



***ITTO 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)”***

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***The 23<sup>rd</sup> Session of APFC, Bhutan  
11 June 2010***



International Tropical Timber Organization

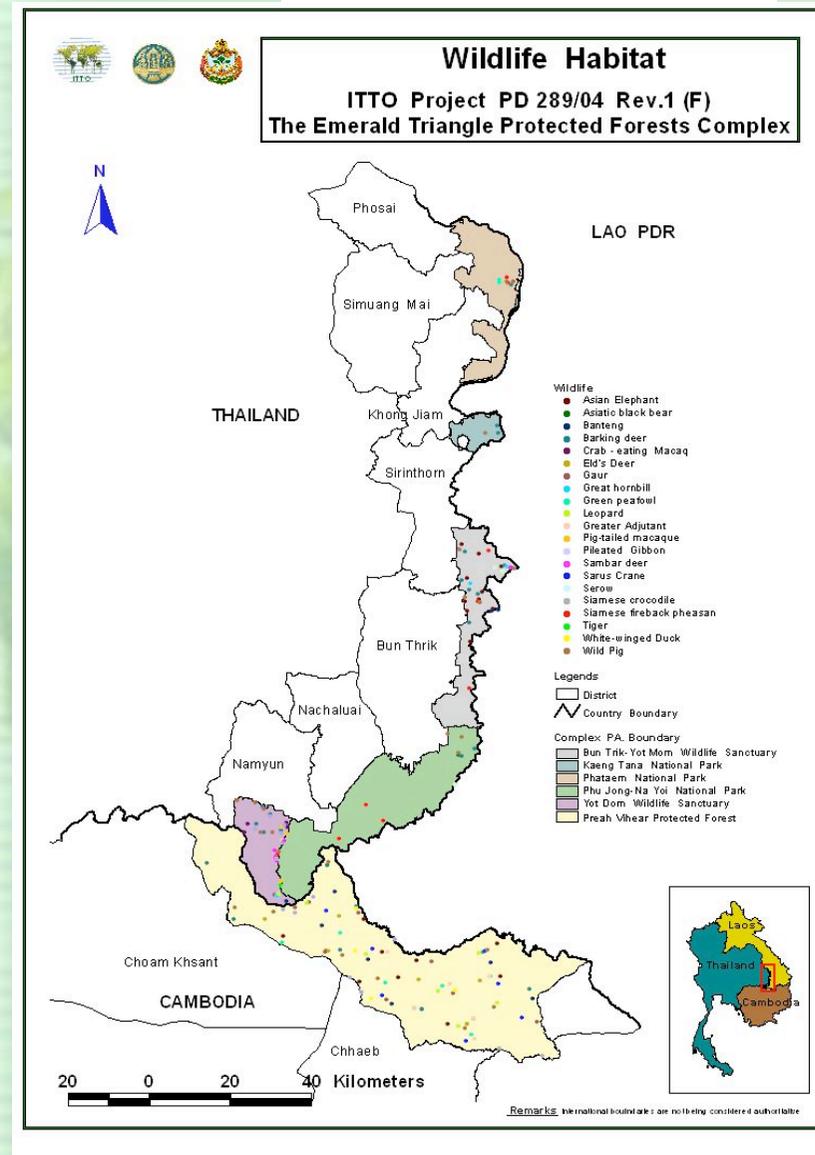


RFD - Thailand



FA - Cambodia

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





## Background

ITTO PD 15/00 Rev. 2 “*Management of the Pha Taem Protected Forests Complex to Promote Cooperation for Trans-boundary Biodiversity Conservation between Thailand, Cambodia and Laos (PPFC) Phase I*” **as a pilot project**

Implementation Period: 2001 – 2004

### ***Objectives:***

- Initiate cooperation among Thailand, Cambodia and Laos for trans-boundary biodiversity conservation
- Develop a management planning process for Pha Taem Protected Forests Complex in the framework of TBCA



## Background (cont.)

### Why PPFC/TBC ?

- Increasing pressure on biodiversity from trade in plants and animals across the borders and deminishing of habitat.





Background (cont.)

## Achievement and Conclusion of PPFC Phase I

**PPFC Phase I** was mainly implemented in Thailand

- Initiated cooperation for TBCA (CAM shows interest but Laos is reluctant)
- achieved a management plan of Pha Taem Forest Complex in Thailand.



