



International Tropical Timber Organization
ITTO



Forestry Administration
FA

COMPLETION REPORT

(Cambodia Project Component)

Project Number:
ITTO Project PD577/10 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 III)”**

Host Government
THE GOVERNMENT OF CAMBODIA

Executing Agency
THE FORESTRY ADMINISTRATION OF CAMBODIA

Starting Date:
1 August 2012

Duration of Project:
36 months + 8 months 'No Cost' Extension

Project cost: US \$1,479,609

Forestry Administration, Phnom Penh, Cambodia
July 2016

COMPLETION REPORT

Project Number: ITTO Project PD577/10 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 III)” - Cambodia Project Component.

Starting Date: 1 August 2012

Duration of Project: 36 months + 8 months 'No Cost' Extension

Project Cost:

<u>Overall Project Costs</u>	<u>Sources of financing (US\$)</u>	
Implementation in Thailand:	ITTO	800,280
Government:		339,552
Implementation in Cambodia:	ITTO	1,250,759
Government:		<u>228,850</u>
Total ITTO:		2,051,039
Total Government:		<u>568,402</u>
Grand Total:		<u>2,619,441</u>

Type of Report: Completion Report

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Table of Contents

Executive Summary.....	iii
1. Project Identification	1
1.1 Context.....	1
1.2. Origin and problems.....	5
2. Project Objectives and Implementation Strategy	7
3. Project Performance	10
4. Project Outcome, Target Beneficiaries Involvement	68
5. Assessment and Analysis	75
6. Lessons Learned	77
7. Conclusions and Recommendations.....	77
Annex 1: Project financial statements (Cambodia)	80
Annex 2: Project cash flow statements (Cambodia).....	83
References	87

Executive Summary

The ITTO project PD577/10 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 III)”- was formulated at the end of Phase II. It was on the basis of the interim recommendations of the independent terminal evaluation of the second phase of the project (Gasana 2010) that the project Executing Agencies - the Royal Forest Department in Thailand and the Forestry Administration in Cambodia - jointly submitted a request to ITTO on 2 May 2010 to formulate a Phase III project proposal and this request was officially endorsed on May 21, 2010. That proposal was approved by the International Tropical Timber Council at the Forty-Sixth Session from 13-18 December 2010 and Phase III project activities were initiated in Cambodia on 1 August 2012 and in Thailand on 1 September 2012 for a period of three years.

The Development Objective of Phase III of the project was "To contribute to the conservation of trans-boundary biodiversity in the Emerald Triangle Protected Forests Complex between Thailand, Cambodia and Laos" and its Specific Objective was "To strengthen the protection of trans-boundary habitats of protected wide-ranging wildlife species in the Emerald Triangle."

Project interventions in Phase III were successful in strengthening ecosystem management by increasing the understanding of wildlife distribution patterns as a means of integrating trans-boundary biodiversity conservation efforts across the three participating countries. The sharing of research results and other related information was institutionalized, as well, across the trans-boundary region as the basis of the development of revised and updated protected area management plans and the formulation of sustainable management strategies to protect wildlife populations and reduce barriers to migratory wildlife movements throughout the cross-border region.

Project interventions were also extended to the improvement of local community livelihoods using the results of Sustainable Livelihood Assessments which were conducted in Thailand and Cambodia. Those actions were accompanied by an expansion of the most effective Integrated Conservation and Development Programs and Community Livelihood Enhancement program activities that were initially introduced in the second phase of the project.

Project interventions were also developed to ensure multi-stakeholder participation, particularly with respect to underscoring the involvement of Lao PDR in project activities, including the collection of baseline information on wildlife distributions, as well as participants in research on wide-ranging, landmark wildlife species in collaboration with the project teams in Thailand and Cambodia.

Project efforts also continued during Phase III to strengthen capacities of project staff, rangers, border patrol police, and local communities through the provision of training. The capacity-building strategies included hands-on-training and the sharing of lessons learned. The use of this approach was reflected in joint research activities conducted on landmark

wildlife distribution patterns in each of the three countries, which provided a practical platform for not only strengthening trans-boundary cooperation, but also developing effective training programs.

The situation after the completion of Phase III resulted in the increased sharing of management information and experiences between the three countries through joint research, training, workshops, and information exchanges; the development of revised and updated protected area management plans for the Pha Taem National Park in Thailand and the Preah Vihear Protected Forest in Cambodia (Cambodia Forestry Administration 2016b); the increased awareness among local communities of the contributions of trans-boundary biodiversity conservation; significant improvements in the livelihoods of local communities; and reduced encroachment of protected areas throughout the trans-boundary region.

There have been several lessons learned through the three phases of the project, the more prominent of which include the following:

- Each of the countries involved in a trans-boundary conservation initiative should participate in, and agree to, the development of a shared vision.
- The nature and extent of problems, constraints, and progress should be expected to vary irregularly across countries.
- Technical cooperation generally precedes political cooperation and much of the emphasis, particularly in the early stages of activities, should be directed to expanding technical cooperation between participating countries.
- The political support of every participating country is essential to the ultimate success of trans-boundary conservation.
- The participation of stakeholders and, in particular, local communities, is a necessary component for ensuring the longevity of on-going activities.
- The capacities and capabilities of stakeholders, especially government authorities and local communities, should be well-understood prior to developing training programs and organizing workshops.
- Efforts to raise the awareness of local communities, government officials, and others of the importance of conservation in trans-boundary conservation initiatives should be an on-going process.
- It is essential that the compatible management plans that are produced are shared with other relevant government agencies and departments.

Completion Report

ITTO Project PD577/10 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 III)”

Cambodia Project Component

.....

1. Project Identification

1.1 Context

The Royal Government of Cambodia (RGC) established the country’s current system of "National Protected Areas" in 1993 to conserve biodiversity. There was a decree 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 decree, the RGC, from 2002 to 2010, established twelve protected forests over an area of 1.6 million ha, including the Preah Vihear Protected Forest with an area of 190,027 ha.

On the completion of the initial phase of the project, which was primarily implemented in Thailand, the Governments of Thailand and Cambodia received additional funding through ITTO to enable them to implement the second phase of the project in the period from 2008 to 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 that second phase, which was executed in two Components, i.e., a Thailand Component and a Cambodia Component, included a) the conservation of the resources of Cambodia’s Preah Vihear Protected Forest in the project's trans-boundary conservation area; b) strengthened cooperation and increased interactions among the project's three participating countries; c) increased human resources capacity; and d) integration of a conservation and development program in Thailand and Cambodia in buffer zones and nature-based tourism interventions as a part of the efforts to increase livelihood opportunities for local communities.

Irrespective of the recognized critical importance of establishing and sustaining the impacts of project activities in promoting trans-boundary biodiversity conservation in the project's 'Emerald Triangle Protected Forests Complex,' there were several constraints limiting the achievement and affecting the sustainability of project objectives that were referenced in the final evaluation report for Phase II of the project. These were overlaid by external constraints associated with the limited participation of Lao PDR in project activities and sporadic border disputes between Thailand and Cambodia, which interrupted tri-national collaboration. In responding to those challenges, as well as the results of the 3rd Project Steering Committee (PSC) meeting organized in Bangkok on 17 November 2009, the Validation Workshop organized in Siem Reap, Cambodia on 2-4 April 2010, and the interim recommendation of the

independent final evaluation of the project, 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 21 May 2010. The proposal was approved by The International Tropical Timber Council at the Forty-Sixth Session from 13-18 December 2010 and Phase III project activities were initiated in Cambodia on 1 August 2012 and in Thailand on 1 September 2012 for a period of three years.

Project interventions in Phase III were designed to improve ecosystem management by increasing the understanding of wildlife distribution patterns as a means of integrating trans-boundary biodiversity conservation efforts across the three counties. The sharing of research results and other related information was also planned to be institutionalized across the trans-boundary region, as well, as a basis for developing revised and updated protected area management plans and formulating sustainable management strategies to protect wildlife populations and reduce barriers to migratory wildlife movements throughout the cross-border region.

Cambodia

Location and Extent of the Preah Vihear Protected Forest Complex

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, which is part of the Pha Taem Protected Forests Complex in Thailand, between latitudes 13°51'19" and 14°25'01" North and longitudes 104°51'42" and 105°47'04" East and has an area of approximately 190,000 ha. It also borders to the northeast the Dong Khanthung proposed National Biodiversity Conservation Area (NBPA) in Lao PDR, which covers 182,800 ha. The other protected area in Lao PDR included in the Emerald Triangle Protected Forests Complex (ETFC) is the Phou Xeingthong National Biodiversity Conservation Area, which is located east of Pha Taem National Park, and has an area of 190,000 ha. The cumulative area of the protected areas in the ETFC encompasses 666,200 ha (Table 1) (Figure 1).

Reserve	Area (ha)
Preah Vihear Protected Forest (Cambodia)	190,000
PhaTaem National Park (Thailand)	35,300
Kaengtana National Park (Thailand)	8,400
Phu Jong Na Yoi National Park (Thailand)	69,700
Yot Dom Wildlife Sanctuary (Thailand)	23,500
Buntriik-Yot Mon Wildlife Sanctuary (Thailand)	36,500
Dong Khanthung (Lao PDR)	182,800
Phou Xiengthong NBPA (Lao PDR)	120,000
Total	666,200

Table 1. Protected areas in the Emerald Triangle Protected Forests Complex.

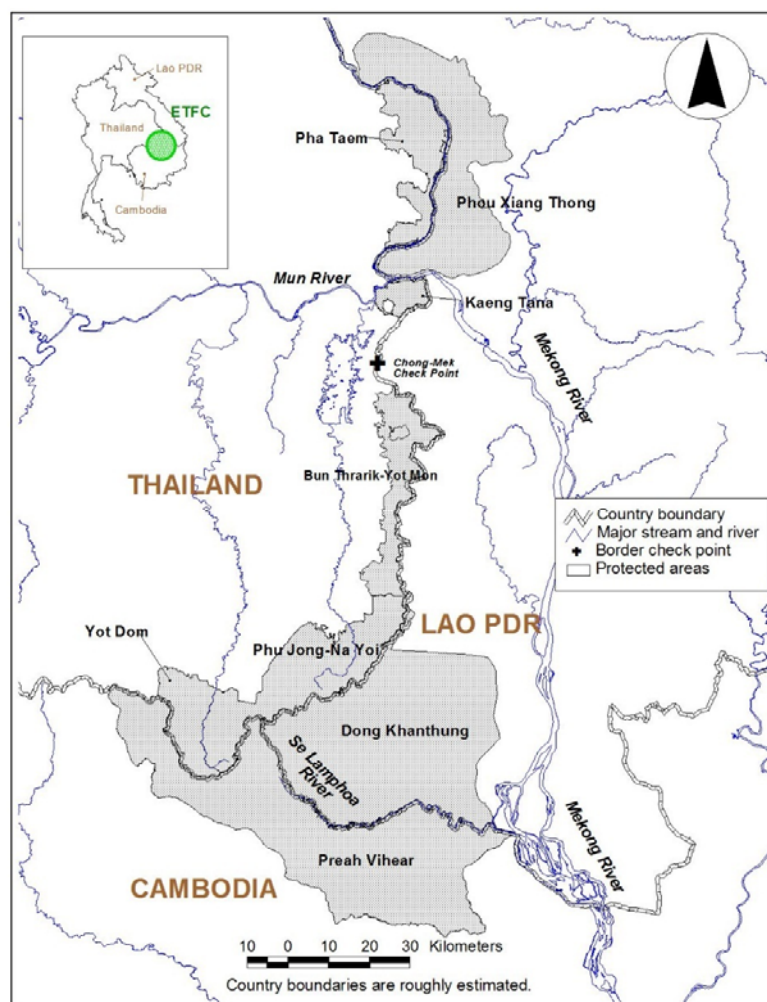


Figure 1. The eight reserves of the Emerald Triangle Protected Forests Complex.

National Conservation Policies

Forestry Law

The new Forestry Law was enacted in 2002 and implementing regulations for enabling it are regularly developed. The Forestry Law 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 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 in the country, as well as flooded forests and coastal mangrove areas. The administrative structure at the provincial level includes forestry cantonments, divisions, and triages.

The MOE administers its protected areas through its General Department of Administration for 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 Declaration on Forestry Sector Reform (22 October 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 (2010).

The 12 National Protected Forests that have been established in Cambodia cover 1.6 million ha of natural forests. These have management objectives of biodiversity conservation, watershed protection, climate change regulation, improvement of ecosystem functions, and sustainable uses by forest-dependent communities.

Cambodia's National Forest Program priority programs:

- Forest Demarcation and Registration;
- Forest Resource Management and Conservation;
- Forest Law Enforcement and Governance;
- Community Forestry;
- Capacity and Research Development; and
- Forest Financing and Climate Change.

The National Forest Program has established these nine strategic objectives:

- maximize sustainable forest contributions to poverty alleviation, enhanced livelihoods, and equitable economic growth;
- adapt to climate change and mitigate its effects on forest-based livelihoods;
- establish macro land use planning that allows for holistic planning across sectors, jurisdictions, and local government borders;
- ensure forest governance, law, and enforcement at all levels;

- develop a conflict management system;
- raise awareness, capacity of institutions, and quality of education to enable sustainable implementation of the National Forest Program;
- ensure environmental protection and conservation of forest resources;
- apply modern sustainable management models adaptive to changing contexts; and
- develop sustainable financing systems for sustainable forest management.

International Conventions

Cambodia has committed to five international conventions related to the environment and conservation, including the Convention on Biological diversity (1996), the United Nations Framework Convention on Climate Change (1996), the Convention on Marine Pollution (1996), RAMSAR (1999), and the Convention on International Trade in Endangered Species-CITES (1997). It is also a member state of the United Nations Educational, Scientific and Cultural Organization, or UNESCO (1951), and a party to the “ASEAN Agreement on the Conservation of Nature and Natural Resources.”

1.2. Origin and problems

The protected areas of the ETFC comprise habitats of diverse wildlife species. Large mammal species, such as the wild elephant, banteng, and tiger, are observed along the national borders and seasonally migrate across the tri-national boundaries (Bhumpakphan 2015). Cambodia has some of the most extensive unfragmented natural forests in Southeast Asia and the northern plains contain considerable numbers of globally threatened and endangered species. Indeed, the area is either a last refuge for, or maintains important populations of, 23 Critically Endangered and Endangered species from the International Union for the Conservation of Nature (IUCN) Red List (Cambodia Forestry Administration 2016a).

It is as the result of the highly seasonal nature of the environment, however, that landmark wildlife 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 that was encountered in the third phase of the project was 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 and the increased threat to the functioning of ecosystem at the landscape level. The root causes of that problem at the start of this phase of the project were (a) the limited capacity to implement compatible trans-boundary conservation management plans; (b) inadequate tri-national trans-boundary conservation cooperation; and (c) unsustainable harvesting of natural resources by local communities.

- **Limited capacity to implement compatible trans-boundary conservation management plans**

There were recognizable gaps associated with the skills and capacities required to manage protected areas between the participating countries. Cambodia, but more especially Lao PDR, lacked sufficient capacity to manage and plan biodiversity conservation effectively at every level of management, but especially at the local level. Protected area staff at central, but particularly local levels, had limited access to training; management budgets were often

constrained; and there were few rangers in the field. These obstacles impacted the effectiveness of patrolling and law enforcement to reduce forest encroachment, illegal poaching, and the illegal trade in wildlife along protected border areas. Capacity building, thus, was an important issue that had to be effectively addressed in Phase III of the project.

In order to strengthen capacities at the local level in this phase of the project, training programs had to be established and delivered and coordination between central offices and field offices had to be more effectively coordinated to support the effective implementation of Phase III project activities. Efforts to increase the project involvement of decision-makers in the Department of National Parks, Wildlife and Plant Conservation, which has the primary mandate in Thailand to manage protected areas, also had to be extended..

- Inadequate tri-national trans-boundary conservation 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 initial stages in Phase I of the project, in which Thailand established a scoping process to encourage international cooperation, through Phase II, in which international cooperation on trans-boundary conservation issues between Thailand and Cambodia were started. The final Phase II evaluation (Gasana, 2010) indicated, however, that there were still two especially difficult challenges that had to be overcome if the complete development of the project's conceptualization of international cooperation was to be realized in Phase III.

The first of those challenges involved the participation of Lao PDR in the project. While its representatives had attended several project meetings, Lao PDR had 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 Protected Forests Complex had 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 participating countries to conserve trans-boundary biodiversity. Project efforts were, therefore, 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 involved the irregular border disputes between Thailand and Cambodia, which had heightened political tensions and interrupted tri-national collaboration at the policy-making level. It was, thus, imperative that there would continue to be strong engagement at technical and managerial levels, as well as extended collaboration at local, district, and provincial political levels, in Phase III 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 Protected Forests Complex have been living under the poverty level and relying on natural resources for their subsistence. This has been 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 has been derived from the demand for bush meat, which is an important source of protein for rural households (Trisurat 2003).

The illegal trade of wild animals, as well as plants, has also been observed at border checkpoints between Thailand and Lao PDR. Local people who have collected edible plants, moreover, have often burned areas of dry dipterocarp forests to stimulate young shoot rejuvenation and the application of scientific research was essential to raise local awareness of the relationships between forest fires and the sustainable management of deciduous tropical forests.

These difficulties were likely to continue apace throughout the Emerald Triangle Forests Complex because local people have been using forest resources for many generations unless the project ensured in Phase III that there would be alternative activities available to supplement local community incomes, strict protection measures and proper land-use planning were enforced, and bilateral meetings were organized between Thailand and Cambodia to coordinate efforts to diminish these illegal cross-border actions (Trisurat 2007).

2. Project Objectives and Implementation Strategy

i) Project Objectives

- Project Rationale

Thailand had initiated the first phase of the project by recognizing the potential benefits, as well as challenges, associated with cooperating with neighboring countries in coordinating efforts to conserve biodiversity in trans-boundary protected areas. It had envisaged the establishment of conservation initiatives in selected protected areas through which neighboring countries would be invited to collaborate in those coordinated efforts. It understood the critical importance of protecting landscape wildlife species, including rare and endangered species, in those areas from illegal hunting and poaching. It recognized that the protection of critical wildlife habitats and corridors of migration offered exceptional opportunities for collaborative efforts in trans-boundary biodiversity conservation and the control of the illegal trade in plants collected from protected areas. It understood, too, that since trans-boundary cooperation for biodiversity conservation must recognize the importance of cross cultural ties of local people on both sides of borders, efforts had to be made to avoid management practices that would constitute threats to that diversity.

- Development Objective

The 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 the end of Phase II Validation Workshop.

The Development Objective of Phase III of the project was "To contribute to the conservation of trans-boundary biodiversity in the Emerald Triangle Protected Forests Complex between Thailand, Cambodia and Laos." It was expected that the collective experiences and lessons learned with the completion of this phase of the project would be used as a forerunner of other trans-boundary conservation areas in participating countries, as well as throughout the Greater Mekong Sub-region.

The long-term impact indicators of the Development Objective were that:

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

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

- **Specific Objective**

The Specific Objective of Phase III of the project was "To strengthen the protection of trans-boundary habitats of protected wide-ranging wildlife species in the Emerald Triangle."

The outcome indicators of the Specific Objective were that:

- Information would be collected and exchanged between the three countries on wildlife distributions and applied in joint research activities.
- Maps indicating the habitats of wide-ranging wildlife species would be produced.
- Capacities of park officials and management staff throughout the trans-boundary conservation area would be increased.
- Livelihoods of local communities would be enhanced.

ii) Project implementation strategy

Implementation strategies in the third phase of the project were directed to the harmonization between Thailand, Cambodia and Lao PDR of guidelines for management planning and the implementation of several joint ecological monitoring activities. Within that broad structure, planned research on wide-ranging wildlife species would continue in Thailand and Cambodia and be extended to Lao PDR. The sharing of information would be institutionalized between the three countries, as well, as a basis for formulating sustainable management strategies to conserve forest resources, improve carbon sequestration and increase carbon stocks, protect wildlife populations, and reduce barriers to migratory wildlife movements along the tri-national borders, which would contribute collectively to the forest-related Aichi Targets 2020 developed through the Convention on Biological Diversity (CBD). The implementation of the third phase of the project under the ITTO/CBD Collaboration on Tropical Biodiversity Conservation with support from the Government and the people of Japan would not only strengthen regional cooperation and enhance monitoring and conservation interventions, but would also mobilize support and strengthen the collective political will to maintain the common natural heritage of the three countries participating in the project. It would also promote understanding and peace in the region and improve rural community livelihoods and economic prosperity on all sides of the Emerald Triangle Protected Forests Complex.

iii) Assumptions and risks

The ultimate success of the project in all of its phases has depended 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 structure to guide the establishment of an appropriate policy environment for the planning and execution of trans-boundary agreements. The participating countries, moreover, have ratified a number of international conventions related to biodiversity and the environment and each country is committed to the United Nations Millennium Development Goals and Sustainable 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 was that the executing agencies – the Royal Forest Department in Thailand and the Forestry Administration in Cambodia - would provide qualified staff to participate in project activities, both at national and local levels, especially with regard to the collaborative research that was planned to be conducted on wide-ranging wildlife species distribution. It was also assumed that in Thailand the Department of National Parks, Wildlife and Plant Conservation, which has direct responsibility to manage protected areas, would assume greater leadership in project implementation. It was anticipated, as well, that the involvement of development NGOs and other donors to sustain livelihood enhancement activities in Thailand and Cambodia would increase the incomes of local communities and reduce their dependence on natural resources.

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

- Lao PDR might still not be compelled to participate in project activities. This was an external risk that was essentially beyond the control of the project, but concerted efforts were made in Phase III to mitigate its potential impacts by providing several opportunities for Lao PDR to participate in “soft” collaborative research activities. Those opportunities were extended to smooth the pathway for their anticipated full participation in Emerald Triangle Protected Forests Complex trans-boundary conservation activities subsequent to their securing official membership in the 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, would be too concerned to visit project sites. These were also external risks over which the project had little or no control, but their impacts were mitigated to some extent by understanding that their occurrences are irregular and oftentimes transitory and project efforts were redoubled during those periods that they were inactive.
- The government agencies responsible for executing Phase III of the project in Thailand and Cambodia might be unable to provide sufficient incentives for staff to commit themselves to the project or the Department of National Parks, Wildlife and Plant Conservation 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 were also external risks over which the project had little or no control. Its impacts were mitigated to some extent, however, by ensuring that the most industrious, responsible and committed staff of those agencies were assigned to the project.
- Significant infrastructure might be developed under the GMS Economic Corridor Development program, which would fragment and damage critical ecosystems in the Emerald Triangle Protected Forests Complex. This was also an external risk over which the project had little control, but its impacts were 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 livelihood enhancement activities, but would rather cling to clearing forest to support unsustainable agricultural practices. The impacts of this risk were mitigated by the establishment of screening procedures intended to exclude more disinterested

communities as part of the Sustainable Livelihood Assessments that were 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 were mitigated by ensuring that the livelihood enhancement activities responded to local communities' income requirements, as reflected in the Sustainable Livelihoods Assessments that were 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 were mitigated by recognizing that impediments such as these are not necessarily uncommon, anticipating the timing of their occurrences, and redoubling efforts during more productive periods of project implementation to ensure that the activities that were described in the work plan were implemented as envisioned to the greatest extent possible by the close of Phase III of the project.

