Shrub land Dry
- Non Forest
- Bamboo

- Change of forest type
- Forest type stays same
- Non forest become forest
- Forest become non forest
- Non forest stays same



20 10 0 20 KM



### Forest cover change 2002-2006 in Preah Vihear Protected Forest

No.	FOREST TYPES	FOREST COVER AREA				CHANGE 2002-2006	
		2002		2006		2002-2006	
		Ha	%	Ha	%	Ha	%
1	Evergreen forest	33,587	17.67	35,710	18.79	2,123	1.12
2	Semi evergreen forest	18,512	9.74	18,231	9.59	-281	-0.15
3	Deciduous forest	130,951	68.91	127,198	<b>66.94</b>	-3,753	-1.97
4	Others forest	4,237	2.22	2,696	1.42	-1,541	-0.80
	<b>Total forest land</b>	<b>187,287</b>	<b>98.56</b>	<b>183,835</b>	<b>96.74</b>	<b>-3,452</b>	<b>-1.82</b>
5	Non forest	2,740	1.44	6,192	3.26	3,452	1.82
	<b>TOTAL AREA</b>	<b>190,027</b>	<b>100</b>	<b>190,027</b>	<b>100</b>		





## Distribution of Local Communities

Protected Areas	No. of Villages	Families	Male	Female	Total
Thailand Project Site					
Pha Taem NP	28	3,930	9,184	8,695	17,870
Kaengtana NP	7	935	1,734	2,070	3,333
Phu Jong Na Yoi NP	26	3,792	8,622	8,281	16,155
Yot Dom WS	16	3,493	7,171	7,016	14,187
Buntrik-Yot Mon WS	5	628	1,707	1,798	3,505
<b>TOTAL</b>	<b>82</b>	<b>12,778</b>	<b>28,418</b>	<b>27,860</b>	<b>55,050</b>
Cambodia Project Site					
Preah Vihear Protected Forest	21	3,042	7,082	7,107	14,189



The Project Phase II was approved in Thirty-seventh Session the recommendations of the three Committees on Projects, Pre-Projects and Activities, 13 – 18 December 2004, Yokohama, Japan-DECISION 1(XXXVII).

#### Project Identification

**Title:** *Management of the Emerald Triangle Protected Forests Complex to Promote Cooperation for Trans-boundary Biodiversity Conservation between Thailand, Cambodia and Laos (Phase II)*

**Serial Number:** *ITTO Project PD 289/04 Rev.1 (F)*

**Implementing Agency:** *1. The Royal Forest Department, Thailand  
2. The Forestry Administration, Cambodia*

**Starting Date:** *February 1, 2008*

**Duration:** *24 Months*

**Project cost (US\$):** *688,208*

#### **BUDGET AND FUNDING SOURCES (\$)**

##### Implement in Thailand

ITTO	352,879
Gov't of Thailand	323,400

##### Implement in Cambodia

ITTO	335,329
Gov't of Cambodia	540,335
ITTO Total	688,208
<b>GRAND TOTAL</b>	<b>1,551,943</b>

## **ITTO BUDGET (\$)**

ITEM		Allocation (\$)	
		THAILAND	CAMBODIA
10	Project Personnel	132,000.00	96,390.00
20	Sub - contracts	78,750.00	29,920.00
30	Duty Travel	43,390.00	40,720.82
40	Capital Items	9,700.00	70,326.00
50	Consumable Items	8,500.00	2,912.00
60	Miscellaneous	40,900.00	56,721.18
<b>TOTAL</b>		<b>313,240.00</b>	<b>296,990.00</b>
80	ITTO Monitoring , Evaluation & Administration	39,639.00	38,339.00
<b>GRAND TOTAL</b>		<b>352,879.00</b>	<b>335,329.00</b>





# **Project Objectives**

## **Specific Objectives**

- 1. Strengthen cooperation between Thailand, Cambodia and Laos for biodiversity conservation in respective trans-boundary conservation area.**
- 2. Enhance protection measures and monitoring of the biological resources along tri-national borders.**
- 3. Strengthen the involvement of local communities and stakeholders to ensure sustainable uses and management of natural resources both in enclaved communities and/or in the buffer zones.**