## **Broader Scale of Cooperation on Trans-boundary Biodiversity Conservation**

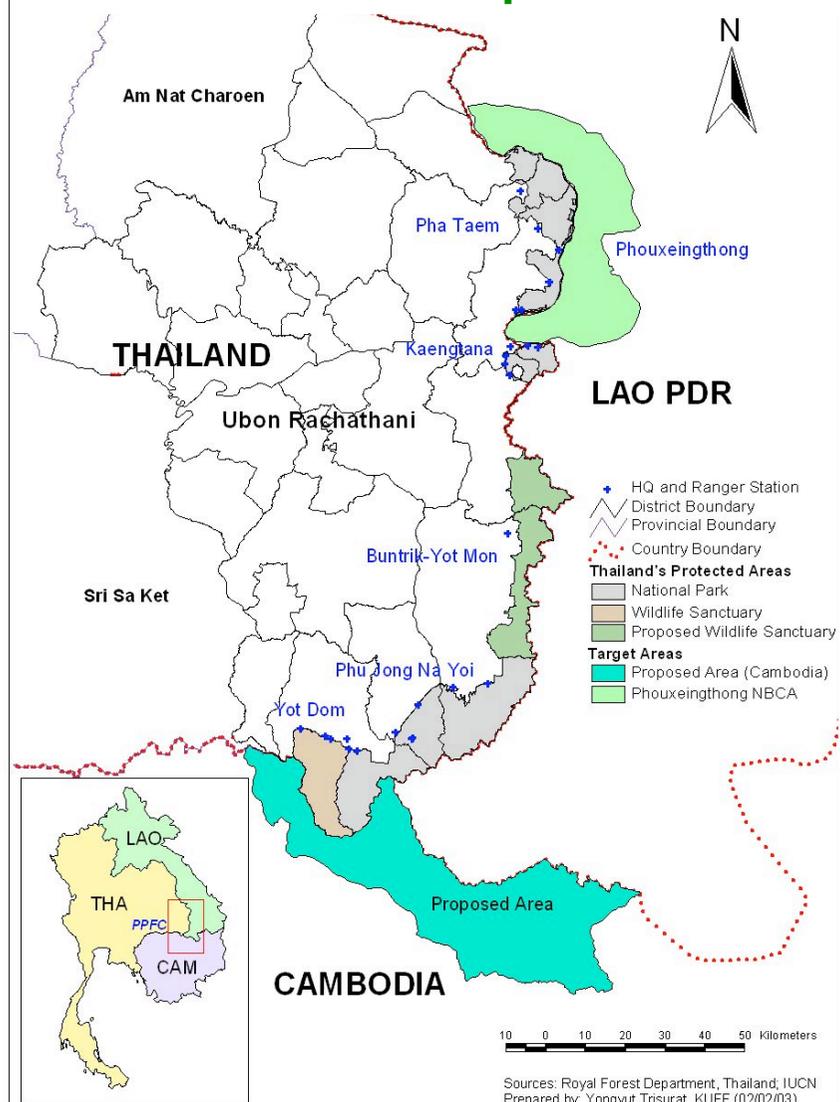
- **Thailand and Cambodia joint project proposal submitted to ITTO *"Management of the Emerald Triangle Protected Forest Complex to Promote Cooperation for Trans-boundary Biodiversity Conservation between Thailand, Cambodia and Laos (Phase II)"***
- **Implementation Period: 2008-2010**



- O b j e c t i v e s :**
- 1. Strengthening cooperation among 3 countries,**
  - 2. Enhancing protection measures and monitoring of the biological resources along tri-national b o r d e r s , a n d**
  - 3. Strengthening the involvement of local communities in sustainable use and management of natural resources in the buffer z o n e s .**