3. Project Performance

- (a) Specific Objective – There were no substantial differences between planned and realized project elements in the Specific Objective, which was "To strengthen the protection of trans-boundary habitats of protected wide-ranging wildlife species in the Emerald Triangle."
- (b) Outputs and related activities – There were no substantial differences between planned and realized project outputs. There were two supplemental activities (A. 1.9.1 and A. 1.9.2) that were inserted into Input 1, however, as recommended at the 4th PSC meeting organized on 9 July 2014.

The listings of meetings, trainings, and workshops are summarized in the tables that are provided at the end of the following descriptions of the Cambodia Project Component project activities.

Activity 1.1: Revise and establish a Project Steering Committee (PSC) and strengthen the National Coordinating Office (NCO) and Project Management Team (PMT) for the Trans-boundary Conservation Area in accordance with ITTO rules.

- 1.1.1 Recruit a Project Manager, Field Manager, Accountant and Administration Officer, and local and field staff. Subsequent to receiving an NOL from the ITTO, a Project Manager, Forest Land Use Planning and Field Manager, Accountant and Administration Officer, GIS Specialist and local support staff were recruited and started their assignments. ITTO provided an NOL to engage a replacement Forest Land Use Planning and Field Manager, who had resigned from the project for personal reasons on 1 January 2013. A Community Livelihood Development Officer and four field research assistants started their assignments with the project in May 2013.
- 1.1.2 Prepare contracts with TORs for key project staff and TORs for the PSC and the PTC. TORs and contracts were prepared for key project staff and TORs were prepared for the PSC and the PTC.

- 1.1.3 Designate PSC/PTC members. The PSC and PTC were formulated and assigned by the Forestry Administration in consultation with the ITTO and JICA.
- 1.1.4 Recruit Specialists/Consultants. Several Specialists, including a Forest and Biodiversity Conservation Officer, Plant Nursery Establishment Specialist, and Technical Advisor on Livelihoods and Natural Resource Management were recruited.
- 1.1.5 Select an auditor for the project. The ITTO and JICA provided NOLs on November 26, 2012 with regard to the selection of PricewaterhouseCoopers (Cambodia) Ltd., an international accounting company, as the project auditing firm for the Cambodia Project Component. PricewaterhouseCoopers contracted with the project to start the audit of the Cambodia Project Component on February 13, 2013 and the first project audit report covering the period from 1 August to 31 December 2012 was submitted to the ITTO on 10 July, 2013.

Activity 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 Preah Vihear Protected Forest (PVPF) annually.

- 1.2.1 Organize the project launching ceremony on the commencement of the implementation of the project. The project launching ceremony was organized in Phnom Penh, Cambodia on 1 October 2012 according to the schedule recommended by the ITTO.



Group Photo of the Project Launching's Honorable Guests and Distinguished Participants.



Presentation of General Project Overview and ITTO's Biodiversity Conservation-related initiatives at the Project Launching.

- 1.2.2 Prepare a project brochure. The designs of project posters, the project brochure and other display materials were prepared and the project brochure was distributed widely during project implementation. The project posters and other display materials were distributed to the Preah Vihear Forestry Administration Cantonment, Preah Vihear Protected Forest office and the Thailand Project Component and were displayed at the 'National Conference on Forest Biodiversity and the Conservation of Carbon Stocks in the Permanent Forest Estate' and the 'Regional Conference on Biodiversity Conservation in the Tropical Forests of the Greater Mekong Sub-region' that were organized on 16-18 December 2015 and 23-25 March 2016, respectively, by the Cambodia Project Team.

1.2.3 Organize the Project Steering Committee (PSC) meeting. The 1st PSC meeting was conducted in Phnom Penh, Cambodia on 2 October 2012; the 2nd PSC meeting was organized in Bangkok, Thailand on 1 May 2013; the 3rd PSC meeting was organized in Bangkok, Thailand on 9 December 2013; the 4th PSC meeting was organized in Siem Reap, Cambodia on 9 July 2014 to coincide with the National Arbor Day ceremony and the inauguration of the Preah Vihear Forestry Administration Cantonment headquarters building constructed using project funds; the 5th PSC meeting was organized in Ubon Ratchathani, Thailand on 22 February 2015; and the 6th PSC meeting was organized in Phnom Penh, Cambodia on 24 July 2015.



The 6th Project Steering Committee meeting at the Phnom Penh Hotel, Phnom Penh, Cambodia organized on 24 July 2015.

1.2.4 Organize PTC meetings. The 1st Joint Project Technical Committee (PTC) meeting was organized in Phnom Penh, Cambodia on 2 October 2012; the 2nd PTC meeting was organized in Bangkok, Thailand on 8 December, 2013; the 3rd PTC meeting was organized in Siem Reap, Cambodia on 9 July 2014 to coincide with the National Arbor Day ceremony and the inauguration of the Preah Vihear Forestry Administration Cantonment headquarters building constructed using project funds; the 4th PTC meeting was organized in Ubon Ratchathani, Thailand on 22 February 2015; and the 5th PTC meeting was organized in Phnom Penh, Cambodia on 24 July 2015.



The 3rd Joint Technical meeting organized in Siem Reap province, Cambodia on 8-9 July 2014.

1.2.5 Organize Task Force meetings. There was a Special Task Force meeting organized to endorse the Sixth Project Progress Report and the 'Proposal for a Project No Cost Extension' from 1 August 2015 to 31 March 2016 that were presented in the Project Technical Committee and 6th Project Steering Committee meetings that were conducted in Phnom Penh, Cambodia on 24 July 2015.

Activity 1.3: Conduct analyses of land use and land cover changes and on the basis of those analyses develop preliminary estimates of changes in carbon stocks in the Preah Vihear Protected Forest.

- 1.3.1 Conduct an assessment of land use in the Preah Vihear Protected Forest. Site assessments were conducted to document land uses and the current situation associated with wildlife species and habitats and training was provided to four student researchers from the Prek Leap National School of Agriculture and the Royal University of Agriculture, Chamkardong, in the process of conducting their 'thesis' research with support under the project. There were land use assessments conducted in 13 villages in the Preah Vihear Protected Forest, including 4 villages in Teuk Kraham commune, 7 villages in Morokot commune, and 2 villages in Chaom Ksan commune in Chaom Ksan district. Participatory mapping approaches were used to compile local knowledge on the current status of land uses.
- 1.3.2 Conduct an assessment of carbon stocks in the Preah Vihear Protected Forest. Preliminary estimates of carbon biomass stocks in evergreen, semi-evergreen and deciduous forests in the Preah Vihear Protected Forest were completed and a report was prepared to include as one of the chapters in the ITTO-Convention on Biological Diversity (CBD) technical series publication. There were 78 plots randomly established in three forest types to initiate measures of carbon stocks prior to a more extensive assessment of the practicability of establishing REDD+ activities in the PVPF.
- 1.3.3 Conduct analyses of land use and land cover changes. The ground truthing of 280 satellite imagery interpretation sample points in the Preah Vihear Protected Forest was completed as part of the assessments of land use and land cover changes. Of the 280 points, 266 were correct, representing an accuracy of the forest cover classification of 95%. The results of the land cover change analysis reflected a loss in forest cover from 97.62% in 2002 to 91.11% in 2014, equivalent to an average annual deforestation rate of 0.715% compared to a country-wide annual deforestation rate during the same period of time of 1.055%. In order to maintain the same percentage of forest cover in the Preah Vihear Protected Forest as it was in 2002 would require 12,370 hectares of non-forest land to be converted to man-made forest tree plantations and agroforestry areas.



The use of a drone to capture aerial photos of land encroachment and the ground truthing of land cover changes in the Preah Vihear Protected Forest.

- 1.3.4 Consult with stakeholders on land uses, land cover changes and carbon stocks in the PVPF. Consultation meetings involving 114 participants were conducted with commune councils, local communities, Forestry Administration officials and other relevant stakeholders on 2-4 February and 28 May 2015 to discuss

land cover change scenarios, the impacts of land use changes on biodiversity, and community use areas in the Preah Vihear Protected Forest.

- 1.3.5 Prepare and publish reports of land-use, land cover changes and carbon stocks in the PVPF. The report on carbon stocks in the Preah Vihear Protected Forest was prepared for inclusion in the ITTO-CBD technical series publication prepared with financial support under the Cambodia Project Component. The report on land cover changes was prepared for distribution by project staff and graduates of the Forestry Faculty of the Royal University of Agriculture in collaboration with the GIS Unit of the Forestry Administration. The report on land use was prepared to highlight changes in land use and identify drivers of changes in land use and tenure, especially forestland conversion and indigenous land alienation. The reports on land use, land cover changes, and carbon stocks, which were prepared, printed, bound, and disseminated with other research studies conducted under the project as a separate publication, will contribute to the efforts of the Forestry Administration to develop strategic options to address drivers of land use change and forest encroachment in the Preah Vihear Protected Forest.

Activity 1.4: Conduct a feasibility study for amending the boundaries of the Preah Vihear Protected Forest.

- 1.4.1 Assess the status of forest cover and forest degradation in and around the Preah Vihear Protected Forest. The forest cover assessment of the Preah Vihear Protected Forest was prepared using “SPOT” satellite images to update previous assessments that were conducted in 2002, 2006 and 2010 using “LANDSAT” satellite imagery. The 2014 forest cover assessment was completed by the GIS Unit in the Forestry Administration using “LANDSAT 8 Operational Land Imager (OLI)” images with training in preparing the assessment provided to student researchers from the Royal University of Agriculture whose research on land use was supported under the project. On the basis of the verification of the satellite images and ground truthing, the results of the assessment, which indicated an increase in non-forest cover, were included in the report updating forest cover in the Preah Vihear Protected Forest. The changes in non-forest were primarily associated with net ‘gains’ of 1069.7 ha from evergreen forests, 818.76 ha from semi-evergreen forests, 6466.21 ha from deciduous forests, and 16.99 ha from other forests. The conversion of forestland to settlements and agricultural land observed in the assessment was in accordance with the land policy reforms of the Royal Government of Cambodia that allocate Social Land Concessions to local people, particularly landless military families. There was also another cause of forest degradation in the Preah Vihear Protected Forest, as well, that is attributable to illegal forestland encroachment by migrants from other provinces, predominantly Kampong Cham, Takeo and Prey Veng.
- 1.4.2 Assess the presence of wildlife and biodiversity in and around the Preah Vihear Protected Forest. The process of establishing the presence of wildlife and biodiversity in and around the Preah Vihear Protected Forest incorporated the use of 35 transect lines, each of which was 2-3 km in length, that were established in the wildlife corridor from the Preah Roka forest in the southwest to the Namsam area and/or along the border with Lao PDR in the northern part of the Preah Vihear Protected Forest in Kampong Sraloa. The technical report that incorporates updated information on wildlife distributions in the Preah Vihear Protected Forest is included as one of the chapters in the ITTO-CBD technical series publication.



Regular wildlife monitoring activities in the Preah Vihear Protected Forest.

- 1.4.3 Assess local community use areas (residential and agricultural lands) in and around the Preah Vihear Protected Forest. The assessments of local community use areas in four communes in the Preah Vihear Protected Forest were completed by student researchers from the Prek Leap National School of Agriculture whose research was supported under the project. Corroborative consultation meetings with local communities, commune councils and other stakeholders were organized by staff of the Preah Vihear Protected Forest. The consultations on “local community use areas” were organized with 129 participants, including representatives of commune councils, village chiefs, and community members. The assessment of the 2014 “LANDSAT” satellite imagery and the consultations with local communities indicated that 14,100.95ha were occupied for settlement on lands allocated by the government as Social Land Concessions, for farming, by the military, as cultural heritage temples, and for a local police station.
- 1.4.4 Compile data, information and required documents on proposed revisions of Preah Vihear Protected Forest boundaries. The compilation of information on forest cover and forest degradation, the presence of wildlife and biodiversity, and community settlements in and around the Preah Vihear Protected Forest were completed, the proposal to expand the boundaries of the Preah Vihear Protected Forest was discussed, and it was concluded that it would be more practical to establish a new protected area than to expand the boundaries of the current one.
- 1.4.5 Consult with stakeholders about the proposed revision of the boundaries of the PVPF. Consultations were conducted with the Chief of the Preah Vihear Forestry Administration Cantonment, local authorities and local communities to discuss proposed revisions of the boundaries of the PVPF. The issue was subsequently discussed at the national level and the decision was made to maintain the original boundaries that were established in 2002 when the PVPF was initially designated a Protected Forest.

Activity 1.5: Compile wildlife distribution information on landscape species and conduct botanical studies in and around the Preah Vihear Protected Forest.

- 1.5.1 Review existing data associated with the distribution of wildlife and landscape species. A review of the data associated with the distribution of landscape wildlife species in the Preah Vihear Protected Forest was completed as part of the process to update elements of the project’s resource information system.
- 1.5.2 Conduct an assessment of wildlife distribution in and around the Preah Vihear Protected Forest, especially along the borders with Lao PDR and Thailand. There were 35 transect lines, each of which was 2-3 km in length, that were established in the wildlife corridor from the Preah Roka forest in the southwest to the Namsam area and/or along the border with Lao PDR in the northern part of the Preah Vihear Protected Forest in Kampong Sraloa to assess the current situation

regarding the distribution of landscape wildlife species in the border areas between the three countries. The assessments were conducted by project field staff assisted by student researchers from the Royal University of Agriculture and the Prek Leap National School of Agriculture whose research was supported under the project.



The mentoring of undergraduate students from the Forestry Faculty of the Royal University of Agriculture to support studies of nature-based tourism, wildlife conservation, and forestland use in and around the Preah Vihear Protected Forest.

1.5.3 Map the distribution of landscape species. The distributions of landscape wildlife species in the Preah Vihear Protected Forest were mapped. Distributions maps of the 14 wildlife landscape species present in each of the three participating countries included 10 mammal, 3 avian, and 1 reptile species. The current assessment of each of those species' status as reported in the IUCN Red List (i.e., Critically Endangered, Endangered, Threatened, Vulnerable and Near-Threatened to Least Concern) was incorporated with the maps into one of the chapters of the ITTO-CBD technical series publication.

1.5.4 Conduct botanical studies in and around the PVPF. The flora of the Preah Vihear Protected Forest was surveyed to illustrate its species richness and identify potential plant species for domestic use. The surveys were conducted in the central part of the Preah Vihear Protected Forest that coincides with the area in which wood biomass and carbon stock assessments had been previously conducted. There were 15 species of orchids collected from the Preah Vihear Protected Forest to assess the feasibility of breeding each of those species in the project's nursery at the O Chanh patrolling station. There are more than 446 species of vegetation that have been recorded in the Preah Vihear Protected Forest, including 153 tree species, 100 shrubs, 60 climbers, 45 mushrooms, 8-10 bamboo species, 49 herbs, 17 palms and about 20-30 decorative species of plants.

1.5.5 Prepare a technical report on the results of the botanical studies. The technical report summarizing the results of the botanical studies determining the presence of flora in evergreen, semi-evergreen, and deciduous forests in the Preah Vihear Protected Forest was prepared, printed, bound, and disseminated with other research studies conducted under the project as a separate publication.

Activity 1.6: Publish the results of research findings.

1.6.1 Prepare a report on land-use scenarios in the Preah Vihear Protected Forest. Land use scenarios in the Preah Vihear Protected Forest were initially discussed during the joint training workshop on "Land use and land cover change modeling" that was organized by the Preah Vihear Forestry Administration Cantonment on 14-16 March 2014. Those scenarios continued to be discussed with commune councils, local communities and other stakeholders in the meeting on land uses and the identification of community use areas in the Preah Vihear Protected Forest organized on 2-4 February 2015. The report on "Land use

scenarios in the PVPF” was prepared for the chapter on ‘Land Use and Land Use Change Scenarios’ in the technical publication produced by the Cambodia Component on “Forest Biodiversity and Forest Land Use in the Preah Vihear Protected Forest.” The report determines the locational preferences of different Land Use/Land Cover classes based on the relationship between occurrence of a particular Land Use/Land Cover type and the physical and socioeconomic conditions of a specific location.



The organization of a meeting with local authorities and local communities on communal land use.

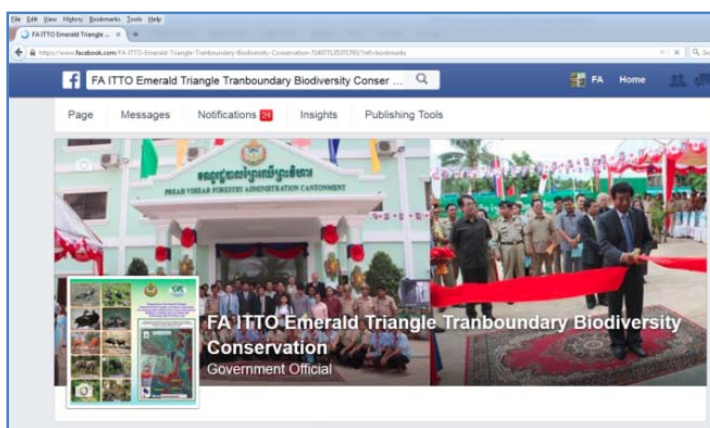
1.6.2 Present or publish a paper on future land use in the Preah Vihear Protected Forest. The use of ‘Dyna Clue’ software to forecast land use in the Preah Vihear Protected Forest was introduced at the joint training workshop on “Land use and land cover change modeling” organized by the Preah Vihear Forestry Administration Cantonment on 14-16 March 2014. ArcGIS software and land cover data from the Preah Vihear Protected Forest were provided to Preah Vihear Forestry Administration Cantonment officers to facilitate their participation in the training course on “Using Geographic Information Systems and remote sensing technologies for forest management and land use planning and assessment applications” that was organized on 19-21 October 2015. The paper on future land use in the Preah Vihear Protected Forest was prepared, printed, bound, and disseminated with other research studies conducted under the project as a separate publication.

1.6.3 Prepare a paper on the consequences of land use changes on wide-ranging species distribution in the Preah Vihear Protected Forest during the 3rd year of the project. The report incorporating information collected on the impacts of land use changes on biodiversity was prepared by a student researcher from the Forestry Faculty of the Royal University of Agriculture.



Plots for conducting forest inventories to assess carbon density in the Preah Vihear Protected Forest with students from the Prek Leap National School of Agriculture.

- 1.6.4 Prepare reports on the sustainable livelihood assessment, botanical studies and the biological assessment. The reports on the sustainable livelihood assessment, the botanical studies and the biological assessment were prepared. The paper on future land use in the Preah Vihear Protected Forest was prepared, printed, bound, and disseminated with other research studies conducted under the project as a separate publication.
- 1.6.5 Prepare a presentation on trans-boundary biodiversity conservation for the CBD COP 11. A paper on 'Emerald Triangle Trans-boundary Biodiversity Conservation' was prepared by the Cambodia and Thailand Project Components and presented by Mr. Chheang Dany - Project Manager of the Cambodia Project Component - at the ITTO-JICA-Birdlife International "Collaborative approach to forest-related Aichi Targets" side event during UN CBD COP 11 organized in Hyderabad, India in October 2012.
- 1.6.6 Use the Forestry Administration website to post information on the Cambodia Component trans-boundary project. Information on project activities that had been published in the Forestry Administration's biannual Forestry and Wildlife magazine supported through the project was distributed at Arbor Day 2013 and Arbor Day 2014 tree planting ceremonies in Preah Vihear province. There was a website established on Facebook to facilitate the posting of the activities of the Cambodia Component of the project.



Facebook home page of the PVPF ITTO project (PD 577 10 Rev1F).

Activity 1.7: Organize a Regional Conference on Biodiversity Conservation in Tropical Forests.

- 1.7.1 Coordinate with ITTO regarding the regional conference. There were efforts to ensure effective coordination of the "Regional Conference on Biodiversity Conservation in Tropical Forests of the Greater Mekong Sub-region" with ITTO and the organization of the Regional Conference was announced at the 51st Session of the International Tropical Timber Council and Associated Sessions of Committee (ITTC-51) in Kuala Lumpur, Malaysia on 16-21 November 2015. The "Regional Conference on Biodiversity Conservation in Tropical Forests of the Greater Mekong Sub-region" occurred on 23-25 March 2016 in Siem Reap, Cambodia.
- 1.7.2 Prepare an agenda for the conference. The draft of the agenda for the "Regional Conference on Biodiversity Conservation in Tropical Forests of the Greater Mekong Sub-region" was distributed to participants at the 51st Session of the International Tropical Timber Council and Associated Sessions of Committee (ITTC-51) in Kuala Lumpur, Malaysia on 16-21 November 2015. The agenda of the Regional Conference is provided as an annex to this Project Completion Report.

- 1.7.3 Prepare administrative arrangements and send invitation letters to national and overseas participants. The administrative arrangements and invitation letters were prepared and the invitation letters were sent to national and international participants.
- 1.7.4 Prepare accommodations, retain a conference room and develop field visits for the conference. A conference room and hotel accommodations for conference participants were reserved at the Angkor Paradise Hotel in Siem Reap, Cambodia. There was a field trip arranged to visit the Khun Ream restoration and *Dahlbergia cochinchinensis* seed source site at which participants were invited to plant *Dahlbergia cochinchinensis* seedlings. Memorial plaques were used to mark the locations of the plantings.
- 1.7.5 Conduct the regional conference on Trans-boundary Biodiversity. The "Regional Conference on Biodiversity Conservation in Tropical Forests of the Greater Mekong Sub-region" was organized at the Angkor Paradise Hotel in Siem Reap, Cambodia, on 23-25 March 2016. There were 108 participants in attendance at the Regional Conference, including officials from Greater Mekong Sub-region countries - Cambodia, China, Lao PDR, Myanmar, Thailand, and Vietnam - representatives of the Embassies of Thailand and the United States of America in Thailand, the ITTO Secretariat, CBD Secretariat, the Satoyama Initiative, Asian Development Bank and the Forestry Administration of Cambodia. The conference participants also included lecturers and students from the Royal University of Agriculture and the Prek Leap National School of Agriculture, as well as representatives from the GMS Environmental Operations Centre of the Asian Development Bank, and other development partners and conservation organizations.



Photos highlighting the Regional Conference on 'Biodiversity Conservation in Tropical Forests of the Greater Mekong Sub-region' organized on 23-25 March 2016 in Siem Reap, Cambodia.



Post Conference field visit to *Dalbergia cochinchinensis* seed source area and Forest Landscape Restoration site.

Activity 1.8: Development of a common vision for long-term management of the Emerald Triangle Protected Forests Complex.