# Target Beneficiaries

- In Thailand, the Project areas protects the head watersheds that supply water to the Sirinthorn and Pak Moon Hydropowers.
- The local communities involving in buffer zone management gain additional knowledge on alternative income generation with opportunity to express their expectation and share responsibility in natural resources management.
- Thailand, Cambodia and Laos are recognized by international communities and show commitment in biodiversity conservation.
- More reliable data within each country and neighboring countries to assist decision-making.
- Park rangers will gain knowledge and effective tools in conservation management planning and to interact with park rangers working in adjoining protected areas.





## Activities Implementation

**The project targeted to implement :**

- 1. Strength cooperation for TBCA and implement activities among three countries.**
- 2. Human resource capacity in biodiversity conservation and management , law enforcement and protection measures strengthened, research programs on wide-ranging species and ecological processes carried out and published.**
- 3. Local community fora and network established and strengthened , ICDP or CLDP activities carried out through pilot activity fund, and Nature-based tourism activities established and expanded.**



# Achievements of the project

## Achievements of both Thailand and Cambodia,

- National Coordinating Committee on TBCA were established.
- Member of PSC were appointed as stated in the project document
- 3 PSC Meetings were organized as planned.
- The Joint Task Force meetings were held among project staff after the PSC Meetings.
- Wildlife Habitat information were exchange between Thailand and Cambodia.
- More information on wildlife was collected at the same time of regular patrolling with support of equipments from the project.



- First and third PSC meetings were held in Thailand and Second PSC meetings and validation workshop were held in Cambodia which intended by Cambodia, Laos and Thailand.
- The Joint Task Force meetings were held among project executing agencies after the 1<sup>st</sup> and 2<sup>nd</sup> PSC Meetings.

