INTERNATIONAL TROPICAL TIMBER ORGANIZATION
ITTO

PROJECT DOCUMENT

TITLE	CAPACITY BUILDING FOR STRENGTHENING TRANSBOUNDARY BIODIVERSITY CONSERVATION OF THE TANINTHAYI RANGE IN MYANMAR
SERIAL NUMBER	PD 723/13 Rev.2 (F) Phase I – Stage 1
COMMITTEE	REFORESTATION AND FOREST MANAGEMENT
SUBMITTED BY	GOVERNMENT OF MYANMAR
ORIGINAL LANGUAGE	ENGLISH

SUMMARY

The Taninthayi (Tenasserim) Mountain Range, along the border between Myanmar and Thailand, covers a global important terrestrial eco-region with a transition zone from continental dry evergreen forests common in the north to semi-evergreen rain forests to the south. As a consequence, they contain some of the highest diversity of both bird and mammal species found in the Indo-Pacific region. The world's smallest mammal, Kitti's hog-nosed bat, equal in mass to a large bumblebee, resides in the limestone caves of this eco-region. Recent studies indicated that this eco-region is recognized as one of the world's largest populations of Asian elephants and tigers surviving in the forests along the border between Thailand and Myanmar. Besides biodiversity features, the rugged watersheds drain into the mighty Tennaserim, Salween, and Chao Phraya rivers, supporting globally endangered and endemic species as well as a diversity of human cultures. Karen and Mon people live in the Taninthayi Range and many other indigenous cultures call this area home as a template for sustainable use of the region's rich natural resources.

However, the outstanding biodiversity features and cultural diversity of the Taninthayi Range are vulnerable due to poaching, fragmentation and encroachment for agriculture, illegal logging, settlements inside and around the park, and human-elephant conflicts. In addition, limited capacity and resources for adequate biodiversity conservation, management and monitoring in Myanmar make it unable to contribute to the transboundary biodiversity conservation in this eco-region. Therefore, this project seeks to address the problem associated with limited national capacity and resources in biodiversity conservation and ineffective conservation of forest ecosystems and biodiversity in the Taninthayi Range in Myanmar. Expected outputs of the project include: 1) capacity building of national institutions to design and implement the sustainable biodiversity conservation, monitoring and research in the Taninthayi Range in Myanmar; 2) establishment of initial institutional mechanisms for the transboundary biodiversity conservation in protected areas in the Taninthayi Range; and 3) strengthening of local stakeholder participation and livelihoods of forest-dependent local communities in the transboundary biodiversity conservation areas. At the national level the project will contribute to the establishment of transboundary biodiversity conservation programmes and activities that can be further enhanced in the Taninthayi Range between Myanmar and Thailand and other transboundary protected areas.

EXECUTING AGENCY	Forest Department, Ministry of Environmental Conservation and Forestry, the Republic of the Union of Myanmar
COOPERATING GOVERNMENT	
DURATION	PHASE I – STAGE 1: 24 MONTHS
APPROXIMATE STARTING DATE	TO BE DETERMINED

BUDGET AND PROPOSED SOURCES OF FINANCE

Source	Total Contribution in US$	Phase I	Phase II
ITTO	**1,939,045**	**599,962** (Stage 1: **140,000**)	**1,339,083**
Gov. of Myanmar	83,400	41,700 (Stage 1: 13,900)	41,700
	2,022,445	**641,662** (Stage 1: **153,900**)	**1,380,783**

BRIEF OF THE PROJECT

The Taninthayi (Tenasserim) Mountain Range, along the border between Myanmar and Thailand, covers a global important terrestrial eco-region with a transition zone from continental dry evergreen forests common in the north to semi-evergreen rain forests to the south. As a consequence, they contain some of the highest diversity of both bird and mammal species found in the Indo-Pacific region. The world's smallest mammal, Kitti's hog-nosed bat (*Craseonycteris thonglongyai*), equal in mass to a large bumblebee, resides in the limestone caves of this eco-region. Recent studies indicated that this eco-region is recognized as one of the world's largest populations of Asian elephants (*Elephas maximus*) and tigers (*Panthera tigris*) survive in the forests along the border between Thailand and Myanmar. Besides biodiversity features, the rugged watersheds of the Tenasserim, Dawna, and other mountain ranges drain into the mighty Tennaserim, Salween, and Chao Phraya rivers, supporting globally endangered and endemic species as well as a diversity of human cultures. Karen and Mon people live in the Taninthayi Range and many other indigenous cultures call this area home. In many ways, the traditional practices of these groups provide a template for sustainable use of the region's rich natural resources.

However, the outstanding biodiversity features and cultural diversity of the Taninthayi Range are vulnerable due to poaching, fragmentation and encroachment for agriculture, illegal logging, settlements inside and around the park, and human-elephant conflicts. In addition, intensive hunting of wildlife occurs in both Myanmar and Thailand. Unsustainable harvesting of non-timber forest products is prevalent throughout the eco-region. Some areas have been subjected to seasonal forest fires, the impacts of which are unclear. Therefore, long-term viability of biodiversity in the Taninthayi depends on promoting community oriented biodiversity conservation in the biodiversity corridors in a framework of the trans-boundary biodiversity conservation area (TBCA)

The development of the project seeks to contribute to the long-term sustainable conservation of trans-boundary biodiversity conservation in the Range. Specifically, the project aims at enhancing national capacity and resources in biodiversity conservation and ineffective conservation of forest ecosystems and biodiversity in the Taninthayi Range in Myanmar. Expected outputs of the project include: 1) capacity building of national institutions to design and implement the sustainable biodiversity conservation, monitoring and research in the Taninthayi Range in Myanmar; 2) establishment of initial institutional mechanisms for the transboundary biodiversity conservation in protected areas in the Taninthayi Range; and 3) strengthening of local stakeholder participation and livelihoods of forest-dependant local communities in the transboundary biodiversity conservation areas.

Project interventions will also be extended to improve local community livelihoods. There will also be an expansion of the most effective Integrated Conservation and Development Program and Community Livelihood Development Program activities, including nature-based tourism interventions as well as other promising income-generating opportunities. Project interventions will also ensure multi-stakeholder participation through the development of sub-contractors for the village consultation process, village development zoning, and community-based natural resource management (CBNRM) in the proposed Taninthayi National Park as well as the collection of baseline information on wildlife distribution in the and adjoining forest areas and as participants in researchon wide-ranging species with the support of the project teams in Myanmar.

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

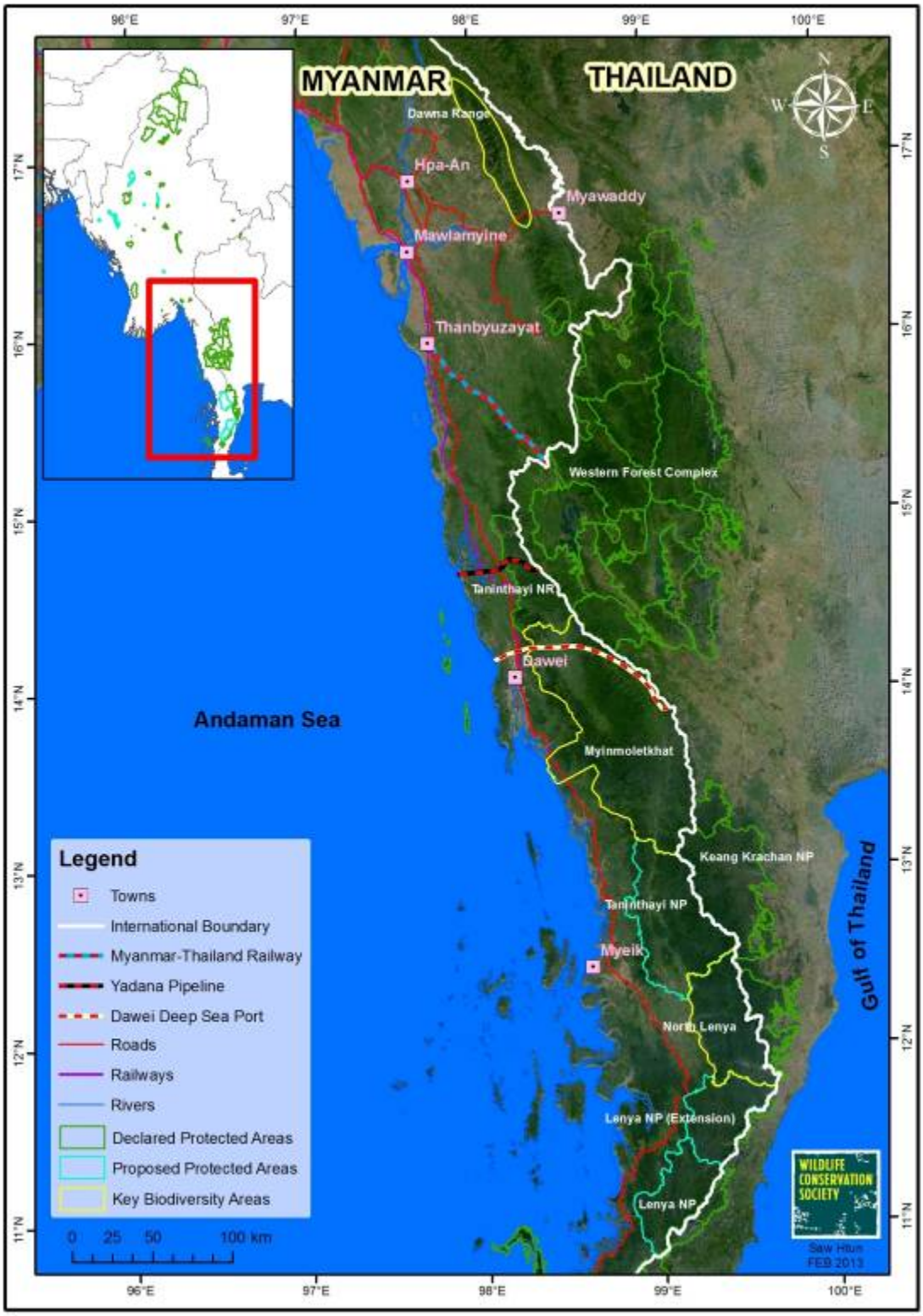
The capacity-building strategies of the project include national institutions' biodiversity research through human resource development and a series of training courses in biodiversity assessment and monitoring including forest and wildlife law enforcement. Joint research in biodiversity surveys in the Taninthayi Range will provide various opportunities to share experiences and lessons from the implementation of biodiversity projects between Thailand and Myanmar.The expected situation after the completion of the project is characterized by the effective establishment of trans-boundary biodiversity conservation area in the Taninthayi Range that enhances habitats for a wide-range of wildlife species and facilitates migration and long-term survival of large mammals. This target condition will be accomplished through the following actions:

- National capacity and resources for biodiversity conservation management and research in protected areas will be substantially increased through the establishment of the proposed Taninthayi National Park as a fully functional protected area after a serious of project activities relating to village consultation process, village development zoning, and community-based natural resource management (CBNRM) with the support of national NGOs like WCS-Myanmar. The Forest Research Institute of Myanmar will have increased its capacity of biodiversity research through the establishment of a new division dedicating biodiversity and GIS with necessary equipment and facilities to ensure its long-term research capacity.
- Park rangers and management staff of protected areas will have been trained and will have learned to use more effective tools in patrolling and in collecting data. Technical and professional staff at regional and central levels will have increased their understanding of how to use systematic baseline data for trans-boundary biodiversity conservation. Necessary tools for effective patrolling will have been provided to park officials to prevent encroachment and poaching in risk areas as predicted by project models.
- Sustainable livelihoods of forest-dependant local communities will have been enhanced to support the conservation of biodiversity in the project site with strengthening of local community organizations and networks. Community-based natural resource management activities will have been intensively implemented in the Taninthayi National Park and its surrounding areas. Local communities involved in the project will have gained additional knowledge of alternative income-generating activities. Their livelihoods will have been improved and they will be less dependent on forest resources in protected areas. They will be more aware of trans-boundary biodiversity conservation issues. Other funding sources to sustain livelihood activities will have been identified.
- Initial coordinating institutional mechanisms with Thailand will take place to ensure the effective management of wide-ranging species in the Taninthayi Range. Baseline data will be available and shared to support joint research between the participating countries. The locations of important habitats for selected wide-ranging species, based on the existing research outcomes and potential areas of risk, will have been identified and used as a framework for coordinating activities to conserve transboundary biodiversity in the Taninthayi Range.

LIST OF ABBREVIATIONS

ACB	:	ASEAN Centre for Biodiversity
ADB	:	Asian Development Bank
AHP	:	ASEAN Heritage Park
ASEAN-WEN	:	ASEAN Wildlife Enforcement Network
CBD	:	Convention on Biological Diversity
CBNRM	:	Community-based Natural Resource Management
CITES	:	Convention on International Trade in Endangered species of Wild Fauna and Flora
CLDP	:	Community Livelihood Development Program
CTA	:	Chief Technical Advisor
DWB	:	Department of Wildlife and Biodiversity
FAO	:	Food and Agriculture Organization
FRI	:	Forest Research Institute
GIS	:	Geographic Information System
GMS	:	Greater Mekong Subregion
GPS	:	Global Positioning System
HQ	:	Headquarters
ICDP	:	Integrated Conservation and Development Program
ITTA	:	International Tropical Timber Agreement
ITTO	:	International Tropical Timber Organization
IUCN	:	The World Conservation Union
MOECAF	:	Ministry of Environmental Conservation and Forestry of Myanmar
MIS	:	Management Information System
MRC	:	Me Kong River Commission
NBCA	:	National Biodiversity Conservation Area
NBSAP	:	National Biodiversity Strategy and Action Plan
NESDP	:	National Economic and Social Development Plan
NGOs	:	Non-Government Organizations
NP	:	National Park
PM	:	Project Manager
PAs	:	Protected Areas
PSC	:	Project Steering Committee
SFM	:	Sustainable Forest Management
TA	:	Technical Advisor
TBC	:	Trans-boundary Biodiversity Conservation
TBCA	:	Trans-boundary Biodiversity Conservation Area
TFSMP	:	Thai Forestry Sector Master Plan
TNP	:	Taninthayi National Park
TNR	:	Taninthayi Nature Reserve
TR	:	Taninthayi (Tenasserim) Range
UNFCC	:	United Framework Convention on Climate Change
WCS	:	Wildlife Conservation Society
WS	:	Wildlife Sanctuary

Map of Project Area



Map 1 Proposed transboundary biodiversity cooperation area in the Taninthayi (Tenasserim) Mountain along the border between Myanmar and Thailand. In Myanmar, the Taninthayi Nature Reserve and the Taninthayi National Park (proposed in 1992).

PART I: CONTEXT

1. 1 Origin

The Taninthayi (Tenasserim) Range along the border between Thailand and Myanmar is located at the crossroads of four biogeographical zones: Indo-Chinese, Sino-Malayan, Indo-Burmese and Eastern India. These four global important terrestrial eco-region with a transition zone from continental dry evergreen forests common in the north to semi-evergreen rain forests to the south have provided a unique assemblage of the highest diversity of both bird and mammal species found in the Indo-Pacific region.

Besides biodiversity features, the rugged watersheds of the Taninthayi, Dawna, and other mountain ranges drain into the mighty Taninthayi, Salween, and Chao Phraya rivers, supporting globally endangered and endemic species as well as a diversity of human cultures. Karen and Mon peoples live in the Taninthayi (Tenasserim) Range and many other indigenous cultures call this area home. In many ways, the traditional practices of these groups provide a template for sustainable use of the region's rich natural resources.

However, long-term integrality of forest ecosystems and biodiversity in the Taninthayi (Tenasserim) Range are vulnerable to several major threats. These include subsistence poaching for bush meat, forest clearing and subsequent land encroachment for small and large scale agriculture and fragmentation, influx of refugees and immigration during the war, illegal and legal logging, increasing settlement inside protected areas and in the buffer zone, forest fires and repeated burning leading to permanent ecosystem degradation, a significant history of human-elephant conflict along park boundaries, and lack of collaboration on the ground to management contiguous protected areas and lack of a mechanism and a common interests to manage the Taninthayi Range at landscape level.

Besides scientific facts, there have been continuous engagements from decision-makers and international communities for the biodiversity conservation of the Taninthayi Range. These include the Greater Mekong Subregion (GMS) governments with the support from Asian Development Bank (ADB) and environmental conservation NGOs' support to the establishment of biodiversity corridors (ADB, 2005). The most recent dialogue on the Taninthayi Range was made at the 18th Annual Meeting, GMS, WGE which was took place on 17th May 2012 in Jinghong, Yunnan, China. At this meeting, the Ministry of Environmental Conservation and Forestry of Myanmar made a presentation on the six priority transboundary biodiversity cooperation areas between Myanmar and China, India and Thailand of which include the three priority areas with Thailand such as Taninthayi Nature Reserve, Taninthayi National Park (Proposed) and Lenya National Park (Proposed). In a side line of the tenth session of the United Nations Forum on Forests (UNFF 10) held in Turkey in April 2013, delegates from Thailand and Myanmar further discussed the formulation of a proposal for the Taninthayi Range.

In light of importance of enhancing the transboundary initiative, this project seeks to address the problem associated with limited national capacity and resources in biodiversity conservation and ineffective conservation of forest ecosystems and biodiversity in the Taninthayi Range in Myanmar in the context of transboundary biodiversity conservation.

1.2 Relevance

1.2.1 Conformity with ITTO's objectives and priorities

In supporting the strategies and mechanisms to ensure protection of trans-boundary protected forest areas, as well as promoting cooperation for trans-boundary biodiversity conservation (TBC), the project is an effective contributor to the prevention of deforestation and the strengthening of biodiversity conservation, and it complies therefore with the International Tropical Timber Agreement (ITTA) 2006 by meeting the following objectives of its Article 1:

(a) Providing an effective framework for consultation, international cooperation and policy development among all members because the project will provide support to mechanisms of consultation.