1.8.1 Organize discussions with project representatives of Thailand and Lao PDR to develop a common vision for the Trans-boundary Conservation Area. *The Cambodia and Thailand Project Components and representatives of Champasack University in Lao PDR jointly developed a common vision for long-term management of the Emerald Triangle Protected Forests Complex that reads “By 2020, Cambodia, Lao PDR and Thailand will have established a common cooperative framework for the conservation and sustainable management of the Trans-boundary Emerald Triangle Protected Forests Complex of the Greater Mekong Sub-region in order to strengthen the protection of the trans-boundary habitats of wide ranging wildlife species and will endeavor to maintain the viability and ecological integrity of the forest ecosystems and increase its land use and climate changes adaptation capability to transform the Emerald Triangle Protected Forests Complex into an international symbol of trans-boundary biodiversity conservation”*

1.8.2 Endorsement of the common vision by each of the participating countries. *The Cambodia Project Team coordinated and provided logistic and financial support and participated in the 1st Bilateral Meeting on cooperation on trans-boundary wildlife law enforcement between Cambodia and Thailand organized on 18-19 December 2014 in Ubon Ratchathani province, Thailand, to contribute to the achievement of the common vision for the project.*



The 1st Bilateral Meeting on cooperation on trans-boundary wildlife law enforcement between Cambodia and Thailand organized on 18-19 December 2014 in Ubon Ratchathani province, Thailand.

Activity 2.1: Conduct law enforcement patrols in target sites on a regular basis.

2.1.1 Conduct monthly law enforcement patrols in the Preah Vihear Protected Forest and in surrounding areas. There were monthly law enforcement patrols to reduce incidences of illegal forest activities in target sites in the Preah Vihear Protected Forest conducted in cooperation with military police and provincial military officers throughout the project starting in January 2013. There were several incidences of illegal activities that occurred in areas around the O Chhun project office and Ksant, Robonh and Sen Teches villages. Those incidences resulted in the confiscation by law enforcement officers of 1,385 kg of wild meat, 95% of which originated from species that included the wild boar, redmuntjac, and Bengal monitor. The confiscated wildlife species that were still alive were released into the forest, while the wildlife that was not alive, as well as the confiscated meat, was burned. There was 135.39 m³ of sawnwood confiscated from species of rosewood (*Dalbergia cochinchinensis*), *Pterocarpus macrocarpus*, *Afzerlia xylocarpa*, *Dalbergia barriensis*, *Hopea odorata*, *Xylia dolabriformis*, *Shorea roxburgshii*, *Shorea obtusa*, *Sindora cochinchinensis*, and other species. Some equipment and material that was either considered to be illegal or was used in committing illegal activities, including 10 vehicles, 1 motor vehicle, 7 tractors (Koyon), 53 chainsaws, 15 electric shock units with 7 batteries, 9 homemade guns, 83 snares, and 4 nets used to catch birds and other animals, was also confiscated. The court cases of those committing the most serious acts were prepared and filed in the provincial appeals court.



Confiscated chain saws, electro-shock batteries, illegally poached wildlife, and illegally cut wood.



Monthly law enforcement patrol in the Preah Vihear Protected Forest.

2.1.2 Communicate with competent agencies for data sharing related to law enforcement patrol activities. *Informal meetings and radio communications with the provincial court, prosecutors, and commanders of the military police, border police and military battalions were conducted to discuss project activities and mechanisms for maintaining effective communication and collaboration in forest law enforcement and the planning of patrolling activities in the Preah Vihear Protected Forest.*



Consultations and engagement with law enforcement agencies to coordinate patrolling activities in the PVPF.

2.1.3 Compile law enforcement patrol reports. *The reports of enforcement patrols to reduce incidences of illegal forest activities in target sites in the Preah Vihear Protected Forest were incorporated into monthly project reports in Khmer that were submitted to the Head of Forestry Administration management by the Preah Vihear Forestry Administration Cantonment.*



Shutting down an illegal wood workshop in the PVPF.



Shutting down an illegal wood workshop in the PVPF.

2.1.4 Coordinate with district and provincial Forestry Administration related to law enforcement patrol activities. Meetings with the Chief of the Preah Vihear Forestry Administration Cantonment and local Forestry Administration officers were organized to discuss project activities and mechanisms for maintaining effective communication and collaboration in forest law enforcement and the planning of patrolling activities in the Preah Vihear Protected Forest, as well as with regard to community livelihood improvement activities and sustainable forest management. Project activities to suppress forest and wildlife offenses were conducted on a regular basis in cooperation with local Forestry Administration officials and local authorities.



Consultations with law enforcement agencies to coordinate patrolling activities in the PVPF.

2.1.5 Organize meetings with relevant stakeholders on law enforcement activities. Meetings with the provincial court and prosecutors and commanders of the military police, border police and military battalions were organized to discuss project activities and mechanisms for maintaining effective communication and collaboration in forest law enforcement and the organization of monthly patrolling activities in the Preah Vihear Protected Forest. The meetings with military officers, in particular, were conducted several times every month in order to collaborate and share information regarding law enforcement activities.



Meeting with law enforcement representatives to coordinate efforts to reduce incidences of illegal forest activities in the Preah Vihear Protected Forest.

Activity 2.2: Coordinate quarterly meetings and workshops, as well as regular consultations, with relevant stakeholders on trans-boundary biodiversity conservation.

2.2.1 Organize meetings, training and consultations with stakeholders, local communities and the local Forestry Administration. *Informal meetings were organized with border police and the military to discuss cooperation in combating illegal forest and wildlife activities in and around the Preah Vihear Protected Forest. There was also a training course conducted for local Forestry Administration officers and other relevant stakeholders on “Using Drone-GIS technology integrated with mobile devices ('Smart' phones)” to determine locations of forestland encroachment and forest crimes.*

2.2.2 Plan a national conference on Biodiversity Conservation and the Conservation of Carbon Stocks in the Permanent Forest Estate. *The “National Conference on Forest Biodiversity and the Conservation of Carbon Stocks in the Permanent Forest Estate” was organized in Phnom Penh on 16-18 December 2015. There were 175 participants in attendance, including officials from the Forestry Administration, Fisheries Administration, the General Department of Agriculture, and the Department of Animal Health and Production in the Ministry of Agriculture, Forestry and Fisheries; the Ministry of Environment; and the Ministry of Health. The conference participants also included lecturers and students from the Royal University of Agriculture, the Royal University of Phnom Penh, and the Prek Leap National School of Agriculture, as well as representatives from the Asian Development Bank, the Embassy of Japan in Cambodia, and other development partners and conservation organizations, including JICA, ITTO, USAID, Wildlife Alliance, WWF, and WCS.*



Highlights of National Conference on “Forest Biodiversity and the Conservation of Carbon Stocks in the Permanent Forest Estate” organized in Phnom Penh on 16-18 December 2015.

Activity 2.3: Provide training to the staff of the Preah Vihear Protected Forest in biodiversity conservation, GIS mapping, land-use planning, forest management planning, and habitat suitability analysis.

2.3.1 Provide training on GIS mapping, land use planning, and forest management planning to the local Forestry Administration, local communities and other stakeholders. Informal training on GIS mapping and land use planning was provided to local Forestry Administration officials. There were 84 representatives of the local Forestry Administration and other stakeholder groups who participated in GIS and land use mapping training courses. There were 17 local Forestry Administration officials, as well, who participated in the second of the joint training activities on wildlife distribution modelling that was organized in Ubon Ratchatani, Thailand on 20-25 October 2014. There were 26 participants, including local Forestry Administration officials, representatives of the Kulen Promtep Wildlife Sanctuary, and students from the Royal University of Agriculture, who participated in the GIS training organized on “Using Geographic Information Systems and remote sensing technologies for forest management and land use planning and assessment applications” that was conducted in the Preah Vihear Forestry Administration Cantonment on 19-21 October 2015.



Joint Training Workshop on GIS Modeling for Forest Land Use Assessment and Prediction organized on 11-13 March, 2014 at the Preah Vihear Forestry Administration Cantonment.



Joint Training Workshop on GIS-Wildlife Distribution Modelling organized in Ubon Ratchathani province, Thailand on 21-24 October 2014.

2.3.2 Conduct workshops on land use planning and forest management planning. Meetings and consultations with local Forestry Administration officers, local authorities and targeted local communities on land use planning and forest management planning were conducted throughout the project on an ad hoc basis. There were 114 representatives of local communities, commune councils, and others involved in the ongoing process of consultations who participated in meetings that were organized on 2-4 February and 28 May 2015. There were also 26 representatives of the Forestry Administration's Preah Vihear Cantonment, Division, and Triage, the Kulen Promtep Wildlife Sanctuary, and students of the Royal University of Agriculture who participated in the discussion of the development of a forest management plan 2016-2020 for the Preah Vihear Protected Forest that was organized on 19-21 October 2015.

2.3.3 Prepare appropriate materials for training and workshops. The development and updating of presentations, supporting documents, and other materials required for organizing training and workshops, including training on GIS mapping, land use planning, and forest management planning for the local Forestry Administration and meetings and consultations with local authorities and targeted local communities, were prepared and revised on a regular basis depending on circumstances and revisions in current requirements. There was an extension meeting organized with 63 participants, representing local communities, local authorities, and other stakeholders, on Integrated Conservation and Development Project (ICDP) activities, wildlife protection, land use and law enforcement on 10 April 2015. Several posters of the research conducted on land use and land cover changes, livelihood improvements, non-timber forest products, carbon stocks, medicinal plants, and landmark wildlife distributions in the Preah Vihear Protected Forest were also produced and printed for display at the 'National Conference on Forest Biodiversity and the Conservation of Carbon Stocks in the Permanent Forest Estate' organized on 16-18 December 2015 and at the 'Regional Conference on Biodiversity Conservation in Tropical Forests of the Greater Mekong Sub-region' that was organized on 23-25 March 2016.

Activity 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 the Convention on Biological Diversity.

- 2.4.1 Conduct workshops on effective law enforcement and the wildlife trade and international conventions (CITES, CBD, UNFCCC). Workshops on effective law enforcement and the wildlife trade and international conventions, including CITES, the CBD and the UNFCCC, were conducted with relevant enforcement authorities, including the local Forestry Administration, commune councils and armed forces, and local communities.
- 2.4.2 Organize training on forest climate change mitigation and REDD+. Trainings were conducted with primary school children and teachers in Sen Song Reung 1 & 4, Robunh, and O Chunh villages. The project team raised awareness of forest climate change mitigation and REDD+, provided children with the opportunity to draw pictures related to forest and climate change mitigation, and organized tree planting events at each of the primary schools. Overall, there were 858 students who participated in extension training that was conducted by project staff on climate change mitigation, forest fire prevention, and tree planting techniques, as well as on comprehensive writing and painting associated with forest and wildlife protection.
- 2.4.3 Disseminate information on law enforcement, forest climate change mitigation and REDD+. Meetings and consultations with local authorities, border police, the military, targeted local communities in the Forestry Administration Cantonment of Preah Vihear and local Forestry Administration officers to disseminate information on law enforcement to reduce incidences of illegal forest activities and forestland clearance, prevent wildlife poaching and restrict the illegal wildlife trade in and around the Preah Vihear Protected Forest, as well as on forest climate change mitigation and the potential contributions of forest carbon credits, were conducted on a regular basis. The information was shared, as well, with 30 senior students of the Royal University of Agriculture as part of a study tour organized in the Preah Vihear Protected Forest on 20-22 November 2014. The dissemination of information on forest benefits, the distribution of wildlife in the Preah Vihear Protected Forest and climate change was also directed to more than 300 school children from primary schools in Ro Bunh, Sen Rung Reung 1 & 4 and O Chunh villages during March-April, 2015.
- 2.4.4 Prepare display materials. Information on project activities published in the Forestry Administration's biannual Forestry and Wildlife magazine supported through the project was widely distributed at Arbor Day 2013 and Arbor Day 2014 tree planting activities throughout the country. That information was disseminated, as well, prior to the 4th PSC meeting and the 3rd Project Technical Committee meeting organized on 9 July 2014 in Siem Reap, Cambodia and at the tree planting event conducted in Preah Vihear province on 6 August 2014. Project brochures were disseminated at the 5th PSC meeting and the 4th Project Technical Committee meeting organized in Ubon Ratchathani, Thailand on 22 February 2015 and were widely distributed at Arbor Day 2015 tree planting events conducted on 9 July 2015 in Kampong Thom province.



The extension materials produced through the project were posted at workshops and conferences, as well as on Facebook.

2.4.5 Provide training on international conventions (CBD, CITES, UNFCCC). Training on international conventions, including the CBD, CITES and the UNFCCC, were conducted in conjunction with meetings with local community committee leaders, village chiefs, commune chiefs and relevant enforcement authorities, including the local Forestry Administration, commune councils and armed forces, to discuss the implementation of project activities.

Activity 2.5: Organize stakeholder meetings for trans-boundary biodiversity conservation cooperation and mitigating future land use changes, as well as proposed adjustments as might be required.

2.5.1 Organize stakeholder meetings and consultations on trans-boundary biodiversity conservation cooperation adjustments. Informal meetings were conducted with local community committee leaders, village chiefs, and commune chiefs to discuss the implementation of project activities. There was also an extension meeting organized on 20 January 2016 with 62 representatives of local communities, local authorities, and other stakeholders on wildlife protection, land use, law enforcement, forest restoration and nursery techniques, and the feasibility of domesticating wild flora and fauna species.



The organization of a meeting with senior officers of the Provincial Department of Public Works and the Provincial Department of Land Management and Construction.

2.5.2 Organize meetings with relevant government agencies and provincial authorities to endorse trans-boundary biodiversity conservation cooperation and the mitigation of land use changes. The First Bilateral meeting between representatives of Thailand and Cambodia was organized on 18-19 December 2014 in Ubon Ratchatani, Thailand to strengthen cooperation between the two countries in reducing incidences of illegal forest activities in the trans-boundary region and to share information on collaborative efforts to reduce the illegal trade in wildlife. There were also informal meetings with military officers and commune councils in the Preah Vihear Protected Forest to strengthen forestry law enforcement to prevent illegal forestland encroachment.



The organization of a meeting with local authorities and local communities on communal land use.

Activity 2.6: Strengthen Protected Forest management by allocating more equipment and staff to resource management and monitoring activities.

2.6.1 Procure equipment. *On receiving the NOL from the ITTO on 12 November 2012, a project vehicle and motorbikes were purchased. Subsequent equipment procured under the project included six motorcycles, two 4WD pick-up trucks, two desktop computers, four laptop computers, three GPS units, four hand-held cameras, two color printers, three black & white printers, two LCD projectors, and three external hard disks, as well as equipment procured for the project headquarters in the Preah Vihear Forest Administration Cantonment, including meeting tables and chairs, photocopiers, desktop computers, LCD projection screens, air conditioners and generators. On receiving the NOL from the ITTO on 27 October 2014, construction of a plant nursery supported under the project was completed on 30 April 2015. On receiving the NOL from the ITTO on 25 November 2015, additional equipment, including two air conditioners, one meeting table with document shelves, one solar water pump, two desktop computers, and communication devices, were purchased. The remaining procurement of equipment was completed during the 'no cost' extension period of the project.*



The Morokot (O Chunh) ranger patrolling station and agroforestry research and development center was established and is now in use.



The Morokot commune meeting hall was completed and is now in use.

- The procurement of capital items was completed in April 2016 and those items are currently used at the project office or have been distributed to the Preah Vihear Forestry Administration Cantonment. Those items include:

ITEM	UNIT	USD
4WD Pick-up Trucks Double Cab	2	54,445.00
Motorbikes	6	8,070.00
Protected Forest Headquarters	1	141,650.00
Air Conditioners	10	6,750.00
Tables for Meeting Rooms	28	4,300.00
Solar Battery Panels and Deep Cycle Batteries	1set	6,166.00
Photocopier	2	780.00
Color Printer A3	2	966
LCD Projectors	2	1,598.00
Laser Printers	3	975
Laptop Computers with Microsoft Office	4	3,350.00
Hand-held Digital Cameras	4	732
GPS 60csx	3	1,605.00
Generators	2	3,300.00
Field Equipment and Camping Gear	65	2,250.00
External Hard Disks	3	378
Computers (Database and MIST)	6	4,320.00
Communication devices	1set	3,040.00
Chairs for Meeting Rooms	60	1,800.00
Pumping Wells/5ponds (2,500/pond)	12	12,500.00
Nursery for Seedlings	1	41,620.58
Tissue Culture Lab Equipment/Main Ranger Patrolling Station	1	36,841.00

2.6.2 Construct a project headquarters. *The construction of the project headquarters was completed and offices were established for the use of staff of the Preah Vihear Forest Administration Cantonment, as well as other organizations with sustainable forest resource management or biodiversity conservation programs operating in or around the Preah Vihear Protected Forest.*



Inauguration of the headquarters building of the Preah Vihear Forestry Administration Cantonment by H.E. Um Mara, Governor of Preah Vihear province, and H.E. Dr. Chheng Kimsun, Government Delegate and Head of the Forestry Administration, on 8 July 2014.

2.6.3 Establish a plant nursery. *The plant nursery, with dimensions of 30 m x 60 m, was constructed by an individual construction contractor who was the successful bidder in a competitive selection process and the plant nursery has continued to remain in active use since the end of March 2015.*



Transplanting tree seedlings at the Morokot plant nursery in O Chunch village.

2.6.4 Organize a workshop on effective patrolling and protection. *Informal meetings with stakeholders and local communities were regularly organized during site visits to discuss patrolling and the protection of forests, wildlife and biodiversity in and around the Preah Vihear Protected Forest. The First Bilateral meeting on law enforcement was conducted in Ubon Ratchatani province, Thailand, on 18-19 December 2014. Its primary purposes were to strengthen cooperation between Thailand and Cambodia in reducing incidences of illegal forest activities in the trans-boundary region and to share information on collaborative efforts to reduce the illegal trade in wildlife. There was also a meeting organized on 28 May 2015 to discuss the effectiveness of patrolling and protection with 54 representatives of local communities and commune councils from Morokot, Teuk Kraham and Chaom Ksan communes.*

Activity 2.7: Organize training on domestication of wild flora and fauna for the local Forestry Administration and local communities.

2.7.1 Identify wild flora and fauna for domestication. *Consultations were organized with local communities regarding the use of medicinal and decorative plants, including orchids and ferns, in the process to determine the most useful plants for domestication. Orchids and ferns in the Preah Vihear Protected Forest were also studied by students from the Royal University of Agriculture as part of the requirements for completing their bachelor's degree theses that were supported under the project.*



The organization of a meeting with local communities on flora and fauna domestication and tree species identification.

- 2.7.2 Determine the dependence of local communities on flora and fauna to domesticate. The results of consultations organized with local communities underscored the importance of orchids and ferns, edible fruit trees, such as *Eugenia* spp. and *Baccaurea ramiflora* Lour, and various species of fauna, including wild boar and barking deer, as potential sources of domestication. The results of those assessments indicated that 15 species of orchids, 22 species of edible plants, including rattan shoots, mushrooms, and herbs, as well as 4 species of amphibians, and 46 medicinal plants are collected by local people from the Preah Vihear Protected Forest and sold in local markets.
- 2.7.3 Conduct a feasibility study on the domestication of wild flora and fauna. A structured questionnaire was developed and administered to local communities to assess the prefer ability of various species of wild flora and fauna for domestication. The results of that assessment indicated that there was more community interest in the domestication of wild flora, such as that of commercial rosewood (*Dalbergia cochinchinensis*), medicinal plants, and decorative plants, especially orchids and ferns, than in the domestication of fauna.
- 2.7.4 Prepare a report on the results of the feasibility study. The assessment of the domestication of wild flora and fauna was conducted and a report was prepared on the results of the assessment.
- 2.7.5 Organize a workshop on the feasibility of domesticating wild flora and fauna. A workshop was organized concurrently with law enforcement activities on 23 February 2015 to discuss the feasibility of domesticating some wild flora and fauna species. There was general agreement during the discussion that there were some significant challenges associated with the technical breeding, legal framework and marketing constraints that would have to be overcome to ensure the success of such domestication of those wild flora and fauna species.

Activity 2.8: Organize training on land-use planning, demarcation and GIS mapping for the local Forestry Administration and local communities.

- 2.8.1 Conduct training on GIS mapping for local Forestry Administration staff. Ninety twolocal Forestry Administration officials received practical training in the use of GPS and GIS mapping for forest land use planning through monthly mentoring and on-the-job training.



Training Workshop for local Forestry Administration officers and other stakeholders on GIS applications for Forest Management and Land Use Planning.

- 2.8.2 Conduct training on land-use planning and demarcation for local communities. There were eight training courses provided to 111 local Forestry Administration officers on GIS and GPS use, land use, and land cover and wildlife distribution modelling. There were four other courses, as well, provided to local commune members and representatives of local authorities at which a practical exercise on land use planning and demarcation and commune land use mapping was provided to 43 local community participants from O Chanh village and 60 representatives of local authorities from Teuk Kraham, Morokort and Chaom Ksan communes.



Awareness Raising and Consultations with local communities and local authorities on Forest and Wildlife Conservation.

- 2.8.3 Organize a workshop on land-use planning, demarcation and GIS mapping for the local Forestry Administration and local communities. *The workshop on land use planning was organized at the O Chanh patrolling station in May 2015. Community use areas, protection areas for wildlife habitats and the effects of land use changes were discussed at the workshop with 54 participants, including the Chief of the Pring Thom Romdos Srey Forestry Administration Triage, the commune Chief, the commune council and local communities.*



Organization of meetings to discuss commune use areas and proposed extensions of the Preah Vihear Protected Forest with local communities in Chaom Ksant and Teuk Kraham commune, Chaom Ksant district.

Activity 3.1: Plan and conduct a comprehensive sustainable livelihoods assessment, potential ecotourism development assessment and scale up local community fora and networks.

- 3.1.1 Prepare questionnaires and provide training on the means of collecting livelihoods information. *Guideline questions on livelihood improvement initiatives incorporating forest resources and biodiversity conservation concerns were developed and training was provided to administer the questionnaire.*
- 3.1.2 Conduct interviews on livelihoods and nature-based tourism development. *Field interviews on livelihood improvements with local people were conducted in five targeted local communities.*
- 3.1.3 Prepare a technical report on the results of the sustainable livelihoods assessment and publish and distribute the report. *The information on sustainable livelihoods assessments incorporating forest resources and biodiversity conservation concerns was completed and the technical report on the results of the assessment was distributed as part of the Project Completion Report. The results indicated that the income contributed from forest resources accounts for approximately*

30% of the income of traditional communities and about 12% of the income of more recently established communities. The income composition of the traditional communities of primarily indigenous people includes on-farm jobs and other sources, which accounted for 46% and 25%, respectively, of their income. The more recently established inhabitants, who are primarily immigrants of military families, in contrast, depend on salaries and on-farm income, which accounted for 72% and 16%, respectively, of their income.