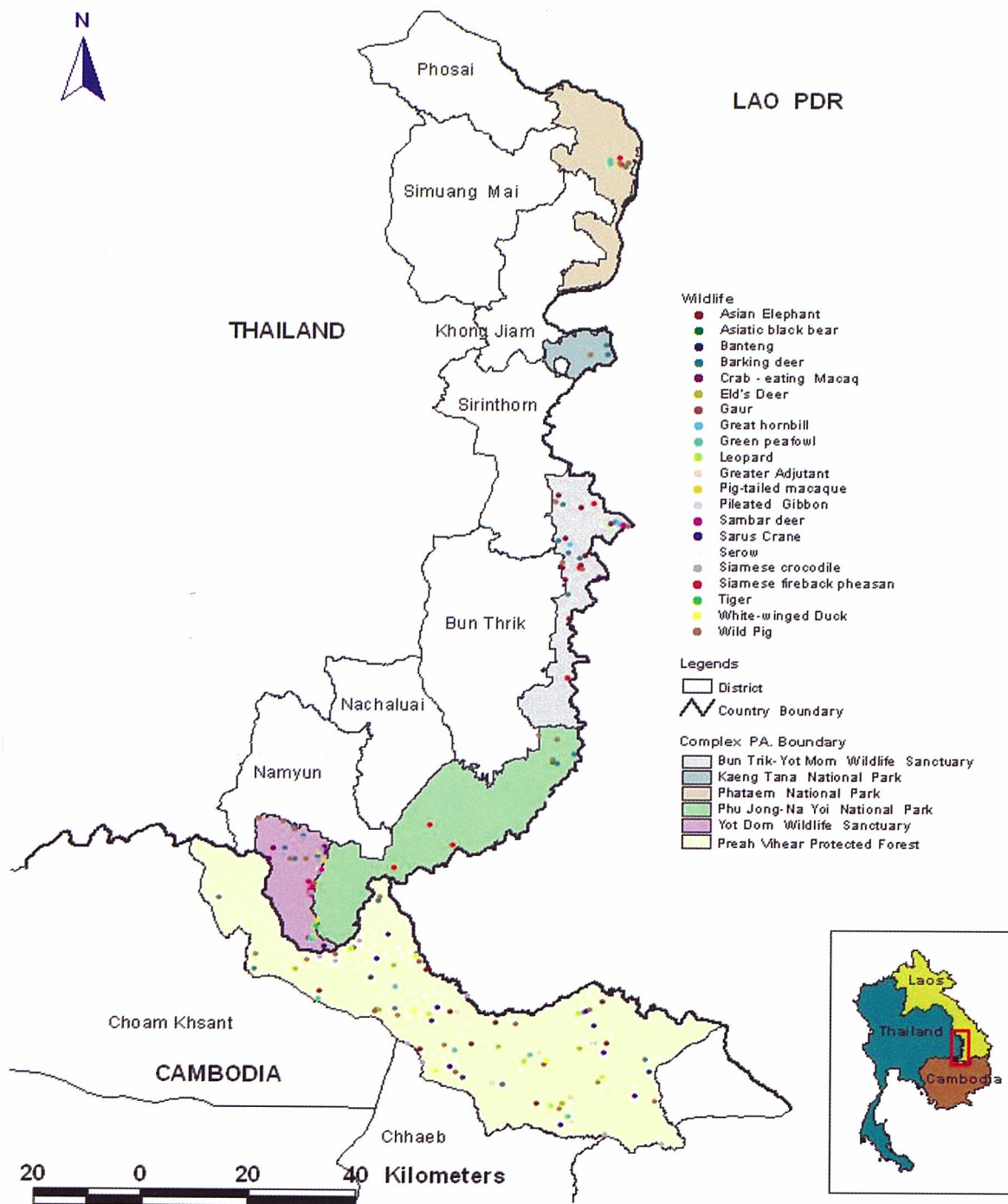






## Wildlife Habitat

ITTO Project PD 289/04 Rev.1 (F)  
The Emerald Triangle Protected Forests Complex





# Achievements of the project

## **In Thailand:**

- Consultative Committee Meetings were held to follow up and advise to the project. One of the meetings was for the selection of the ICDP pilot project for the appropriate villages and communities.
- Stakeholders meetings were held, comprised of NGOs, Local Administration Officers, RFD and DNP staff, community leaders and representatives, and project staff to advice on the activities implementation.

## **In Cambodia:**

- Consulted regularly with CALM Project for parallel project implementation, financing, content of PVPF Management Plan, Staffing and coordinated field activities.
- Consulted regularly with commune and district authorities, FA officers at triage, divisions and cantonment level, community leaders, and project staff to ensure effective and efficient implementation of the project activities.

The Joint Task Force meetings were held among project staff after the PSC Meetings. The meeting agreed that the project from both Thailand and Cambodia will:

- Continue informal communication with Laos.
- Tri-national meeting as Informal technical working meeting/technical level.
- Each EAs conduct its own Trans-boundary patrolling and sharing relevant information.
- Each EAs have own Taskforce meeting and workshop and sharing the relevant information.
- Each EAs conduct its own stakeholder meeting and workshop and share relevant information.



# Achievements of the project

In Thailand:

Organized trainings and workshops for PAs staff, border patrol, and local people on:

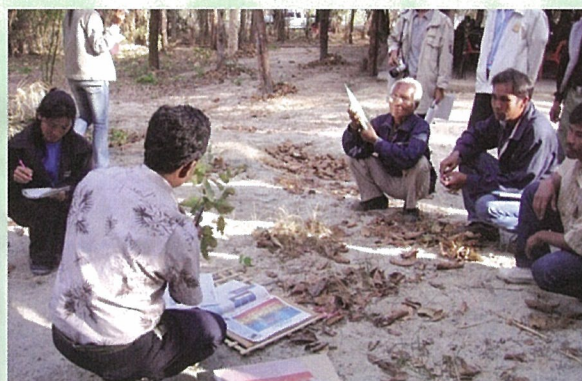
- Domestication of edible wild species and insect, and plant propagation.
- GIS and Area Demarcation.
- Wildlife.
- Study tours for local communities on biodiversity conservation and gain more experience.
- Community networks and were established.
- ICDP project proposal, criteria, regulation and monitoring system, and evaluate the implementation of pilot activity fund in terms of sustainability .
- Eco-tourism packages development and nature-based tourism management.