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

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

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

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

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

The proposal is also in compliance with the priorities and operational activities specified in the current ITTO Strategic Action Plan 2013-2018 (ITTO, 2013), especially Strategic Priority 3 "Enhance the conservation and sustainable use of biodiversity in timber producing forests" as well as Strategic Priority 1 "Promote good governance and enabling policy frameworks for strengthening SFM and related trade and enhancing SFM financing and investment" and Strategic Priority 6 "Build and develop human resource capacity to implement SFM and increase trade in forest goods and services from sustainably managed forests" as demonstrated in the accompanying table:

ITTO Strategic Action Plan 2013-2018	Proposed Actions
Priority 1 "Promote good governance and enabling policy frameworks for strengthening SFM and related trade and enhancing SFM financing and investment"	Identify and implement forest and wildlife law enforcement programmes in the Taninthayi (Tenasserim) Rangewhich contribute to the reduction of illegal logging and illegal wildlife hunting and tradewhile improving the livelihoods for forest-dependent people.
Priority 3 "Enhance the conservation and sustainable use of biodiversity in timber producing forests"	In close collaboration with relevant organizations and partners (e.g., IUCN, the Greater Mekong sub-region, ASEAN-WEN, WCS-Myanmar), strengthen the Taninthayi (Tenasserim) Range's dedication totransboundary biodiversity conservation.
Priority 6 "Build and develop human resource capacity to implement SFM and increase trade in forest goods and services from sustainably managed forests"	Provide human resource programmes in biodiversity conservation to support national capacities to efficiently implement biodiversity-related activities: Capitalize on environmental services the Taninthayi (Tenasserim) Rangethat further the security of the tropical timber resource base while accounting for the requirements of forest-dwelling indigenous and local communities

The proposed Taninthayi Range Transboundary biodiversity conservation project will also contribute to the implementation of the ITTO/IUCN Guidelines for the conservation and sustainable use of biodiversity in tropical timber production forests in particular Principle 3 "Political commitment, policies and laws". Strong commitment from the Ministry of Environmental Conservation and Forestry of Myanmar will be enhanced to ensure that the conservation and sustainable use of biodiversity in the Taninthayi Range through adoption of a common vision for the conservation of the Taninthayi Range during project implementation.

Furthermore, the project will contribute to enhancing the transboundary conservation of tropical forest resources in line with the objectives of the ITTO-CBD Joint Work Programme, based on a MoU signed in 2011 as well as the achievement of the Aichi Biodiversity Target of CBD COP 10 relating to the expansion of protected areas. The lessons of the Taninthayi Range Transboundary biodiversity conservation project will also contribute to the revision of the National Biodiversity Strategy and Action for Myanmar as the decision-makers of the both countries will be

engaged in project implementation. The project team is planned to introduce the experience and lesson from the implementation of the Taninthayi Range Transboundary biodiversity conservation project through side events at COP 12 and COP 13 of CBD.

1.2.2 Relevance to the submitting country's policies

The project is consistent with the conservation policies of Myanmar as reflected in its national policies and legislation.

Sustainable management and conservation of Myanmar's forests have been accorded a high priority by the Government. Efforts are being advanced to ensure that the flora and fauna are conserved for future generations. Myanmar has ratified the Convention on Biological Diversity in 1994 and the United Nations Framework Convention on Climate Change in 1994 and the Kyoto Protocol in 2003. Myanmar has tried to participate in the programs of a number of other international and regional conventions and organizations concerning biodiversity conservation and sustainable natural resource uses such as Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), World Heritage Convention (WHC), Ramsar Convention, Man and the Biosphere (MAB) Programme, ASEAN Wildlife Enforcement Network (ASEAN-WEN) and ASEAN Centre for Biodiversity (ACB). At the moment, The major international conservation partners are wildlife conservation society (WCS) from USA, Makino Botanical Garden (MBK) from Japan, Smithsonian Institution from USA, flora and fauna international (FFI) from Britain, and Istituto Oikos from Italy. The major collaboration fields are biodiversity survey, strengthening biodiversity conservation and protected area management, capacity building and livelihood supporting.

In line with the Government commitment to biodiversity conservation, the Forest Policy (1995) identified six imperatives: (a) Protection of soils, water, wildlife, biodiversity and environment; (b) Sustainability of forest resources; (c) Basic needs of the people for fuel, shelter, food and recreation; (d) Efficiency to harness the full economic potential of the forest resource; (e) Participation of the people in the conservation and utilization of the forests; and Public awareness about the vital role of the forests.

The Forest Policy identified ten important objectives of which the following four objectives are particularly relevant to the proposed project.

(a) Protection and Management
To decide development unclassified and protected public forest areas strategically located in the country to extend existing areas under forest reserves and the protected areas system in order to ensure sustainable forest management with the object of minimizing social and environmental benefits for the country and its population; restoration of ecological balance and biodiversity conservation;

(b) Forestry Planning
To initiative the development planning for the forestry sector to achieve sustainable development in resource production, processing and marketing, biodiversity conservation and restoration of ecological balance;

(c) Institutional Strengthening
To ensure that the basic goals of forestry, environmental protection and increased economic benefits to be achieved from forests and forestry are reflected in the institutional structure; and

(d) People's Participation and Public Awareness
To enlist people's participation in forest sector development activities in order to provide "people-based-development" as also create public awareness and mass motivation for protection and conservation of forests.

According to the Myanmar Environmental policy law and National Biodiversity Strategy and Action Plan (NBSAP) which is the outcomes of extensive data and information collating and analysis, as well as series of workshops and working group meetings with participation from government departments, NGOs, and academic institutions, this project proposal is related with the country' forest policy and national biodiversity strategy and action plan of Myanmar.

In relation to the effective implementation of the Myanmar National Biodiversity Strategy and Action Plan (NBSAP), the project is directly linked to the Priority Corridor 7 – Taninthayi, Sundaic Subregion:

> *The Priority Corridor comprises the Sundaic Subregion, an extremely large block of natural habitat, which includes small parts of Mon and Kayin States plus the vast majority of Taninthayi Region. The Sundaic Subregion includes the largest areas of lowland wet evergreen forest remaining in the Indo-Myanmar (Indo-Burma) Hotspot. Of greatest significance, the Priority Corridor supports the bulk of the world population of Gurney's Pitta (Critically Endangered), a species endemic to Taninthayi Region and a small part of peninsular Thailand (Anon. 2003, Eames et al. 2005). Moreover, the Priority Corridor is thought to support a relatively large population (approximately >50 individuals) of Tiger (Endangered) (Lynam 2003). The potential of the Sundaic Subregion for the long-term conservation of landscape species, such as Asian Elephant, Tiger and Plain-pouched Hornbill, is enhanced by the existence of significant areas of contiguous natural habitat in western and peninsular Thailand.*

1.3 Target area

1.3.1 Geographical location

The Republic of the Union of Myanmar is geographically located in Southeast Asia and bordered on the north and northeast by China, on the east and southeast by Laos and Thailand, on the west by Bangladesh and India. Myanmar is endowed with a rich diversity of habitat types arising largely from its unusual ecology diversity.

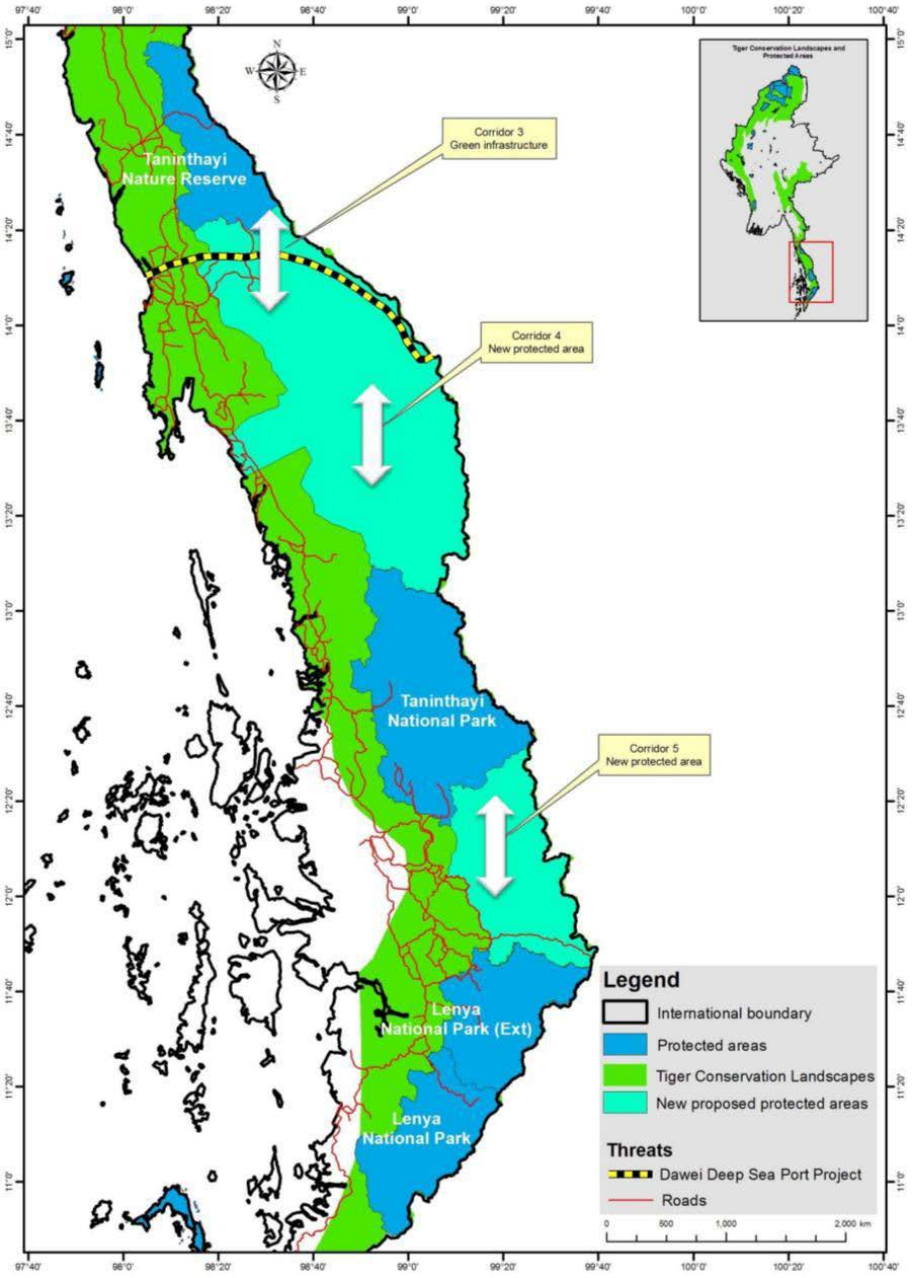
In Myanmar, currently there are four protected designated in the Tenasserim Range. These include Taninthayi National Park (proposed), Taninthayi Nature Reserve, Mulayit Wildlife Sanctuary and Lenya National Park (proposed). Taninthayi National Park is the largest area and it is located to the left of Kaeng Krachan National Park in Thailand, while Taninthayi Nature Reserve is situated to the north and adjoins Thong Pha Phum and Sai Yok National Parks in Thailand (Map 2). It is proposed that the project site in Myanmar will cover theTaninthayi Nature Reserve, the Taninthayi National Park and the remaining forest cover between these two protected areas. It is noted that the proposed corridor area will play a significant role in transboundary biodiversity conservation in the Tenasserim Range between Myanmar and Thailand as an ecological linkage between fragmented protected areas and migratory routes of mega-fauna like elephant and tiger. A list of the proposed project areas are shown in Table 1. As illustrated in Map3, the project will also complement the existing Global Tiger conservation initiatives between theTaninthayi Nature Reserve and the Taninthayi National Park (WCS, 2013).

The Taninthayi Nature Reserve is located in Taninthayi Hills, Southern Myanmar. It was established as a PA in 2005 with an area of 1,619 km^2. Its altitudes are ranged from 20 to 1,300 m. Major vegetation types of the Taninthayi Nature Reserve include: tropical evergreen forest, mixed deciduous forest, bamboo break and grassland. In terms of key biodiversity, the Taninthayi Nature Reserve reserves mammals (59 species), including tiger, elephant, tapir, leopard, bear and birds (230 species), including eleven important species such as Gurney's Pitta, one of the most beautiful bird in the world. Table 1 provides the extent of each protected area and the corridor in the Taninthayi Range.

The project work will be concentrated on the proposed Taninthayi National Park and some effort to theTaninthayi corridor area (partial area) to support trans-boundary biodiversity conservation in the Taninthayi Range, in Myanmar.

Table 1 Protected areas in the proposed project area in the Taninthayi Range in Myanmar

No	Name	Size (km^2)	Status
	Myanmar		
1	Taninthayi National Park	3,663	Proposed
2	Taninthayi Nature Reserve	1,619	Designated
3	Taninthayi corridor area (partial area)	8,400	Proposed
	Total	**13,682**	



Map 2 Proposed project area; Important corridors in Tiger Conservation Landscape in Myanmar
Source: Stocktaking Conference on Tiger Conservation -Case studies on habitat connectivity and threats in Tiger Conservation Landscapes of Myanmar

1.3.2 Social, cultural, economic and environmental aspects

Social and cultural aspects

There are nine villages within the Taninthayi Nature Reserve (TNR), eight are in the northern part while one village is located in the southern part. The number of households for each village range from 20 to 70 households. Outside the TNR, there is no village within the one mile from the boundary. Within the 4 mile parameter of the boundary there are 29 villages with the maximum households of 350 and minimum of 30 households. The villagers mainly rely on the paddy fields associated to shifting cultivation while rubber plantations belong to the businessmen. The Total company has funded a multi-year project to the Forest Department for the conservation and management of the reserve. The project has prepared a 4-year management plan of TNR area to last until 2013. The plan extends to the buffer zone where several villages are located whose livelihoods depend on agriculture, fishing, hunting and subsistence logging. There are 45 villages located in and around the proposed Taninthayi National Park (TNP), and the population is approximately 30,000. The major livelihoods are agriculture and fishery. Beetle nut, cashew and rubber are the major crops for agriculture. In the low land areas, paddy fields are common for livelihood, whereas shifting cultivation is practiced in the mountain areas.

One of the prominent trends that would exert impacts on the communities around TNR is population dynamics. The relative trend of the population of the area reveals rise and fall. The fall part of the trend is proved to be a reflection of socio-political processes of the area. However, in the future, there is a high tendency of population growth in the area due not only to biological potentials but also because of social reactions. The high tendency of the future population growth will largely be related to biological potential of reproduction in the existing population. High total fertility rate (3.7 child per women per life time), many young families in the communities (over 50% of the married couples are at the active reproductive range of 16-40), and many young people in the population (40% of the total population are between the age of 16-40) will lead to a rapid population growth (Technical report of TNR).

In the case of the Taninthayi Nature Reserve, local residents generally hold fairly good knowledge on environmental issues and relations with the TNR staff members and show some degree of positive attitudes towards the Reserve. The on-going TNR project generally is in its initial phase of motivating local participation emphasizing on extension and educational activities in order to enhance their awareness and avoid confrontation with local people. Law enforcement is used just as a complementary tool for preventing serious forest and wildlife crimes. So far, no serious legal action has been taken against local residents. Thus, TNR still appears to be an open access land where hunting, fishing, gathering and cultivation activities are being accomplished in some degree by local residents as traditional ways of life. Accordingly, if serious actions are going to take place against illegal activities inside TNR with strong law enforcement, it may possibly spoil existing relations with local people (Technical report of TNR). It is likely that effective community talks to be conducted by the project would be important to enhance the full and effective participation of local communities in protected areas, in the TNR as well as the TNP in the Taninthayi Range.

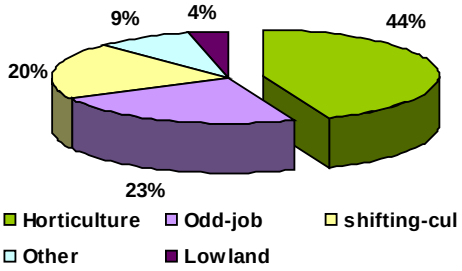
Economic aspects

Most of the local communities in the project site are rural and dependent on forest resources for basic needs such as food, fodder, fuel, and shelter. Community forestry has been encouraged to ensure sustainable development of forest resources while conserving its biodiversity, wildlife, plants, and ecosystem.

A community survey conducted for the Taninthayi Nature Reserve (TNR), indicates that most families (44%) inhabiting in the villages are making their living as horticultural farmers while 20% of households are practicing shifting cultivation as a main livelihood strategy. Another 4% are farmers who grow rain-fed paddy rice on the lowlands. The remaining households are odd-job workers (23%) and a collective group of other professionals such as Government staff, company workers etc. (9%). (See Table 2.)