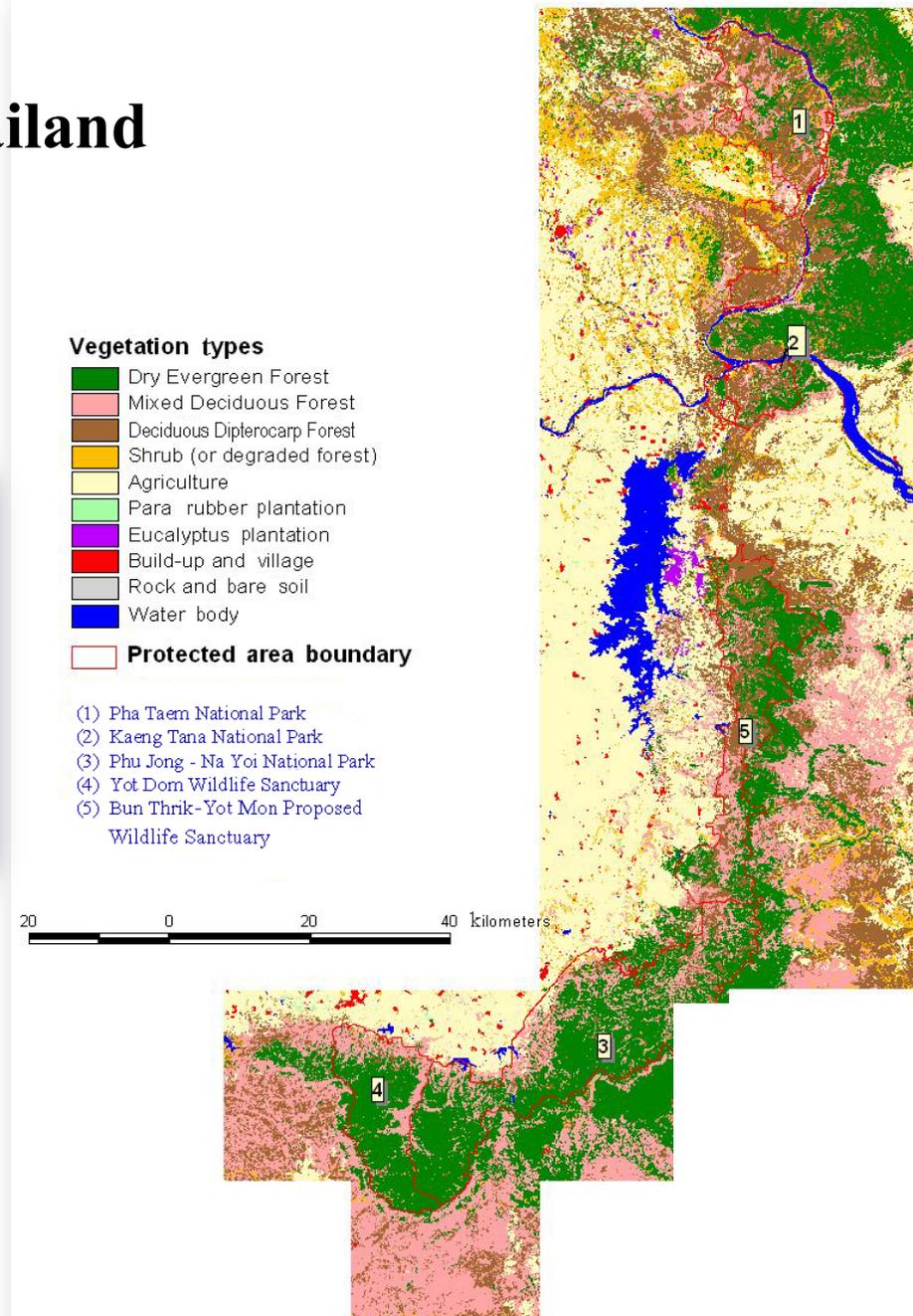
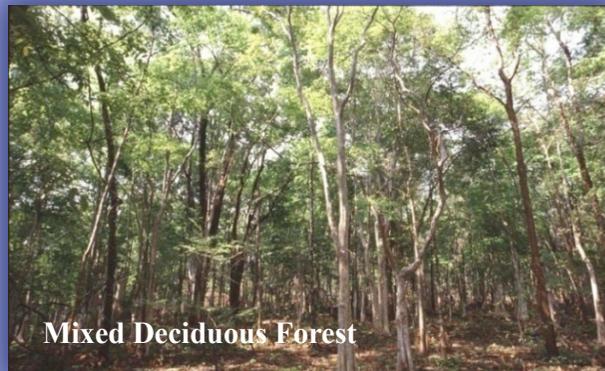
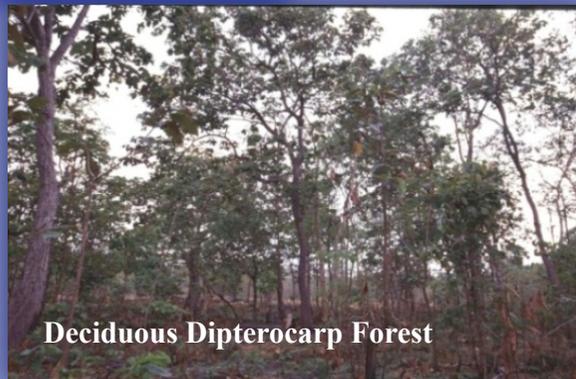
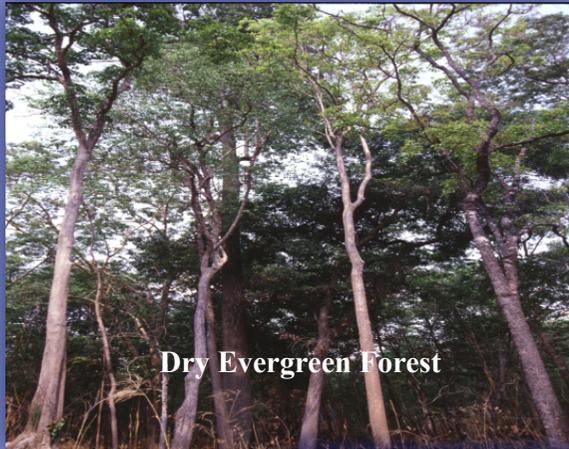
## Pha Taem and Emerald Triangle Landscape



Name	Area (km <sup>2</sup> )
Pha Taem NP	353
Kaengtana NP	84
Phu Jong Na Yoi NP	697
Yot Dom WS	235
Buntarik-Yot Mon WS	365
<b>Total</b>	<b>1,736</b>
Preah Vihear Protected Forest-Cambodia	1,900
Phou Xieng Thong NBCA - Laos	1,200

# The Forest Classification of the Project Areas

## Thailand



Source: Landsat-7/ETM+, Acquired 2002/02/20  
Prepared by: PPFC Project, Trisurat (2003)