Conduct survey along the Mekong River/Thai-Cambodian borders and 30 areas was identified as potential areas for culture adventure and nature based tourism.

Nature based tourism map was produced, the booklet in local language was published



GIS



Plant Species



Networks



ICDP Project



# Nature-Based Tourism Attractions Map

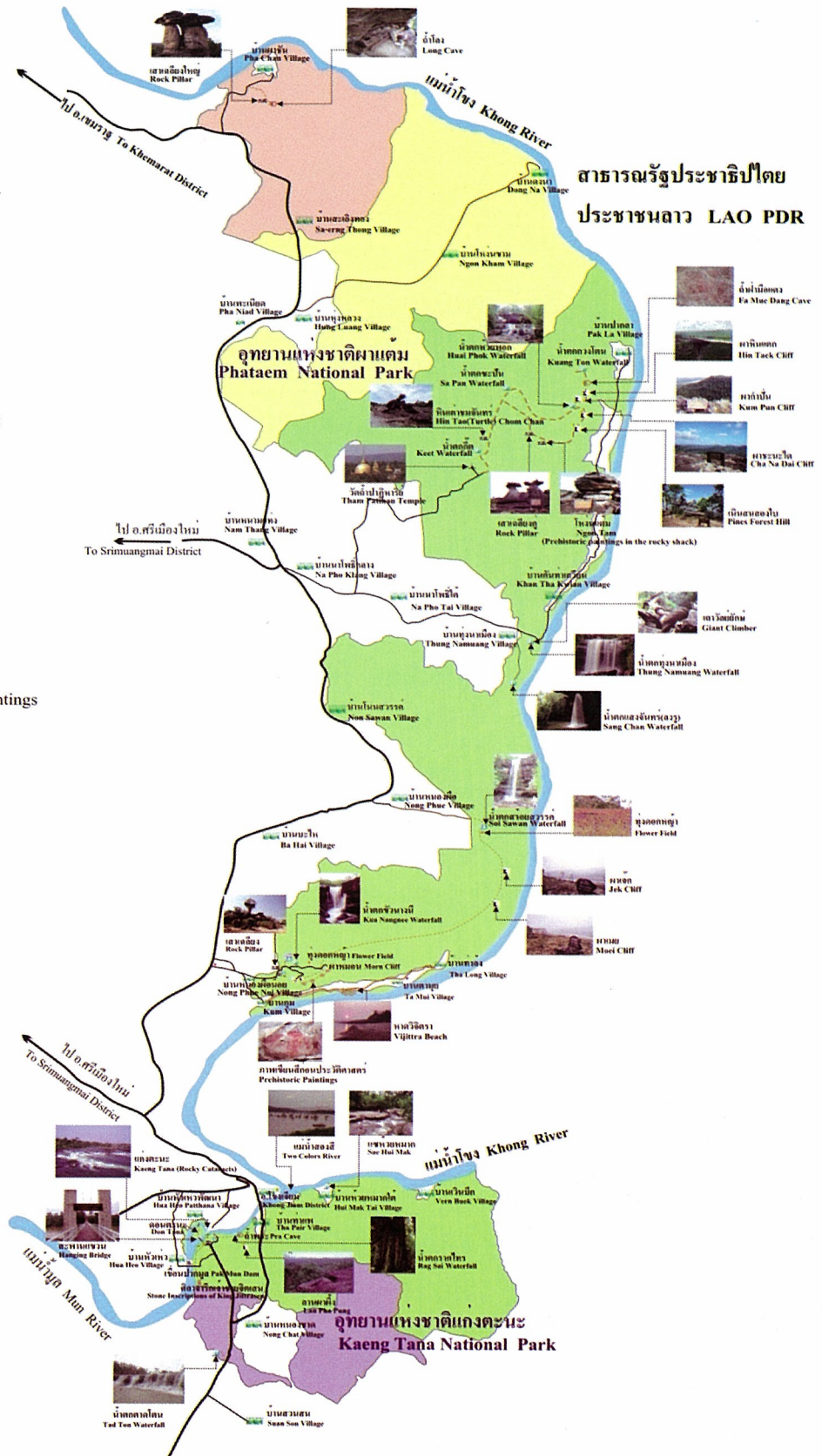
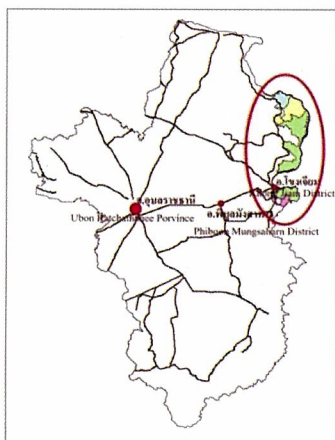
ITTO Project PD 289/04 Rev.1 (F)