Table 2 Livelihood composition of study villages (by households)

Village	Shift-culti	horticul	Lowland	Odd-job	Other	Total
Yapu	20	112	1	25	35	193
Tharyarmon	41	34	4	25	-	104
Mayaungchaung	29	30	5	19	1	84
Michaunglaung	37	20	-	10	7	74
Zimba	50	30	10	34	15	139
Kyaukshut	15	86	-	46	11	158
Yepon	14	66	-	20	7	107
Heinze	5	20	-	8	1	34
Hnan-kye	-	45	5	47	-	97
Wunpo	3	17	12	10	17	59
	214	460	37	244	94	1049



The common crops grown in the surrounding areas of the TNR are betel nuts and cashew nuts. Generally, two crops are grown together on a same parcel of land. Betel nuts require more water and are thus sensitive to soils. As a result, betel nuts are arbitrarily grown in low laying areas while cashewsare grown on the remaining space of the lands in rows with equal spacing. Betel nuts that are less subjective to disease and pest infestation and could produce a regular fruiting 8-10 years after planting; they have an average yield of nearly 100 nuts per palm and survive up to the age of more than 50 years. Hence, a betel palm can make 1000 kyats a year at the present farm gate price. In contrast, cashews take 5-6 years to mature and could produce an average per acre yield of 200-300 visses from the farms containing 200 trees per acre. However, cashew is very sensitive to frost and subject to a large fluctuation in yield. With the prevailing farm gate price of 1,800 kyats per viss, there can be a huge amount of earnings in good seed years. For cashews, the farmers asserted that frost damages at the time of flowering can lead to a total crop failure and such a wonderful year is rather hard to encounter. Very recently, due to policy supports in extending rubber plantations under an agricultural commercialization scheme, more local people tried to make an investment in rubber plantations across the area.

Environmental aspects

In TNR, over 75% of the area is covered by evergreen forest followed by deciduous forests, and these forests are habitats of several globally threatened plant species such as *Hopea sangal* (CR), *Parashorea stellata* (CR), *Shorea assamica* (CR) *Shorea farinosa* (CR) *Anisoptera costata*(EN), *Dalbergia cultrata* (EN), *Diospyros crumentata* (EN), *Dipterocarpus alatus* (EN), *Dipterocarpus costatus* (EN), *Shorea gratissima* (EN), *Shorea henryana* (EN), *Hopea odorata* (VU), *Memecylon grande* (VU), *Myristica malabarica* (VU) and *Schima wallichii* (VU).

The TNR hosted about 70 mammal species including several globally threatened species such as Asian elephant (EN), dhole (EN), Malayan tapir (EN), tiger (EN), clouded leopard (VU), gaur (VU), Himalayan black bear (VU), marbled cat (VU), sambar (VU) and sun bear (VU). There are more than a hundred of avifauna occurring in the TNR.

The proposed TNP is very prevalent in the mountains, and the elevation gradually rises from west to the east. The altitudes range from sea level to 1,490 m. The proposed national park mainly features evergreen rainforests followed by deciduous forests. Though a detail study for biodiversity is still lacking there have been several recordings ofmammals including several globally threatened species such as the Asian elephant (EN), dhole (EN), Malayan tapir (EN), tiger (EN), clouded leopard (VU), gaur (VU), Himalayan black bear (VU), sambar (VU), and sun bear

(VU). Birdlife International reported that TNP is one of the important bird areas (IBAs) of Myanmar, and TNP is one of few remaining sites for the endangered Gurney's Pitta *(Pitta gurneyi*), endemic to Thailand and Myanmar.

However, environmental degradation is another outstanding trend across the communities. Among others, soil degradation, due to shifting cultivation, appears to be immense in the area. Another casual factor to soil degradation is wildfire. Ground cover vegetation of all sorts are consumed by frequent and severe wildfires, making easily erodible soils on the steep slopes exposed directly to torrential rains and finally leading to widespread landslides and erosions. The consequence is siltation in stream system and catastrophic floods over most of the area (Technical report of TNR).

According to the Wildlife Conservation Society (WCS) report, both TNR and TNP are key biodiversity areas (KBAs) of Myanmar. In addition both areas are located within the Taninthayi range conservation corridors (NBSAP, Myanmar, 2011).

The remaining forest between Taninthayi Nature Reserve and Taninthayi national parks is still intact and covers over 8,000 km^2. This large forest block is recognized as an important corridorfor the Tiger Conservation Landscape and other large mammal species such as Asian elephants, tigers, gaur, and clouded leopard. Recent surveys conducted by WSC programs in Thailand and Myanmar reveals that these mega-fauna use the forest blocks as migration routes between fragmented protected areas both in Thailand and Myanmar. Thus, the Taninthayi Range between Myanmar and Thailand plays an important role as a trans-boundary biodiversity corridor. Long-term viability of biodiversity in the Tenasserim Range not only depends on effective management of protected areas in Myanmar and Thailand but also effectively manages the Taninthayi Range landscape in a sustainable manner.

The world's smallest mammal, Kitti's hog-nosed bat (*Craseonycteris thonglongyai*) resides in the limestone caves of this eco-region. Recent studies indicated that this eco-region is recognized as one of the world's largest populations of Asian elephants (*Elephas maximus*) and tigers (*Panthera tigris*) survive in the forests along the border between Thailand and Myanmar. Some of the other mammals of conservation importance include several threatened species such as gaur (*Bos gaurus*), banteng (*Bos javanicus*), wild water buffalo (*Bubalus arnee*), southern serow (*Naemorhedus sumatraensis*), clouded leopard (*Pardofelis nebulosa*), common leopard (*Panthera pardus*), Malayan tapir (*Tapirus indicus*), wild dog (*Cuon alpinus*), Siamese crocodile (*Crocodylus siamensis*), and Asiatic black bear (*Ursus thibetanus*). Wildlife survey in Myanmar is limited due to lack of financial support. It is reported that the The Taninthayi Nature Reserve reserves mammals (59 species), including tiger, elephant, tapir, leopard and bear and birds (230 species) including 11 important species such as Gurney's Pitta, one of the most beautiful bird in the world.

1.4 Expected outcomes and project completion

The expected situation after the completion of the project is characterized by the effective establishment of trans-boundary biodiversity conservation area in the Taninthayi Range that enhances habitats for a wide-range of wildlife species and facilitates migration and log-term survival of large mammals. This target condition will be accomplished through the following actions:

- National capacity and necessary resources for biodiversity conservation management and research in protected areas will be substantially increased through the establishment of the Taninthayi National Park as a fully functional protected area after a series of project activities relating to village consultation process, village development zonation, and community-based natural resource management (CBNRM) with the support of national NGOs like WCS-Myanmar. The Forest Research Institute of Myanmar will have increased its capacity of biodiversity research through the establishment of a new division dedicating biodiversity and GIS with necessary equipment and facilities to ensure its long-term research capacity.
- Park rangers and management staff of protected areas will have been trained and will have learned to use more effective tools in patrolling and in collecting data. Technical and professional staff at regional and central levels will have increased their understanding of how to use systematic baseline data for trans-boundary biodiversity conservation. Necessary tools for effective patrolling will have been provided to park officials to prevent encroachment and poaching in risk areas, as predicted by project models

- Sustainable livelihoods of forest-dependent local communities will have been enhanced to support the conservation of biodiversity in the project site with strengthening of local community organizations and networks. Community-based natural resource management activities will have been intensively implemented in the Taninthayi National Park and its surrounding areas. Local communities involved in the project will have gained additional knowledge of alternative income-generating activities. Their livelihoods will have been improved and they will be less dependent on forest resources in protected areas. They will be more aware of trans-boundary biodiversity conservation issues. Other funding sources to sustain livelihood activities will have been identified.
- Initial coordinating institutional mechanisms with Thailand will take place to ensure the effective management of wide-ranging species in the Taninthayi Range. Baseline data will be available and shared to support joint research between the participating countries. The locations of important habitats for selected wide-ranging species based on the existing research outcomes and potential areas of risk will have been identified and used as a framework for coordinating activities to conserve trans-boundary biodiversity in the Taninthayi Range.
- **The Reporting system to CBD will be improved through the Project. The technical information to the CBD will have been provided by the Project. Regular National Reporting System to CBD Secretariat will have been assisted and improved by the Project. Two side events during the CBD COPs will have been organized by the Project.**

PART II: PROJECT RATIONALE AND OBJECTIVES

2.1 Rationale

2.1.1 Institutional set-up and organizational issues

Myanmar is a signatory to a number of international agreements concerning biodiversity conservation and sustainable resource uses. The most relevant agreements are Convention on International Trade in Endangered Species of Wildlife Fauna and Flora (CITES), CBD, World Heritage Convention (WHC), Ramsar Convention and Man and Biosphere (MAB) Programme. For the most part, Myanmar's commitments to these agreements have yet to be fully translated into effective conservation action. Thus, this project is very much relevant to fulfill the international commitments by the Government of Myanmar.

The Ministry of Environmental Conservation and Forestry (MOECAF) is fully responsible for the effective implementation of biodiversity conservation as outlined in the Myanmar National Biodiversity Strategy and Action Plan (NBSAP). These include: strengthening conservation of protected areas; mainstreaming biodiversity into other policy sectors; implement focused conservation actions for priority species; support local NGOs and academic institutions to engage in biodiversity conservation and create capacity to coordinate conservation investment in Myanmar.

The Forest Department of the Ministry of Environmental Conservation and Forestry will be the Executing Agency and will fulfill its mandate towards the effective and successful implementation of the project in accordance with relevant rules and procedures.

Specifically, Planning and Statics Division,Nature and Wildlife Conservation Division and Forest Research Institute of the Forest Department will be implementing the Project activities. Planning and Statics Division will take the responsibilities of administration role and Nature and Wildlife Conservation Division will take the technical role in implementing the Project. Forest Research Institute will be responsible for overall research components, capacity building activities and institutional strengthening.

Partners' organizations include Wildlife Conservation Society-Myanmar and other conservation NGOs like Bird Life International-Myanmar which have long worked for the planning, management and expansion of the national protected areas in the country. In addition, the project will seek collaboration with relevant regional initiatives like ASEAN-WEN.

The project strategy includes strengthening capacity of national institutions in particular the Forest Research Institute for in conducting various researches for biodiversity conservation, management and monitoring with facilitation to the establishment of Biodiversity Conservation Division at an early stage of the project. The project will also assist in improving biodiversity conservation programs of the University of Forestry through training courses and joint research programs.

In addition, the project will attach its importance to the full operation of the Taninthayi National Park which was proposed in 2002 with active participation of local communities. Since the Ministry of Environmental Conservation and Forestry has revitalized its effort from last year to finalize necessary administrative arrangements with local governments, it is expected that the designation of the Taninthayi National Park as a fully operational protected area will be made in the early stage of the project.

In order to increase collaboration with partners, a number of project activities will be working with such partners to supplement the expertise of the Forest Department as well as to increase the quality of project outcomes and publications. In the context of transboundary biodiversity conservation with Thailand, the Executing Agency will seek close collaboration with Royal Forest Department and Department of National Park and Wildlife of Thailand in order to establish an institutional mechanism. In conducting joint biodiversity research in the Taninthayi Range, close partnerships will be made to Kasetsart University and WCS-Thailand which have long associations with ITTO biodiversity projects.

2.1.2 Stakeholder analysis

Table 3 provides an analysis of primary and secondary stakeholders, together with a brief outline of their involvement in the Project. During the consultation, interested stakeholders were encouraged to participate in the various project design activities based on the the Myanmar National Biodiversity Strategy and Action Plan (NBSAP). As mentioned above, NBSAP is the outcome of extensive data and information collating and analysis, as well as series of workshops and working group meetings with participation from government departments, NGOs, and academic institutions. Based on the consultations, discussions, comments, suggestions and updated information of biodiversity and natural resources in the country, the NBSAP has been prepared and approved by national stakeholders. The NBSAP is acting as the major guiding document for the planning framework for effective and efficient conservation and management of biodiversity and natural resources based on greater transparency, accountability and equity.

During the stakeholder consultations, the Forest Department of the Ministry of Environmental Conservation and Forestry as the Executing Agency has played a key role in designing the project activities by intensively reviewing the effective engagement of key stakeholders, in particular the Wildlife Conservation Society-Myanmar and other conservation NGOs like Bird Life International-Myanmar, which have accumulated a lot of experiences and lessons from the implementation of various conservation and management activities in protected areas around the country. National institutions, such as FRI and University of Forestry, participated in consultation meetings organized by Forest Department and they identified a critical research area and necessary equipment and facilities to enhance biodiversity conservation, management and monitoring. Communications with local governments and NGOs have been made to identify more feasible project activities to ensure the effective participation of local communities. In particular, strategy selection was followed by experiences and lessons from the implementation of the Taninthayi Nature Reserve Project which would facilitate the establishment of the Taninthayi National Park. In order to capture the initial transboundary biodiversity conservation cooperation with Thailand, intensive communications with concerned biodiversity experts in Thailand, in particular Royal Forest Department, Department of National Park and Wildlife Conservation and Kasetsart University.

Table 3 Key Stakeholders in the capacity building for strengthening transboundary biodiversity conservation and management of the Taninthayi Range in Myanmar

Institutions	Characteristics	Problem/needs/	Potential	Involvement in the project
Primary Stakeholders				
Forest Department (Nature and Wildlife Conservation Division; Planning and Statistic Division), Ministry of Environmental Conservation and Forestry	Key element in the sustainable conservation and management of biodiversity and ecosystem management. Sustainable management of natural forests and planted forests	Limited human resources, Limited infrastructure, Limited financial resources, Need to upgrade and technical cooperation Weak coordination, weak law enforcement Problems of unsustainable management practices, climate change impacts, limited capacity to effective biodiversity conservation	Biodiversity, including transboundary biodiversity, policy and decision maker at the national level Key player for planning and consultation for consensus building Key role in international cooperation in transboundary biodiversity sector	Project management and monitoring leading role towards its success in accordance with the rules and procedures of ITTO and the Ministry of Environmental Conservation and Forestry Facilitate the effective participation of key stakeholders in implementing project activities relating to national and regional workshops and community consultation and participation in co-management of the Taninthayi National Park Take a leading role in identifying lessons from the implementation of the project for their wider dissemination to a similar project case as well as formulation and revision of biodiversity conservation policy at the national local level as a mainstream process Facilitate disseminating project outcomes to national and international level
Forest Research Institute	Key element in the technical research of biodiversity conservation aspects of project	Limited human resources in biodiversity assessment and monitoring, Limited infrastructure, Limited financial resources, Need to upgrade and technical cooperation	Only national institution to conduct forest biodiversity conservation, management and monitoring related research Key role in research & educational development in biodiversity conservation	Improve biodiversity research capacity through receiving fellowships and training Take a leading role in biodiversity assessment and monitoring with the assistance of partners including WCS-Myanmar Take a leading role in publishing technical reports resulting from the project Facilitate the preparation of scientific papers for their inclusion in relevant international journals Assist the implementation of the project to facilitate the work of the Forest Department towards the success of the project
Local communities in the Taninthayi Range in particular the Taninthayi	Highly dependent on natural resources (all forests are	Lack of knowledge and skills, low level of awareness about important role of forests and	Key player to implement the project and to improve the	Involve in the activities related with biodiversity conservation, capacity building, and various

National Park and its surrounding areas	State-owned)	biodiversity, limited alternative income options Less opportunities to communicate with Government officials	sustainability of conserving biodiversity in protected areas Decision maker under participatory approach towards the establishment of co-management of the Taninthayi National Park	extension activities In the case of the Taninthayi National Park, local communities will be proactive in village consultation process such as natural resource listing, mapping and collecting socio-economic information and data to ensure their full and effective participation In the process of village development zonation, village area and boundary surveys and village land use planning will be carried out in close collaboration with local communities in order to establish community-based natural resource management systems including participatory boundary demarcation between the wildlife sanctuary and the village, village level land use plan development and establishment of minor forest product nurseries and pilot income generation programs
Wildlife Conservation Society-Myanmar,Bird Life International, BANCA	Play a very important role in wildlife monitoring and conservation	Inadequate resources to conduct a large scale biodiversity conservation and wildlife monitoring activities	High potential to cooperate with MOECAF in wildlife monitoring and smart patrol activities, as well as training activities	Expertise of the Wildlife Conservation Society-Myanmar, Bird Life International, BANCA and other relevant conservation NGOs will be provided through the provision of national consultants or sub-contracts Training courses will invite experts from the three organizations as resource persons as appropriate Representatives from the three organizations will be invited to the National Project Technical Committee member to ensure their contributions. Some of them will also be invited to the National Project Steering Committee
Secondary Stakeholders				
University of Forestry, Central Forestry Development Training Centre, Myanmar Forestry School	Prominent institution in the development of technologies, methodologies, capacity building centre in biodiversity and forestry	Limited facilities, limited access to updated information, limited budget to conduct research, limited capable resource persons	Play an important role to produce well-trained foresters and staff whom are well equipped with forest biodiversity conservation	Involve in the provision of scientific data. Involve in the development and promotion of technology required for operational biodiversity conservation in the area Involve in the various assessment and development of monitoring system,

			with active participation of local communities	resource base inventory etc. Involve in selection of participants in the training courses and the overseas study
UN agencies (CBD, UNDP-Myanmar, FAO, UN-habitats) and regional organizations – ASEAN Biodiversity Centre and ASEAN-Wildlife Enforcement Network	Independent to communicate with Government Ministries and to facilitate working relationship with NGOs	Lack of linkage with national policy, lack of integration with biodiversity and forestry master plan	Key elements in coordination among relevant stakeholders	Involve in coordination mechanism to promote biodiversity conservation partnerships Provide facilities and supports to the Ministry of Environmental Conservation and Forestry as well as local communities and local NGOs for rural development activities, community forestry, extension activities in forest and wildlife enforcement
Conservation development NGOs (FREDA, ECCDI, MERN, and ECODEV)	Play important role in the community development, extension and mediation	Lack of facilities, access to formal institutions, lack of resources, Lack of awareness, limited capacity in biodiversity conservation and planning, lack of linkage with national policy, lack of integration with forestry master plan	High potential to cooperate with MOECAF in extension activities, conservation and participatory carbon monitoring	Involve in the community development and income generating activities, continue and expand the existing initiative, sub-contract
Local authority	Authorized body to monitor and coordinate every affair including forestry-related matters	Limited knowledge, low level of awareness about ecosystem services, limited facilities, limited environmental education	Key element to coordinate relevant Ministries, organizations and stakeholders	Involve in the coordination mechanism among stakeholders
Tertiary Stakeholders				
Primary/middle and high schools in the Project site	Active participation in environmental conservation	Limited knowledge, low level of awareness about ecosystem services, limited facilities, limited environmental education	High potential, new generation to conserve biodiversity and enhance environmental services	Involve in the extension activities such as public educational talks, poster and environmental exhibition, seminars
Ministry of Agriculture and Irrigation, Ministry of Livestock Breeding and Fisheries	Key player in conserving agro-biodiversity and aquatic biodiversity	Weak coordination and cooperation with other ministries and agencies	Play in high potential involving biodiversity conservation	Involve in various types of agro-forestry, income generating activities for local communities, extension activities

2.1.3 Problem analysis

An important question for the effective and sustainable conservation of biodiversity is whether national capacity and resources will be sufficient enough to ensure the active participation of all stakeholders. Myanmar has been regarded as one of the most biodiversity rich countries in the Asia-pacific region, but biodiversity resources have been dwindling for many years due to the lack of integrated capacity and necessary resources for the sound protection and management of biodiversity.