- 3.1.4 Organize awareness raising meetings and training for community networks and local communities. Informal meetings in targeted local communities were organized regularly to raise awareness of forest and biodiversity conservation issues in cooperation with livelihood improvement initiatives. Training needs assessments of local communities were conducted every two months to determine requirements for capacity building and to share practical experiences among local communities on the use of agricultural techniques. Over the course of the project, there were 59 training and awareness raising meetings organized for 3,185 participants, including representatives of local communities, as well as military families, local authorities, primary school students, and others. The trainings were provided on improving agricultural techniques incorporating the introduction of rice intensification systems, home garden preparation, animal raising, agroforestry, tree planting, livelihood development, forest fire prevention, climate change mitigation and adaptation, and REDD+.



Awareness raising on stopping illegal forest land encroachment and illegal wildlife hunting with local communities and school children in Teuk Kraham and Morokot communes.

- 3.1.5 Conduct a workshop on livelihoods and nature-based tourism development for local communities. Consultations on establishing livelihood strategies and discussing emerging opportunities for nature-based tourism development, especially at the sites of the ancient temples located in and around the Preah Vihear Protected Forest, as well as land use changes and their effects on biodiversity, were conducted on 28 May 2015. Fifty four community members participated in those consultations. Special tourism sites, including the ancient temples, the Tonle Lapove riverside along the trans-boundary area between Cambodia and Lao PDR, and the international border checkpoint at An Ses, as well as sites for viewing vultures, were highlighted in project posters that were prepared for the National Conference on 'Forest Biodiversity and the Conservation of Carbon Stocks in the Permanent Forest Estate' that was organized on 16-18 December 2015 in Phnom Penh and were subsequently posted on the project's Facebook website. There were two extension and discussion meetings with 116 participants, as well as another extension workshop organized on 20 January 2016 for 62 local community members and students from the Royal University of Agriculture, that were concerned with developing local livelihood improving strategies and nature-based tourism activities. The

thesis results of one of the students from the Royal University of Agriculture supported under the project also indicated that more than 50% of the people living nearby these potential tourism development sites were interested in participating in low impact nature-based tourism development that would provide more opportunities for income generation and improving local livelihoods, while reducing dependence on forest resources.



Meeting with local communities on Community Livelihood Support activities and raising awareness of forest and wildlife conservation and management practices.

Activity 3.2: Organize reciprocal visits between staff of the Preah Vihear Protected Forest and local communities' networks to share experiences with other projects in Cambodia for promoting trans-boundary biodiversity conservation.

3.2.1 Communicate with related projects working on developing linkages between conservation and livelihood development. Project staff organized a collaborative meeting with CARITAS NGO officers to study the feasibility of establishing solar water pumps in Robonh and O Chunh villages. The meeting was conducted on an ad-hoc basis to promote the development of community livelihood-based agriculture to reduce dependence on forest resources and encourage biodiversity conservation. There was a meeting organized to discuss the establishment of 20 m x 20 m ponds to conserve water for local use in the dry season in Teuk Kraham commune with the commune council, local communities and representatives of local primary schools, as well. There were also discussions with the Deputy Chief of the 9th infantry military brigade regarding the organization of a ceremony to distribute native trees and fruit trees to soldiers and to provide support to local communities through the establishment of rice banks and cow banks. There were more than 10 consultative meetings organized with local communities and other stakeholders to discuss the feasibility of digging ponds to provide local communities with access to clean water for domestic use and irrigation and 12 ponds were dug to improve local livelihoods by increasing agricultural productivity, especially through the establishment of home gardens and animal raising, while reducing dependence on forest resources. In efforts to strengthen the linkage between conservation and livelihood development, the project collaborated with local communities, local authorities, and other stakeholders to improve local conditions and alleviate poverty by improving food security, enhancing agricultural productivity and increasing irrigation, expanding access to clean water and energy, and promoting environmental education. Project sites in the Preah Vihear Protected Forest were visited, as well, by 17 Korean students and 2 professors from Seoul National University on 18-20 February 2016 to increase social cooperation and strengthen environmental education. The visitors provided local communities with a set of solar panels and light bulbs, as well as

study materials and solar ‘toys,’ and socialized with 250 primary school students. Over the course of Phase III project implementation, there were 12 ponds dug and 7 sets of medium-size solar panels and batteries provided to rice banks to encourage local communities and to promote livelihood development. Overall, there were 13 consultative meetings with 530 local people, primary school principals and students, and local authorities organized to improve social and environmental education, simplify the monitoring system used in rice banks and cow banks, monitor the purchasing and returning of borrowed rice from rice banks and the purchasing and distribution of cows to local community cow banks, and discuss the organization of training on agroforestry and tree planting demonstrations.



Collaboration with the Seoul National University team and interacting with community students at O Chanh Primary School to provide a new classroom, table, chairs, and study materials, install solar panels, and plant native species trees in the Preah Vihear Protected Forest.



The digging of a pond to reserve water for school and community consumption during the dry season.

3.2.2 Organize experience and information sharing meetings. There were two meetings with commune councils organized to discuss success stories shared by local communities who participated in exchange visits with other community forestry members in Siem Reap province to learn more about 'best' agricultural and agroforestry practices. The lessons learned from those experiences were discussed in the meeting that was organized on project extension activities on 28

May 2015, as well as in consultative meetings conducted to share experiences and obtain constructive recommendations associated with the implementation of livelihood enhancement activities. Over the course of Phase III project implementation, there were 6 extension meetings and 2 exchange visits, involving 1,141 people, including representatives of local communities, military officers, and local authorities, organized. Their primary purposes were to discuss project achievements, discuss the current status of efforts to suppress forest offenses, introduce laws & regulations related to wildlife protection, land use encroachment, and law enforcement, and share experiences associated with natural resource management and livelihood improvement.



Training provided on home garden preparation, animal raising, and integrated agroforestry systems to local communities and military families.

3.2.3 Organize awareness meetings and training for local schools and local communities. Forest, wildlife, and biodiversity management and conservation awareness raising activities were conducted on an ad-hoc basis during site visits and meetings with stakeholders and targeted local communities and local schools. There were training courses organized to demonstrate technical practices associated with preparing home gardens and establishing integrated agroforestry systems for 291 participants from Sen Rung Reung (SRR-1), SRR-2, SRR-3, SRR-4 and SRR-5, Malis, O Chunh, and Sen Tehchas villages. Over the course of Phase III project implementation, there were 11 awareness raising meetings and trainings organized for 858 local people, primary students, local teachers, and health center officers. The aims of those meetings and trainings were to raise awareness of, and demonstrate, tree planting techniques to primary school students and local communities and mainstream the concepts of sustainable forest management and development, forest fire prevention, and forest and wildlife protection into educational curricula.



Provision of study materials and commercial tree seedlings to local primary schools and the organization of question and answer sessions on forest conservation.

3.2.4 Organize a workshop for local communities. *A workshop to share agricultural practices and experiences was organized in January 2014 to discuss the progress of activities with rice bank and cow bank community committees. There was a second workshop organized on 28 May 2015 at the O Chunh patrolling station with 54 participants representing rice bank and cow bank community committees, local Forestry Administration officials, commune councils and local authorities to disseminate information about project achievements and discuss 'best' agricultural and agroforestry practices to improve community livelihoods and promote biodiversity conservation. The workshop provided for group discussions of land use changes and its impacts on biodiversity; the establishment of livelihood improvement strategies; the domestication of wild flora and fauna by local communities for ex-situ and in-situ conservation; and the means of increasing community incomes.*



The organization of a workshop for commune councils and local authorities to disseminate information about project achievements and discuss 'best' agricultural and agroforestry practices to improve community livelihoods and promote biodiversity conservation.

3.2.5 Organize exchange study visits for local communities and the local Forestry Administration. There were two exchange visits organized, one for 20 commune council members and village chiefs and the other for 20 farmers from local communities, to share experiences and to discuss lessons learned to improve local livelihoods. Forty people, including 19 females, participated in these two exchange visits. Local exchange visits - from village to village were also organized for communities to provide opportunities to interact with and establish network connections with neighboring villagers.



Exchange visit of Teuk Kraham and Morokot commune councils, village chiefs, and local communities to the multi-agricultural and fish farming and rice and cow bank development activities implemented through the Tbeng lech community forestry committee in Banteay Srey district and the manufacture of furniture and souvenirs from NTFPs by local communities in Sot Nikum district, Siem Reap province.

Activity 3.3: Maintain existing ICDPs 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.

3.3.1 Organize meetings on ICDPs for local communities and stakeholders. Project staff visited the ICDPs established in Phase II of the project on several occasions to discuss activities and monitor on-going ICDPs. Random home visits were organized to discuss potential varieties of vegetables to be planted by local communities; as well as to monitor activities in Malis, O Chunh, and Robonh villages, which were used to assess the progress of cow banks, rice banks, and microcredit activities; and elect new rice bank committee members in Morokot village, which was accompanied by presentations describing sustainable management, procedures for borrowing rice, and the importance of benefit sharing. Over the course of Phase III project implementation, there were 49

meetings on ICDPs with 637 local people, as well as local authorities, that were used to track the progress of activities, ensure transparency of benefit sharing, monitor and con

3.3.2 duct inventories of rice and cow stocks, and discuss means of improving local conditions.



The organization of a meeting with local authorities and communities on dissemination of the project's progress on ICDPs.

3.3.3 Provide additional funding for ICDPs. The construction of rice storage houses in three local communities - Malis, O Chunh, and Sendekcheas villages - was funded through the project to promote conservation and enhance livelihood opportunities in those communities. There were several calves from the cow banks that were provided to other households, as well, to scale up cow bank activities. Project funding was used to purchase 5 tons of rice to store in the new rice bank in O Chunh village and another 2 tons of rice were purchased for the new rice bank in Sendekcheas village to provide to community members who might require emergency support. Over the course of Phase III project implementation, the number of cows in cow banks increased from 13 at the end of Phase II of the project to 69, with 8 other cows sold to generate cash to support construction activities in the two villages that share a cow bank and 1 cow reported to have died. Over that same implementation period, the amount of rice in rice banks increased from 16.50 tons to 27.13 tons, with an additional 4 tons of rice sold to generate cash to maintain the rice bank, and two other rice banks in other villages established. The availability of credit was increased, as well, from USD 1,000.00 to USD 1,780, with \$300 of that amount withdrawn for management coordination activities and maintenance costs; and other provisions, including the planting of fruit trees and chicken raising. Overall, the project delivered 91,850 native commercial trees and fruit trees to local communities, military families and other local people living in and around the Preah Vihear Protected Forest to promote reforestation and agroforestry, and planned to provide 21,500 seedlings to those stakeholders and communities, and constructed a school building for the O Chunh primary school that was equipped with desks and chairs for the use of the students.



Monitoring of Community Livelihood Enhancement activities involving the establishment of rice banks and cow banks.



The distribution of seedlings of high value commercial timber species, as well as fruit trees, to military families and local communities from the Morokot Nursery at the O Chhunh project office in the Preah Vihear Protected Forest.

There were two rice banks, three cow banks, and twelve community ponds that were established in Phase III of the project:

No	Villages	Quantity	COST (USD)
2 Rice banks			
1	O'Chunh Community	2 mt	500.00
2	Sen Techeah Community	2 mt	500.00
3 Cow banks			
3	O'Chunh Community	7 cows	3,678.50
4	Robunh Community	6 cows	3,153.00
5	Chaes Community	7 cows	3,678.50
12 Ponds			
6	O'Chunh Secondary School	1 pond	1,800.00
7	Rong Roeung II Village	1 pond	1,800.00
8	Morokot Nursery Station	2 ponds	3,600.00
9	Sen Rong Roeung III Village	1 pond	2,500.00
10	Sen Rong Roeung IV Village	1 pond	2,500.00
11	Sen Rong Roeung V Village	1 pond	2,500.00
12	Sen Rong Roeung I Village	1 pond	2,500.00
13	Sen Techeah Village	1 pond	2,500.00
14	Srar Moach Village	1 pond	2,500.00
15	Robunh Village	1 pond	2,500.00
16	Chheuteal Koang Village	1 pond	2,500.00
Commercial and fruit trees distributed to local communities, military families, on provincial Arbor Day, and other local people living in and around the PVPF			
17	Commercial and fruit trees	101,013 trees	41,807.25*
School buildings constructed for the O Chunh and Robonh primary schools			
18	Two school buildings (total 4 rooms), desks, and chairs, solar panels, and school materials (books, pens, pencils, and so on)		8,481.51
19	Solar panels for Rice Banks	3 sets	945.00
20	Rice Bank Construction	2 sets	1,782.5
Community meeting halls and solar panels			
21	Morokot community meeting halls and solar panels	1 set	7,750.00
Grand Total			99,476.26

* *The project delivered 91,850 native commercial trees and fruit trees to local communities, military families, and other local people living in and around the Preah Vihear Protected Forest to promote reforestation and agroforestry, and planned to provide 21,500 seedlings to those stakeholders and communities.*

No	Community	Rice Bank (metric tons)		Cow Bank (number of cows)			Microcredit (Riels)	
		Beginning	End	Beginning	Additional purchases	End	Beginning	End
1	Chaes-Mlis	16.50	23.64 ^a	0	7	7	4,000,000	7,120,000
2	O'Chunh	2.04	5.09	4	7	25 ^d	-	-
3	Robonh	-	-	9	6	44 ^e	-	-
4	Sen Techeah	3.30	2.30 ^b	-	-	-	1,000,000	1,012,000
	Total	21.84	31.03	13	20	76	5,000,000	8,132,000
	The remaining	21.84	31.03^c	10	20	67	5,000,000	6,932,000^f

- Note:**
- a = The rice stock taken out of the bank at O Chunh was 2.04 tons and the interest earning of the rice bank was 2.04 tons.
 - b = The income from the sold rice was 1 million Riel, which was provided to Microcredit.
 - c = The additional paddy rice purchased was 3.625 tons and the interest earning of the rice bank was 6.565 tons.
 - d = There were 20 cows remaining in the community because 5 cows were sold to sustain the community.
 - e = The cows remaining in Robonh were 40 because 4 cows died.
 - f = The microcredit increased to 8.13 million Riel, but community members withdrew 1.2 million Riels to support the community.

- 3.3.4 Develop and sign conservation contracts linking the livelihood program with conservation. The structure of the contract for borrowing from rice banks and cow banks was revised to incorporate conservation linkages and, in a related action, a conservation contract was prepared and signed with the Chief of Teuk Kraham commune and the Director of the O Chunh primary school regarding the location of the establishment of village ponds to store water during the dry season.
- 3.3.5 Develop simple monitoring system for ICDP. Rice bank, cow bank and microcredit contracts were revised to facilitate the monitoring of those activities by means of reporting through elected management committees. The project established monthly monitoring of activities to ensure regular assessments of the progress of community development and the status of collective community assets, including the pumping wells and school buildings that were funded under the project, and to facilitate on-going determinations of maintenance requirements. There was a meeting organized with the O Chunh Rice Bank Committee to introduce the monitoring system on 15 June 2015. Over the course of project implementation, both scheduled and random home visits were used to track the progress of ICDP activities and at the end of the project, smart phones were used to record the progress of those activities and to provide photos of the status of cow banks and rice banks.



Monitoring the status of the cow bank established through the project with the Cow Bank Committee in Robonh.

Activity 3.4: Increase economic opportunities for local communities through sustainable agriculture and agroforestry practices and community-based ecotourism in the buffer zones of the PVPF.

- 3.4.1 Pilot nature-based tourism and ecotourism in target communities. Extension meetings were organized to promote nature-based tourism development of local communities, but the impacts of those activities had to be restricted to some extent as the result of the region's socioeconomic conditions, inadequate infrastructure development, and concerns with security. It appeared, however, that the rapids along the Lapov River at the northeastern part of the Preah Vihear Protected Forest in the trans-boundary area between Lao PDR and Cambodia would be an

attractive site for nature-oriented tourism and there are several ancient temples that would present opportunities for ecotourism development, as well. Potential sites for tourism development were studied in an undergraduate thesis prepared by one of the students from the Royal University of Agriculture supported under the project. Those sites, highlighted in project posters that were prepared for the 'National Conference on Forest Biodiversity and the Conservation of Carbon Stocks in the Permanent Forest Estate' that was organized on 16-18 December 2015 in Phnom Penh and posted on the project's Facebook website, included several of the region's ancient temples, the Tonle Sap riverside along the trans-boundary area between Cambodia and Lao PDR, and the international border checkpoint at An Ses, as well as sites for viewing vultures. The results of those assessments underscored the interest of local communities in participating in the development and expansion of tourism activities associated with the benefits that would be available through the provision of homestays, guesthouses, and interpretive and guiding services, as well as the preparation and sale of food, handicrafts and souvenirs.

3.4.2 Pilot agroforestry and agricultural practices in target communities. Agroforestry demonstrations were conducted through which more than 4500 fruit trees and other trees were delivered to local communities to provide examples of their use in various agroforestry systems, including the intermixing of those trees to provide 'living fencing,' windbreaks, borders around paddy fields and intercropped plants. Over the course of Phase III project implementation, there were 91,850 native commercial trees and fruit trees provided to local communities, military families, and other local people living in and around the Preah Vihear Protected Forest to plant in rice fields and home gardens at meetings organized to promote agricultural and agroforestry practices. A survey that was conducted by one of the students from the Royal University of Agriculture supported under the project indicated that at least US \$100 of equivalent income was added through agroforestry practices to local livelihoods through the collection of liquid and solid resins, fuelwood, and other wood that was used for domestic purposes. While there were only a few families that benefited from collecting resin, the resin-sourced income was the dominant source of income among those families.



The distribution of high value trees and fruit trees to military families and local communities to promote home gardens and agroforestry practices.

3.4.3 Promote livestock raising in target communities. Training was provided to improve techniques of chicken raising to 6 communities in which the raising of chickens is a relatively popular endeavor. That training was supplemented by individual consultative meetings to further increase its effectiveness. There were also consultative home meetings with 62 other families with interests that were directed to the raising of cows and home-grown vegetables who received information through the distribution of various technical articles that incorporated lessons learned on those subjects. Six other trainings were organized for 123 local people, as well, on raising cows and during those trainings there were additional cows that were provided to members of cow bank communities.



Cows and calves delivered to members of local communities to promote livestock raising.

3.4.4 Promote home gardens in target communities. There were 76 families who received vegetable seeds and, of those, more than 50 were successful in planting those seeds and experiencing higher than usual yields by applying the technical lessons learned during training provided to them on preparing home gardens and promoting agricultural diversification. The seeds were planted between other home-grown fruit trees to form intercropped systems and promotional activities were conducted during site visits to local communities. There were home visits with 165 families to discuss potential varieties of vegetables to be planted by local communities and training courses were designed to support home garden improvement as part of the livelihood development strategies that were developed as the result of the sustainable livelihood assessment that was implemented during the project. There were 21 trainings involving 909 participants that were organized on home garden promotion.



A representative vegetable garden established by a model farmer provided with seeds and training through the project.

3.4.5 Conduct training and organize meetings on options to increase economic opportunities of local communities. Training was conducted every two months on the basis of the seasonal agricultural calendar. Training topics included techniques for planting vegetables, raising chickens, and improving rice productivity, as well as promoting agroforestry. There were two training sessions promoting integrated agricultural systems and agroforestry organized for local

communities. Overall, there were more than 1,790 beneficiaries from 8 villages in the Preah Vihear Protected Forest who attended 25 training sessions to promote agricultural skills and increase economic opportunities to promote community incomes.



Training on home garden preparation, natural-based animal raising, and integrated agroforestry systems organized for local communities in Senrong Reung 1, 2, 3, 4, 5, O Chunh, Mlis, and Sen Techeas villages.

Activity 3.5: Organize fund-raising meetings for potential donors and NGOs to sustain ICDP activities.

3.5.1 Organize meetings with local communities and stakeholders on ICDP. Project staff visited ICDPs established in Phase II of the project on several occasions to discuss planned activities and monitor on-going ICDPs. The communities were encouraged to incorporate prioritized livelihood development requirements into commune investment plans, as well as district development plans, during integration district workshops to obtain support for those initiatives. Monitoring and extension meetings were conducted regularly with local communities and stakeholders to track the ongoing progress of the project's ICDP activities. Those activities were indirectly supported by ten financial assistantships that were provided to students from the Forestry Faculty of the Royal University of Agriculture to prepare undergraduate theses required to obtain bachelors' degrees. That support extended to the mentoring of fieldwork in conducting studies of nature-based tourism, wildlife conservation, forestland use, and community agroforestry practices in and around the Preah Vihear Protected Forest. The savings programs associated with the establishment of rice banks and microcredit facilities, and the contributions required from new members of cow banks, were defined in internal rules and regulations that were developed in, and by, each local community to ensure the sustainable management of those activities. Over the course of Phase III project implementation, there were 49 meetings involving 637 community members and local stakeholders that were organized to discuss rules and regulations with members and to monitor the progress of each of those activities, incorporating participatory discussions and consultations and the election of management committees supported by local authorities that were organized as part of a transparent process to establish the project's community rice banks. The use of voluntary local labor was also encouraged to assist in the construction of the rice bank that was established in Sen Taches village and the primary school building that was constructed in O Chunh village.



The organization of meetings to track the progress of ICDPs and discuss potential problems.

- 3.5.2 Organize fund-raising meetings with potential donors and NGOs. Informal discussions with potential donors and representatives of several NGO projects were conducted on an ad-hoc basis throughout the project. There were several meetings with commune councils and village chiefs in which the primary objectives of the meetings were to encourage the mainstreaming of prioritized livelihood improvement activities and forest conservation strategies into district development plans to obtain initial commitments of funding and support ongoing efforts to obtain further funding from international donors, as well as through other projects. There was a meeting organized, as well, with the head of the 9th military infantry brigade and Teuk Kraham commune council to discuss the mobilization of resources to establish a commune meeting hall funded primarily through the project, but which would also received contributions from local authorities and military organizations.
- 3.5.3 Prepare fund-raising documents for potential donors. Concept proposals were prepared and sent to potential donors.
- 3.5.4 Communicate with development partners to increase cooperation. Informal discussions with development partners and representatives of several NGO projects were conducted on an ad-hoc basis. Those included discussions with commune councils to establish collaborative support for prioritized activities through budget allocations determined at district integration workshops, as well as with CARITAS to determine the feasibility of establishing solar water pumps in Robonh and O Chunh villages.

Activity 3.6: Organize training in ecotourism, community-based ecotourism, sustainable agroforestry, and agricultural practices

- 3.6.1 Provide training in nature-based tourism, community-based ecotourism, sustainable agroforestry, and agricultural practices. Training workshops on technical practices for preparing home gardens and agroforestry systems for local communities were organized on 59 occasions and were attended by 3,185 participants from local communities, military families, and primary schools from 8 villages. The trainings included a theoretical component, as well as examples of technical practices to demonstrate the use of inter-cropped planting in home gardens and paddy fields inter-planted with trees.
- 3.6.2 Organize training and workshops on agroforestry and agricultural practices for local communities. Training workshops to introduce technical practices associated with agroforestry systems were organized for local communities, students, teachers and local health center officials. The provision of 'living fencing' and the application of home garden intercropping and paddy field inter-planting of trees were determined to be the most suitable agroforestry practices in the area. There were 17 trainings with 1,103 participants provided on agroforestry.