The Emerald Triangle Protected Forests Complex



## สัญลักษณ์ Legends

- เขตอำเภอโพธิ์ไทร Phosai District
- เขตอำเภอศรีเมืองใหม่ Srimuangmai District
- เขตอำเภอโขงเจียม Khongjiam District
- เขตอำเภอสิรินธร Sirinthorn District
- หมู่บ้าน Village
- น้ำตก Waterfall
- เสาหิน Rock Pillar
- หน้าผา Cliff
- จุดชมวิว View Point
- ถ้ำ Cave
- ภาพเขียนก่อนประวัติศาสตร์ Prehistoric Paintings
- ทุ่งดอกหญ้า Flower Field
- วัด Temple
- เขื่อน Dam
- หาดทราย Beach
- ลานกางเต็นท์ Camping Site
- ศูนย์บริการนักท่องเที่ยว Visitor Center
- บ้านพักบริการนักท่องเที่ยว Lodge
- ที่ทำการอุทยานฯ Headquarter
- สถานีอนามัย First Aid Station
- ถนนลาดยาง Paved Road
- ถนนลูกรัง Unpaved Road
- ทางเดินเท้า Nature Trail



Remarks International boundaries are not being considered authoritative





## Location of 6 ICDP Pilot Projects

(Integrated Conservation and Development Program)

ITTO Project PD 289/04 Rev.1 (F)

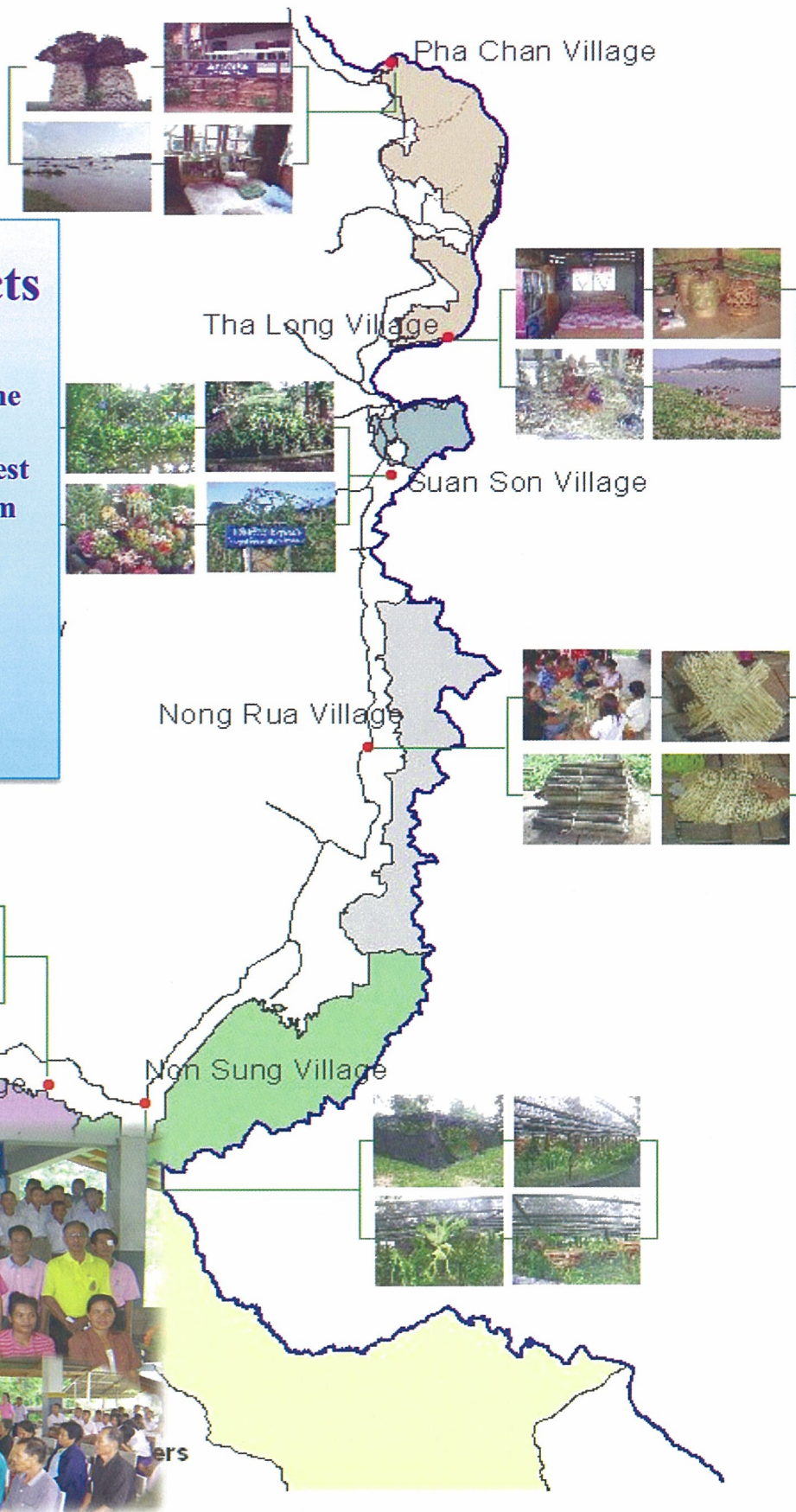
The Emerald Triangle Protected Forests Complex