The Taninthayi Range along the border between Myanmar and Thailand has been recognized as a global important terrestrial eco-region containing some of the highest diversity of both bird and mammal species found in the Indo-Pacific region. In particular, the eco-region has provided rich habitats for the world's smallest

mammal, Kitti's hog-nosed bat (*Craseonycteris thonglongyai*), one of the world's largest populations of Asian elephants (*Elephas maximus*) and tigers (*Panthera tigris*). However, the outstanding biodiversity features of the Taninthayi Range have been reduced and threatened due to lack of capacity and necessary resources to ensure the effective conservation of biodiversity. In this regard, the key problem to be addressed by the project has been identified as ineffective conservation of transboundary ecosystems and biodiversity in the Taninthayi Range in Myanmar. The causes of this key problem which are outlined in the problem trees in Figure 1 include: (1) lack of capacity and resources to promote the sustainable biodiversity conservation, monitoring and research in the Taninthayi Range in Myanmar; (2) lack of mechanismsfor transboundary biodiversity conservation in the Taninthayi Range in Myanmar; and (3) lack of the effective participation of local stakeholders in the conservation in the Taninthayi Range in Myanmar.

Lack of capacity and resources to promote the sustainable biodiversity conservation, monitoring and research in the Taninthayi Range in Myanmar

Myanmar has committed to biodiversity conservation in the Taninthayi Range as a priority protection area and proposed transboundary biodiversity conservation cooperation of this eco-region with Thailand at the 18th Annual Meeting, GMS and WGE (17 May 2012, Yunnan, China), as mentioned in Section "Origin". However, there is a significant gap to conserve, manage and monitor biodiversity resources in the Taninthayi Range due to limited capacity and resources. For instance, the National Forest Research Institute established in 1978to provide technical information of all aspects of forestry and forest-based activities to increase the contribution of the forest and forest-lands to the well-being of the nation. The FRI has at present 69 researchers and 133 support staff. In the 69 researchers, included are 2 Ph.D. holders, 22 M.Sc. holders, 34 B.Sc. and diploma holders. The FRI has conducted the following research programs: sustainable forest management in natural forests; development of plantation forests; reforestation in the central dry zone; efficient utilization of timber; systematic utilization of the non-wood forest products and fuelwood resources development and wood energy conservation measures. The FRI has recognized an urgent need to establish a new division to deal with biodiversity conservation associated with manpower, as they have limited access to training and overseas study. In order to address this capacity building need, one of the project activities aims at providing necessary facilities and equipment while raising biodiversity experts at the national forest research institute level.

In improving the quality of the biodiversity conservation in the Taninthayi Range (about 1.36 million ha) in Myanmar, which covers the Taninthayi Nature Reserve (0.16 million ha), the proposed Taninthayi corridor area (partial area-0.84 million ha) and the proposed Taninthayi National Park (3.6 million ha), there has been a critical gap to improve the capacity and resources associated with human resources and conservation funds required to mange sustainably. Sustainable conservation of the Taninthayi Nature Reserve has been enhanced with the support of a long-term Taninthayi Nature Reserve Project (TNRP), initiated in 2005 with funds provided by Motamma Gas Transportation Company (MGTC)and Taninthayi Pipeline Company (TPC), in order to support the planning, establishmentand operation of the tropical rainforests and their constituent biodiversity in theTaninthayi region of southern Myanmar.

However, there is limited progress on the establishment of the Taninthayi National Park proposed in 2002 as a fully operational protected area due to limited resources. There has been limited consultation between local communities and local governments in establishing the Taninthayi National Park after issuing a settlement report in 2002. In September 2012, the Minister of Environmental Conservation and Forestry visited theproposed Taninthayi National Park and called for an urgent need to facilitate the administrative arrangements for the designation of the Taninthayi National Park through Ministry's proposal to the Cabinet. Since there are minor settlement issues with local communities, the proposed Taninthayi National Park will be established in the early stage of the project in accordance with national forest laws and only consented local communities will be included in the boundary of a national park. Park rangers and management staff of protected areas have limited training in effective patrolling and in local community consultation and development. Technical and professional staff at regional and central levels also has their limited understanding of how to use systematic baseline data for trans-boundary biodiversity conservation.

In addition, there is increasing evidence on extensive encroachment and overexploitation of biodiversity resources due to poaching, fragmentation and encroachment for agriculture, illegal and legal logging, settlements inside and around the park, and human-elephant conflicts.

Poaching - Commercial and subsistence poachingand selling of wildlife products through cross-border trade, thus wildlife numbers have been depleted by past hunting and poaching activities. With active involvement of

Wildlife Conservation Society (WCS) in the Smart Patrol program in the last three years, field observers feel there is still some subsistence poaching but not large scale market hunting.

Fragmentation and Encroachment - Increased habitat fragmentation as a resultof agriculturalactivities, particularly around enclave communities because Karen minority still practice land rotation or shifting cultivation but the rotation period is shorten due to strict law enforcement. In addition, scattered large scale encroachments for rubber plantation are observed to date along the boundaries. In addition, the Taninthayi Range is located within the GMS economic corridors. Therefore, more fragmentation is anticipated from the infrastructure development project.

Illegal and legal logging – Small scale illegal logging is observed. Meanwhile,after Thailand banned timber exploitation in its forests in 1988, Myanmar granted large logging concessions to Thai companies, and illegal timber extraction in Myanmar by Thai loggers has become common in recent years.

Settlements inside and around the park – A majority of the total population practice is in agriculture and still enlarge their land whenever they have opportunities to do so. These lead to increased population, encroachment, pollution and wildlife impacts. Land use planning and demarcation are essential to minimize current and unforeseen impacts through patrolling and clear demarcation.

Forest fires- Forest fires and repeated burning lead to permanent ecosystem degradation.

Human-elephant conflict - There has been human-elephant conflict in the proposed project area where elephants invade agricultural crops.

Lack of mechanismsfor trans-boundary biodiversity conservation in the Taninthayi Range in Myanmar

The effective transboundary biodiversity conservation in the Taninthayi Range requires a considerable degree of cooperation between Myanmar and Thailand. Although the transboundary biodiversity conservation initiative has been proposed by Myanmar, there is no coordinating institutional mechanism between Myanmar and Thailand to ensure the effective management of wide-ranging species in the Taninthayi Range. There is no comprehensive and detailed information on the locations of important habitats for selected wide-ranging species as a framework for coordinating activities to conserve transboundary biodiversity in the Taninthayi Range.

The project aims at establishing an initial institutional arrangement between the Forest Department of Myanmar and the Royal Forest Department and the Department of National Park and Wildlife Conservation of Thailand to support the development of long-term transboundary cooperation in the Taninthayi Range. This will be facilitated through the participation of representatives of theRoyal Forest Department and the Department of National Park and Wildlife Conservation of Thailand in meetings of the Project Technical Committee and Project Steering Committee which meet regularly to review the implementation of the project. Joint researches between scientists in the two countries in biodiversity surveys in the Taninthayi Range are also expected to provide various opportunities to draw the attention of decision makers to the importance of developing transboundary biodiversity conservation programs. Such joint research will also provide a good opportunity to share experiences and lessons from the implementation of biodiversity projects in the two countries towards the development of transboundary cooperation partnerships

Lack of the effective participation of local stakeholders in the conservation in the Taninthayi Range in Myanmar

The effective conservation in the Taninthayi Range in Myanmar depends totally on the proactive participation of local stakeholders and the provision of sustainable livelihoods of forest-dependent local communities.In particular, there is an urgent need to facilitate the intensive implementation of community-based natural resource management activities in the Taninthayi National Park and its surrounding areas as there has been a long delay in establishing it as a fully functional protected area in collaboration with local communities. There have been limited good practices on the co-management of a protected area with local communities in the country due to different interests and concerns among local stakeholders. A weak capacity of local community organizations has created some problem in consensus building in natural resource conservation and management. Local capacity building is an important task of the project.

Since most of the local communities rely on natural resources for their subsistence, Project intervention includes Integrated Conservation and Development Program and Community Livelihood Development Program

activities, including nature-based tourism interventions as well as other promising income-generating opportunities. Concerted efforts are required to strengthen the long-term viability of the livelihood initiatives which have been introduced by establishing closer program linkages with civil society, including non-governmental organizations (NGOs).

Problem Tree

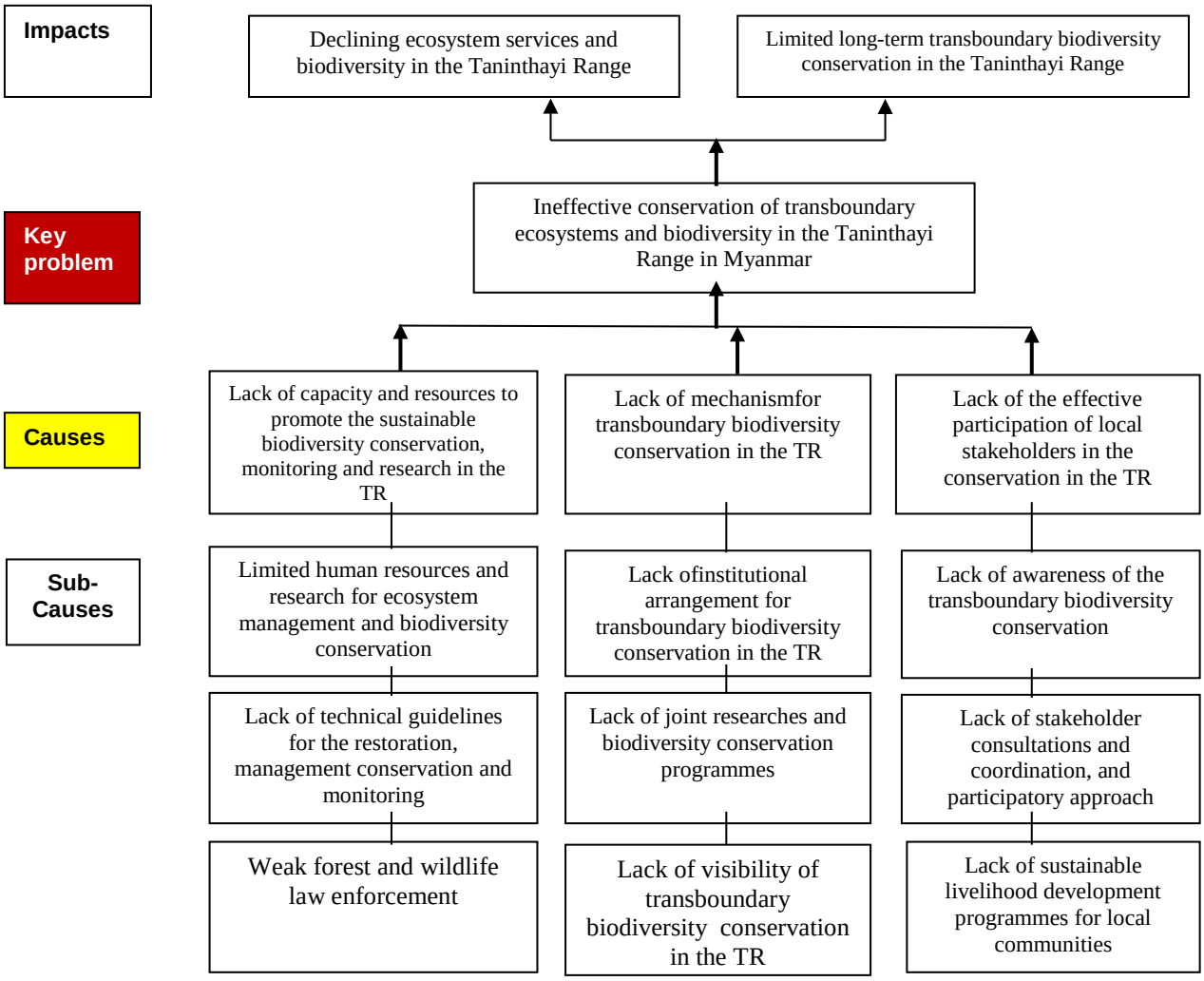


Figure 1 Problem Tree of the trans-boundary biodiversity conservation in the Taninthayi Range

Objective Tree

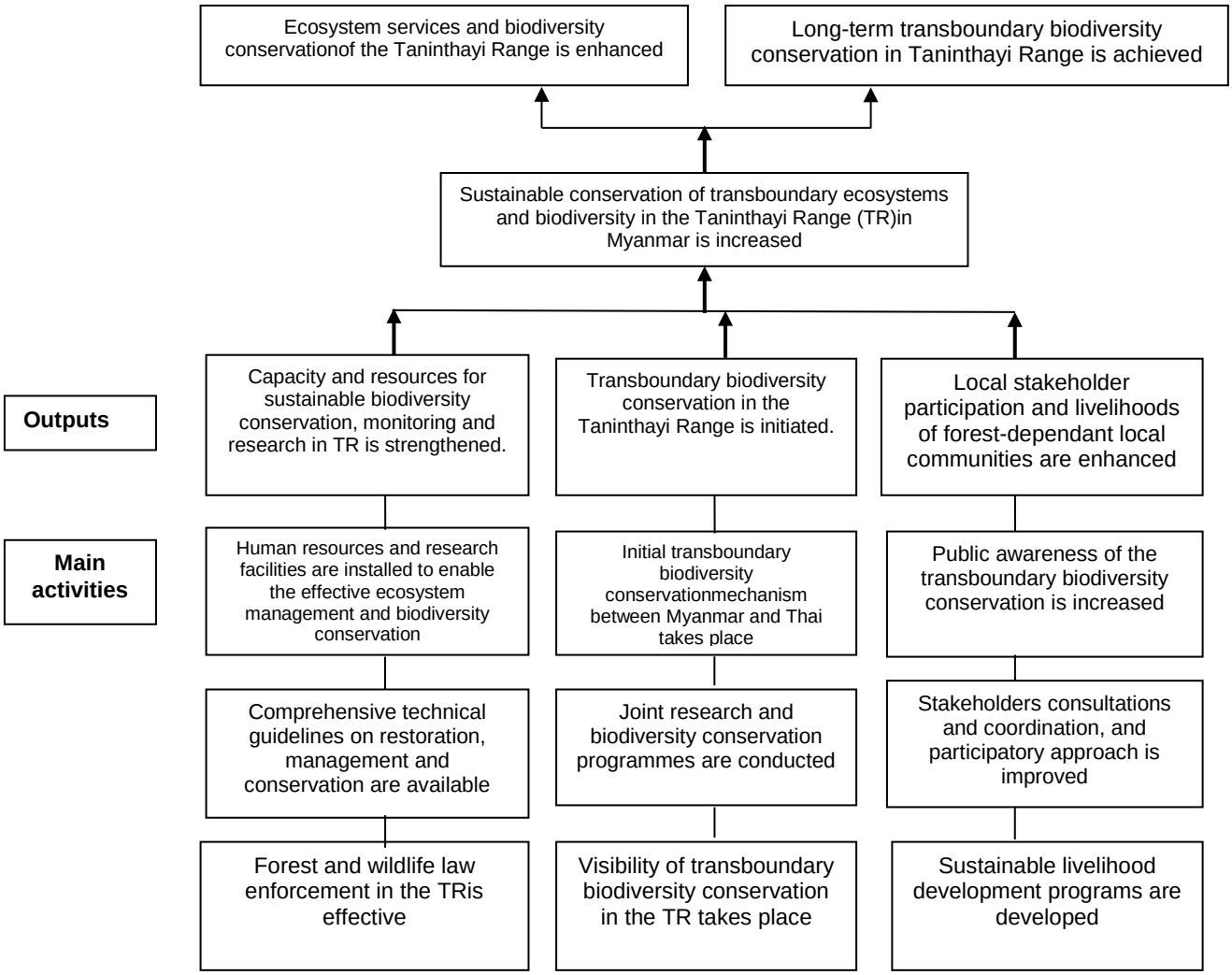


Figure 2 Objective-Tree of the trans-boundary biodiversity conservation in the Taninthayi Range