Training on integrated agroforestry systems organized for local communities and distribution of high value commercial trees and fruit trees as part of agroforestry promotion.

3.6.3 Conduct training on the production of compost fertilizers to improve agricultural yields. During agricultural training, the production and use of organic fertilizer was recommended as a preferential treatment to increase agricultural productivity. This approach was supported by local district agronomists.



Preparing tree seedling nursery and compost fertilizer at the O Chhun office in the Preah Vihear Protected Forest.

3.6.4 Conduct training on livestock raising and disease prevention and husbandry. Several training sessions on livestock raising and husbandry were provided to local people. The livestock considered included cows, pigs, chickens and ducks. Home visits and follow-up activities commonly included the provision of animal husbandry consultations, as well. The sharing of experiences among farmers and the discussion of model rules for farmers were encouraged during technical sessions. There were 14 trainings with 561 participants that specialized in animal raising.



Training on animal raising organized for local communities in Teuk Kraham and Morokt communes.

- 3.6.5 Communicate with potential partners to strengthen the capacity of local communities. Meetings were organized with commune councils to consider prioritized training requirements and the provision of support for training through government budget allocations. Collaboration was also discussed with district agricultural officers, local military human resource units and representatives of several NGOs on capacity building, especially with regard to the transfer of agricultural techniques and vocational training for livelihood improvement for communities using resources in the area.

Activity 3.7: Strengthen local community fora and networks to facilitate biodiversity conservation.

- 3.7.1 Organize awareness raising meetings and training for community networks and local communities. Raising awareness of forest, wildlife and biodiversity management and conservation was conducted on an ad-hoc basis during site visits and meetings with stakeholders and targeted local communities. The domestication of some species of flora and fauna, including wild orchids, ferns and wild pigs, was requested by local communities and was introduced through the project. Their importance and their markets were also promoted through outside brokers who collect some of the species of flora for profit. Domestication of those wild species is, however, not yet as popular in and around the Preah Vihear Protected Forest as in other areas. Meetings with district and commune councils and community committees to discuss forest and land use planning, law enforcement and livelihood strategy development and to determine input requirements and assess relative strengths, weaknesses and interventions to be supported under the project to empower local communities were organized, as well.



Organize awareness raising meetings on the importance of biodiversity conservation, and exchange visit for local communities to build the network.

- 3.7.2 Conduct workshops on forest and biodiversity conservation for local communities. Meetings with local communities were organized regularly during site visits to raise awareness of forest and biodiversity conservation in and around the Preah Vihear Protected Forest. Informal meetings with villagers were also often conducted together with other livelihood training activities. Those included awareness raising meetings for local primary school students and communities and the mainstreaming of sustainable forest management and forest fire prevention concepts into education, as well as the organization of competitive sessions in which drawings were sought to present student perceptions of biodiversity conservation and wildlife and forest protection.
- 3.7.3 Establish a network for local community committees and Preah Vihear Protected Forest staff. Meetings with local communities were regularly organized during site visits to discuss the feasibility of establishing a network for local community committees and staff of the Preah Vihear Protected Forest. Those meetings were used as a means to establish effective communications between local community

committees and the Preah Vihear Protected Forest staff with the same vision and mission of protecting biodiversity in the region. Cooperation was strengthened through mutual reporting, including on the status of community development requirements, especially those associated with capacity building and participatory law enforcement, which were reflected in the reports that were provided on incidences of forest offenses. ICDP community committees were also invited to attend workshops and meetings to discuss the establishment of networks with communities and authorities in other villages. Extension activities and follow-up meetings were organized between the community committees and project staff to establish closer relationships, increase understanding of underlying technical concepts, and resolve outstanding issues. There were 25 meetings and 2 exchange visits involving 595 members of communities and community committees that were organized to establish a network for local community committees and Preah Vihear Protected Forest staff and to monitor the progress and development of ICDPs.



The organization of a meeting to elect a new rice bank committee, discuss the establishment of a rice bank house, and exchange visits to develop a network with local community members.

(c) The project's planned duration and overall costs are summarized below:

Schedule: The start of Phase III of the project in Thailand was delayed by one month because of legislation requiring that the project be initially approved by the Cabinet.

Duration: 36 months + 8 months 'No Cost' Extension

Starting Date: 1 August 2012 in Cambodia; 1 September 2012 in Thailand.

(d) Project inputs were appropriate and adequate.

<u>Overall Project Costs</u>	<u>Sources of financing (\$ US)</u>	
Implementation in Thailand:	ITTO	800,280
Government:		339,552
Implementation in Cambodia:	ITTO	1,250,759
Government:		<u>228,850</u>
Total ITTO:		2,051,039
Total Government:		<u>568,402</u>
Grand Total:		<u>2,619,441</u>

Listings of Meetings, Training, and Workshops in Cambodia.

Meetings and training workshops organized from 1 January 2013 to 31 March 2016.

No.	Training workshop	Target Groups	No. of participants	Date
1	Regional Conference on “Biodiversity Conservation in Tropical Forests of the Greater Mekong Sub-region”	Officials from Greater Mekong Sub-region countries, including Cambodia, China, Lao PDR, Myanmar, Thailand and Vietnam and representatives of the Embassies of Japan, Thailand, and the United States of America in Cambodia, the ITTO Secretariat, CBD Secretariat, UNEP Asia and the Pacific Regional Office, ASEAN Wildlife Enforcement Network, the Satoyama Initiative, JICA, Asian Development Bank, the Forestry Administration, lecturers and students from the Royal University of Agriculture, the Royal University of Phnom Penh, and the Prek Leap National School of Agriculture, as well as representatives from the GMS Environmental Operational Centre of Asian Development Bank, and other Development Partners and conservations organizations, including USAID.	84	23-25 March 2016
2	Training on cow raising and agroforestry for local community.	O Chunch village.	20	29 Dec. 2015
3	Training on cow raising and agroforestry for local community.	Mlis village.	19	27 Dec. 2015
4	Training on cow raising and agroforestry for local community.	Robonh village.	23	27 Dec. 2015
5	National Conference on “Forest Biodiversity and the Conservation of Carbon Stocks in the Permanent Forest Estate”	Government officers from respective ministries and departments of the Ministry of Agriculture, Forestry and Fisheries, central & provincial FA officers, students from three universities, stakeholders from NGOs, ITTO projects staff, JICA, USAID, Wildlife Alliance, WCS, WWF.	175	17-19 December 2015
6	Training on cow raising and agroforestry for local community.	O Chunch village.	18	23 Nov. 2015
7	Training on cow raising and agroforestry for local community.	Mlis village.	20	22 Nov. 2015
8	Training on cow raising and agroforestry for local community.	Robonh village.	23	21 Nov. 2015
9	Training on tree planting and agroforestry for military officers.	395 th Battalion.	84	28 Oct. 2015
10	Training on Tree Planting & agroforestry for military officers.	394 th Battalion.	86	26 Oct. 2015
11	Training course on using GIS and remote sensing for forest land use assessment.	Preah Vihear Cantonment Forestry Administration officers, ITTO project staff, and students from the Royal University of Agriculture.	26	19-21 Oct. 2015

No.	Training workshop	Target Groups	No. of participants	Date
12	Training on integration of tree planting with agroforestry for military officers.	393 rd Battalion.	130	28 Sept. 2015
13	Training on integration of tree planting with agroforestry for military officers.	392 nd Battalion.	121	24 Sept. 2015
14	Awareness raising meeting and tree planting demonstration for primary students and local communities.	Local authorities, villagers, teachers, and students at Robonh village primary school.	74	24 July 2015
15	Awareness raising meeting and tree planting demonstration for primary students and local communities.	Local authorities, villagers, teachers, and students at Senrong Roeung 5 village primary school.	69	23 July 2015
16	Awareness raising meeting and tree planting demonstration for primary students and local communities.	Local authorities, villagers, teachers, and students at Sen Techah village primary school.	73	22 July 2015
17	Awareness raising meeting and tree planting demonstration for primary students and local communities.	Local authorities, villagers, teachers, and students at O Chunnh village primary school.	67	21 July 2015
18	Awareness raising meeting and tree planting demonstration for primary students and local communities.	Local authorities, villagers, teachers, and students at Senrong Roeung 2 village primary school.	78	20 July 2015
19	Awareness raising and mainstreaming meeting for local primary students on sustainable forest management and development and forest fire prevention, as well as competitive painting session on forest and wildlife protection.	Village chief, primary teachers, and Sen Rong Roeung 3 primary students.	75	29 May 2015
20	Awareness raising meeting with local authorities and community committees to empower local communities and discuss project achievement with stakeholders.	Local communities, and commune councils from Morokot, Teuk Kraham and Chaom Ksan communes.	54	28 May 2015
21	Awareness raising and mainstreaming meeting for local primary students on sustainable forest management and development and forest fire prevention, as well as competitive painting session on forest and wildlife protection.	Village chief, local people, primary teachers, and Sen Rong Roeung 4 village primary students.	87	27 May 2015
22	Awareness raising meeting with 11 schools and 6 health centers on agroforestry and planting trees.	Local teachers and health center officers.	28	16-18 May 2015
23	Awareness raising and mainstreaming meeting for local primary students on sustainable forest management and development and forest fire prevention, as well as competitive painting sessions on forest and wildlife protection.	Village chief, primary teachers, and Sen Rong Roeung 1 village primary students.	96	31 April 2015
24	Awareness raising and mainstreaming meeting for local primary students and community on benefits of sustainable forest management and development and	Village chief, local people, primary teachers, and Robonh primary students.	101	29 April 2015

No.	Training workshop	Target Groups	No. of participants	Date
	forest fire prevention, as well as competitive question-answer session for primary students.			
25	Awareness raising and mainstreaming meeting for local primary students and community on benefits of sustainable forest management and development and forest fire prevention, as well as competitive question-answer session for primary students.	Village chief, local people, primary teachers, and O Chunh village primary students.	110	30 March 2015
26	Awareness raising on land uses and the identification of community use areas in the Preah Vihear Protected Forest.	Local communities and commune councils from Morokot, Teuk Kraham and Chaom Ksan communes.	60	2-4 February 2015
27	Training workshop on technical practices for preparing home gardens and agroforestry systems for local communities.	SRR1-5, Mlis, O Chunh, and Sen Tehces villages.	291	31 Jan.-7 Feb. 2015
28	Training on endangered species and law enforcement for fauna and flora.	Local people (O Chunh).	33	22 December 2014
29	Organize study tours on “forest restoration, biodiversity conservation, land use, law enforcement, and community development in Preah Vihear Protected Forest.”	Royal University of Agriculture students.	30	21-23 November 2014
30	Exchange Visit to Tbeng Lech Community Forest, Tbeng commune, Banteay Srey district, Siem Reap province.	Selected famers and model role of farmers, Teuk Kraham and Morokot communes.	20	8 -9 November
31	Joint on “ Wildlife Distribution Modeling” at Ubon Ratchathani province, Thailand	Local Preah Vihear Forestry Administration officers, ITTO project staff.	17	20-25 October 2014
32	Exchange Visit to Tbeng Lech Community Forest, Tbeng commune, Banteay Srey district, Siem Reap province.	Village chiefs and commune councils, Teuk Kraham and Morokot communes.	20	17-18 October 2014
33	Natural Pesticides for Home Gardens and System of Rice Intensification (SRI), Experience Sharing of Model Farmer.	Senrongroeurng 5 village.	35	2 June 2014
34	Natural Pesticides for Home Gardens and System of Rice Intensification (SRI), Experience Sharing of Model Farmer.	Senrongroeurng 2 village.	41	1 June 2014
35	Natural Pesticides for Home Gardens and System of Rice Intensification (SRI), Experience Sharing of Model Farmer.	Senrongroeurng 1 village.	16	31 May 2014
36	System of Rice Intensification (SRI) and Compost Fertilizer and Chicken Raising.	O Chunh village.	43	30 May 2014
37	Natural Pesticides for Home Garden and System of Rice Intensification (SRI), Experience Sharing of Model Farmer.	Senrongroeurng 3 village.	33	29 May 2014
38	Integrated Pest Management for Home Gardens and System of Rice Intensification (SRI), Experience Sharing of Model Farmer.	Senrongroeurng 1 village.	18	28 May 2014

No.	Training workshop	Target Groups	No. of participants	Date
39	Cash and Fruit Crop Improvement (Melon, Watermelon, Peanuts, Corn, Papaya, Bananas, Mango, Jackfruit, Sapodilla, Sugar Apples, Coconuts).	Senrongroeurng 1 village.	15	24 May 2014
40	Integrated Pest Management for vegetable and fruit crops; System of Rice Intensification (SRI) Review, Experience Sharing of Model Roles of Farmers.	Senrongroeurng 3 village.	21	23 May 2014
41	Integrated Pest Management for vegetable and fruit crops; System of Rice Intensification (SRI) Review, Experience Sharing of Model Roles of Farmers.	Senrongroeurng 2 village.	32	22 May 2014
42	Integrated Pest Management for vegetable and fruit crops; System of Rice Intensification (SRI) Review, Experience Sharing of Model Roles of Farmers.	Senrongroeurng 5 village.	20	21 May 2014
43	Integrated Pest Management for vegetable and fruit crops; System of Rice Intensification (SRI) Review, Experience Sharing of Model Roles of Farmers.	Senrongroeurng 4 village.	34	20 May 2014
44	System of Rice Intensification (SRI) and Compost Fertilizer.	Senrongroeurng 3 village.	21	31 March 2014
45	System of Rice Intensification (SRI) and Compost Fertilizer.	Sentechah village.	21	30 March 2014
46	Training on Home Gardens (<i>Chinese Radish, Yard-long Bean, Eggplant, Petsai Convolvulus and Cucumber</i>), Animal Raising (<i>Chicken Raising</i>), and Agroforestry (<i>Rice and Trees</i>).	Sentechah village.	25	29 March 2014
47	Training on Home Gardens (<i>Chinese Radish, Yard long Bean, Eggplant, Petsai Convolvulus and Cucumber</i>), Animal Raising (<i>Chicken Raising</i>), and Agroforestry (<i>Rice and Trees</i>).	Senrongroeurng 3 village.	55	28 March 2014
48	System of Rice Intensification (SRI) and Compost Fertilizer.	Senrongroeurng 2 village.	22	27 March 2014
49	Training on Home Gardens (<i>Chinese Radish, Yard long Bean, Eggplant, Petsai Convolvulus and Cucumber</i>), Animal Raising (<i>Chicken Raising</i>), and Agroforestry (<i>Rice and Trees</i>).	Senrongroeurng 2 village.	47	26 March 2014
50	System of Rice Intensification (SRI) and Compost Fertilizer.	Senrongroeurng 4 village.	32	25 March 2014
51	System of Rice Intensification (SRI) and Compost Fertilizer.	Senrongroeurng 1 village.	13	24 March 2014
52	System of Rice Intensification (SRI) and Compost Fertilizer.	Senrongroeurng 5 village.	23	23 March 2014
53	Training on Home Gardens (<i>Chinese Radish, Yard long Bean, Eggplant, Petsai Convolvulus and Cucumber</i>), Animal Raising (<i>Chicken Raising</i>), and Agroforestry (<i>Rice and Trees</i>).	Senrongroeurng 5 village.	71	22 March 2014

No.	Training workshop	Target Groups	No. of participants	Date
54	Training on Home Gardens (<i>Chinese Radish, Yard long Bean, Eggplant, Petsai Convolvulus and Cucumber</i>), Animal Raising (<i>Chicken Raising</i>), and Agroforestry (<i>Rice and Trees</i>).	Senrongroeurng 4 village.	48	21 March 2014
55	Training on Home Gardens (<i>Chinese Radish, Yard long Bean, Eggplant, Petsai Convolvulus and Cucumber</i>), Animal Raising (<i>Chicken Raising</i>), and Agroforestry (<i>Rice and Trees</i>).	Senrongroeurng 1 village.	22	20 March 2014
56	GPS and GIS for basic users.	Forestry student of the Prek Leap National Agriculture School.	35	24 May 2014
57	Introduction to forest restoration, biodiversity conservation, and land use in Preah Vihear Protected Forest.	Forestry student of the Prek Leap National Agriculture School.	45	1-2 April 2014
58	Land Use and Land Cover Change Modeling.	Officers of Preah Vihear Forestry Administration Cantonment, Division, and Triage, Thailand's national park officers, Lao PDR's University representatives.	30	14-16 March 2014
59	GIS and land use mapping.	Officers of the Preah Vihear Forestry Administration Cantonment, Division, and Triage.	19	03-05 March 2014
60	GIS and land use mapping.	Officers of the Preah Vihear Forestry Administration Cantonment, Division, and Triage.	8	07 June, 2013
61	Raising Awareness	Robonh Primary School.	51	10 May 2013
	Total		3,108	

Monitoring and Extension Meetings organized from 1 January 2013 to 31 March 2016.

No.	Activity	Target Group	No. of participants	Date
1	Cow distribution meeting	Mlis village.	20	12 Mar. 2016
2	Discussion on Cow bank contract and cow lucky draw for raising	Mlis village.	48	12 Mar. 2016
3	Cooperation Visit on Social and Environmental Education by 17 students and 2 professors from Seoul National University.	Local primary students (O Chunh, Robonh, and Sen Taches primary schools).	250	18 – 20 Feb. 2016
4	Extension workshop on Project Result with Local community and RUA students	Local Community and students.	62	20 Jan. 2016
5	Monitoring cow bank progress in O Chunh Village	O Chunh village.	2	15 Jan. 2016
6	Monitoring cow bank progress in Mlis Village	Mlis village.	4	15 Jan. 2016
7	Monitoring cow bank progress in Robonh Village	Robonh village.	2	15 Jan. 2016
8	Monitoring and follow-up meeting with Cow Bank Committee.	O Chunh village.	3	29 Dec. 2015
9	Monitoring and follow-up meeting with Cow Bank Committee.	Mlis village.	3	28 Dec. 2015
10	Monitoring and follow-up meeting with Cow Bank Committee.	Robonh village.	3	27 Dec. 2015
11	Consultative meeting on constructing a primary school building with teachers and local community members who would volunteer their labor as carpenters.	O Chunh villagers and primary school teachers.	23	14 Dec. 2015
12	Consultative meeting on constructing a wooden primary school building with teachers and local community members.	O Chunh villagers and the Principal of the primary school.	5	13 Dec. 2015
13	Meeting to monitor purchasing and returning borrowed paddy rice from the rice bank.	Mlis village.	8	10 Dec. 2015
14	Consultative meeting on pond digging with local authorities and communities.	Village chief of Morokot, army officers, and villagers from Sen Rung Reung1, 5 and Sen Taches villages.	7	3 Dec. 2015
15	Monitoring and follow-up meeting with Cow Bank Committee.	O Chunh village.	2	23 Nov. 2015
16	Monitoring and follow-up meeting with Cow Bank Committee.	Mlis village.	3	22 Nov. 2015
17	Monitoring and follow-up meeting with Cow Bank Committee.	Robonh village.	3	21 Nov. 2015
18	Monitoring and follow-up meeting with Cow Bank Committee.	Robonh village.	3	21 Nov. 2015
19	Meeting to discuss the organization of the next training on agroforestry and tree planting demonstrations with 4 local military battalions and 3 villages.	Local military battalions and local authorities.	12	23 Sept. 2015
20	Meeting on law enforcement and patrolling activities in the Preah Vihear Protected Forest.	Preah Vihear Cantonment Forestry Administration officers.	20	3 Sept. 2015
21	Extension meeting on forest law enforcement regulations followed by the distribution of higher-value commercial tree species and fruit trees at the O Chunh patrolling station.	Military officers of the 9 th Infantry Brigade, local communities, and commune councils.	500	1 Sept. 2015

No.	Activity	Target Group	No. of participants	Date
22	Monitoring inventory of rice in the rice bank in Sen Tacheah village.	Rice Bank Committee in Sen Tacheah village.	11	31 Aug. 2015
23	Monitoring inventory of cows in the cow bank in Robonh village.	Cow Bank Committee in Robonh village.	39	31 Aug. 2015
24	Meeting on law enforcement and patrolling in the Preah Vihear Protected Forest.	Preah Vihear Cantonment Forestry Administration officers and military officers of the 395 th Battalion.	25	29 Aug. 2015
25	Meeting with the local community and the Cow Bank Committee to simplify the monitoring system in use in O Chunh village.	Local villagers and the Cow Bank Committee in O Chunh village.	35	19 Aug. 2015
26	Meeting with the local community and the Cow Bank Committee to simplify the monitoring system in use in Mlis village.	Local villagers and the Cow Bank Committee in Mlis village.	32	19 Aug. 2015
27	Meeting with the local community and the Cow Bank Committee to simplify the monitoring system in use in Robonh village.	Local villagers and the Cow Bank Committee in Robonh village.	30	2 Aug. 2015
28	Meeting with the Rice Bank Committee and local people borrowing rice from the rice bank.	Rice Bank members in Mlis village.	20	24 July 2015
29	The 6 th Project Steering Committee and Joint Project Technical Committee meetings organized at the Phnom Penh Hotel.	ITTO management, project officers from Cambodia, Thailand, and Lao PDR, and local university students.	30	24 July 2015
30	Meeting with the Rice Bank Committee and local people borrowing rice from the rice bank.	Rice Bank members in O chunh village.	15	23 July 2015
31	Meeting on law enforcement and patrolling activities in the Preah Vihear Protected Forest.	Military police and military officers of the 9 th Infantry Brigade.	20	1 July 2015
32	Meeting with O Chunh village Rice Bank Committee to introduce simple monitoring system.	Local community and committee members.	30	15 June 2015
33	Monthly meetings with provincial foresters and other authorities to discuss the progress regarding suppression of forestry offenses.	Provincial foresters, relevant authorities, and other stakeholders.	20	At the end of every month from January to June.
34	Collaborative discussion and provision of fruit trees and other trees to representatives of military sub-brigade No. 393.	Local soldiers.	4	11 June 2015
35	Collaborative discussion and provision of fruit trees and other trees to representatives of military brigade No. 9.	Soldiers, local authorities.	400	26 May 2015
36	Collaborative discussion and provision of fruit trees and other trees to representatives of military bodyguard unit No. 246.	Local soldiers.	3	15 May 2015
37	Collaborative discussion with representatives of military brigade No. 9 on organizing a ceremony to commemorate the provision of fruit trees and other trees to soldiers.	Local soldiers.	4	14 May 2015