### 6 ICDP Pilot Projects

6 local communities fully supported and participated in the ICDP/CLDP as planned, other communities showed their interest and expected to join the program in the next phases.

Activities were planned after community forums and implemented after receiving support funds.





# Achievements of the project

In Thailand:



**Trainings**



**Workshops**



**Raising Awareness**



# Achievements of the project

## In Cambodia:

- Prepared management plan of Preah Vihear Protected forest, submitted to relevant offices of the FA and was reviewed, consulted and endorsed by the FA. \_
- Designed, Constructed, equipped PVPF Main Field Control Post and Ranger Outpost.
- Mapping of the Preah Vihear Protected Forest Management Zone categories is completed. Three sign boards have been erected to demarcate key entrances.



Mapping of the Preah Vihear Protected Forest Management Zone categories



H.E. Ty Sokhun, Director General of Forestry Administration and FA senior staffs visit the construction of Preah Vihear Forest and Wildlife Research Station funded through ITTO PD 289/04 Rev. 1 (F)



# Achievements of the project

In Cambodia:

- Target communities were organized to formulate **CLDP** project proposal, criteria, regulation and monitoring system, and evaluate the implementation of pilot activity fund in terms of sustainability. Three communities were established through election to facilitate project activities.
- Awareness raising activities have been carried out on a regular basis on Law on Forestry and related regulations, roles and responsibilities of local communities and authorities in the conservation and management of PVPF, the consequences of destruction and degradation and importance of PVPF to livelihood of local community in and around PVPF.
- Three community committee meetings were held and encouraged to facilitate community participation in the conservation of PVPF.
- Six Forestry Administration Officers at Cantonment, Division and Triage level were trained in basic GIS Mapping and Forest Management



Raising Awareness



Community Committee meetings



# Achievements of the project

## In Cambodia:

- A Rice Bank was constructed in Chaes village and originally stocked with over 16.5 tons of rice. All of the rice has been distributed to the local community in July-August, 2009. The Bank is being re-stocked during the December 2009 and January 2010 harvesting period with increasing 2,400Kg. About 1.2 tons of rice was sold with the total of \$370. The money with half of contribution from community members is used as credit.
- 2500 fruit trees seedlings with different species have been provided to 140 local families in the three target villages. Training on the techniques of planting and maintenance of seedlings was provided during distribution.
- Chicken raising has been initiated with 40 selected families in three target villages. Ten families in Chaes village, 20 Robonh and 10 in Chunh have received chickens. Training on keeping chicken and cage construction was provided during the distribution in each village. The number of chicken is accumulating.