2.1.4 Logical Framework Matrix

Strategy of intervention	Measurable indicators	Means of verification	Key assumptions
Development objectives The project will contribute to the long-term cooperation of transboundary biodiversity conservation in the Taninthayi (Tenasserim) Range between Myanmar and Thailand	• Areas of critical habitats available to sustain viable populations of wide-ranging species in the Taninthayi Range are maintained and enhanced in the context of promoting transboundary conservation. • **Integrated Protected Areas Management Plan developed** • **Long-term MoU for transboundary biodiversity conservation between Myanmar and Thailand** • **Joint-committee between Myanmar and Thailand for transbounday biodiversity conservation established.** • Institutional arrangements for transboundary biodiversity cooperation will be enhanced after project completion at least 10 years more	• Project reports • Minutes of PSC meetings • Integrated Protected Areas maps •	• Political will and continued commitment of Myanmar and Thailandto support trans-boundary cooperation in the Taninthayi Range • Key stakeholders including local communities maintain their strong support to the transboundary biodiversity in in the Taninthayi Range • Continued support from international and regional organizations to the conservation of dwindling ecosystems and biodiversity resources in the project activities
Specific Objective: To promote the sustainable conservation and management of transboundary ecosystems and biodiversity in the Taninthayi Range in Myanmar	• **By the end of the project, at least three institutional mechanisms for transboundary cooperationwill be established at the central government, Regional level and research institute/scientific research level** • **Before the end of the second year of the project, collecting and exchanging information on wildlife were carried out and joint research activities conducted.** • Before the end of the second year of the project, maps indicating the habitats of five key wide-ranging landscape species in the Taninthayi Range landscape are produced • Before the end of the second year of the project, biodiversity conservation division is established in the FRI and the number of their research papers on biodiversity is increased to 50% compared to the year one of the project • **Before the end of the third**	• Project reports and minutes of meetings • Research papers • Project maps • Training reports • Surveys of local communities	• Continued high-level decision makers' support to the transboundary cooperation • Partnerships among key stakeholders are increased in participating in the project activities

Strategy of intervention	Measurable indicators	Means of verification	Key assumptions
	year of the project, the Taninthayi National Park in Myanmar became a fully operational protected area • The number of Myanmar park officials and management staff in the TBCA are increased to 30 % • Local community livelihood has increased by 50% compared to the before this project • **Biodiversity of Taninthayi Range is enhanced 50% at the end of the Project.**		
Outputs			
1. Capacity of national institutions to design and implement the sustainable biodiversity conservation, monitoring and research in the Taninthayi Range is strengthened .	• **Before the end of year 1, capacity need assessment on biodiversity conservation is done** • **Before the end of year 1, biodiversity research facilities and equipment are updated at the FRI of Myanmar** • **Before the end of year 2, community zoning based on consultations in Taninthayi Rangeare done** • **Community-based natural resource management plan for Taninthayi National Park is developed.** • **Research methodologies are developed and applied for conservation of** • **At least the capacity of 100 staff from two countries are trained for transboundary biodiversity conservation and national park management** • **At least 40 Scientists and professional staff from the two countries actively conducted joint research since the 2nd year of the project.** • **At least 4different training courses are organized annually during the project period to strengthen resource management capacity** • **Wildlife law enforcement is strengthened in the Taninthayi Range**	• Wildlife survey report • Current and projected land use/land cover maps • Final project report	• Support the establishment of biodiversity conservation division in the FRI maintains with engagement of qualified staff in line with the government rules and procedures • The full and effective participation of local communities in the establishment of the Taninthayi National Park • Qualified scientists in the two countries participate in joint research activities. • The effective engagement and continued contributions of qualified resource persons and consultants

Strategy of intervention	Measurable indicators	Means of verification	Key assumptions
	throughimproving legal knowledge and promoting coordination among government ministries as well as two counties		
2. Appropriate institutional mechanisms for the transboundary biodiversity conservation in protected areas in the Taninthayi Range	• Before the end of year 1, a joint project technical committee is established with the proactive participation of key stakeholders including representatives from conservation NGOs • **Before the end of Year 2, an advisory committee/group of implementing agencies and stakeholder network is established and meets every three months (quarterly)** • Before the end of year 2, a common vision for the conservation of the TR is adopted by the two countries • Before the end of year 3, five joint activities on the distribution of key wide-ranging landscape species, and forestland use, are planned and implemented by Myanmar • **Before the end of year 3, reservation process of Taninthari National Park is done and legally enforced.** • **Before the end of year 3, permanent Park warrant and staff are assigned to implement conservation and park management activities**	• Minutes of Regional Advisory Committee (implementing agencies & stakeholder networking) meetings • Project progress reports • Training reports and evaluations	• The EA assigns committed staff to participate in the project at both national and local levels • Knowledgeable instructors and staff are available for training • Adequate funds are available to fund facilities and equipment.
3. Local stakeholder participation and livelihoods of forest-dependent local communities in the transboundary biodiversity conservation areas are enhanced	• **Before the end of year 1, socioeconomic survey in transboundary biodiversity conservation areas is done** • **Before the end of year 2, 5 target local communities are selected, supported and improved their socioeconomic conditions** • **Before the end of year 3, at least two co-management plans between target local communities and the Taninthayi National Park are established** • **Before the end of year 3, ten ICDP activities areimplemented in and numberof families participate inICDP activities,**	• Project progress reports • ICDP pilot program evaluations • Awareness materials	• Better understanding and proactive cooperation of local stakeholders on the conservation of biodiversity in the Taninthayi Range in Myanmar • Local communities are willing to establish ICDP activities and local authority support maintains • Development NGOs and rural finance institutions collaborate in implementing ICDP activities to increase

Strategy of intervention	Measurable indicators	Means of verification	Key assumptions
	established and expanded with two eco-tourism activities • **Before the end of year 3, community-based biodiversity conservation in selected communities and area is well functioned with the participation of local communities.** • **Before the end of year 4, a strategy for the sustainability of the ICDP is formulated and adopted**		the sustainability

2.2 Objectives

2.2.1 Development objectives and impact indicators

Development Objective:

The project will contribute to the long-term cooperation of transboundary biodiversity conservation in the Taninthayi (Tenasserim) Range in Myanmar and Thailand.

The impact indicators after the project implementation include

- Areas of critical habitats available to sustain viable populations of wide-ranging species in the Taninthayi Range are maintained and enhanced in the context of promoting transboundary conservation.
- A common vision for the conservation of transboundary biodiversity conservation in the Taninthayi Range is implemented with the establishment of management measures to protect wide-ranging species, especially five key landscape species.
- Institutional arrangements for transboundary biodiversity cooperation will be enhanced after project completion at least 10 years more.

2.2.2 Specific objective and outcome indicators

Specific Objective

The specific objective of the project is to promote the sustainable conservation and management of transboundary ecosystems and biodiversity in the Taninthayi Range in Myanmar.

The outcome indicators are:

- By the end of the project, at least two institutional mechanisms for transboundary cooperation between the two countries will be established at the central government, and research institute/scientific research level.
- Before the end of the second year of the project, information is collected and exchanged between the two countries on wildlife distribution and applied in joint research activities.
- Before the end of the second year of the project, maps indicating the habitats of five key wide-ranging landscape species in the Taninthayi Range landscape are produced.
- Before the end of the second year of the project, biodiversity conservation division is established in the FRI and the number of their research papers on biodiversity is increased to 50% compared to the year one of the project.
- Before the end of the third year of the project, the establishment of the Taninthayi National Park in Myanmar in a fully operational protected area.
- The number of Myanmar park officials and management staff in the TBCA is increased to 30% compared to the before the project.
- Local community livelihood has increased by 50% compared to the before the project.

PART III: DESCRIPTION OF PROJECT INTERVENTIONS
3. 1 Outputs and activities

The following outputs and activities, including associated sub-activities, have been identified to achieve the Specific Objective to promote the sustainable conservation and management of transboundary ecosystems and biodiversity in the Taninthayi Range in Myanmar.

3.1.1 Outputs

Output 1: **Capacity building of national institutions to design and implement the sustainable biodiversity conservation, monitoring and research in the Taninthayi Range in Myanmar.**

Output 2: **Establishment of initial institutional mechanisms for the transboundary biodiversity conservation in protected areas, in the Taninthayi Range**.

Output 3: **Strengthening of local stakeholder participation and livelihoods of forest-dependent local communities in the Taninthayi National Park and its surrounding areas.**

3.1.2 Activities

The proposed activities under their respective outputs are shown in Table 4.

Table 4 List of activities under their respective specific objectives and outputs

Output/ Activity	Description
Output 1	**Capacity building of national institutions to design and implement the sustainable biodiversity conservation, monitoring and research in the Taninthayi Range in Myanmar.**
A 1.1	Establish and conduct Project Steering Committee (PSC), Project Technical Committee (PTC) and other technical coordination bodies to ensure the effective coordination and collaboration among partners Sub activity: A.1.1.1 Establish National Project Steering Committee (PSC), National Project Technical Committee (PTC) and an Advisory Group for Transboundary biodiversity conservation in the Taninthayi Range A.1.1.2 ConductPSC and PTC meetings twice a year and other advisory meetingsto ensure the successful implementation of the project
A 1.2	Provide M.Sc. fellowships in biodiversity conservation and organize training courses in biodiversity conservation, GIS mapping, land-use planning, forest ecosystem management planning and habitat suitability analysis. Sub activity: A.1.2.1 Provide MSc fellowships in biodiversity conservation to enable overseas studies in Japan, Thailand and other countries A.1.2.2 Organize training courses for relevant staff members of the government and non-government organizations in biodiversity conservation, GIS mapping, land-use planning, forest ecosystem management planning and habitat suitability analysis A. 1.2.3 Diploma course for wildlife conservation and field biology at WII, India
A 1.3	Provide necessary equipment and facilities to conduct sustainable biodiversity conservation, management, monitoring and research activities in the Taninthayi National Park and the Forest Research Institute. A 1.3.1 Facilitate the establishment of the Taninthayi National Park with necessary facilities to conduct sustainable biodiversity conservation, management, monitoring and research activities A 1.3.2 Facilitate the establishment of Biodiversity Conservation Research Division in the Forest Research Institute (FRI) to enhance biodiversity-related research and upgrade

Output/ Activity	Description
	technical cooperation A 1.3.3 Provide necessary equipment and facilities to improve sustainable biodiversity conservation research in the Forest Research Institute
A 1.4	Conduct specific research on biodiversity assessment in theTaninthayi National Park and its surrounding areas. A 1.4.1 Assess and invite target experts from universities and NGOs A 1.4.2 Prepare a long-term research program on sustainable biodiversity conservation, management and monitoring in the Taninthayi National Park A 1.4.3 Conduct researches on biodiversity assessment in the Taninthayi National Park and its surrounding areas by the FRI, project staff and biodiversity scientists
A 1.5	Develop technical guidelines for restoration, management, conservation and monitoring in the national language. A 1.5.1 Prepare technical guidelines/operational manuals for restoration, management, conservation and monitoring A 1.5.2 Publish and disseminate technical guidelines/operational manuals for restoration, management, conservation and monitoring
A 1.6	Establish and implement regular patrolling systems in theTaninthayi National Park and its surrounding areas with conduction of training courses. A 1.6.1 Establish regular patrolling systemsin theTaninthayi National Park and its surrounding areas to address illegal activities by the Park Authority and community organizations A 1.6.2 Organize and conduct of training courses for the Park Authority and concerned community organizations in forest and wildlife law enforcement (e.g. SMART patrol techniques) A 1.6.3 Conduct forest and wildlife law enforcement on a regular basis in target sites intheTaninthayi National Park and its surrounding areas with the establishment of community-based patrolling systems
Output 2	**Establishment of initial institutionalmechanisms for the transboundary biodiversity conservation in protected areas, in the Taninthayi Range**.
A 2.1	Establish institutional mechanisms for the transboundary biodiversity conservation in the Taninthayi National Park. A 2.1.1 Organizing meeting for institutional mechanisms for the transboundary biodiversity conservation (two times, each in Thailand and Myanmar), and forming a joint body with terms of reference A 2.1.2 Regular meetings of a joint body for transboundary biodiversity conservation based on the terms of reference
A 2.2	Conduct joint research on transboundary ecological connectivity and habitat distribution for a wide-range wildlife species and economic valuation of ecosystem services in the transboundary biodiversity protected areas. A 2.2.1 Conduct basic line survey for biodiversity in TNP by Myanmar A 2.2.2 Develop and conduct joint biodiversity research in the Taninthayi Range with Thailand A 2.2.3 Conduct joint research on economic valuation of ecosystem services in the transboundary biodiversity protected areas
A 2.3	Develop and promote community-based conservation programs to support the transboundary conservation of the Taninthayi Range. A 2.3.1 Identify target local communities and NGOs to promote community-based conservation in the Taninthayi Range in particular in the Taninthayi National Park to be engaged in the transboundary conservation programmes including the identification of supporting groups in Myanmar and Thailand A 2.3.2 Establishing community conservation funds (revolving funds) for targeted communities in Myanmar after conducting a feasibility study and organize exchange visiting programs for the supporting groups in the two countries to each other's site

Output/ Activity	Description
	Organize national and regional workshops on transboundary biodiversity conservation with relevant stakeholders in collaboration with regional and international organizations. A 2.4.1 Organize annual national workshops with relevant stakeholders A 2.4.2 Organize a regional workshop on transboundary biodiversity conservation with relevant stakeholders in collaboration with regional and international organizations
A 2.5	Widely disseminate the outcomes, experiences and lessons from the implementation of the project to interested parties and in relevant national, regional and international events. A 2.5.1 Prepare promotional materials of the project and establish a project website A 2.5.2 Prepare and circulate a monthly newsletter to share information A 2.5.3 Prepare technical reports on the outcomes, experiences and lessons from the implementation of the project A 2.5.4 Deliver technical reports to interested parties A 2.5.5 **Make presentations in relevant national, regional and international events (e.g. CBD COP12 in Korea in 2014 and CBD COP 13 in 2015)**
A 2.6	Publish the results of joint research findings in relevant national/regional/international journals. A 2.6.1 Prepare scientific papers on the outcomes of joint researches in the Taninthayi Range A 2.6.2 Submit scientific papers to relevant national/regional/international journals
Output 3	**Strengthening of local stakeholder participation and livelihoods of forest-dependent local communities in the proposed Taninthayi National Park and its surrounding areas.**
A 3.1	Raise awareness of local communities and other local stakeholders through meetings and consultations to discuss the biodiversity conservation and the purposes of transboundary biodiversity conservation in the Taninthayi Range. A 3.1.1 Conduct outreach programs to local schools and local communities to raise awareness of biodiversity conservation and the purpose of the with TBC project A 3.1.2 Conduct Participatory Action Research (PAR) for community forestry to raise awareness and participation of local community
A 3.2	Plan and conduct a comprehensive sustainable livelihoods assessment, potential eco-tourism development assessment, and training needs assessment. A 3.2.1 Surveying socio-economic condition of local community and analysis for a needs assessment A 3.2.2 Conduct of village consultation, village zoning and development of community-based natural resource management plan to support the establishment of the TNP A 3.2.3 Assessments for eco-tourism development A 3.2.4 Assessments for livelihood training
A 3.3	Provide training in plantations, sustainable agro-forestry, promotion of selected non-timber forest products development, community-based ecotourism with establishment of community-based sustainable livelihood groups. A 3.3.1 Conduct training programs in plantations and sustainable agro-forestry A 3.3.2 Conduct training programs for promotion of selected non-timber forest products development A 3.3.3 Conduct trainings for community-based ecotourism
A 3.4	Scale up local community organizations and networks and community forestry to facilitate biodiversity conservation, forest fire protection and avoid illegal activities in the proposed Taninthayi National Park and its surrounding areas. A 3.4.1 Organize meetings to strengthen community-based organizations (CBOs) in conservation
A 3.5	Organize fundraising meetings for potential donors and NGOs to sustain livelihood improvement activities and biodiversity conservation. A 3.5.1 Provide additional funding for sustainable livelihood programs to improve the livelihoods of local communities in accordance with criteria jointly approved by the

Output/ Activity	Description
	project and the local community network
A 3.6	Scale up children environmental education programmes with local elementary schools in the Taninthayi Range. A 3.6.1 Materials for education programs (computer and accessories, projector, handheld generator, digital camera, printer, pamphlet and posters) A 3.6.2 Conducting education programs

3.2 Implementation approaches and methods

To increase the trans-boundary biodiversity conservation in the Taninthayi Range, it is expected that cooperation on trans-boundary biodiversity conservation in the Taninthayi Range would be initiated by both countries. Key strategies that are to be conducted include ecosystem management, biodiversity corridor, local livelihood improvement, multi-stakeholder participation at all levels, capacity building and sharing lessons learned.

Capacity building and sharing lessons learned: After strengthening of the biodiversity conservation and management of the national institutions in particular the Forest Research Institute and the Taninthayi National Park, a series of training sessions will be conducted to increase the capacity of project staff, rangers, border patrol police, and local communities. However, some staff may resign from protected areas and new staff will have been recruited. Therefore, those efforts will continue in the project. In addition, necessary equipment (e.g., GPS, hand compasses, cameras and camera traps) will be allocated to protected area staff for strengthening on-going monitoring system. The provision of the training will be especially important in Myanmar, where staff have little or no access to training, budgets for management are very small, and there are very few rangers and facilities on the ground, especially in protected areas.

The capacity-building strategies of the project will include hands-on-training and sharing lessons learned about protected areas management, smart patrol and wildlife monitoring from experts. This approach will be reflected in the joint research on wildlife distribution that will be conducted in each of the participating countries, which will provide a practical platform for not only strengthening trans-boundary cooperation, but also developing hands-on-training. Engagement of WCS-Myanmar in project implementation will be enhanced as they have accumulated a lot of biodiversity conservation in the project site as well as in the other parts of the two countries.

Ecosystem management and biodiversity corridors: The outstanding biodiversity features and cultural diversity of the Taninthayi Range are vulnerable. This is due to the fact that much of the forest remaining in Myanmar remains unprotected and is vulnerable to logging and clearance for agriculture. In addition, existing protected areas in Myanmar are not sufficient to maintain viable of mega-fauna populations like Asian elephant and tiger. Meanwhile, management of protected areas in the past was stand alone and with a lack of cooperation between nearby protected areas although they were situated in the same ecological boundary.