No.	Activity	Target Group	No. of participants	Date
38	Collaborative meeting on agroforestry planning and pound digging at the O Chunh primary school.	Teachers, local authorities, community.	13	1-4 May 2015
39	Extension meeting with local communities and other stakeholders on ICDPs, wildlife protection, land use, and law enforcement.	Local authorities, villagers, and other stakeholders.	63	10 April 2015
40	Microcredit, rice bank and cow bank follow-up meeting.	Local people (Robonh, O Chunh, and Mlis villages).	7	1-2 April 2015
41	Monitoring of microcredit and cow bank progress in Mlis, O Chunh, and Robonh villages.	Local people (Mlis, Robonh, and O Chunh villages).	8	23-24 March 2015
42	Collaborative discussion with commune councils, communities, and others on the feasibility of establishing ponds for public use in the dry season.	Commune councils, local communities.	15	17 March 2015
43	Collaborative meeting with CARITAS officers to study the feasibility of establishing solar water pumps in Robonh and O Chunh villages.	CARITAS staff members.	2	6 March 2015
44	Meeting to elect a new Rice Bank Committee in Morokot village and discuss the sustainable management rule, procedures for borrowing rice, and benefit sharing.	Local community in Sen Teches village and the commune council.	55	28 February 2015
45	Extension meeting with local communities and other stakeholders on wildlife protection, land use, law enforcement, and the feasibility of domesticating target flora and fauna.	Authorities and local villagers.	63	23 February 2015
46	Monitoring of progress of the cow banks in Mlis, Robonh, and O Chunh villages.	Local people (Mlis, Robonh, and O Chunh villages).	10	7-8 February 2015
47	Random home visits to discuss varieties of vegetables to be planted by local communities.	Farmers of local communities (Sen Rong Roeung 1, 2, 5, Sentechah, and Mlis villages).	43	10–14 January 2015
48	Meeting with the rice bank and microcredit members in O Chunh village and the Cow Bank Committee in Robonh village.	Local people (Robonh and O Chunh villages).	8	4-5 January 2015
49	Meeting with O Chunh village Rice Bank Committee to introduce simple monitoring system.	Local community and committee members.	33	1 January 2015
50	Female cow transferring from one person to another person	Local people (O Chunh village).	5	27 December 2014
51	Meeting on rice return to ricehouse	Local people (O Chunh village).	20	23 December 2014
52	Committee election and new role discussion for new rice bank committee in Ochonh	Local people (O Chunh village).	33	22 December 2014
53	Meeting about the material for new rice bank construction in O Chunh village.	Local people (O Chunh village).	5	15 December 2014
54	Meeting about the material and labor for new rice bank construction in O Chunh village.	Local people (O Chunh village).	5	20 November 2014
55	Meeting on cow transferring to other people.	Local people (O Chunh village).	3	13 November 2014
56	Meeting on exchange visit for local	Local people	20	5 -6 November 2014

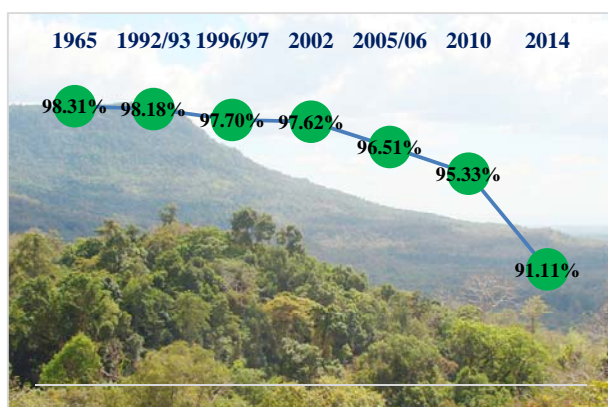
No.	Activity	Target Group	No. of participants	Date
	people.			
57	Meeting on exchange visit for local authorities.	Local Authorities (Morokot and Tek Kraham communes).	20	15 October 2014
58	Meeting on rice borrowing from the rice bank.	Local people and Rice Bank Committee (O Chunh and Malis villages).	19	29-30 September 2014
59	Microcredit, Rice Bank, and Cow Bank follow up meeting.	Local people (Robonh, O Chunh, and Malis villages).	7	11-12 September 2014
60	4000 fruit trees and mango trees provided to army families,	SenRong Reung 1,2,3,4,5 villages.	571	6 September 2014
61	5000 fruit trees and mixed species provided to the Provincial Forestry Administration of Preah Vihear.	Forestry Administration Cantonment.	500	3 September 2014
62	Microcredit, Rice Bank, and Cow Bank follow up meeting	Local people (Robonh, O Chunh, and Malis villages).	7	29-30 August 2014
63	Random home visits on Vegetable Home Gardens and Seeds and Manual Distribution of Varieties of Vegetables to local communities.	Senrongroeu 1 and 2 villages,	36	9 – 12 August 2014
64	Meeting with Cow Bank Committee on cow diseases.	Robonh village.	4	6 August 2014
65	Microcredit, Rice Bank, and Cow Bank follow up meeting.	Local people (Robonh, O Chunh, and Malis villages).	7	29-30 July 2014
66	Meeting with Morokot commune council on Establishment of New Rice Bank in Sen Thaches.	Morokot commune council	3	28 July 2014
67	Meeting with Sen Thaches community on Establishment of New Rice Bank Projection in Sen Thaches.	Sen Thaches villagers.	25	27 July 2014
68	Meeting with O'Chunh community on Establishment of New Rice Bank in O Chunh.	O Chunh villagers.	20	14 July 2014
69	Microcredit and Rice Bank follow up meeting (Established in Phase II).	Microcredit and Rice Bank Committees.	5	20 June 2014
70	Random home visits on Vegetable Home Gardens of local communities.	Farmers of local communities, Tek Kraham and Morokot communes.	32	16 – 27 June 2014
71	Random home visits on Potential Varieties of Vegetables to be planted by local communities.	Farmers of local communities, Tek Kraham and Morokot communes.	19	10 – 14 June 2014
72	Scheduled home visits on Seed Distribution of Varieties of Vegetables to local communities.	Farmers of local communities, Tek Kraham and Morokot communes.	31	12 - 22 June 2014
73	Forest land demarcation and land use with local community.	Local people from O Chunh village.	43	30 May 2014
74	Extension meeting on Environmental Concerns and Law Enforcement activities.	Local community (Robonh village).	31	19 May 2014
75	Microcredit and Rice Bank and Cow Bank follow up meeting.	Local people (Robonh, O Chunh, and Malis villages).	7	10-11 April 2014
76	Extension meetings on Environmental Concerns and Law Enforcement activities.	Local communities (SenRong Reung 1 and O Chunh villages).	22	20 March 2014

No.	Activity	Target Group	No. of participants	Date
77	Monitoring microcredit and cow bank progress in Malis, O Chunh, and Robonh villages.	Local people (Malis, O Chunh, and Robonh villages).	8	14-15 March 2014
78	Monitoring cow bank progress in Malis, O Chunh, and Robonh villages.	Local people (Malis, O Chunh, and Robonh villages).	10	27-28 February 2014
79	Pre-training consultation meeting for organizing extension training on agricultural diversification and agroforestry for local communities.	Officials of Cham Ksant District Agricultural Office and village chiefs.	12	16 -19 February 2014
80	Pre-training consultation meeting for organizing extension training on agricultural diversification and agroforestry for local communities.	Local people (Sentecheh Senrongreung 1, 2, 3, 4 and 5 villages).	23	17-19 February 2014
81	Monitoring cow bank progress in Malis and Robonh villages.	Local people (Malis and O Chunh villages).	5	10 January 2014
82	Mango trees provided to villagers in O Chunh village.	Local villagers (O Chunh village).	12	7 January 2014
83	Mango trees provided to army families at Prasat Neak Buos.	Local army families (Prasat Neak Buos and Malis villages).	8	5 January 2014
84	Meeting with Rice Bank, Microcredit, and Cow Bank Committees in Malis and O Chunh villages.	Local people (Malis and O Chunh villages).	8	2 January 2014
85	Pre-training consultation meeting for organizing extension training on agricultural diversification and agroforestry for local communities.	Officials of Cham Ksant District Agricultural Office and village chiefs.	12	16-19 March 2014
86	Establishment of new ICDP.	Authorities and local villagers.	40	25 November 2013
87	Cow Bank and School follow up meeting (Established in Phase II).	Cow Bank Committee, local authorities, teachers, and local villagers.	35	14 November 2013
88	ITTO project extension meeting on land use, community development, biodiversity conservation, and forest law enforcement.	Local villagers from 7 villages in Tek Krahorm and Morokot communes, Senrung Reung 5 and Sen Dekchas villages.	89	October 2013
89	ITTO project extension meeting on land use, community development, biodiversity conservation, and forestry law enforcement.	Local villagers from 7 villages in Tek Krahorm and Morokot communes, Malis, O Chunh, Sen RungReung 1, Sen RungReung 2, Sen RungReung 3, and Sen RungReung 4 villages.	267	September 2013
90	Commune land use consultation meeting.	Tek Krahorm community chief, chief and deputy chief of village.	15	09 June 2013
	Total		4,065	

Overview of project research results.

There were several research studies conducted under the Cambodia Project Component in the Preah Vihear Protected Forest during Phase III of the project. Those studies have been printed, bound and disseminated as a separate publication entitled "Integrating Forest Biodiversity Resource Management and Sustainable Community Livelihood Development in the Preah Vihear Protected Forest" (Cambodia Forestry Administration 2016a) and include the following research studies:

I. 'Forest Cover Trends in the Preah Vihear Protected Forest (PVPF),' *which assessed the forest cover of evergreen, semi-evergreen, and deciduous forests and changes in forest cover between 2002 and 2014 in the Preah Vihear Protected Forest.*



The primary objectives of this study were to assess the forest cover of each forest cover type, as well as forest cover changes between 2002 and 2014, in the Preah Vihear Protected Forest and to conduct a ground assessment of forest conditions in 2014. The assessments were conducted using SPOT satellite image data of the LANDSAT Thematic Mapper (TM) 5 and LANDSAT 8 OLI

with high resolution pixels (30 m x 30 m). Four bands (3-4-5-6) of the 11 bands that were available were used for forest classification. Seven land use classes were used in the assessments, including those of evergreen forest, semi-evergreen forest, deciduous forest, open deciduous forest, grassland, agricultural land, and water surfaces. ArcView 3.3, ArcGIS 10.1, and ERDAS Imagine 2014 software were used in the interpretation process. The interpretation of the 2014 imagery delineated two vegetation classes, forest and non-forest, consistent with the national definition of forest under the Forest and Agriculture Organization of the United Nations (FAO) and the Cambodia Forestry Law (2002). There were 280 points used for ground truth verification and reinterpretation was performed by the GIS and Remote Sensing Unit of the Watershed Management and Forestland Office of the Forestry Administration.

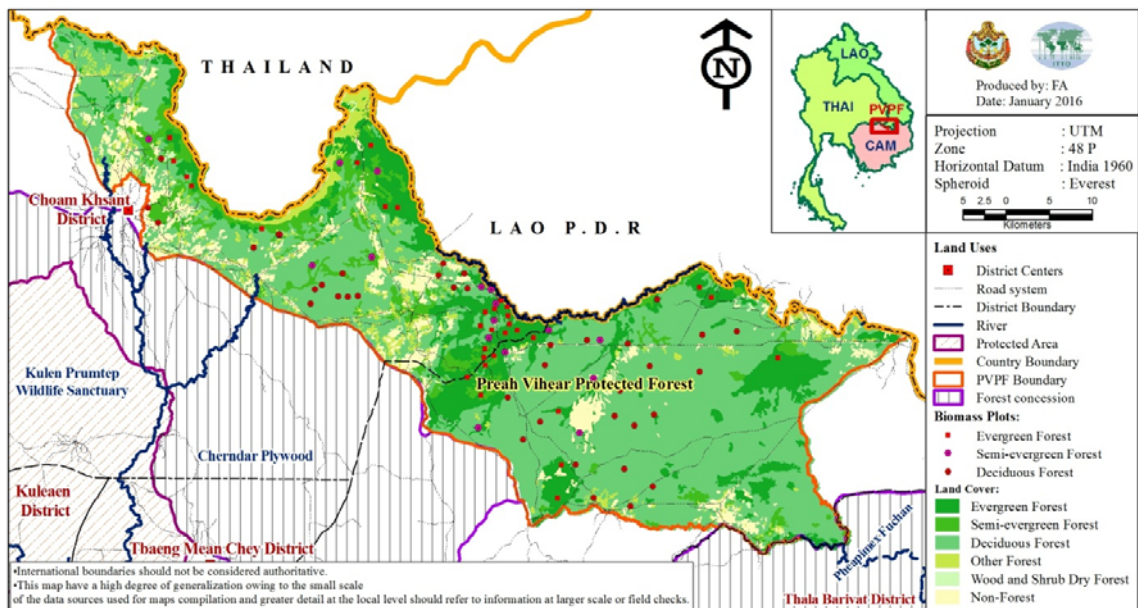
The results of the 2014 assessment in the Preah Vihear Protected Forest indicated a forest cover of 173,134 hectares, representing 91.11% of total land area. The composition of that forest cover revealed that dry deciduous forest had the most extensive forest coverage (59.19%), followed by evergreen forest (17.81%) and semi-evergreen forest (8.62%). Site assessments of 280 satellite imagery interpretation sample points in the Preah Vihear Protected Forest were conducted to confirm forest classifications. The results of the ground truthing revealed that 266 of the 280 ground truthed points were correct and the accuracy of the forest classifications was significant at 95%. The results of the current forest cover assessment in the Preah Vihear Protected Forest indicate a progressive decline in forest cover from 97.62% in 2002 to 96.51% in 2006, 95.33% in 2010, and 91.11% in 2014, equivalent to an average annual deforestation rate over that period of 0.715% of the land area of the Preah

Vihear Protected Forest. That rate is, however, lower than the country-wide average of annual forest cover loss of 1.055% during that same period.

The lower rate of decrease of forest cover in the PVPF is, nevertheless, a critical concern, especially in the context of efforts to mitigate the impacts of climate change. One of the primary reasons for the loss in forest cover is the increase in demand for the use of land for agriculture and agro-industrial endeavors, especially the conversion of forestland to Social Land Concessions and illegal forestland encroachment by the military and migrants with respect to which land use policy reforms would not be able to compensate sufficiently to achieve either the Cambodia Millennium Development Goals or the Sustainable Development Goals. In order to maintain the percentage of forest cover in the Preah Vihear Protected Forest as it was in 2002 (187,282 hectares) would require 14,148 hectares of non-forest land to be converted to man-made forest and agroforestry plantations.

II. 'Preliminary Assessment of Carbon Stocks,' which established preliminary estimates of carbon stocks in the evergreen, semi-evergreen, and deciduous forests of the Preah Vihear Protected Forest as a means of providing measures of those stocks prior to a more extensive assessment of the practicability of establishing REDD+ activities in the PVPF.

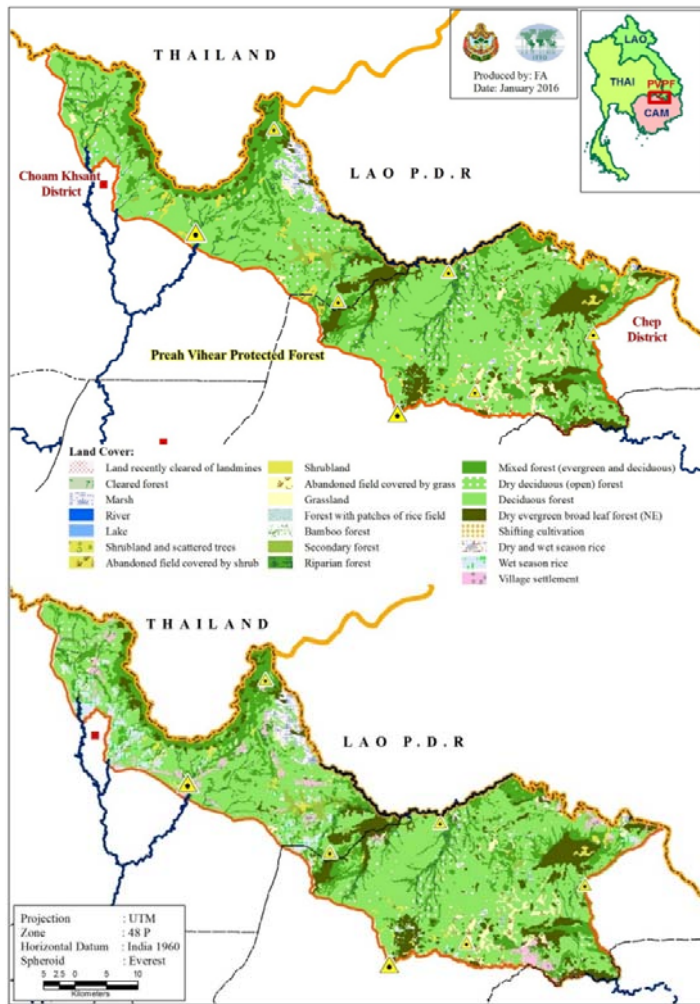
The primary purpose of this study was to establish preliminary estimates of carbon stocks in the evergreen, semi-evergreen, and deciduous forests of the PVPF as a means of providing measures of those stocks prior to a more extensive assessment of the practicability of establishing REDD+ activities in the PVPF. The sampling area consisted of eighty Nine (89) plots (30 m x 50 m) that were established in evergreen (33), semi-evergreen (17), and deciduous forests (39) in the PVPF. Individual plot locations within each of those forest cover types were determined by random selection of GPS coordinates. The assessment was conducted in accordance with National Forest Inventory recommendations with rectangular plots established to increase the accuracy of sampling intensity. Under this structure, there were three levels of sub-plots in each plot, including (1) a sub-plot for measuring large trees (DBH \geq 30cm.); (2) a sub-plot for measuring medium size trees (15cm. \leq DBH \leq 30cm.); and (3) a sub-plot for measuring small trees (5cm. \leq DBH $<$ 15cm.).



The results indicated that there were 5,723 trees in the 89 sample plots with an estimated above ground biomass of 1,524 mt, which is equivalent to approximately 762 mt of carbon biomass. The maximum carbon biomass (288 mt) was present in the 31-60 cm DBH class and the second most biomass (258 mt) was present in the 0-30 cm DBH class. The least carbon biomass (104 mt) was present in the 61-90 cm DBH class. The sum of the above ground and below ground biomass was 322.859 ± 36.721 mt/ha in the evergreen forest; 259.086 ± 36.611 mt/ha in the semi-evergreen forest; and 130.479 ± 10.299 mt/ha in the deciduous forest. The sum of the above ground and below ground carbon stocks in the evergreen forest was 161.43 ± 18.36 mt/ha; 129.54 ± 18.31 mt/ha in the semi-evergreen forest; and 65.24 ± 5.15 mt/ha in the deciduous forest. The differences of biomass and carbon stocks between evergreen, semi-evergreen and deciduous forest were primarily related to differences in tree densities and volumes. The assessment of the correlation between DBH and tree biomass resulted in a correlation of 0.8526 in the evergreen forest, 0.8737 in the semi-evergreen forest, and 0.8781 in the deciduous forest. This confirmed the positive correlation and strong linear relationship between DBH and biomass in each of the forest cover types in the Preah Vihear Protected Forest.

The extent to which the relatively low estimates of carbon stocks in the deciduous forest cover type were the result of the random selection of more cutover sampling sites in deciduous forests in the PVPF or the use of the more general, and perhaps less applicable, allometric equations for moist tropical forests and tropical forests in deciduous forests is uncertain. The lower estimates of carbon stocks in deciduous forests suggest the efficacy of conducting further sampling to increase the accuracy of the estimates in deciduous forests and provide the means to facilitate a more inclusive and accurate evaluation of the feasibility of establishing REDD+ activities in the PVPF.

III. 'Land Use and Land Cover Change Scenarios,' *which evaluated the manner in which land, forest cover, and tenure arrangements in the Preah Vihear Protected Forest have been changing.*



There have been dramatic changes in land use in the Preah Vihear Protected Forest (PVPF) since 2000. In responding to those changes, data on land use were collected under the 'Management of the Emerald Triangle Protected Forests Complex to Promote Conservation Between Thailand, Cambodia and Laos (Phase III) project funded by the government and the people of Japan through the International Tropical Timber Organization (ITTO). The purpose of this study was to assess the manner in which land, forest cover, and tenure arrangements in the Preah Vihear Protected Forest have been shifting. This study of Land Use and Land Cover (LULC) used widely available data, including Landsat satellite images from the United States Geological Survey, Digital Elevation Model images from JICA, the existing geo-

database of land cover from the Cambodia Forestry Administration, as well as field observations, interviews, and group discussions

The results of LULC analyses in the PVPF have indicated a decline in forestland from 97.62% in 2002 to 91.11% in 2014, equivalent to an average annual deforestation rate of 0.715% of the land area of the PVPF, which is lower, however, than the country's average annual deforestation rate of 1.055% during that same period. This means that to maintain the percentage of forest cover in the PVPF as it was in 2002 of 185,503 ha to compensate sufficiently to achieve the Cambodia Millennium Development Goals would require 12,369 ha of non-forest land to be converted to man-made forest tree plantations and agroforestry.

The changes in land cover that were observed during the most recent period from 2009 to 2014 were primarily associated with net 'losses' of 6158.38 ha to village settlements and 6705.73 ha to agricultural land. The representations of those changes in village settlements were primarily associated with net 'gains' of 333.55 ha from agricultural land, 5103.05 ha from forest land, 460.51 ha from grasslands and/or swamps, 205.05 ha from shrub lands, and 56.22 ha from water features (marshes). Other changes that occurred in agriculture land were primarily associated with net 'gains' of 5596.66 ha from forestland, 375.25 ha from grasslands and/or swamps, 729.32 ha from shrub lands, and 4.5 ha from water features. The largest percentage

change in area was associated with village settlements and agricultural land, the area of which expanded by 81.54% and 71.74%, respectively, primarily as the result of the net ‘gain’ of 5103.05 ha of village settlements and 5596.66 ha of agricultural land from forestland.

Based on simulated LULC maps in 2030 for four scenarios using the Dyna-Clue Model combination with ArcGIS 10.0 conducted by the LULC modeling expert, the *unsustainable economic development and serious resource degradation* scenario predicted a considerable amount of land conversion to arable land and rubber plantations. The area of mixed deciduous and dry dipterocarp forests was predicted to decline from 22.9% of the entire Emerald Triangle Protected Forests Complex in 2013 to 15.1% in 2030. The simulations illustrated, as well, the results of the *low economic decline and localized resource degradation (business-as-usual)* scenario with restrictive policies in the Pha Taem Protected Forests Complex, which were deforestation and agricultural expansion in the remnant forests situated in the recreation forest and regulating water resources zones in the Preah Vihear Protected Forest and area close to the An-Ses international border between Cambodia and Thailand.