Semi-Evergreen Forest



Dry Deciduous Forest during rainy season

# Cambodia



## Legend

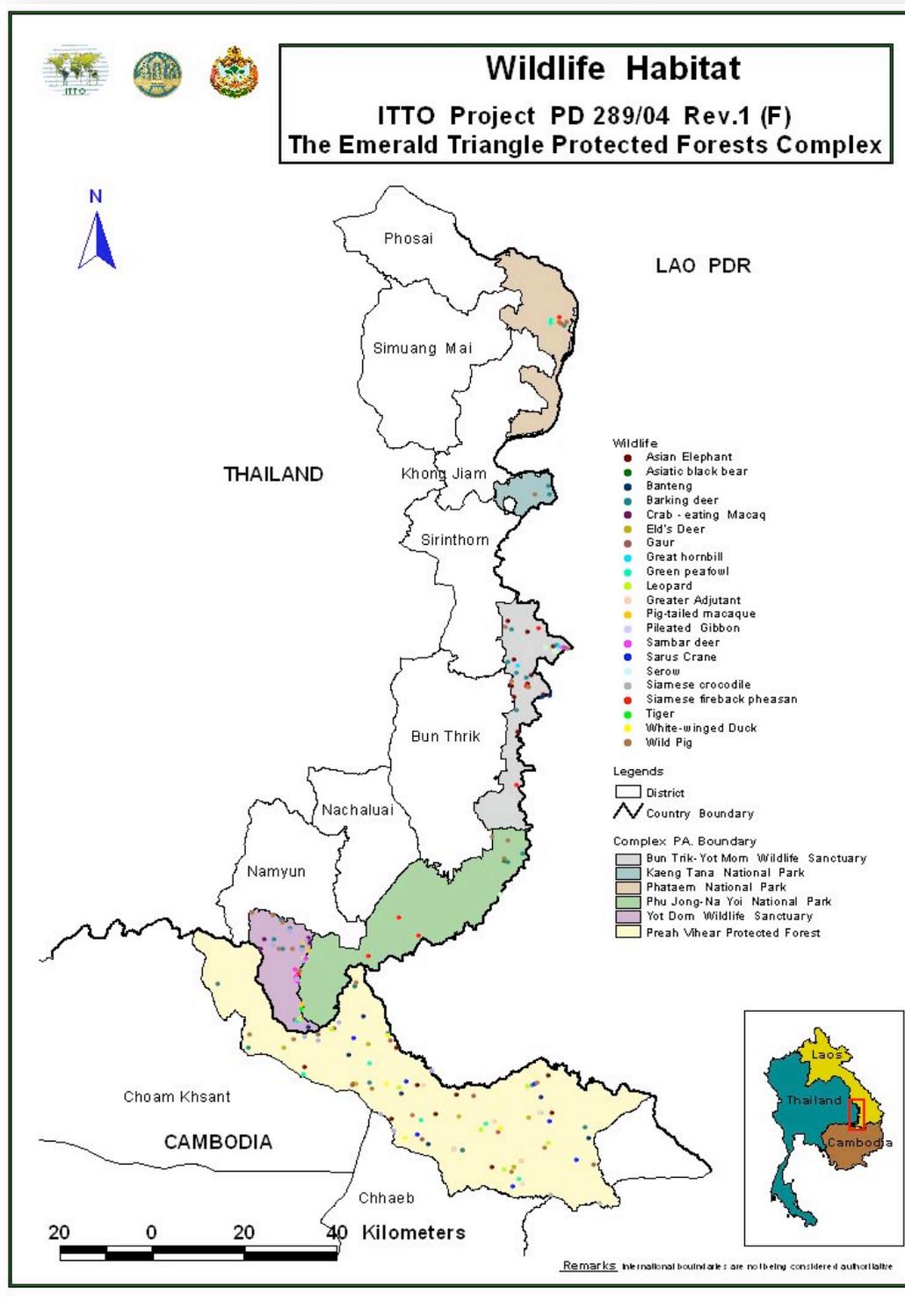
- |  |                             |  |                          |
|--|-----------------------------|--|--------------------------|
|  | Evergreen Forest            |  | Change of forest type    |
|  | Semi-Evergreen Forest       |  | Forest type stays same   |
|  | Deciduous Forest            |  | Non forest become forest |
|  | Other Forest                |  | Forest become non forest |
|  | Wood & Shrub land Evergreen |  | Non forest stays same    |
|  | Wood & Shrub land Dry       |  |                          |
|  | Non Forest                  |  |                          |
|  | Bamboo                      |  |                          |



## 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>		







# Wildlife

- 49 mammals
- 145 birds
- 30 reptiles
- 13 amphibians

## Focal wildlife species

- Elephant
- Leopard
- Banteng
- Sambar
- Serow
- Crocodile
- Macaque
- Pheasant

## Domestic species

- Buffalo
- Cattle





## Insects

- Edible and pollinating insects: 187 species, 130 genera, 45 families, 9 orders
- 48 species out of 187 species are edible
- Potential for commercial cultivation:
  - Metallic beetle (*Sternocera ruficornis*)
  - Red ant (*Oecophylla smaragdina*)
  - Tak Kra Tan Nuat San (*Patanga succincta*)
  - Malang Kra Chon (*Gryllotalpa africana*)
  - Malang Dana (*Lethocerus indicus*)
  - etc.