Therefore, long-term viability of biodiversity in the Taninthayi depends on effective biodiversity conservation and establishingmore protected areas along the borders and considering the remaining forest cover in the Taninthayi Range as one ecological unit as outlined in the ecosystem management approach. This approach is defined as a process that aims to conserve major ecological services and restore natural resources while meeting the socioeconomic, political and cultural needs of current and future generations. The project team will put all efforts into effectively managing ecosystems and engaging in conservation efforts. In addition, the project team will build on the achievements of the Taninthayi Biodiversity Conservation Corridors between WEFCOM and the Kaeng Krachan complex during 2005-2008 and the proposed corridors in the Tiger Conservation Landscapes of Myanmar project. This is due to the fact that biodiversity corridors have three ecological functions: a) conserving habitat for species movement and for the maintenance of viable populations, b) conserving and enhancing ecosystem services, and c) promoting and enhancing local community welfare through the conservation and sustainable use of natural resources.

Local livelihood improvement: Local peoples mainly rely on natural resources for their livelihood. The Integrated Community Development Program (ICDP) should be initiated, and nature-based tourism activities are recommended in some areas to increase livelihood opportunities for local residents in order to reduce pressures on the use of forests to support subsistence on agricultural practices. Concerted efforts will be

extended in the Taninthayi National Park to strengthen the long-term viability of the livelihood initiatives which have been introduced by establishing closer program linkages with civil society, including non-governmental organizations (NGOs) and rural credit programs. Co-management with local communities and provisions of tangible benefits to rural inhabitants are among the mechanisms advocated to reduce conflicts. Garnered by whatever means, the acceptance and support of local people are especially important for the long-term effectiveness in conservation of protected areas. An understanding of factors leading to local support is consequently a first step in the process of developing policies to achieve this end (Technical Report of TNR)

Multi-stakeholder participation at all levels: In addition to encouraging local NGOs to share development experiences and provide support to ICDP activities through the project, it is expected that WSC, academic, researchers at regional and national levels will be involved with providing some capacity building training and that the border patrol police and the army will actively participate with rangers in conducting patrols. In addition, provincial and regional officials will be invited to be involved as committee members in a Joint-Task Force and a Regional Advisory Committee. Moreover, in recognizing that the capacity of Myanmar officials are far behind the expertise and skills of Thai scientists and park rangers, the project teams will provide several opportunities for them to participate in joint collaborative activities. These will include shorter-trainings for selected staff for collecting baseline information on wildlife distribution and effective patrolling (Smart Patrol) in the Taninthayi Hills and the adjoining forest areas, and will include participation in research on wide-ranging species with the support of the project teams.

3.3 Work plan Phase I and Phase II

Outputs/ activities	Description	Responsible parties	Phase I												Phase II											
			Year 1				Year 2				Year 3				Year 4				Year 5				Year 6			
			Quarter				Quarter				Quarter				Quarter				Quarter				Quarter			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Output 1: Capacity of national institutions to design and implement the sustainable biodiversity conservation, monitoring and research in the Taninthayi Range is strengthened.																										
A 1.1	Establish and conduct Project Steering Committee (PSC), Project Technical Committee (PTC) and other technical coordination bodies to ensure the effective transboundary biodiversity conservation	FD																								
A 1.2	Organize training courses in biodiversity conservation, GIS mapping, land-use planning, forest management planning and habitat suitability analysis	FD, PM, Staff																								
A 1.3	Provide necessary equipment and facilities to conduct sustainable biodiversity conservation, management, monitoring and research activities in the Taninthayi National Park and the Forest Research Institute	FD, FRI, PM, Staff																								
A 1.4	Conduct specific research on biodiversity assessment in the Taninthayi National Park and its surrounding areas	FD, FRI, PM, Staff, Consultant, Subcontractor																								
A 1.5	Develop technical guidelines for restoration, management, conservation and monitoring in the national language	FD, PM, Staff, Consultant																								

Outputs/ activities	Description	Responsible parties	Phase I												Phase II											
			Year 1				Year 2				Year 3				Year 4				Year 5				Year 6			
			Quarter				Quarter				Quarter				Quarter				Quarter				Quarter			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
A 1.6	Establish and implement regular patrolling systems in the Taninthayi National Park and its surrounding areas with conduction of training courses	FD, PM, Staff , Consultant																								
Output 2: **Appropriate initial institutional mechanisms for the transboundary biodiversity conservation in protected areas in the Taninthayi Range is put in place**.																										
A 2.1	Establish institutional mechanisms for the transboundary biodiversity conservation in the Taninthayi Range	FD																								
A 2.2	Conduct base line survey on biodiversity and socio-economic and study on economic valuation of ecosystem services research in Taninthayi National Park	FRI, PM, Staff, Consultant																								
A 2.3	Develop and promote community-based conservation programs to support the transboundary conservation of the Taninthayi Range	FD, PM, Staff, PS,																								
A 2.4	Organize national and regional workshops on transboundary biodiversity conservation with relevant stakeholders in collaboration with regional and international organizations	FD, PM, Staff																								
A 2.5	Widely disseminate the outcomes, experiences and lessons from the implementation of the project to interested parties and at relevant national, regional and international events	FD,PM, Staff																								
A 2.6	Publish the results of joint research findings in relevant national/regional/international	FD, PM , Staff																								

Outputs/ activities	Description	Responsible parties	Phase I												Phase II											
			Year 1				Year 2				Year 3				Year 4				Year 5				Year 6			
			Quarter				Quarter				Quarter				Quarter				Quarter				Quarter			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	journals																									
Output 3: **Local stakeholder participation and livelihoods of forest-dependent local communities inside protected areas and the surrounding areas are enhanced.**																										
A.3.1	Raise awareness of local communities on the importance of biodiversity for their sustainable development through communication, education and public awareness (CEPA) program in TNP	FD, PM, Staff																								
A 3.2	Plan and conduct a comprehensive a sustainable livelihoods assessment, a potential eco-tourism development assessment, and a training needs assessment	FD, PM , Staff Consultant subcontractor																								
A 3.3	Provide training in plantations, sustainable agro-forestry, promotion of selected non-timber forest products development, and community-based ecotourism with the establishment of community-based sustainable livelihood groups	FD, PM, Staff , consultant																								
A 3.4	Scale up local community organizations and networks and community forestry groups to facilitate biodiversity conservation, forest fire protection and avoid illegal activities in the proposed Taninthayi National Park and its surrounding areas	FD, PM, Staff																								
A 3.5	Organize fundraising meetings for potential donors and NGOs to sustain livelihood improvement activities and biodiversity conservation	FD, PM Staff																								

Outputs/ activities	Description	Responsible parties	Phase I												Phase II											
			Year 1				Year 2				Year 3				Year 4				Year 5				Year 6			
			Quarter				Quarter				Quarter				Quarter				Quarter				Quarter			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
A 3.6	Scale up children environmental education programs with local elementary schools in the Taninthayi Range	FD, PM, Staff consultant																								

Work plan (Phase I)

Outputs/ activities	Description	Responsible parties	Phase I											
			Year 1				Year 2				Year 3			
			Quarter				Quarter				Quarter			
			1	2	3	4	1	2	3	4	1	2	3	4
Output 1: Capacity of national institutions to design and implement the sustainable biodiversity conservation, monitoring and research in the Taninthayi Range is strengthened.														
A 1.1	Establish and conduct Project Steering Committee (PSC), Project Technical Committee (PTC) and other technical coordination bodies to ensure the effective transboundary biodiversity conservation	FD												
A 1.2	Organize training courses in biodiversity conservation, GIS mapping, land-use planning, forest management planning and habitat suitability analysis	FD, PM, Staff												
A 1.3	Provide necessary equipment and facilities to conduct sustainable biodiversity conservation, management, monitoring and research activities in the Taninthayi National Park and the Forest Research Institute	FD, FRI, PM, Staff												
A 1.5	Develop technical guidelines for restoration, management, conservation and monitoring in the national language	FD, PM, Staff, Consultant												
A 1.6	Establish and implement regular patrolling systems in the Taninthayi National Park and its surrounding areas with conduction of training courses	FD, PM, Staff , Consultant												
Output 2: **Appropriate initial institutional mechanisms for the transboundary biodiversity conservation in protected areas in the Taninthayi Range is put in place**.														
A 2.1	Establish institutional mechanisms for the transboundary biodiversity conservation in the Taninthayi Range	FD												
A 2.2	Conduct base line survey on biodiversity and socio-economic and study on economic valuation of ecosystem services research in Taninthayi National Park	FRI, PM, Staff, Consultant												
A 2.3	Develop and promote community-based conservation programs to support the transboundary conservation of the Taninthayi Range	FD, PM, Staff, PS,												
A 2.4	Organize national and regional workshops on transboundary biodiversity conservation with relevant stakeholders in collaboration with regional and international organizations	FD, PM, Staff												
A 2.5	Widely disseminate the outcomes, experiences and lessons from the implementation of the project to interested parties and at relevant national, regional and international events	FD,PM, Staff												
A 2.6	Publish the results of joint research findings in relevant national/regional/international journals	FD, PM , Staff												
Output 3: **Local stakeholder participation and livelihoods of forest-dependent local communities inside protected areas and the surrounding areas are enhanced.**														
A.3.1	Raise awareness of local communities on the importance of biodiversity for their sustainable development through communication, education and public awareness (CEPA) program in TNP	FD, PM, Staff												

Stage 1 of Phase I

Outputs/ activities	Description	Responsible parties	Stage 1							
			Year 1				Year 2			
			Quarter				Quarter			
			1	2	3	4	1	2	3	4
Output 1: Capacity of national institutions to design and implement the sustainable biodiversity conservation, monitoring and research in the Taninthayi Range is strengthened										
A 1.1	Establish and conduct Project Steering Committee (PSC), Project Technical Committee (PTC) and other technical coordination bodies to ensure the effective transboundary biodiversity conservation	FD								
A 1.2	Organize training courses in biodiversity conservation, GIS mapping, land-use planning, forest management planning and habitat suitability analysis	FD, PM, Staff								
A 1.3	Provide necessary equipment and facilities to conduct sustainable biodiversity conservation, management, monitoring and research activities in the Taninthayi National Park and the Forest Research Institute	FD,FRI,PM, Staff								
A 1.4	Develop technical guidelines for restoration, management, conservation and monitoring in the national language	FD, PM, Staff, Consultant								
A 1.5	Establish and implement regular patrolling systems in the Taninthayi National Park and its surrounding areas with conduction of training courses	FD, PM, Staff Consultant								
Output 2: **Appropriate initial institutional mechanisms for the transboundary biodiversity conservation in protected areas in the Taninthayi Range is put in place**.										

A 2.1	Establish institutional mechanisms for the transboundary biodiversity conservation in the Taninthayi Range	FD									
A 2.2	Conduct base line survey on biodiversity and socio-economic and study on economic valuation of ecosystem services research in Taninthayi National Park	FRI, PM, Staff,									
A 2.3	Develop and promote community-based conservation programs to support the transboundary conservation of the Taninthayi Range	FRI, PM, Staff, PS									
A 2.4	Organize national and regional workshops on transboundary biodiversity conservation with relevant stakeholders in collaboration with regional and international organizations	FRI, PM, Staff,									
A 2.5	Widely disseminate the outcomes, experiences and lessons from the implementation of the project to interested parties and at relevant national, regional and international events										
A 2.6	Publish the results of joint research findings in relevant national/regional/international journals										
Output 3: Local stakeholder participation and livelihoods of forest-dependent local communities inside protected areas and the surrounding areas are enhanced.											
A 3.1	Raise awareness of local communities on the importance of biodiversity for their sustainable development through communication, education and public awareness (CEPA) program in TNP	FRI, PM, Staff,									

Workplan (Phase II)

Outputs/ activities	Description	Responsible parties	Phase II											
			Year 4				Year 5				Year 6			
			Quarter				Quarter				Quarter			
			1	2	3	4	1	2	3	4	1	2	3	4
Output 1: Capacity of national institutions to design and implement the sustainable biodiversity conservation, monitoring and research in the Taninthayi Range is strengthened.														
A 1.2	Organize training courses in biodiversity conservation, GIS mapping, land-use planning, forest management planning and habitat suitability analysis	FD, PM, Staff		■		■		■		■		■		■
A 1.3	Provide necessary equipment and facilities to conduct sustainable biodiversity conservation, management, monitoring and research activities in the Taninthayi National Park and the Forest Research Institute	FD, FRI, PM, Staff	■	■	■	■					■	■	■	■
A 1.4	Conduct specific research on biodiversity assessment in the Taninthayi National Park and its surrounding areas	FD, FRI, PM, Staff, Consultant, Subcontractor		■	■	■			■	■			■	■
A 1.5	Develop technical guidelines for restoration, management, conservation and monitoring in the national language	FD, PM, Staff, Consultant	■			■	■			■	■			■
A 1.6	Establish and implement regular patrolling systems in the Taninthayi National Park and its surrounding areas with conduction of training courses	FD, PM, Staff , Consultant	■	■	■	■	■	■	■	■	■	■	■	■
Output 2: **Appropriate initial institutional mechanisms for the transboundary biodiversity conservation in protected areas in the Taninthayi Range is put in place**.														
A 2.1	Establish institutional mechanisms for the transboundary biodiversity conservation in the Taninthayi Range	FD		■				■	■				■	
A 2.2	Conduct base line survey on biodiversity and socio-economic and study on economic valuation of ecosystem services research in Taninthayi National Park	FRI, PM, Staff, Consultant			■	■				■				■
A 2.3	Develop and promote community-based conservation programs to support the transboundary conservation of the Taninthayi Range	FD, PM, Staff, PS,		■				■	■				■	
A 2.4	Organize national and regional workshops on transboundary biodiversity conservation with relevant stakeholders in collaboration with regional and international organizations	FD, PM, Staff				■				■				■
A 2.5	Widely disseminate the outcomes, experiences and lessons from the implementation of the project to interested parties and at relevant national, regional and international events	FD,PM, Staff	■		■		■				■	■		■
A 2.6	Publish the results of joint research findings in relevant national/regional/international journals	FD, PM , Staff		■		■		■	■	■			■	
Output 3: **Local stakeholder participation and livelihoods of forest-dependent local communities inside protected areas and the surrounding areas are enhanced.**														

Outputs/ activities	Description	Responsible parties	Phase II											
			Year 4				Year 5				Year 6			
			Quarter				Quarter				Quarter			
			1	2	3	4	1	2	3	4	1	2	3	4
A.3.1	Raise awareness of local communities on the importance of biodiversity for their sustainable development through communication, education and public awareness (CEPA) program in TNP	FD, PM, Staff												
A 3.2	Plan and conduct a comprehensive a sustainable livelihoods assessment, a potential eco-tourism development assessment, and a training needs assessment	FD, PM , Staff Consultant subcontractor												
A 3.3	Provide training in plantations, sustainable agro-forestry, promotion of selected non-timber forest products development, and community-based ecotourism with the establishment of community-based sustainable livelihood groups	FD, PM, Staff , consultant												
A 3.4	Scale up local community organizations and networks and community forestry groups to facilitate biodiversity conservation, forest fire protection and avoid illegal activities in the proposed Taninthayi National Park and its surrounding areas	FD, PM, Staff												
A 3.5	Organize fundraising meetings for potential donors and NGOs to sustain livelihood improvement activities and biodiversity conservation	FD, PM Staff												
A 3.6	Scale up children environmental education programs with local elementary schools in the Taninthayi Range	FD, PM, Staff consultant												

3.4 Budget

3.4.1 ITTO Master Budget Table (Phase I and Phase II)

Outputs/ Activities	Description	Bud. Component	Quantity						Units	Unit cost	Total costs	ITTO					
												Phase I			Phase II		
			Y1	Y2	Y3	Y4	Y5	Y6				Y1	Y2	Y3	Y4	Y5	Y6
Output 1	Capacity building of national institutions to design and implement the sustainable biodiversity conservation, monitoring and research in the Taninthayi Range																
A.1.1	Establish and conduct Project Steering Committee (PSC), Project Technical Committee (PTC) and other technical coordination bodies between Myanmar and Thailand to ensure effective transboundary biodiversity conservation.																
	Project Manager (1)	11	12	12	12	12	12	12	Month	1000	72000	12000	12000	12000	12000	12000	12000
	Project Secretary (1)	12	12	12	12	12	12	12	Month	400	28800	4800	4800	4800	4800	4800	4800
	Field Assistance (5)	18	12	12	12	12	12	12	Month	300	108000	18000	18000	18000	18000	18000	18000
	GIS Consultant (1)	110	2	2	2	2	2	2	Month	1000	12000	2000	2000	2000	2000	2000	2000
	Wildlife Survey Consultant (1)	111	2	2	2	2	2	2	Month	1000	12000	2000	2000	2000	2000	2000	2000
	Ecology Consultant (1)	112	2	2	2	2	2	2	Month	1000	12000	2000	2000	2000	2000	2000	2000
	Social-economic Consultant (1)	113	2	2	2	2	2	2	Month	1000	12000	2000	2000	2000	2000	2000	2000
	Economic Valuation of Ecosystem Services Consultant (1)	114	2	2	2	2	2	2	Month	1000	12000	2000	2000	2000	2000	2000	2000
	Project Accountant (1)	115	12	12	12	12	12	12	Month	200	14400	2400	2400	2400	2400	2400	2400
	Independent Auditor (1)	116	1	1	1	1	1	2	Month	1500	6000	1500	1500	1500	500	500	500
	Local travel costs	311	4	4	4	4	4	4	Month	435	10440	1740	1740	1740	1740	1740	1740
	Sub-total										299640	50440	50440	50440	49440	49440	49440
A.1.2	Provide fellowships in biodiversity conservation and organize training courses in biodiversity conservation, GIS mapping, land-use planning, and forest management planning and habitat suitability analysis.																
	Training courses	120	2	2	2	2	2	2	Time	5000	99000	10000	10000	10000	23000	23000	23000
		121									20000				20000		
	Sub-total										119000	10000	10000	10000	43000	23000	23000
A.1.3	Biodiversity research equipment and facilities																
	Project vehicles (Pick-up Van)	43	1						Number	38000	38000	38000					