IV. 'Floral Diversity,' *which documented the current extent of plant species and compiled lists of distributions of the floral species in the Preah Vihear Protected Forest and confirmed the presence or absence of threatened species of plant communities, particularly with respect to the domesticated use of plants by local communities.*

The landscape of the PVPF is composed of hill evergreen forest, lowland evergreen forest, open forest, dried deciduous forest, grassland, and wetlands. A primarily seasonal network of rivers and streams flows through the PVPF, contributing ultimately to the flow of the Mekong River. It is the result of its diversity of plant environments that the PVPF is home to a mosaic of ecosystems and supports a great number of wildlife species. There is a variety of flora in the PVPF that is useful to humans, including commercial species, medicinal plants and herbs, and non-timber forest products. The objectives of this floral survey were to document the current extent of plant species and compile lists of species' distributions of the floral species in the Preah Vihear Protected Forest. Its specific objective was to confirm the presence or absence of threatened species of plant communities in the Preah Vihear Protected Forest, particularly with respect to the domesticated use of plants by local communities. Floral surveys follow the “random meander,” in which the recorder walks in a random manner through different forest types in the Preah Vihear Protected Forest, recording every species observed on the boundaries between various plant communities, as well as the conditions of each of those communities. The collected unknown plant species were labeled and photographed on the same day that they were collected. The floral survey was conducted in several locations in Ro Bunh, Kbal Damrey, Nam Sam, and other sites in the different plant ecological zones of the PVPF, especially in evergreen, semi-evergreen, and deciduous forests.



There were 432 species of flora recorded in the field survey in the Preah Vihear Protected Forest. Of those species, there were 160 timber and non-timber species, 43 shrub species, 63 climber species, 49 spermatophytes, 46 pteridophytes - including 30 orchid species - 42 mushroom species, 11 bamboo species, and 17 palm species. The timber species included 12 species of Luxury grade, 18 species of 1st Grade, 16 species of 2nd Grade, 22 species of 3rd Grade and 92 species of non-grade.

There are at least 42 species of mushrooms growing in the PVPF, as well as 107 edible species of vegetables, 22 of which are collected by local people to meet daily consumption requirements, as well as to sell in markets to generate incomes. The edible mushrooms and other edible vegetables are natural foods with high nutritious, especially protein, value that are available from May to July for consumption by local communities. Of

the 432 species of plants present in the Preah Vihear Protected Forest, 243 have some part that may be used as traditional medicine and, of those, 46 are collected by traditional doctors and local communities. There are more than 30 orchid species present in the Preah Vihear Protected Forest, as well, and of those more than 15 have been observed by the project team, which has brought them from the forest for ex-situ conservation in the Morokut nursery. The fruits of forest trees may also be used as sources of food, which may be collected throughout the year. Those fruits may also be processed and preserved to sell in markets to generate additional income.

V. 'The Distribution of Landscape Wildlife Species,' *which facilitated species-specific comparisons of the distributions of landscape wildlife species common to the three countries as a prelude to the achievement of trans-boundary biodiversity conservation throughout the Emerald Triangle Protected Forests Complex.*

The Cambodia Forestry Administration, in cooperation with the Cat Action Treasury from 1998 to 2005 and the Wildlife Conservation Society from 1999, and in Phase II (2008-2010) and Phase III (2012-2016) of the ITTO Emerald Triangle Trans-boundary Biodiversity Conservation project, has conducted several biodiversity surveys in the Preah Vihear Protected Forest (PVPF). The cumulative results of those surveys have documented the presence of a fauna that is probably unique in Southeast Asia with regard to its representation of species of dry dipterocarp forests and other habitats, many of which are in rapid decline elsewhere in the region. There are at least 57 mammal species, more than 255 bird species, and 58 reptile species that have been documented. Indeed, the PVPF is either a last refuge for, or maintains important populations of 23 Critically Endangered and Endangered species from the International Union for the Conservation of Nature (IUCN) Red List. This diversity does not mask the disappearance of several animal species that formerly occurred in the Preah Vihear Protected Forest, including the Asian Two-horned Rhinoceros (*Dicerorhinus sumatrensis*), the Lesser One-horned Rhinoceros (*Rhinoceros sondaicus*), which was last observed in the 1930s, and Kouprey (*Bos sauveli*) and Wild Water Buffalo (*Bubalus bubalis*), both of which were apparently extirpated by 1964.



The initial step of the process used to distinguish landscape wildlife species in the Preah Vihear Protected Forest was determined by the relative weighting of several factors, including the relative frequency of occurrence of individual wide-ranging landscape wildlife species in and around the PVPF; the social and/or economic importance of each species to local communities and relative to their regional, national and international distributions; and the extent to which each species represents, or is an indicator of, the biodiversity of the area. Those criteria resulted in the initial selection of 11 mammal, 10 avian and 1 reptile

landscape wildlife species, which are presented with their International Union for the Conservation of Nature (IUCN) Red List classifications. Of the 22 landscape wildlife species selected, 10 of the 11 mammals - including the Asian Elephant (*Elephas maximus*), Banteng (*Bos javanicus*), Tiger (*Panthera tigris*), Gaur (*Bos gaurus*), Pileated Gibbon (*Hylobates pileatus*), Sambar (*Rusa unicolor*), Sumatran (Southern) Serow (*Capricornus sumatraensis*), Leopard (*Panthera pardis*), Golden Jackal (*Canis aureus*), and Wild Boar (*Sus scrofa*), as well as 3 of the 10 birds – including the Green Peafowl (*Pavo muticus*), White-winged Duck (*Asarcornis scutulata*), and Siamese Firebird (*Lophura diardi*) - and the 1 reptile – the Siamese Crocodile (*Crocodylus siamensis*) - were classified as landscape wildlife species that are present in each of the three countries of the Emerald Triangle Protected Forests Complex. It was to facilitate species-specific comparisons across the three countries that the distributions of those 14 landscape wildlife species are presented in this report.

There are considerable amounts of information that have been collected on landscape wildlife species in the PVPF and the most important recommendation resulting from this study is that efforts should continue to apply the results presented on these distributions to achieve trans-boundary biodiversity conservation throughout the Emerald Triangle Protected Forests Complex.

VI, 'Sustainable Livelihoods Assessment,' *which assessed livelihood resources in the Preah Vihear Protected Forest and, on the basis of that assessment, proposed sustainable livelihood approaches.*



Livelihoods comprise the capabilities, assets - including stores, resources, claims and access - and activities required for a means of living. Those livelihoods are sustainable that are able to cope with and recover from stresses and shocks, maintain or enhance their capabilities and assets, and provide sustainable livelihood opportunities for the next generation. The primary purpose of this study was to assess

livelihood resources, including natural, economic, human, and social capital, in the Preah Vihear Protected Forest and, on the basis of that assessment, propose sustainable livelihood approaches. There were 85 interviewees from 8 villages of Teuk Kraham and Morokot communes in the Preah Vihear Protected Forest selected to participate in the assessment.

Assets and Vulnerabilities: The population increased at an average annual rate of 1.16% between 2011 and 2014 and about 87% of those villagers have limited education. There are usually two laborers, or 'breadwinners,' who receive some form of salary, in each household, which, on average, has four people. Since there have been no close reciprocal relationships between institutions, the provisions of stakeholders do not often match with the requirements of the people. The poor depend to a considerable extent (12%-30%) on natural resources for their incomes since these assets gradually deteriorate and require replacement. The incomes available from agricultural sources account for from 16% to 46% because farming may only be conducted during the rainy season, there is not enough irrigation during the dry season, and lower productivity soils cover 58% of the project area. Most villagers, especially more recent inhabitants, cannot access many assets, including farmland and land tenure, intensive and diversified agricultural techniques, markets for agricultural products, toilet and sanitation facilities, materials for preventing malaria infection, or lower rates of loans.

Livelihood Strategies: There are four principal livelihood strategies that local communities have been using to meet their requirements and attain their goals. These include: (1) salary-paid employment; (2) farming; (3) collecting forest resources; and (4) businesses. The results indicated that the annual incomes of traditional communities were US \$1,550, while those of the more recent inhabitants were US \$2,007. The income earned from forest resources represented 12% of the income of new residents and 30% of the income of local indigenous people. Forest resources, nevertheless, provide a significant source to meet subsistence requirements, as well as act as a “safety net” in the event of emergencies or a “gap filler” in the event of seasonal shortages and, occasionally, as a means to permanently escape poverty.

Income strategies and outcome indicators: The principal livelihood strategies associated with salary-paid employment, farming, collecting forest resources, and businesses match with the principal indicators of livelihood strategies, which include (1) more income; (2) improved well-being; (3) reduced vulnerability; (4) enhanced food security; and (5) more sustainable use of natural resources.

Sustainable livelihood approaches: must be addressed through the expansion of agricultural diversification, intensification and extensification, agroforestry and home gardens, and small enterprise development. Increasing the use of these approaches will require that vocational training and other support continues to be provided. Land use planning must also be accomplished according to prevailing policies and legislation, as well as with regard to soil productivities, and the rights to secure access to capital assets, including farmland, must be ensured.

4. Project Outcome, Target Beneficiaries Involvement

(i) Project Outcome

Specific Objective

The Specific Objective of Phase III of the project was to strengthen the protection of trans-boundary habitats of protected wide-ranging wildlife species in the Emerald Triangle. The achievement of that Specific Objective was reflected in descriptions of several interrelated outcomes, which include the following:

- Information was collected and exchanged between the three countries on wildlife distribution patterns and applied in joint research activities. Initial studies were conducted on the distribution of several wide-ranging, landmark wildlife species in the Emerald Triangle through joint research efforts in conjunction with the field exercises conducted during joint research and training activities that were organized in Lao PDR in December 2013, Cambodia in March 2014, and Thailand in October 2014. The collaboration between the three countries was successful at the technical level, as well as at the level of the PSC.
- Maps indicating the habitats of wide-ranging, landmark wildlife species in the Emerald Triangle landscape were produced. There is an extensive collection of habitat maps that were developed as the result of joint research and training activities associated with the distribution of several wide-ranging, landmark wildlife species that were organized in Lao PDR on 12-15 December 2013, at the GIS and Wildlife Research Training Workshop on Land Use Scenarios Prediction in Cambodia on March 10-15, 2014, and at the workshop on GIS-Wildlife Distribution Modeling that was organized in Thailand on 20-24 October 2014.



- The locations of representative habitats for selected wide-ranging, landmark species and potential areas of risk were determined and are now used for coordinating activities to conserve trans-boundary biodiversity in the Emerald Triangle.
- Project interventions were developed to ensure multi-stakeholder participation, particularly with respect to underscoring the involvement of Lao PDR in project activities, including through the collection of baseline information on wildlife distributions in the Phouxeingthong National Biodiversity Conservation Area and adjoining forest areas, as well as participation in research on wide-ranging, landmark wildlife species in collaboration with the project teams in Thailand and Cambodia.
- The capacities of project staff, rangers, border patrol police, and local communities were strengthened and equipment and training were provided to increase the frequency of patrols and provide more information on the movements of wide-ranging, landmark wildlife species. The capacity-strengthening strategies that were used included hands-on-training and the sharing of lessons learned. The use of that approach was reflected in joint research activities conducted on landmark wildlife distribution patterns in each of the three countries, which provided a practical platform for not only strengthening trans-boundary cooperation, but also developing effective training programs.
- The results of research conducted among the three countries were incorporated into revised and updated management plans that were developed for the Preah Vihear Protected Forest in Cambodia and the Pha Taem National Park in Thailand.

(ii) Situation existing at project completion

The situation after the completion of the third phase of the project emphasized the increased sharing of management information and experiences between the three participating countries through joint research, training, workshops, and information exchanges; the development of revised and updated protected area management plans for 2016-2020 in the Preah Vihear Protected Forest in Cambodia and the Pha Taem National Park in Thailand; the increased awareness among local communities of the contributions of trans-boundary biodiversity conservation; significant improvements in the livelihoods of local communities; and reduced encroachment of protected areas throughout the trans-boundary region.

(iii) Target beneficiaries

The primary beneficiaries of Phase III of the project included:

- Local communities, who increased their understanding of alternative income-generating opportunities and were able to actively participate in resource management programs and activities under conditions in which raising awareness on biodiversity conservation was a primary concern that was discussed in meetings organized with local communities, local officials, and school children..
- Resource managers, who were provided with refined and expanded forest resources and wildlife databases, more reliable information, and advanced GIS research techniques to inform decision-making processes and improve resource management throughout the Emerald Triangle Protected Forests Complex.
- Park and protected area rangers, who increased their understanding of conservation management planning and were able to increase the numbers of patrols and supplement information on wide-ranging, landmark wildlife species using equipment that was provided through the project.

(iv) Project Sustainability after the Completion of Phase III

Significant efforts were made to secure the sustainability of project activities and the primary factors impacting that sustainability during the implementation of the third phase of the project. Since many of the interventions in Phase II, as well as in Phase III, were institutional and consisted of capacity building, training, and awareness raising, several post-Phase III project activities are expected to continue be sustainable. The largest share of interventions that required significant start-up investments were also completed by the close of the third phase of the project, which will facilitate the continuation of many of the activities that are relatively low-cost.

Contributing, as well, to the sustainability of project activities with the close of Phase III are 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, are the project's contributions that have been associated with (1) the establishment of inter-institutional coordination among relevant government agencies, which provide support for consultative and participatory processes that were introduced in Phase II and strengthened throughout Phase III; (2) the increased understanding among local communities of the contributions of conservation; and (3) the promotion of trust and respect for the opinions of representatives of various national stakeholders.

The project in its third phase also promoted leadership among national staff involved in planning, decision-making, and coordination of project activities. The introduction of participatory land-use planning processes to local communities and stakeholders during Phase II, as well as Phase III, moreover, has strengthened local capacities associated with land management and development planning, which will ease the transition to post-Phase III project implementation of ongoing 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 was introduced to support the effective continuation of project activities.

The project was 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 initiatives were sometimes relatively high, operational and maintenance

costs to continue those activities at the close of Phase III of the project were 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. It is also understood that several of the community livelihood activities, including those associated with nature-based tourism, will, over time, achieve self-sufficiency. Indeed, opportunities for landmark wildlife species nature-based tourism, which were evaluated in 2000-2004 and for which an implementation framework was developed in Phase II of the project that benefits both biodiversity and local communities, have indicated that there is some potential for nature-based tourism revenues to finance continuing community livelihood activities.

Project initiatives have provided an appropriate structure for sustainable management of post-Phase III project activities. Site management staff who will be responsible for continuing project activities will be members of government authorities with appropriate jurisdictions. The basis of the use of project site managers is part of a concept that is currently used by the Forestry Administration in Cambodia in other areas of the country. Under this structure, the Forestry Administration employs project site managers to coordinate activities between Forest Administration jurisdictional units within landscapes of importance for biodiversity conservation. This structure provides an effective means for recognizing important sites within landscapes. The close collaboration that exists between the Royal Forest Department and the Department of National Parks, Wildlife and Plant Conservation in Thailand will endure, as well, and manpower and equipment will continue to be shared in reciprocal activities, including wildlife surveys, patrolling, and the demarcation of the boundaries of protected areas. Educational institutions, especially the Faculty of Forestry at Kasetsart University, as well as other local universities, will also be encouraged to establish research sites in and around protected areas, which will contribute in a meaningful manner to forest resources planning and management.

There are four principal components of sustainability. Those components include:

- ❖ **Sustainability at the administrative and political level** between different political entities in the participating countries as the result of the institutionalization of periodic meetings of each of those entities to discuss cooperation and collaboration in the management of the Emerald Triangle Protected Forests Complex within the much broader context of the socioeconomic and political conditions that define relationships between the countries.
- ❖ **Sustainability at the technical and managerial level** that promotes and encourages the steady flow of research results from each of the participating countries, as well as from joint research activities involving the participation of universities in the three countries, that inform the development of a regional framework for promoting management actions applicable throughout the Emerald Triangle Protected Forests Complex.
- ❖ **Sustainability at the level that impacts the livelihoods of local communities** such that livelihood activities initiated under the project increase the incomes of local communities in such a manner that community demands on local forest resources continue to diminish over time.
- ❖ **Sustainability at the level of available financial resources** to support sustainability through the creation of expanding amounts of social capital and physical infrastructure and the provision of technical training under the project in its initial three phases to accelerate the transition to conditions increasingly conducive to the continuation and expansion of activities that will ensure the sustainability of the other components of sustainability without requiring politically unacceptable allocations of government funding.

Representative contributions to each of these sustainability components that were provided in Cambodia and Thailand during the third phase of the project are summarized in the adjoining table:

Sustainability at the administrative and political level.

Cambodia	Thailand
<ul style="list-style-type: none"> • The joint development and endorsement by the project’s participating countries of a common vision for long-term management of the Emerald Triangle Protected Forests Complex. • The initiation of efforts to institutionalize cross-border relationships that support joint management of the Emerald Triangle Protected Forests Complex by means of periodic ‘Bilateral’ meetings between Cambodia and Thailand that increase cooperation, especially with regard to increasing cooperation on trans-boundary wildlife law enforcement activities. • The commencement of informal meetings between different levels of political entities in the participating countries to discuss potential avenues of political collaboration in the management of the Emerald Triangle Protected Forests Complex. 	<ul style="list-style-type: none"> • The development of a database management system to improve planning and natural resources management. • The continuation of collaboration between the Royal Forest Department and the Department of National Parks in reciprocal activities, including wildlife research, patrolling, the demarcation of protected areas, and maintaining the existing headquarters for communication. • The strengthened cooperation with local educational institutions to establish research in relation to biodiversity conservation for forest resources planning and management. • The initiation of 'Bilateral' meetings for cooperation to reduce the illegal wildlife trade and wildlife crime, and information sharing.

Sustainability at the technical and managerial level.

Cambodia	Thailand
<ul style="list-style-type: none"> • The assessment and sharing of research results, especially on current distributions of landmark wildlife species in the Preah Vihear Protected Forest with resource managers in the Emerald Triangle Protected Forests Complex of Thailand and university researchers in Lao PDR that will continue to be expanded and which will lead to the development of integrated management plans for individual landmark wildlife species throughout the Emerald Triangle Protected Forests Complex. • The consolidation of efforts to develop management measures on the basis of joint research conducted under the project into the revised and updated management plan that was developed for the Preah Vihear Protected Forest as an initial step in the development and implementation 	<ul style="list-style-type: none"> • The promotion of the conservation and sustainable utilization of biodiversity to motivate stakeholders to participate more in sustainable natural resources management activities. • The concentration of joint research efforts in the Emerald Triangle on ecological relationships involving iconic wildlife species. • The development of a revised and updated management plan for the Pha Taem National Park. • Increased cooperation with educational institutions in the participating countries to promote training on the recovery and rehabilitation of landmark wildlife species. • The continuation of support for research activities in the Emerald Triangle by various divisions of the Royal Forest Department in protected areas and the expansion of lessons learned into adjacent

Cambodia	Thailand
of a collaborative joint management framework for the Emerald Triangle Protected Forests Complex.	protected areas.

Sustainability at the level that impacts the livelihoods of local communities.

Cambodia	Thailand
<ul style="list-style-type: none"> • The establishment of Rice Banks, Cow Banks, and village microcredit programs in various local communities in the Preah Vihear Protected Forest. • The establishment of a centrally-located plant nursery to produce and distribute seedlings of high commercial value trees and fruit trees to local communities and military families to plant in agroforestry plots and home gardens to increase incomes. • The organization on a recurring basis of awareness raising activities on forest resources management and biodiversity conservation, and technical practices associated with the preparation of home gardens and the establishment of integrated agroforestry systems, for local communities to continue to increase their incomes in the Preah Vihear Protected Forest. 	<ul style="list-style-type: none"> • The continued support of livelihood improvement activities to increase incomes of local communities inside protected areas and buffer zones. • The encouragement provided to businesses to invest in livelihood improvement activities, forest rehabilitation, and nature-based tourism, and provide support in marketing community-made products. • The expansion of livelihood improvement activities to other communities and the establishment of a network to reduce dependence on forest resources. • The strengthened communications with institutes to organize trainings and workshops to improve product quality and the capabilities of local communities

Sustainability at the level of sufficient financial resources.

Cambodia	Thailand
<ul style="list-style-type: none"> • The construction of a project headquarters building with the establishment of offices to concentrate the long-term efforts and coordinate the long-term activities of other conservation programs directed to sustainable forest management and biodiversity conservation in the Preah Vihear Protected Forest. • The procurement of substantial amounts of capital equipment, including four-wheel drive vehicles, motorbikes, computers and other office equipment, as well as field equipment, including GPS units and cameras, to support the continued participation of Forestry Administration officers and other technical experts in activities organized in and around the Preah Vihear Protected Forest. • The organization of significant person-hours of training to local administrative 	<ul style="list-style-type: none"> • The continuation of technical training to protected area personnel and stakeholders on biodiversity conservation and livelihood improvement activities for development of marketing and nature-based tourism services to sustain activities in the long run. • The introduction of the ICDP approach and expansion to more communities and stakeholders to strengthen the understanding of buffer zone management and the use of alternative income generating opportunities to alleviate poverty and reduce forest encroachment. • The encouragement provided to potential donors and NGOs to support the livelihood improvement activities of local communities to ensure the sustainability of those activities.

Cambodia	Thailand
officials, local communities, and Forestry Administration officers to increase their capacities to continue their long-term involvement with sustainable forest management activities in the Preah Vihear Protected Forest.	

One of the most critical sources of post-Phase III project funding that will support the continuation of an important sub-set of project activities will be derived from the rational decisions of villagers to reinvest in the implementation of agricultural and agroforestry extension initiatives, as well as livelihood development activities, introduced throughout the project. These villagers have learned during the course of the project that the implementation of those activities has assisted individuals and small groups to increase the productivity and, by extension, the incomes, of their agricultural systems and improved market access for agricultural and NTFP products supported under the project. Those increased incomes provide significant motivation for villagers to renew their personal support for the continuation of the implementation of those activities in efforts to continue to increase their household incomes.

The spillover effects associated with the enhanced support of local communities participating in community livelihood activities as a result of their increased awareness of the various advantages linked to their participation in integrated conservation and development programs established through the project will also provide an important impetus affecting government decisions to sustain project activities.

5. Assessment and Analysis

(i) Project Rationale

Phase III was developed on the basis of the outcomes and recommendations associated with evaluations of the project's second phase to expand efforts to protect wildlife species, especially rare and endangered species, from illegal hunting and poaching; safeguard critical wildlife habitats and migration corridors; strengthen collaborative efforts to ensure biodiversity conservation; increase research cooperation on wildlife species; strengthen the capacities of staff and agencies involved with resource management; and enhance the livelihood of local communities living in and around the protected areas of the Emerald Triangle Protected Forests Complex.

(ii) Project Objectives and implementation strategy

The implementation strategies that were applied in Phase III of the project were directed to the harmonization between Thailand, Cambodia, and Lao PDR of guidelines for management planning and the organization of several joint research activities, including research on wide-ranging, landmark wildlife species, which was implemented in Thailand and Cambodia and extended to Lao PDR. The sharing of information was institutionalized between the three countries, as well, as a basis for formulating sustainable management strategies and revising and updating the management plans for the Preah Vihear Protected Forest in Cambodia and the Pha Taem National Park in Thailand to conserve forest resources, protect wildlife populations, and reduce barriers to migratory wildlife movements along the tri-national borders. Project strategies were directed, too, at strengthening the capacities of protected areas staff and field personnel, raising awareness on trans-boundary biodiversity conservation, and enhancing the livelihoods of local communities in the project area using the

results of Sustainable Livelihood Assessments that were conducted in Cambodia and Thailand.