## Metallic beetle and products or souvenirs



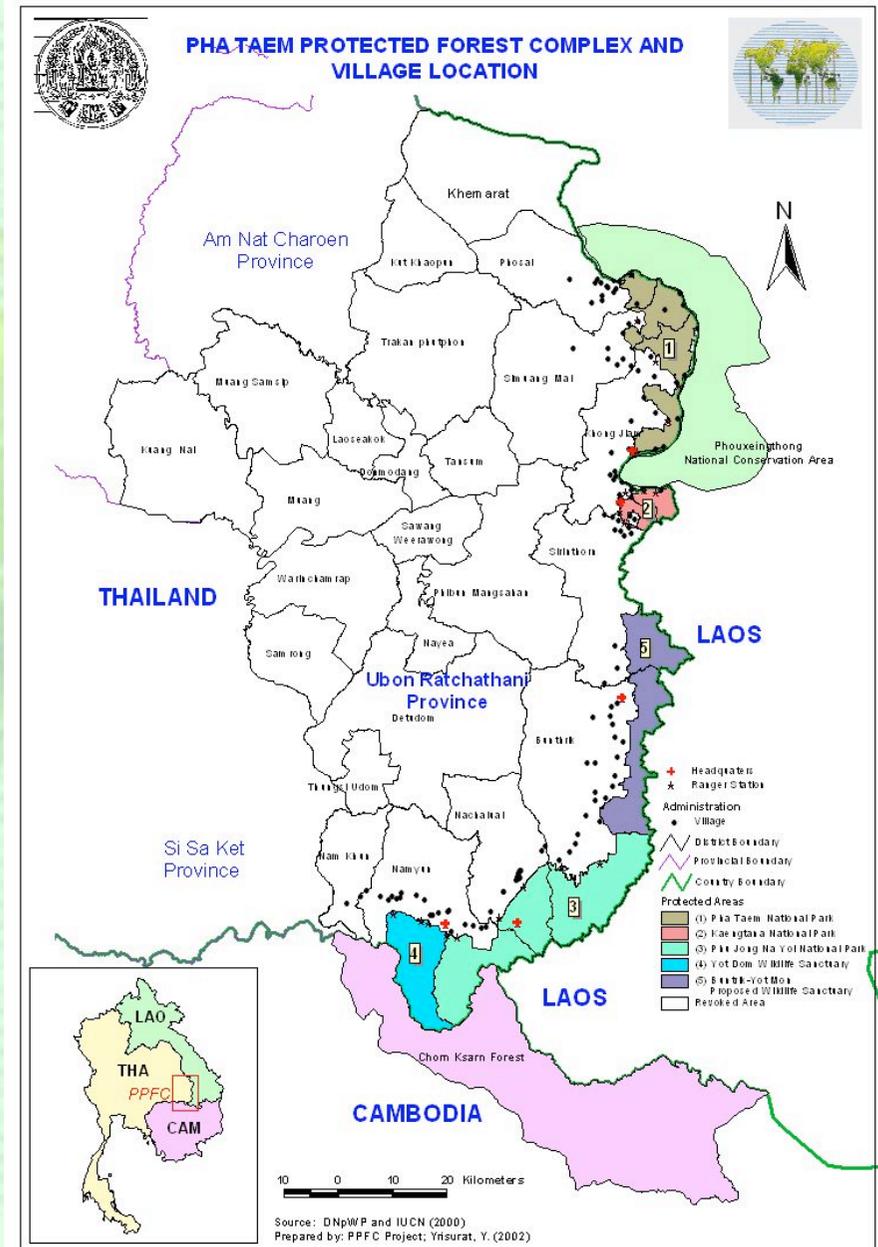
## Distribution of Communities in PA and Buffer Zone

Country	Protected Area	No. of Village	Total Pop.
Thailand	Pha Taem NP	28	17,870
	Kaengtana NP	7	3,333
	Phu Jong Na Yoi NP	26	16,155
	Yot Dom WS	16	14,187
	Buntrik-Yot Mon WS	5	3,505
		82	55,050
Cambodia	Preah Vihear Protected Forest	21	14,189



## Thailand

- 82 villages within 3-km buffer
- **4 villages** located inside Pha Taem
- Education – Pri.& Sec. school (70%)
- Occupations – agriculture & livestock
- Ann. HH income PFFC US\$ 668  
Poverty line US\$ 740
- GNP per capita THA: US\$2,160
- Illegal immigrants: 20-30,000 per yr.





# Outputs

## Objectives 1: Strengthening cooperation among 3 nations

- PSC meetings held
- Joint task force meetings between THA & CAM
- Changing of wildlife habitat exchange between THA&CAM
- Continue informal discussion with Laos





## Outputs (cont.)

### Objectives 2: Enhancing Protection Measure and Monitoring of the Biological Resources

- Thailand: Study on Wildlife, Insects, Vegetation, Socio-economic and GIS carried out.
- Cambodia: Management Plan was developed and endorsed by FA