Outputs/ Activities	Description	Bud. Component	Quantity						Units	Unit cost	Total costs	ITTO					
												Phase I			Phase II		
			Y1	Y2	Y3	Y4	Y5	Y6				Y1	Y2	Y3	Y4	Y5	Y6
	Field equipment for conservation (campus, binocular, counter, sleeping bed, backpack, tripod. etc.)	52	1		1	1		1	Unit	10000	40000	10000		10000	10000		10000
	Petrol and maintenance	61	1	1	1	1	1	1	Unit	1600	9600	1600	1600	1600	1600	1600	1600
	Driver	117	1	1	1	1	1	1	Person	200	14400	2400	2400	2400	2400	2400	2400
	Sub-total										102000	52000	4000	14000	14000	4000	14000
A.1.4	Biodiversity conservation and management facilities																
	Driver	118				1	1	1	Person	200	7200				2400	2400	2400
	Environmental education centre	46				1			Unit		50000				50000		
	Research centre (Biodiversity lab)	47				1			Unit		123250				123250		
	Project vehicles (Pick-up Van)	410				1			Unit		38000				38000		
	Laptop	411				1		1	Unit		2000				1000		1000
	Desktop	412				1		1	Unit		3000				1500		1500
	GPS	413				4		4	Unit		6400				3200		3200
	Camera	414				2		3	Unit		2500				1000		1500
	Camera trap	415				10		10	Unit		5000				2500		2500
	Projector	416				1		1	Unit		6000				3000		3000
	Printer- monochrome laser	417				1		1	Unit		800				400		400
	Printer- color laser	418				1		1	Unit		1000				500		500
	Air Conditioning	419				2		2	Unit		2000				1000		1000
	Tables for meeting rooms	420				10			Unit	100	1000				1000		
	Chairs for meeting rooms	421				60			Unit	30	1800				1800		
	Photocopy machine	422				1			Unit	1	4000				4000		

Outputs/ Activities	Description	Bud. Component	Quantity						Units	Unit cost	Total costs	ITTO					
												Phase I			Phase II		
			Y1	Y2	Y3	Y4	Y5	Y6				Y1	Y2	Y3	Y4	Y5	Y6
	Motorbikes	423	4	2	1	1	1	1	Number	1500	15000	6000	3000	1500	1500	1500	1500
	Petrol and maintenance	62				1	1	1	Unit	1600	4800				1600	1600	1600
	Sub-total										273750	6000	3000	1500	237650	5500	20100
A.1.5	Develop technical guidelines for restoration, management, conservation and monitoring in the national language																
	Preparing technical guidelines/operational manuals	57		2	2	2	2	4	Unit	1000	12000		2000	2000	2000	2000	4000
	Publishing and disseminating guidelines/ manuals	58		2	2	2	2	4	Time	1000	12000		2000	2000	2000	2000	4000
	Sub-total										24000	0	4000	4000	4000	4000	8000
A.1.6	Establishing and implementing regular patrolling systems in the Taninthayi National Park and its surrounding areas with conduct of training courses																
	Establishing regular patrolling system	213	1						Time	4000	4000	4000					
	Conducting SMART patrolling training	214	1	1	1	1	1	1	Time	4000	24000	4000	4000	4000	4000	4000	4000
	Conducting patrolling (4 times of 5-day patrolling in a month, 5 persons will be in each time and 4 teams in the National Park)	308		48	48	48	48	48	Time	160	38400		7680	7680	7680	7680	7680
	Sub-total										66400	8000	11680	11680	11680	11680	11680
	Sub-total output 1										884790	126440	83120	91620	359770	97620	126220
Output 2	Establishment of initial institutional mechanisms for the trans boundary biodiversity conservation in protected areas in the Taninthayi Range																
A.2.1	Establish institutional mechanisms for the transboundary biodiversity conservation in the Taninthayi National Park																
	Organizing meetings for the development of institutional mechanisms	31	1	1	1	1	1	1	Time	6500	39000	6500	6500	6500	6500	6500	6500

Outputs/ Activities	Description	Bud. Component	Quantity						Units	Unit cost	Total costs	ITTO					
												Phase I			Phase II		
			Y1	Y2	Y3	Y4	Y5	Y6				Y1	Y2	Y3	Y4	Y5	Y6
	for the transboundary biodiversity conservation and forming a joint body																
	Sub-total										39000	6500	6500	6500	6500	6500	6500
A.2.2	Conduct research on transboundary ecological connectivity and habitat distribution for a wide-range wildlife species and economic valuation of ecosystem services in the Taninthayi Range																
	Conduct basic line survey for biodiversity in TNP	21	1	1		2	2	2	Time	10000	80000	10000	10000		20000	20000	20000
	Study on economic valuation of ecosystem services	23	1	1	1	1	1	1	Time	10000	50000	10000		10000	10000	10000	10000
	Sub-total										130000	20000	10000	10000	30000	30000	30000
A.2.3	Develop and promote community-based conservation programs to support the transboundary conservation in and around the Taninthayi Range																
	Consultation meetings to identify target local communities and NGOs to promote community-based conservation in the Taninthayi Range in particular in the TNP	35	3	2	1	1	1	1	Time	2000	18000	6000	4000	2000	2000	2000	2000
	Social development activities in the selected villages to facilitate their participation in conservation	24	1	1	1	1	1	1	Time,fund	10000	60000	10000	10000	10000	10000	10000	10000
	Sub-total										78000	16000	14000	12000	12000	12000	12000
A.2.4	Organize national and regional workshops on transboundary biodiversity conservation with relevant stakeholders in collaboration with regional and international organizations																
	National workshops	33	1	1	1	1	1	1	Time	10000	75000	10000	10000	10000	15000	15000	15000

Outputs/ Activities	Description	Bud. Component	Quantity						Units	Unit cost	Total costs	ITTO					
												Phase I			Phase II		
			Y1	Y2	Y3	Y4	Y5	Y6				Y1	Y2	Y3	Y4	Y5	Y6
	Regional workshops	34			1			1	Time	30000	80000			30000			50000
	Sub-total										155000	10000	10000	40000	15000	15000	65000
A.2.5	Widely disseminate the outcomes, experiences and lessons from the implementation of the project to the interested parties and at relevant national, regional and international events																
	Reporting on implementation and dissemination	510	1	1	1	2	2	2	Time	4000	42000	4000	4000	4000	10000	10000	10000
	Sub-total										42000	4000	4000	4000	10000	10000	10000
A.2.6	Publish the results of joint research findings in relevant national/regional/international journals																
	Publications of the results	511	1	2	2	2	2	2	Time	2500	27500	2500	5000	5000	5000	5000	5000
	Sub-total										27500	2500	5000	5000	5000	5000	5000
	Sub-total output 2										471500	59000	49500	77500	78500	78500	128500
Output 3:	Strengthening of local stakeholder participation and livelihoods of forest-dependent local communities in the proposed Taninthayi National Park and its surrounding areas																
A 3.1	Raise awareness of local communities and other local stakeholders through meetings and consultations to discuss the biodiversity conservation and the purposes of transboundary biodiversity conservation in the Taninthayi Range																
	Consultation meetings at the local community	36	3	3	4	3	3	4	Time	1000	20000	3000	3000	4000	3000	3000	4000
	Materials for education programs (computer and accessories, projector, handheld generator, digital camera, printer, pamphlet and posters)	512	1		1		1		Unit	10000	20000	5000		5000		10000	
	Conducting education programs	310	4	4	4	12	12	12	Time	500	24000	2000	2000	2000	6000	6000	6000
	Sub-total										64000	10000	5000	11000	9000	19000	10000
A 3.2	Plan and conduct a comprehensive sustainable livelihoods assessment, a potential eco-tourism development assessment, and a training needs assessment																

Outputs/ Activities	Description	Bud. Component	Quantity						Units	Unit cost	Total costs	ITTO					
												Phase I			Phase II		
			Y1	Y2	Y3	Y4	Y5	Y6				Y1	Y2	Y3	Y4	Y5	Y6
	Surveying the socio-economic condition of local communities and conducting analyses for needs assessments	210	1			1			Time		20000				20000		
	Conduct village consultations, village zonings and development of community-based natural resource management plans to support the establishment of the TNP	211	2	1	1	2	1	1	Time		80000				40000	20000	20000
	Assessments for eco-tourism development	212					1	1	Time		10000					5000	5000
	Sub-total										110000	0	0	0	60000	25000	25000
A 3.3	Provide training in plantations, sustainable agro-forestry, the promotion of selected non-timber forest products development, and community-based ecotourism																
	Trainings for agro-forestry	25	2	2	2	2	2	2	Time		12000				4000	4000	4000
	Trainings for non-timber forest products development	26	2	2	2	2	2	2	Time		12000				4000	4000	4000
	Livelihood development activities in the selected villages (agro-forestry, bee keeping or other income generating activities)	27	2	2	2	2	2	2	Time		60000				20000	20000	20000
	Trainings for community-based ecotourism	28	2	2	2	2	2	2	Time		12000				4000	4000	4000

Outputs/ Activities	Description	Bud. Component	Quantity						Units	Unit cost	Total costs	ITTO					
												Phase I			Phase II		
			Y1	Y2	Y3	Y4	Y5	Y6				Y1	Y2	Y3	Y4	Y5	Y6
	Sub-total										96000	0	0	0	32000	32000	32000
A 3.4	Scale up local community organizations and networks and community forestry to facilitate biodiversity conservation, forest fire protection and avoid illegal activities in the proposed Taninthayi National Park and its surrounding areas																
	Facilitate strengthening community-based organizations (CBOs) in conservation	37	2	2	2	2	2	2	Time		30000				10000	10000	10000
	Sub-total										30000	0	0	0	10000	10000	10000
A 3.5	Organize fundraising meetings for potential donors and NGOs to sustain livelihood improvement activities and biodiversity conservation																
	Fundraising meetings	32					2	2	Time		20000					10000	10000
	Sub-total										20000	0	0	0	0	10000	10000
	Sub-total output 3										320000	10000	5000	11000	111000	96000	87000
	Sub-total (output 1+2+3)										1676290						
	Project monitoring & administration																
	ITTO monitoring and review	81									25000						
	ITTO midterm evaluation	82									30000						
	Sub-total (ITTO M&E)										55000						
	ITTO program support costs (12% on items 10-82)	83									207754.8						
	GRAND TOTAL	**100**									**1939044.8**						

3.4.1 ITTO Master Budget Table (Phase I)

Outputs/ Activities	Description	Bud. Component	Quantity			Units	Unit cost	Total costs	ITTO Phase I		
			Y1	Y2	Y3				Y1	Y2	Y3
Output 1	Capacity building of national institutions to design and implement the sustainable biodiversity conservation, monitoring and research in the Taninthayi Range										
A.1.1	Establish and conduct Project Steering Committee (PSC), Project Technical Committee (PTC) and other technical coordination bodies between Myanmar and Thailand to ensure effective transboundary biodiversity conservation.										
	Project Manager (1)	11	12	12	12	Month	1000	36000	12000	12000	12000
	Project Secretary (1)	12	12	12	12	Month	400	14400	4800	4800	4800
	Field Assistance (5)	18	12	12	12	Month	300	54000	18000	18000	18000
	GIS Consultant (1)	110	2	2	2	Month	1000	6000	2000	2000	2000
	Wildlife Survey Consultant (1)	111	2	2	2	Month	1000	6000	2000	2000	2000
	Ecology Consultant (1)	112	2	2	2	Month	1000	6000	2000	2000	2000
	Social-economic Consultant (1)	113	2	2	2	Month	1000	6000	2000	2000	2000
	Economic Valuation of Ecosystem Services Consultant (1)	114	2	2	2	Month	1000	6000	2000	2000	2000
	Project Accountant (1)	115	12	12	12	Month	200	7200	2400	2400	2400
	Independent Auditor (1)	116	1	1	1	Month	1500	4500	1500	1500	1500
	Local travel costs	311	4	4	4	Month	435	5220	1740	1740	1740
	Sub-total							151320	50440	50440	50440
A.1.2	Provide fellowships in biodiversity conservation and organize training courses in biodiversity conservation, GIS mapping, land-use planning, and forest management planning and habitat suitability analysis.										
	Training courses	120	2	2	2	Time	5000	30000	10000	10000	10000
		121						0			
	Sub-total							30000	10000	10000	10000
A.1.3	Biodiversity research equipment and facilities										
	Project vehicles (Pick-up Van)	43	1			Number	38000	38000	38000		
	Field equipment for conservation (campus, binocular, counter, sleeping bed,	52	1		1	Unit	10000	20000	10000		10000

Outputs/ Activities	Description	Bud. Component	Quantity			Units	Unit cost	Total costs	ITTO		
									Phase I		
			Y1	Y2	Y3				Y1	Y2	Y3
	backpack, tripod. etc.)										
	Petrol and maintenance	61	1	1	1	Unit	1600	4800	1600	1600	1600
	Driver	117	1	1	1	Person	200	7200	2400	2400	2400
	Sub-total							70000	52000	4000	14000
A.1.4	Biodiversity conservation and management facilities										
	Driver	118				Person	200	0			
	Environmental education centre	46				Unit		0			
	Research centre (Biodiversity lab)	47				Unit		0			
	Project vehicles (Pick-up Van)	410				Unit		0			
	Laptop	411				Unit		0			
	Desktop	412				Unit		0			
	GPS	413				Unit		0			
	Camera	414				Unit		0			
	Camera trap	415				Unit		0			
	Projector	416				Unit		0			
	Printer- monochrome laser	417				Unit		0			
	Printer- color laser	418				Unit		0			
	Air Conditioning	419				Unit		0			
	Tables for meeting rooms	420				Unit	100	0			
	Chairs for meeting rooms	421				Unit	30	0			
	Photocopy machine	422				Unit	1	0			
	Motorbikes	423	4	2	1	Number	1500	10500	6000	3000	1500
	Petrol and maintenance	62				Unit	1600	0			
	Sub-total							10500	6000	3000	1500
A.1.5	Develop technical guidelines for restoration, management, conservation and monitoring in the national language										
	Preparing technical guidelines/operational manuals	57		2	2	Unit	1000	4000		2000	2000
	Publishing and disseminating	58		2	2	Time	1000	4000		2000	2000

Outputs/ Activities	Description	Bud. Component	Quantity			Units	Unit cost	Total costs	ITTO Phase I		
			Y1	Y2	Y3				Y1	Y2	Y3
	guidelines/ manuals										
	Sub-total							8000	0	4000	4000
A.1.6	Establishing and implementing regular patrolling systems in the Taninthayi National Park and its surrounding areas with conduct of training courses										
	Establishing regular patrolling system	213	1			Time	4000	4000	4000		
	Conducting SMART patrolling training	214	1	1	1	Time	4000	12000	4000	4000	4000
	Conducting patrolling (4 times of 5-day patrolling in a month, 5 persons will be in each time and 4 teams in the National Park)	308		48	48	Time	160	15360		7680	7680
	Sub-total							31360	8000	11680	11680
	Sub-total output 1							301180	126440	83120	91620
Output 2	Establishment of initial institutional mechanisms for the trans boundary biodiversity conservation in protected areas in the Taninthayi Range										
A.2.1	Establish institutional mechanisms for the transboundary biodiversity conservation in the Taninthayi National Park										
	Organizing meetings for the development of institutional mechanisms for the transboundary biodiversity conservation and forming a joint body	31	1	1	1	Time	6500	19500	6500	6500	6500
	Sub-total							19500	6500	6500	6500
A.2.2	Conduct research on transboundary ecological connectivity and habitat distribution for a wide-range wildlife species and economic valuation of ecosystem services in the Taninthayi Range										
	Conduct basic line survey for biodiversity in TNP	21	1	1		Time	10000	20000	10000	10000	
	Study on economic valuation of ecosystem services	23	1	1	1	Time	10000	20000	10000		10000
	Sub-total							40000	20000	10000	10000

Outputs/ Activities	Description	Bud. Component	Quantity			Units	Unit cost	Total costs	ITTO Phase I		
			Y1	Y2	Y3				Y1	Y2	Y3
A.2.3	Develop and promote community-based conservation programs to support the transboundary conservation in and around the Taninthayi Range										
	Consultation meetings to identify target local communities and NGOs to promote community-based conservation in the Taninthayi Range in particular in the TNP	35	3	2	1	Time	2000	12000	6000	4000	2000
	Social development activities in the selected villages to facilitate their participation in conservation	24	1	1	1	Time,fund	10000	30000	10000	10000	10000
	Sub-total							42000	16000	14000	12000
A.2.4	Organize national and regional workshops on transboundary biodiversity conservation with relevant stakeholders in collaboration with regional and international organizations										
	National workshops	33	1	1	1	Time	10000	30000	10000	10000	10000
	Regional workshops	34			1	Time	30000	30000			30000
	Sub-total							60000	10000	10000	40000
A.2.5	Widely disseminate the outcomes, experiences and lessons from the implementation of the project to the interested parties and at relevant national, regional and international events										
	Reporting on implementation and dissemination	510	1	1	1	Time	4000	12000	4000	4000	4000
	Sub-total							12000	4000	4000	4000
A.2.6	Publish the results of joint research findings in relevant national/regional/international journals										
	Publications of the results	511	1	2	2	Time	2500	12500	2500	5000	5000
	Sub-total							12500	2500	5000	5000
	Sub-total output 2							186000	59000	49500	77500
Output 3:	Strengthening of local stakeholder participation and livelihoods of forest-dependent local communities in the proposed Taninthayi National Park and its										