(iii) Critical differences between planned and actual project implementation

In the initial stage of the project, the timing of some activities was affected by factors that could not be predicted, but those activities were eventually implemented as planned.

Project implementation occurred with no changes to objectives, outputs, and planned activities, although there were two supplementary activities inserted to achieve Output 1 as recommended at the 4th PSC meeting organized on 9 July 2014. Those inserted activities were:

- Activity 1.9.1 Initiate the facilitation of integrating the results of joint research activities on wildlife conducted in the Emerald Triangle Protected Forests Complex into individual country management plans which are exchanged between the project's participating countries, especially Thailand and Cambodia.
- Activity 1.9.2 Establish an effective mechanism to alert participating countries of incidences of illegal wildlife activities in efforts to synchronize cross-border patrolling activities.

Overall, differences between planned and actual project implementation were not significant and had no appreciable effect on the achievement of the outcomes of the project.

(iv) Adequacy of time and project inputs

The time and project inputs available for formulation and implementation of project activities were sufficient, but were sometimes influenced by factors that could not be completely controlled, such as collaboration on wildlife research with Lao PDR, which is not currently an ITTO member, that caused some delays in initiating some project activities.

The resources available for project implementation, including personnel, expertise, equipment, and finance, were adequate, but prior to the start of a succeeding project phase, there should be some consideration of securing interim financial support to cover the expenses of necessary communications and ongoing activities.

(v) External influences

The assumptions made with regard to the implementation of the project remained valid throughout the duration of the project and authorities involved with the project supported and participated in the implementation of project activities. There were some external influences in the project area associated with heavy rains during the rainy season that obstructed the travel of project staff in their efforts to visit local communities, but those had no perceptible effect on the planned long-term implementation of project activities.

(vi) Project beneficiaries

The project beneficiaries encompassed a range of stakeholders involved in project implementation, including the following groups:

- Local communities who participating in ICDP and other livelihood enhancement activities, as well as students and teachers who participated in awareness raising programs.

- Local government authorities, local universities and university students, and local NGOs who learned from implementing activities and undertaking research supported under the project on biodiversity conservation, socioeconomic issues, and enhancing community livelihoods.
- Protected area staff and rangers, who were provided with equipment, GIS and wildlife research training, and conservation and management planning skills to strengthen resource management throughout the Emerald Triangle Protected Forests Complex.

(viii) Institutions involved

The Forestry Administration was the executing agency in Cambodia responsible for project implementation in the Preah Vihear Protected Forest. The implementation of field activities was supported through the Forestry Administration Preah Vihear Cantonment, as well as the Forestry Administration division and triage offices in Preah Vihear province, and by local government authorities. The Royal University of Agriculture and the Prek Leap Natural College of Agriculture in Phnom Penh provided students in the process of obtaining their degrees to conduct research under the project in the Preah Vihear Protected Forest.

6. Lessons Learned

- Each of the countries involved in a trans-boundary conservation initiative should participate in, and agree to, the development of a shared vision.
- The nature and extent of problems, constraints, and progress should be expected to vary irregularly across countries.
- Technical cooperation generally precedes political cooperation and much of the emphasis, particularly in the early stages of activities, should be directed to expanding technical cooperation between participating countries.
- The political support of every participating country is essential to the ultimate success of trans-boundary conservation.
- The participation of stakeholders and, in particular, local communities, is a necessary component for ensuring the longevity of on-going activities.
- The capacities and capabilities of stakeholders, especially government authorities and local communities, should be well-understood prior to developing training programs and organizing workshops.
- Efforts to raise the awareness of local communities, government officials, and others of the importance of conservation in trans-boundary conservation initiatives should be an on-going process.
- It is essential that the compatible management plans that are produced are shared with other relevant government agencies and departments.

7. Conclusions and Recommendations

The principal conclusions of the assessment of project interventions in Phase III of the project indicate that those actions were successful in strengthening ecosystem management by increasing the understanding of wildlife distribution patterns as a means of integrating trans-boundary biodiversity conservation efforts across the three participating counties. The sharing of research results and other related information was institutionalized, as well, across the

trans-boundary region as the basis of the development of revised and updated protected area management plans and the formulation of sustainable management strategies to protect wildlife populations and reduce barriers to migratory wildlife movements throughout the cross-border region.

Project interventions were also extended to the improvement of local community livelihoods using the results of Sustainable Livelihood Assessments that were conducted in Thailand and Cambodia. These actions were accompanied by an expansion of the most effective Integrated Conservation and Development Programs and Community Livelihood Enhancement program activities that were initially introduced in the second phase of the project.

Project interventions in Phase III were developed, as well, to ensure multi-stakeholder participation, particularly with respect to underscoring the involvement of Lao PDR in project activities, including the collection of baseline information on wildlife distributions in the Phouxeingthong National Biodiversity Conservation Area and adjoining forest areas, as well as participants in research on wide-ranging landmark wildlife species in collaboration with the project teams in Thailand and Cambodia.

Project efforts also continued to strengthen capacities of project staff, rangers, border patrol police, and local communities through the provision of training. The capacity-building strategies included hands-on-training and the sharing of lessons learned. The use of this approach was reflected in joint research activities conducted on landmark wildlife distribution patterns in each of the three countries, which provided a practical platform for not only strengthening trans-boundary cooperation, but also developing effective training programs.

The situation after the completion of Phase III of the project resulted in the increased sharing of management information and experiences between the three countries through joint research, training, workshops, and information exchanges; the development of revised and updated protected area management plans for the Pha Taem National Park in Thailand and the Preah Vihear Protected Forest in Cambodia; the increased awareness among local communities of the contributions of trans-boundary biodiversity conservation; significant improvements in the livelihoods of local communities; and reduced encroachment of protected areas throughout the trans-boundary region.

There are several recommendations for initiatives that would consolidate achievements through the third phase of the project in succeeding project efforts to support the institutionalization of those conditions most conducive to the enabling of long-term intergenerational biodiversity conservation throughout the cross-border region of the three countries. Those recommendations include:

- The expansion of livelihood enhancement activities to communities living in and around the Emerald Triangle Protected Forests Complex;
- Support for increased investments in sustainable and environmentally sound commercial business enterprises by local communities;
- Intensified efforts to develop local, as well as regional, markets for non-timber forest products;
- The establishment of appropriate adaptive responses to projected impacts of climate change;

- Increased efforts to increase the effectiveness of the forest crime monitoring, reporting, and response systems;
- The development of estimates of ecosystem service values and their incorporation into determinants of land use and other resource management decision-making processes;
- The institutionalization of self-sustaining joint research programs;
- The increased occurrence of cross-border forest law enforcement activities; and
- The scheduling of more regular meetings between and among officials of participating countries to consolidate political support for conservation.

Responsible for the Report



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Mr. Chheang Dany
Project Manager - Cambodia Component
Date: 26 July 2016

Annex 1: Project financial statements (Cambodia).

PROJECT FINANCIAL STATEMENT

(in United State Dollar)

Project No.: PD 577/10 Rev. 1 (F)

Period ending on: 30 April 2016

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

Component		Original	Expenditures To-date		Available Funds		
		Amount (A)	Accrued (B)	Expended (C)	Total (D) {B+C}	(E) {A-D}	
10	Personnel						
	112	Project Manager	63,800.00	59,450.00	4,350.00	63,800.00	0.00
	113	Forest and Biodiversity Conservation Officer	27,250.00	25,350.00	1,900.00	27,250.00	0.00
	114	Forest Land-Use Planning Specialist and Field Manager	26,200.00	24,300.00	1,900.00	26,200.00	0.00
	115	GIS Specialist	23,400.00	23,400.00	0.00	23,400.00	0.00
	116	Project Accountant	28,600.00	26,650.00	1,950.00	28,600.00	0.00
	117	TA Livelihood and Natural Resource Management	70,000.00	65,500.00	4,500.00	70,000.00	0.00
	118	Community Livelihood Development Officer	14,000.00	12,800.00	1,200.00	14,000.00	0.00
	119	Field Assistance (5) at US\$ 300 per month	46,800.00	41,300.00	2,800.00	44,100.00	2,700.00
	19	Subtotal	300,050.00	278,750.00	18,600.00	297,350.00	2,700.00
20	Sub-contract						
	21	Sub-contract (Lao PDR scientist)	7,082.48	4,082.48	1,380.00	5,462.48	1,620.00
	22	Specialist for Establishing Plant Nursery	4,800.00	4,800.00	0.00	4,800.00	0.00
	23	Specialist for Establishing Tissue Culture Lab	-	0.00	0.00	0.00	0.00
	29	Subtotal	11,882.48	8,882.48	1,380.00	10,262.48	1,620.00
30	Travel						
	311	DSA, National Expert(s)/consultant(s) to Thailand and Lao PDR	6,578.00	6,578.00	0.00	6,578.00	0.00
	312	Others (3 staff) 10days/month	22,770.00	22,470.00	3,174.00	25,644.00	-2,874.00
	314	Law enforcement patrols (reduce incidences of illegal forest activities)	96,900.00	91,800.00	5,100.00	96,900.00	0.00
	315	Assessments of changes in carbon stocks in the PVPF	2,010.00	2,010.00	0.00	2,010.00	0.00
	321	Air tickets, National Expert(s)/consultant(s) to Thailand and Lao PDR	6,838.00	6,838.00	0.00	6,838.00	0.00
	322	Field subsistence allowance and accommodation	42,676.75	40,676.75	1,800.00	42,476.75	200.00
	331	Others (resource persons)	8,020.00	8,020.00	0.00	8,020.00	0.00
	39	Subtotal	185,792.75	178,392.75	10,074.00	188,466.75	(2,674.00)
40	Capital Items						
	44.1	4WD Pick-up Trucks Double Cab	54,445.00	54,445.00	0.00	54,445.00	0.00
	44.2	Motorbikes	8,070.00	8,070.00	0.00	8,070.00	0.00
	44.3	Protected Forest Headquarters	141,650.00	141,650.00	0.00	141,650.00	0.00
	44.4	Air Conditioners	6,750.00	6,750.00	0.00	6,750.00	0.00
	44.5	Tables for Meeting Rooms	4,300.00	4,300.00	0.00	4,300.00	0.00
	44.6	Solar Battery Panels and Deep Cycle Batteries	6,166.00	6,166.00	0.00	6,166.00	0.00
	44.7	Photocopier	780.00	780.00	0.00	780.00	0.00

Component			Original	Expenditures To-date		Available Funds	
			Amount (A)	Accrued (B)	Expended (C)	Total (D) {B+C}	(E) {A-D}
44.8	Color Printer A3	966.00	966.00	0.00	966.00	0.00	
44.9	Monochrome Laser Printer	-	0.00	0.00	0.00	0.00	
44.10	LCD Projectors	1,598.00	1,598.00	0.00	1,598.00	0.00	
44.11	Laser Printers	975.00	975.00	0.00	975.00	0.00	
44.12	Laptop Computers with Microsoft Office	3,350.00	3,350.00	0.00	3,350.00	0.00	
44.13	Hand-held Digital Cameras	732.00	732.00	0.00	732.00	0.00	
44.14	GPS 60csx	1,605.00	1,605.00	0.00	1,605.00	0.00	
44.15	Generators	3,300.00	3,300.00	0.00	3,300.00	0.00	
44.16	Field Equipment and Camping Gear	2,250.00	2,250.00	0.00	2,250.00	0.00	
44.17	External Hard Disks	378.00	378.00	0.00	378.00	0.00	
44.18	Computers (Database and MIST)	4,320.00	4,320.00	0.00	4,320.00	0.00	
44.19	Communication devices	3,040.00	3,040.00	0.00	3,040.00	0.00	
44.20	Chairs for Meeting Rooms	1,800.00	1,800.00	0.00	1,800.00	0.00	
44.21	Pumping Wells/5ponds (2,500/pond)	12,500.00	12,500.00	0.00	12,500.00	0.00	
44.22	Scanner A3	-	0.00	0.00	0.00	0.00	
44.23	Nursery for Seedlings	41,620.58	41,620.58	0.00	41,620.58	0.00	
44.24	Tissue Culture Lab Equipment/Main Ranger Patrolling Station	37,432.00	591.00	36,250.00	36,841.00	591.00	
44.25	ArcGIS 3D Analyst	-	0.00	0.00	0.00	0.00	
44.26	ArcGIS Spatial Analyst	-	0.00	0.00	0.00	0.00	
44.27	Satellite imagery - ALOS(AVNIR-2)	-	0.00	0.00	0.00	0.00	
44.28	Satellite imagery - ALOS(Prism)	-	0.00	0.00	0.00	0.00	
44.29	Satellite imagery - ALOS(Palsar)	-	0.00	0.00	0.00	0.00	
44.30	Satellite imagery - Landsat	-	0.00	0.00	0.00	0.00	
49	Subtotal	338,027.58	301,186.59	36,250.00	337,436.58	591.00	
50	Consumable items						
511	Seedling Production (fast growing trees & fruits trees) 80,000 seedling/year*3years	41,807.25	38,807.25	3,000.00	41,807.25	0.00	
521	Office supplies	9,652.54	8,745.46	1,017.30	9,762.76	-110.21	
59	Subtotal	51,459.79	47,552.71	4,017.30	51,570.01	(110.21)	
60	Miscellaneous						
611	Petrol and maintenance	27,772.05	25,640.95	2,722.11	28,363.05	-591.00	
612	PSC meetings	16,019.52	16,019.52	0.00	16,019.52	0.00	
613	Taskforce and stakeholder meetings	4,936.87	2,186.87	4,210.00	6,396.87	-1,460.00	
614	6 ICDP pilot activities	48,000.00	21,147.62	29,681.50	50,829.12	-2,829.12	
615	Meetings, training, workshops	31,937.58	29,488.54	1,468.50	30,957.04	980.54	
616	Information, publications	15,912.50	8,389.15	7,663.77	16,052.92	-140.42	
617	Regional Conference on Biodiversity Conservation in Tropical Forests	64,500.00	0.00	62,561.25	62,561.25	1,938.75	
618	National Conference on Biodiversity Conservation and the Conservation of Carbon Stocks in the Permanent Forest Estate	20,473.00	20,473.00	0.00	20,473.00	0.00	
619	Project Launching Stakeholders Workshop	4,995.88	4,995.88	0.00	4,995.88	0.00	
620	Meeting for the preparation of TBCA common vision	-	0.00	0.00	0.00	0.00	
621	Audit cost	14,850.00	9,350.00	5,500.00	14,850.00	0.00	

Component			Original	Expenditures To-date		Available Funds	
			Amount (A)	Accrued (B)	Expended (C)	Total (D) {B+C}	(E) {A-D}
	622	Project Phase IV Proposal Preparation	5,000.00	890.00	4,100.00	4,990.00	10.00
	69	Subtotal	254,397.40	138,581.53	117,907.13	256,488.66	(2,091.25)
80	Project monitoring & administration						
	81	ITTO monitoring and review					
	82	ITTO midterm evaluation					
	Sub-total (11-82)						
	83	ITTO program support costs (8% on items 10-82 above)					
	Sub-total						
100	GRAND TOTAL		1,141,610.00	953,346.06	188,228.43	1,141,574.49	35.51

Note: Budget Components are those detailed in the Project Document.

- a) The Cash Flow Statement must be completed prior to providing inputs into the Financial Statement.
- b) Accrued expenditures: expenditures incurred during the reporting date, but not yet settled.
- c) Amount under the Expended column will be imported from the Cash Flow Statement (with direct link – Excel format).

Annex 2: Project cash flow statements (Cambodia).

PROJECT CASHFLOW STATEMENT

Project No.: PD 577/10 Rev. 1 (F)

Period ending on: 30 April 2016

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

Item		Reference	Date	Amount USD
A	Funds received from ITTO:			
	Cash In			
1	1 st Installment US\$200,000	S118107RCPO72512	26 Jul. 12	200,000.00
2	2 nd Installment US\$300,000	S165252RCP042213	23 Apr. 13	300,000.00
3	3 rd Installment US\$200,000	S290020RCP070714	08 Jul. 14	200,000.00
4	4 th Installment US\$150,000	S120138RCP021815	19 Feb. 15	150,000.00
5	5 th Installment US\$150,000	S129094RCP090415	07 Sep. 15	150,000.00
6	6 th Installment US\$150,000	S122086RCP020816	9 Feb. 16	141,610.00
	Total Cash In			1,141,610.00
B	Expenditure By Executing Agency			
10	Personnel			
112	Project Manager			63,800.00
113	Forest and Biodiversity Conservation Officer			27,250.00
114	Forest Land-Use Planning Specialist and Field Manager			26,200.00
115	GIS Specialist			23,400.00
116	Project Accountant			28,600.00
117	TA Livelihood and Natural Resource Management			70,000.00
118	Community Livelihood Development Officer			14,000.00
119	Field Assistance (5) at US\$ 300 per month			44,100.00
19	Subtotal			297,350.00
20	Sub-contract			
21	Sub-contract (Lao PDR scientist)			5,462.48
22	Specialist for Establishing Plant Nursery			4,800.00
23	Specialist for Establishing Tissue Culture Lab			-
29	Subtotal			10,262.48
30	Travel			
311	DSA, National Expert(s)/consultant(s) to Thailand and Lao PDR			6,578.00
312	Others (3 staff) 10days/month			25,644.00
314	Law enforcement patrols (reduce incidences of illegal forest activities)			96,900.00
315	Assessments of changes in carbon stocks in the PVPF			2,010.00
321	Air tickets, National Expert(s)/consultant(s) to Thailand and Lao PDR			6,838.00
322	Field subsistence allowance and accommodation			42,476.75
331	Others (resource persons)			8,020.00
39	Subtotal			188,466.75
40	Capital Items			
44.1	4WD Pick-up Trucks Double Cab			54,445.00
44.2	Motorbikes			8,070.00
44.3	Protected Forest Headquarters			141,650.00

	Item	Reference	Date	Amount USD
	44.4	Air Conditioners		6,750.00
	44.5	Tables for Meeting Rooms		4,300.00
	44.6	Solar Battery Panels and Deep Cycle Batteries		6,166.00
	44.7	Photocopier		780.00
	44.8	Color Printer A3		966.00
	44.9	Monochrome Laser Printer		-
	44.10	LCD Projectors		1,598.00
	44.11	Laser Printers		975.00
	44.12	Laptop Computers with Microsoft Office		3,350.00
	44.13	Hand-held Digital Cameras		732.00
	44.14	GPS 60csx		1,605.00
	44.15	Generators		3,300.00
	44.16	Field Equipment and Camping Gear		2,250.00
	44.17	External Hard Disks		378.00
	44.18	Computers (Database and MIST)		4,320.00
	44.19	Communication devices		3,040.00
	44.20	Chairs for Meeting Rooms		1,800.00
	44.21	Pumping Wells/5ponds (2,500/pond)		12,500.00
	44.22	Scanner A3		-
	44.23	Nursery for Seedlings		41,620.58
	44.24	Tissue Culture Lab Equipment/Main Ranger Patrolling Station		36,841.00
	44.25	ArcGIS 3D Analyst		-
	44.26	ArcGIS Spatial Analyst		-
	44.27	Satellite imagery - ALOS(AVNIR-2)		-
	44.28	Satellite imagery - ALOS(Prism)		-
	44.29	Satellite imagery - ALOS(Palsar)		-
	44.30	Satellite imagery - Landsat		-
	49	Subtotal		337,436.59
50	Consumable items			
	511	Seedling Production (fast growing trees & fruits trees) 80,000 seedling/year*3years		41,807.25
	521	Office supplies		9,762.76
	59	Subtotal		51,570.01
60	Miscellaneous			
	611	Petrol and maintenance		28,363.05
	612	PSC meetings		16,019.52
	613	Taskforce and stakeholder meetings		6,396.87
	614	6 ICDP pilot activities		50,829.12
	615	Meetings, training, workshops		30,957.04
	616	Information, publications		16,052.92
	617	Regional Conference on Biodiversity Conservation in Tropical Forests		62,561.25
	618	National Conference on Biodiversity Conservation and the Conservation of Carbon Stocks in the Permanent Forest Estate		20,473.00
	619	Project Launching Stakeholders Workshop		4,995.88
	620	Meeting for the preparation of TBCA common vision		-

Item		Reference	Date	Amount USD
621	Audit cost			14,850.00
622	Project Phase IV Proposal Preparation			4,990.00
69	Subtotal			256,488.66
TOTAL				1,141,574.49
Total expenditure to-date (B)				1,141,574.49
Remaining Balance of funds (A-B)				* 35.51
Note:	<p>(1) Amounts in US dollars are converted using the average rate of exchange when funds were received by the Executing Agency.</p> <p>(2) Total expenditure to-date (in local currency) should be the same as amount shown in sub total of column (C) of the Financial Statement.</p>			

Bank Statement

CAMPU RBS
 CAMBODIAN PUBLIC BANK PLC
 HOST
 BRANCH ID : HOST
 DATE : 17/05/2016

17/05/2016 09:53:37 AM
 USER : BUNNATH [2180]
 PC : PNH-OP04

PAGE : 1 OF 1

RPT - DD003 - STATEMENT OF DD ACCOUNT
 FROM 01/04/2016 TO 17/05/2016

ACCOUNT NUMBER : 010-02-10-06540-5 (USD)						
CUSTOMER NAME : PD 577/10 Rev.1 (F) - Cambodia						
FROM DATE BALANCE : 21,195.51						
NO	DATE	CHEQUE NO	DESCRIPTION	DEBIT	CREDIT	BALANCE
1	04/04/2016	PPM964925	Inward Cheque Cleared from MBB	3,500.00	0.00	17,695.51
2	25/04/2016	PPM964924	CASH CHQ 964924	7,250.00	0.00	10,445.51
3	29/04/2016	PPM964931	CASH CHQ964931	7,087.50	0.00	3,358.01
4	30/04/2016	PPM964926	CASH WITHDRAWAL BY CHEQUE - OLY AMT USD1,812.50 LESS IPT COM USD0.00	1,812.50	0.00	1,545.51
5	09/05/2016	PPM964928	Inward Cheque Cleared from MBB	1,500.00	0.00	45.51
6	11/05/2016		BG SVG FOR ACCOUNT CONFIRMATION AMT\$10 FM A/C 10-6540-5	10.00	0.00	35.51
END DAY BALANCE : 35.51				TOTAL DEBIT/CREDIT :		21,160.00 0.00
AVERAGE BALANCE : 10,523.01				HIGHEST DEBIT/CREDIT BALANCE :		0.00 17,695.51
NO OF TRANSACTIONS DEBIT: 6				LOWEST DEBIT/CREDIT BALANCE :		0.00 35.51
CREDIT: 0						

END OF REPORT

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