## **Outputs (cont.)**

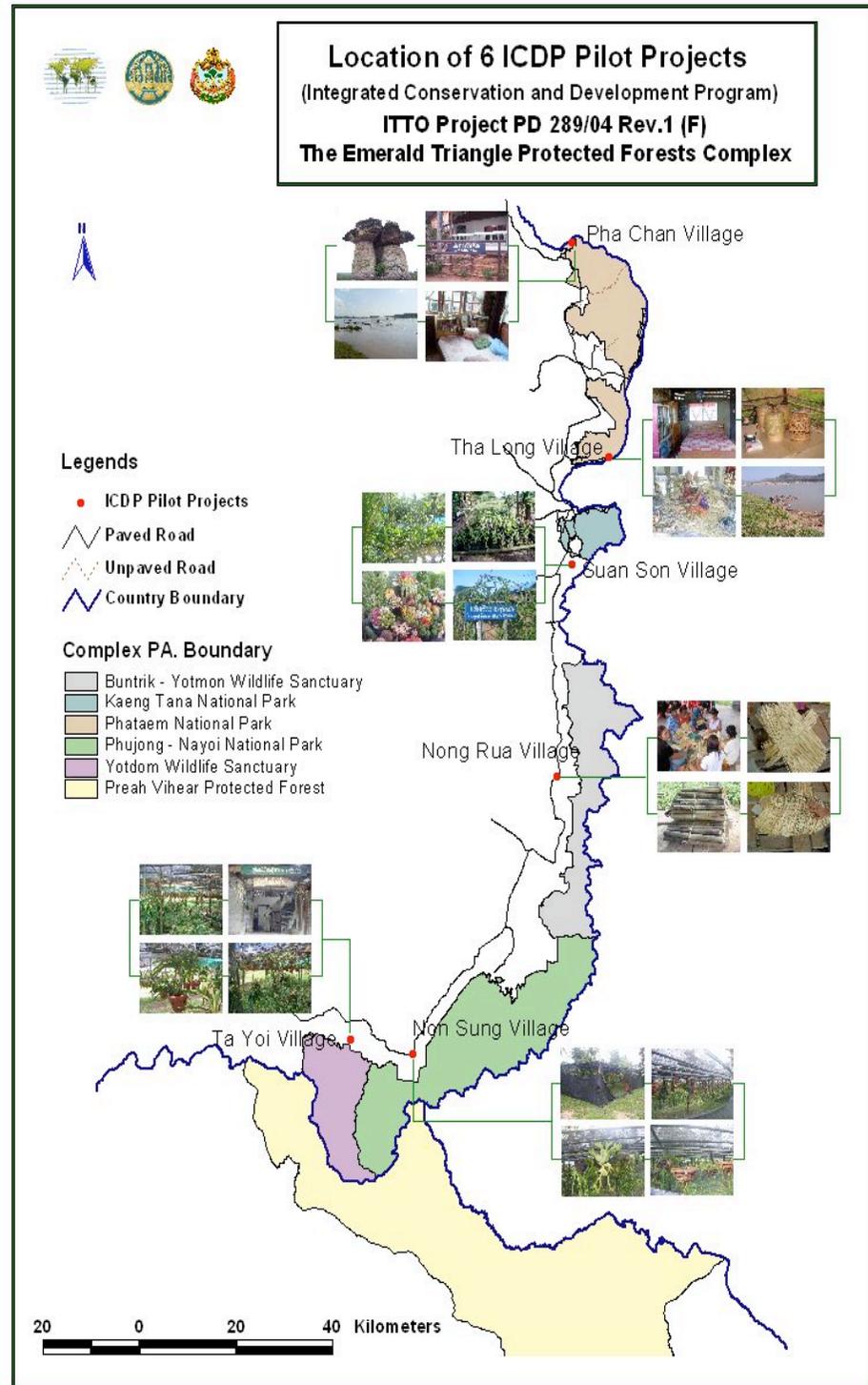
**Objectives 3: Strengthening the involvement of local communities in sustainable use and management of natural resources in the buffer zone**

- **Thailand:** 6 pilot villages were selected to join livelihood development activities related natural resources i.e. wild orchid propagation, cultivation of medicinal and edible forest species, eco-tourism, bamboo weaving, etc

# 6 Pilot villages selected

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.



# Thailand:



**Trainings**



**Workshops**



**Raising Awareness**



# Nature-Based Tourism Attractions Map

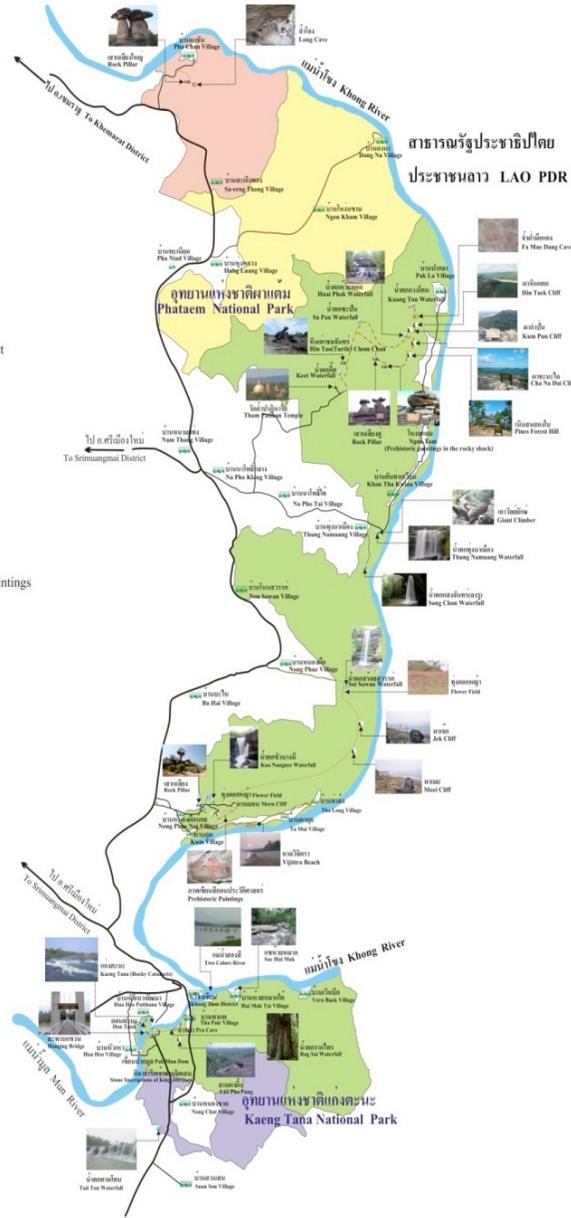
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The Emerald Triangle Protected Forests Complex



## สัญลักษณ์ Legends

- เขตอำเภอโพธิ์ไทร Phosai District
- เขตอำเภอศรีเมืองใหม่ Srimuangmai District
- เขตอำเภอโขงเจียม Khongjiam District
- เขตอำเภอสิรินธร Sirinthorn District
- หมู่บ้าน Village
- น้ำตก Waterfall
- เสาเฉลียง 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



## Outputs (cont.)

### Objectives 3 (cont.)

Cambodia: 6 villages selected as pilot villages to join livelihood development activities on rice bank, fruit orchard, chicken raising, cow bank, water wells, eco-tourism, etc.