**Rice Bank**



**Fruit Tree Seedlings**



**Chicken Raising**



# Achievements of the project

In Cambodia:



**Project staffs and eleven local community committee members from three target villages were trained on community based ecotourism through study tour in January 2010 to Dang Plet village in Chhep district where CALM project has supported the village with community based ecotourism development.**



**Ruin Temples, potential ecotourism and recreation sites are identified and mapped. Strategies, activities, action plan, workplan and estimated budget are described in details in the PVPF management plan.**



# Achievements of the project

In Cambodia:

- Cow Bank in two villages is being established. Selection of families to receive cow is underway. Draft of regulation to manage cow bank is initiated. Consultation with commune chief associated with cow bank was conducted.
- Five water wells ( two in Robonh, two in Chhunh and one in Chaes) were drilled. Three chalk boards were provided to Chhunh (1) and Robonh (2). 15 school tables have been provided to Robonh community and school wall in Chhunh village being renovated in Chhunh village.



**Water Pumping Well, village's children with water for bathing**



**Classrooms, chalk boards and desks provided to the community through PD 289/04 Rev. 1 (F)**





## Conclusions:

The achievements of the project were in harmony with the three specific objectives of the Project.

*The cooperation between Thailand and Cambodia was in favorable to the project, the PSC meetings were success, and the exchange of information and joint work were very satisfactory.*

*The PAs staff supported with more equipment and trainings paid more attention and more frequency in patrolling the areas and supply the project with more information on wildlife. The more frequency in patrolling the areas could yield in less illegal activities in the PAs.*

*The communities and stakeholders cooperate with the project and PAs staff and started to call for more meetings to share the conservation issues. Communities in the enclaved and the buffer zone participate and cooperate in the demarcation of the areas after being trained by the project, and also requested for more support in ICDP and CLDP pilot program.*



## **General conclusions:**

**From Final Evaluation of ITTO Project PD 289/04 Rev.1 (F)**

**Trans-boundary Cooperation has not succeeded as planned due to:**

- ✓ **Problems in project design leading to significant gap between planning and implementation;**
- ✓ **Laos has not joined the initiative as planned.**
- ✓ **Consequently the Project is more a community development than TBC initiative.**
- ✓ **Failure to establish a clear vision for TBC, with a scientific basis and adequate technical tools to enhance cooperation;**
- ✓ **The political context characterized by border dispute since 2008 disempowers technical levels.**

### **General lessons learned and success factors**

- ✓ **Good design is very important for the success of the project.**
- ✓ **There is an encouraging progress in cooperation at technical level.**
- ✓ **A TBC enabling vision is needed and should be established as early and as clearly as possible.**
- ✓ **Good technical capacity-building will be an important success factor in the future.**
- ✓ **The Project's community development activities have strengthened the TBC legitimacy and allowed its survival in a context of border dispute.**
- ✓ **ITTO and the PSC have played a key role.**

### **Some lessons learned and success factors: reasons of limited success in support to community development**

- ✓ **Insufficient baseline information; for Cambodia the scoping phase was skipped off.**
- ✓ **Good practices in planning and implementing rural development not adequately used (ex. SLA, rural banking, participatory project development, participatory M&E).**
- ✓ **Lower levels of forestry services not adequately empowered to implement grassroots activities.**





*“Conservation requires a sense of hope based on a strong vision for the future, this hope is strong in both countries.”*

*“The Project has survived the conflict thanks to good communication at technical level.”*

**Dr. James K. Gasana**  
Consultant, Bussigny, Switzerland





FA - Cambodia



RFD - Thailand



International Tropical  
Timber Organization

# ITTO Project PD 289/04 Rev.1 (F)

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and The Forestry Administration of Cambodia with ITTO support*