Raising Awareness

# Livelihood Development Activities in Cambodia



Rice Bank



Fruit Tree Seedlings

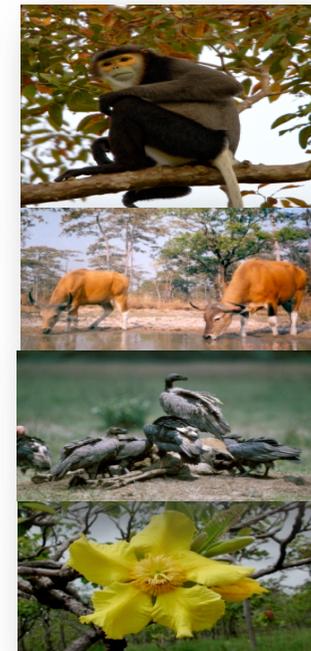


Chicken Raising

# Community Based Eco-tourism:



**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.**



## Constraints:

1. Laos has not joined the initiative since Laos is not ITTO member countries,
2. Border dispute since 2008 disempowers technical levels,
3. Insufficient baseline information from Cambodia side to share and exchange with Thailand during this phase
4. Sustainability of the activities.

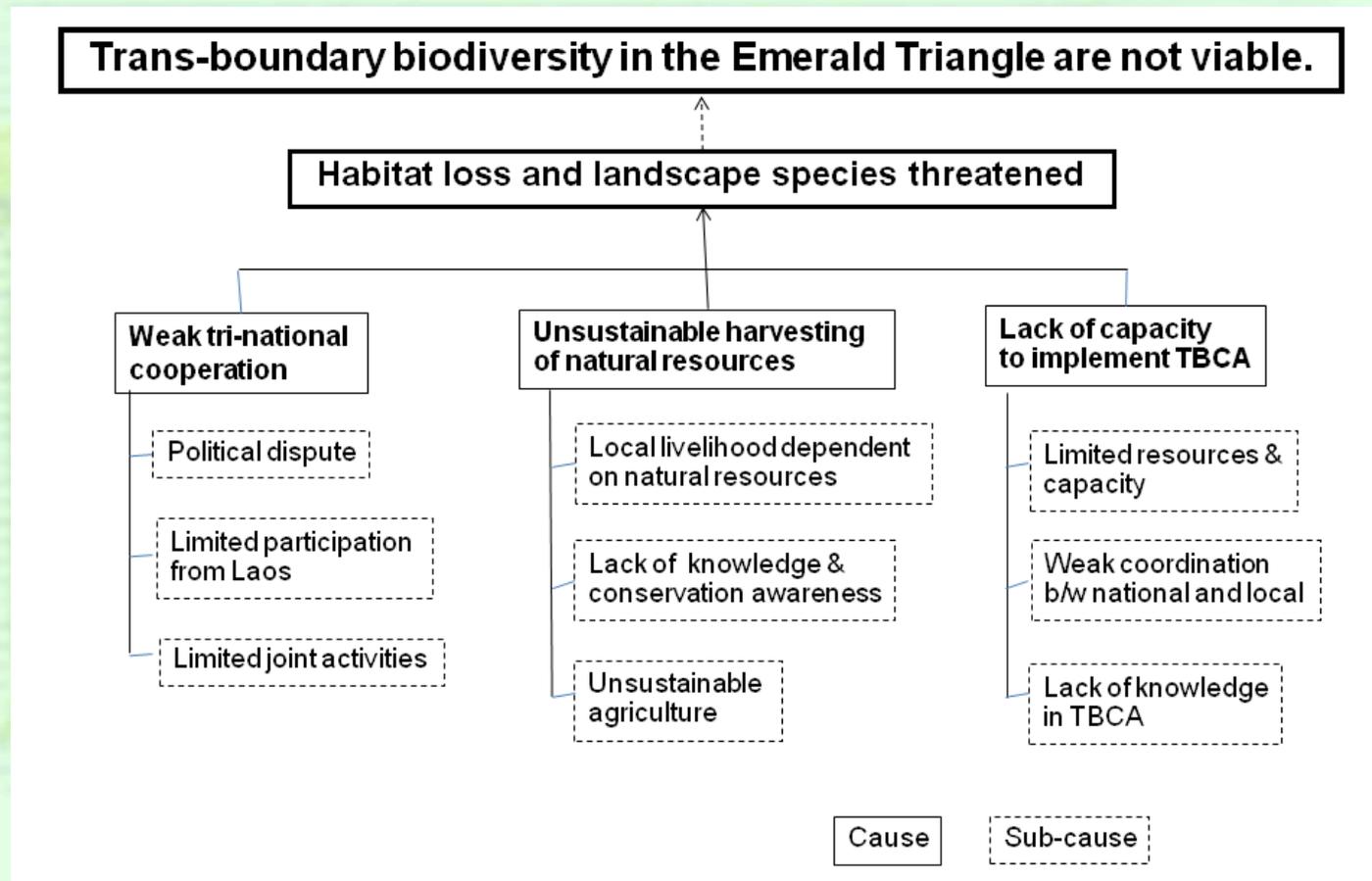


## **Lesson learned:**

1. TBC requires fully support from all participating countries at political level;
2. Level of problems/constraints/progress of each country varies from one country to others;
3. Participation of key stakeholders is one of essence to success, esp., local communities, etc.;
4. Continuation on the effort is needed for TBC sustainability.
5. ?

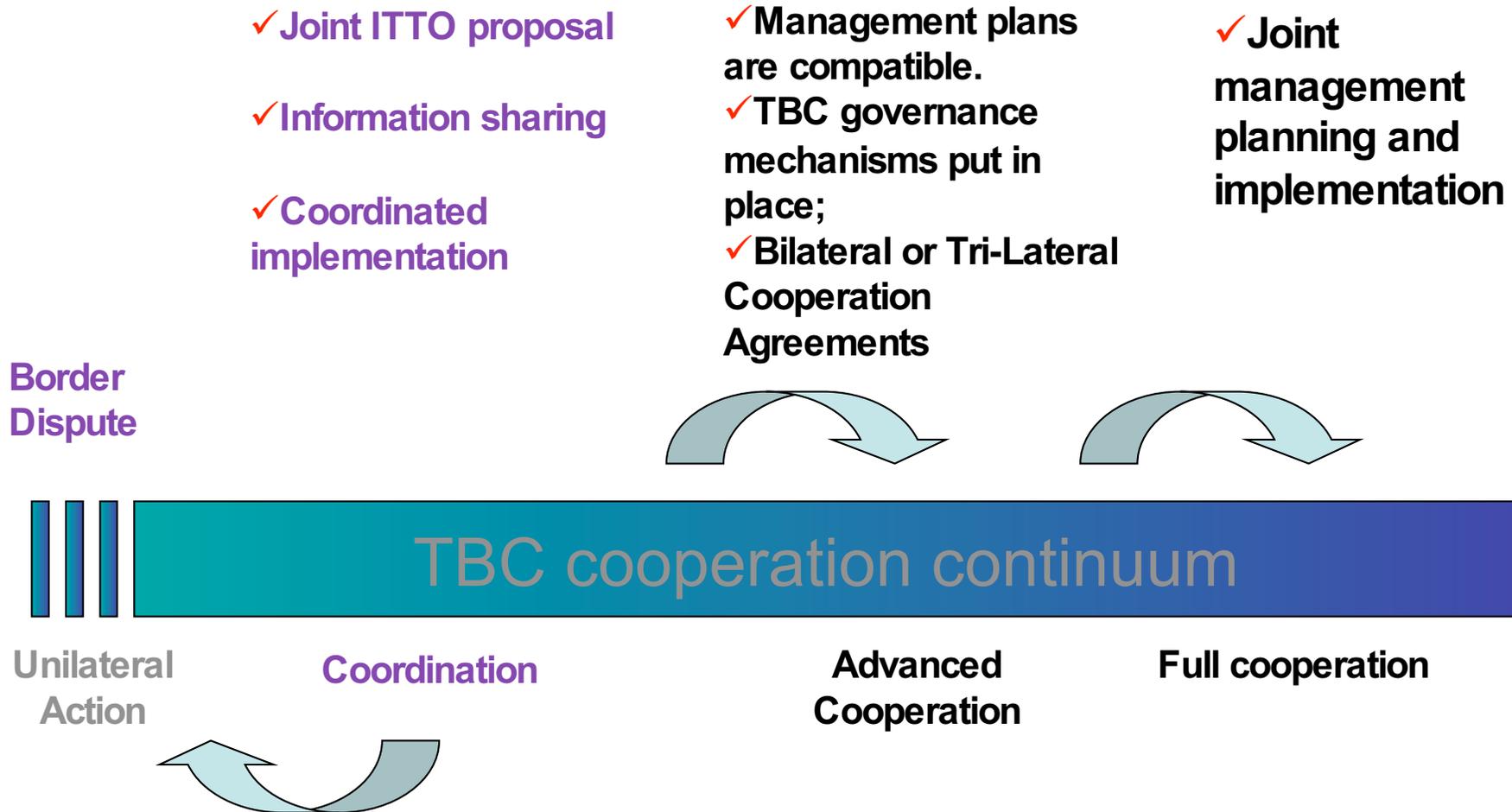


# Way forward: Thailand and Cambodia jointly develop Proposal Phase III to be submitted to ITTO



Problem Tree

# Where are we on the TBC cooperation continuum in the Emerald Triangle?





## Acknowledgements



THA



CAM



LAO

- ITTO: International Tropical Timber Organization
- Donor countries: Japan, Swiss, USA
- RFD and DNP, Thailand
- Forest Administration, Cambodia
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*Thank you*

*KADINCHHEY*

ขอบคุณ  
ครับ