Outputs/ Activities	Description	Bud. Component	Quantity			Units	Unit cost	Total costs	ITTO Phase I		
			Y1	Y2	Y3				Y1	Y2	Y3
	surrounding areas										
A 3.1	Raise awareness of local communities and other local stakeholders through meetings and consultations to discuss the biodiversity conservation and the purposes of transboundary biodiversity conservation in the Taninthayi Range										
	Consultation meetings at the local community	36	3	3	4	Time	1000	10000	3000	3000	4000
	Materials for education programs (computer and accessories, projector, handheld generator, digital camera, printer, pamphlet and posters)	512	1		1	Unit	10000	10000	5000		5000
	Conducting education programs	310	4	4	4	Time	500	6000	2000	2000	2000
	Sub-total							26000	10000	5000	11000
A 3.2	Plan and conduct a comprehensive sustainable livelihoods assessment, a potential eco-tourism development assessment, and a training needs assessment										
	Surveying the socio-economic condition of local communities and conducting analyses for needs assessments	210	1			Time		0			
	Conduct village consultations, village zonings and development of community-based natural resource management plans to support the establishment of the TNP	211	2	1	1	Time		0			
	Assessments for eco-tourism development	212				Time		0			
	Sub-total							0	0	0	0
A 3.3	Provide training in plantations, sustainable agro-forestry, the promotion of selected non-timber forest products development, and community-based ecotourism										
	Trainings for agro-forestry	25	2	2	2	Time		0			
	Trainings for non-timber forest products development	26	2	2	2	Time		0			
	Livelihood development	27	2	2	2	Time		0			

Outputs/ Activities	Description	Bud. Component	Quantity			Units	Unit cost	Total costs	ITTO Phase I		
			Y1	Y2	Y3				Y1	Y2	Y3
	activities in the selected villages (agro-forestry, bee keeping or other income generating activities)										
	Trainings for community-based ecotourism	28	2	2	2	Time		0			
	Sub-total							0	0	0	0
A 3.4	Scale up local community organizations and networks and community forestry to facilitate biodiversity conservation, forest fire protection and avoid illegal activities in the proposed Taninthayi National Park and its surrounding areas										
	Facilitate strengthening community-based organizations (CBOs) in conservation	37	2	2	2	Time		0			
	Sub-total							0	0	0	0
A 3.5	Organize fundraising meetings for potential donors and NGOs to sustain livelihood improvement activities and biodiversity conservation										
	Fundraising meetings	32				Time		0			
	Sub-total							0	0	0	0
	Sub-total output 3							26000	10000	5000	11000
	Sub-total (output 1+2+3)							513180			
	Project monitoring & administration										
	ITTO monitoring and review	81						12500			
	ITTO midterm evaluation	82						10000			
	Sub-total (ITTO M&E)							22500			
	ITTO program support costs (12% on items 10-82)	83						64281.6			
	GRAND TOTAL	**100**						**599961.6**			

3.4.1.1 ITTO Master Budget Table (Stage 1 of Phase I)

Outputs/ Activities	Description	Budget Component	Quantity		Units	Unit cost	Total costs	ITTO Stage 1	
			Y 1	Y 2				Y 1	Y 2
Output 1	Capacity building of national institutions to design and implement the sustainable biodiversity conservation, monitoring and research in the Taninthayi Range								
A 1.1	Establish and conduct Project Steering Committee (PSC), Project Technical Committee (PTC) and other technical coordination bodies between Myanmar and Thailand to ensure effective transboundary biodiversity conservation								
	Project Manager (1)	11	12	12	Month	1000	24000	12000	12000
	Project Secretary (1)	12	12	12	Month	500	12000	6000	6000
	Field Assistance (5)	18	12	12	Month	300	7200	3600	3600
	GIS Consultant (1)	110	2	2	Month	1000	4000	2000	2000
	Wildlife Survey Consultant (1)	111	2	2	Month	1000	4000	2000	2000
	Social-economic Consultant (1)	113	2	2	Month	1000	4000	2000	2000
	Independent Auditor (1)	116	1	1	Month	1500	3000	1500	1500
	Local travel costs	311	4	4	Month	500	4000	2000	2000
	Sub-total					6800	62200	31100	31100
A 1.2	Provide fellowships in biodiversity conservation and organize management planning and habitat suitability analysis.								
	Training courses	120	2	2	Time	1000	2000	1000	1000
	Sub-total					1000	2000	1000	1000
A 1.3	Biodiversity research equipment and facilities								
	Field equipment for conservation (campus, binocular, counter, sleeping bed, backpack, tripod. etc.)	52	1		Unit	2000	1000	500	500
	Travelling allowance FRI staff	61	1	1	Unit	1600	2000	1000	1000
	Sub-total					3600	3000	1500	1500
A 1.4	Biodiversity conservation and management facilities								
	Environmental education center	46	0	0	Unit	0	0	0	0
	Research center (Biodiversity lab)	47	0	0	Unit	0	0	0	0
	Project vehicles (Pick-up Van)	410	0	0	Unit	0	0	0	0
	Laptop	411	0	0	Unit	0	0	0	0
	Desktop	412	0	0	Unit	0	0	0	0

Outputs/ Activities	Description	Budget Component	Quantity		Units	Unit cost	Total costs	ITTO Stage 1	
			Y 1	Y 2				Y 1	Y 2
	GPS	413	3	0	Unit	150	450	450	0
	Camera	414	3	0	Unit	400	1200	1200	0
	Camera trap	415	0	0	Unit	0	0	0	0
	Projector	416	0	0	Unit	0	0	0	0
	Printer- monochrome laser	417	0	0	Unit	0	0	0	0
	Printer- color laser	418	0	0	Unit	0	0	0	0
	Air Conditioning	419	0	0	Unit	0	0	0	0
	Tables for meeting rooms	420	1	0	Unit	400	400	400	0
	Chairs for meeting rooms	421	1	0	Unit	79	79	79	0
	Photocopy machine	422	0	0	Unit	0	0	0	0
	Motorbikes	423	0	0	N0.	0	0	0	0
	Petrol and maintenance	62	0	0	Unit	0	0	0	0
	Sub-total						2121	2121	0
A 1.5	Develop technical guidelines for restoration, management, conservation and monitoring in the national language								
	Preparing technical guidelines/operational manuals	57		1	Unit	1000	1000	500	500
	Publishing and disseminating guidelines/ manuals	58		1	Time	1000	1000	500	500
	Sub-total					1000	2000	1000	1000
A 1.6	Establishing and implementing regular patrolling systems in the Taninthayi National Park and its surrounding areas with conduct of training courses								
	Establishing regular patrolling system	213	1	1	Time	1000	2000	1000	1000
	Conducting SMART patrolling training	214	1	1	Time	1500	3000	1500	1500
	Conducting patrolling (4 times of 5-day patrolling in a month, 5 persons will be in each time and4 teams in the National Park)	308	10	30	Time	150	6000	1500	4500
	Sub-total					2650	11000	4000	7000

Outputs/ Activities	Description	Budget Component	Quantity		Units	Unit cost	Total costs	ITTO Stage 1	
			Y 1	Y 2				Y 1	Y 2
	Sub- total output-1						82321	40721	41600
Output-2	Establishment of initial institutional mechanisms for the trans boundary biodiversity conservation in protected areas in the Taninthayi Range								
A.2.1	Establish institutional mechanisms for the transboundary biodiversity conservation in the Taninthayi National Park								
	Organizing meetings for the development of institutional mechanisms for the transboundary biodiversity conservation and forming a joint body	31		1	Time	4000	4000	0	4000
	Sub-total					4000	4000	0	4000
A 2.2	Conduct research on transboundary ecological connectivity and habitat distribution for a wide-range wildlife species and economic valuation of ecosystem services in the Taninthayi Range								
	Conduct basic line survey for biodiversity in TNP	21	1	0	Time	4000	4000	4000	0
	Sub-total					4000	4000	4000	0
A 2.3	Develop and promote community-based conservation programs to support the transboundary conservation in and around the Taninthayi Range								
	Consultation meetings to identify target local communities and NGOs to promote community –based conservation in the Taninthayi Range in particular in the TNP	35	1	1	Time	2000	4000	2000	2000
	Social development activities in the selected villages to facilitate their participation in conservation	10	1	1	Time, fund	4000	4000	2000	2000
	Sub-total					6000	8000	4000	4000
A 2.4	Organize national and regional workshops on transboundary biodiversity conservation with relevant stakeholders in collaboration with regional and international organizations								
	National workshops	33	1		Time	8000	8000	8000	0
	Regional workshops	34		1	Time	5000	5000	0	5000
	Sub-total					13000	13000	8000	5000

Outputs/ Activities	Description	Budget Component	Quantity		Units	Unit cost	Total costs	ITTO Stage 1	
			Y 1	Y 2				Y 1	Y 2
A 2.5	Widely disseminate the outcomes, experiences and lessons from the implementation of the project to the interested parties and at relevant national, regional and international events								
	Reporting on implementation and dissemination	510	1	1	Time	1500	2000	1000	1000
	Sub-total					1500	2000	1000	1000
A 2.6	Publish the results of joint research findings in relevant national/regional/international journals								
	Publications of the results	511	1	1	Time	2000	3000	1500	1500
	Sub-total					2000	3000	1500	1500
	Sub-total Output-2					30500	34000	18500	15500
Output-3	Strengthening of local stakeholder participation and livelihoods of forest-dependent local communities in the proposed Taninthayi National Park and its								
A 3.1	Raise awareness of local communities and other local stakeholders through meetings and consultations to discuss the biodiversity conservation and the purposes of transboundary biodiversity conservation in the Taninthayi Range								
	Consultation meetings at the local community	36	1	1	Time	1000	2000	1000	1000
	Materials for education programs (computer and accessories, projector, handheld generator, digital camera, printer, pamphlet and posters	51	1		Unit	2000	2000	1000	1000
	Conducting education programs	310	2	2	Time	500	2000	1000	1000
	Sub-total					3500	6000	3000	3000
A 3.2	Plan and conduct a comprehensive sustainable livelihoods assessment, a potential eco -tourism development assessment, and a training needs assessment								
	Surveying the socio-economic condition of local communities and conducting analyses for needs assessments	210			Time				
	Conduct village consultations, village zonings and	211			Time				

Outputs/ Activities	Description	Budget Component	Quantity		Units	Unit cost	Total costs	ITTO Stage 1	
			Y 1	Y 2				Y 1	Y 2
	development of community-based natural resource management plans to support the establishment of the TNP								
	Assessments for eco-tourism development	212			Time				
	Sub-total					0	0	0	0
A 3.3	Provide training in plantations, sustainable agro- forestry, the promotion of selected non-timber forest products development, and community-based ecotourism								
	Trainings for agro-forestry	25	1	1	Time				
	Trainings for non-timber forest products development	26	1	1	Time				
	Livelihood development activities in the selected villages (agro-forestry, bee keeping or other income generating activities)	27	1	1	Time				
	Trainings for community-based ecotourism	28	1	1					
	Sub-total					0	0	0	0
A 3.4	Scale up local community organizations and networks and community forestry to facilitate biodiversity conservation, forest fire protection and avoid illegal activities in the proposed Taninthayi National Park and its surrounding areas								
	Facilitate strengthening community-based organizations(CBOs) in conservation	37	1	1	Time				
	Sub-total					0	0	0	0
A 3.5	Organize fundraising meetings for potential donors and NGOs to sustain livelihood improvement activities and biodiversity conservation								
	Fundraising meetings	32	1	1	Time				
	Sub-total					0	0	0	0
	Sub-total Output-3					3500	6000	3000	3000

Outputs/ Activities	Description	Budget Component	Quantity		Units	Unit cost	Total costs	ITTO Stage 1	
			Y 1	Y 2				Y 1	Y 2
	Sub-total (output 1+2+3)					50100	122321	62221	60100
	Project monitoring & administration								
	ITTO monitoring and review	81					3000		
	ITTO midterm evaluation	82					0		
	Sub-total (ITTO M&E)						3000		
	ITTO program support costs(12% on items 10-82)	83					15000		
	GRAND TOTAL	**100**					**140,000**		

3.4.1 ITTO Master Budget Table (Phase II)

Outputs/ Activities	Description	Bud. Component	Quantity			Units	Unit cost	Total costs	ITTO Phase II		
			Y4	Y5	Y6				Y4	Y5	Y6
Output 1	Capacity building of national institutions to design and implement the sustainable biodiversity conservation, monitoring and research in the Taninthayi Range										
A.1.1	Establish and conduct Project Steering Committee (PSC), Project Technical Committee (PTC) and other technical coordination bodies between Myanmar and Thailand to ensure effective transboundary biodiversity conservation.										
	Project Manager (1)	11	12	12	12	Month	1000	36000	12000	12000	12000
	Project Secretary (1)	12	12	12	12	Month	400	14400	4800	4800	4800
	Field Assistance (5)	18	12	12	12	Month	300	54000	18000	18000	18000
	GIS Consultant (1)	110	2	2	2	Month	1000	6000	2000	2000	2000
	Wildlife Survey Consultant (1)	111	2	2	2	Month	1000	6000	2000	2000	2000
	Ecology Consultant (1)	112	2	2	2	Month	1000	6000	2000	2000	2000
	Social-economic Consultant (1)	113	2	2	2	Month	1000	6000	2000	2000	2000
	Economic Valuation of Ecosystem Services Consultant (1)	114	2	2	2	Month	1000	6000	2000	2000	2000
	Project Accountant (1)	115	12	12	12	Month	200	7200	2400	2400	2400
	Independent Auditor (1)	116	1	1	2	Month	1500	1500	500	500	500
	Local travel costs	311	4	4	4	Month	435	5220	1740	1740	1740
	Sub-total							148320	49440	49440	49440
A.1.2	Provide fellowships in biodiversity conservation and organize training courses in biodiversity conservation, GIS mapping, land-use planning, and forest management planning and habitat suitability analysis.										
	Training courses	120	2	2	2	Time	5000	69000	23000	23000	23000
		121						20000	20000		
	Sub-total							89000	43000	23000	23000
A.1.3	Biodiversity research equipment and facilities										
	Project vehicles (Pick-up Van)	43				Number	38000	0			
	Field equipment for conservation (campus, binocular, counter, sleeping bed,	52	1		1	Unit	10000	20000	10000		10000

Outputs/ Activities	Description	Bud. Component	Quantity			Units	Unit cost	Total costs	ITTO Phase II		
			Y4	Y5	Y6				Y4	Y5	Y6
	backpack, tripod. etc.)										
	Petrol and maintenance	61	1	1	1	Unit	1600	4800	1600	1600	1600
	Driver	117	1	1	1	Person	200	7200	2400	2400	2400
	Sub-total							32000	14000	4000	14000
A.1.4	Biodiversity conservation and management facilities										
	Driver	118	1	1	1	Person	200	7200	2400	2400	2400
	Environmental education centre	46	1			Unit		50000	50000		
	Research centre (Biodiversity lab)	47	1			Unit		123250	123250		
	Project vehicles (Pick-up Van)	410	1			Unit		38000	38000		
	Laptop	411	1		1	Unit		2000	1000		1000
	Desktop	412	1		1	Unit		3000	1500		1500
	GPS	413	4		4	Unit		6400	3200		3200
	Camera	414	2		3	Unit		2500	1000		1500
	Camera trap	415	10		10	Unit		5000	2500		2500
	Projector	416	1		1	Unit		6000	3000		3000
	Printer- monochrome laser	417	1		1	Unit		800	400		400
	Printer- color laser	418	1		1	Unit		1000	500		500
	Air Conditioning	419	2		2	Unit		2000	1000		1000
	Tables for meeting rooms	420	10			Unit	100	1000	1000		
	Chairs for meeting rooms	421	60			Unit	30	1800	1800		
	Photocopy machine	422	1			Unit	1	4000	4000		
	Motorbikes	423	1	1	1	Number	1500	4500	1500	1500	1500
	Petrol and maintenance	62	1	1	1	Unit	1600	4800	1600	1600	1600
	Sub-total							263250	237650	5500	20100
A.1.5	Develop technical guidelines for restoration, management, conservation and monitoring in the national language										
	Preparing technical guidelines/operational manuals	57	2	2	4	Unit	1000	8000	2000	2000	4000
	Publishing and disseminating	58	2	2	4	Time	1000	8000	2000	2000	4000

Outputs/ Activities	Description	Bud. Component	Quantity			Units	Unit cost	Total costs	ITTO Phase II		
			Y4	Y5	Y6				Y4	Y5	Y6
	guidelines/ manuals										
	Sub-total							16000	4000	4000	8000
A.1.6	Establishing and implementing regular patrolling systems in the Taninthayi National Park and its surrounding areas with conduct of training courses										
	Establishing regular patrolling system	213				Time	4000	0			
	Conducting SMART patrolling training	214	1	1	1	Time	4000	12000	4000	4000	4000
	Conducting patrolling (4 times of 5-day patrolling in a month, 5 persons will be in each time and 4 teams in the National Park)	308	48	48	48	Time	160	23040	7680	7680	7680
	Sub-total							35040	11680	11680	11680
	Sub-total output 1							583610	359770	97620	126220
Output 2	Establishment of initial institutional mechanisms for the trans boundary biodiversity conservation in protected areas in the Taninthayi Range										
A.2.1	Establish institutional mechanisms for the transboundary biodiversity conservation in the Taninthayi National Park										
	Organizing meetings for the development of institutional mechanisms for the transboundary biodiversity conservation and forming a joint body	31	1	1	1	Time	6500	19500	6500	6500	6500
	Sub-total							19500	6500	6500	6500
A.2.2	Conduct research on transboundary ecological connectivity and habitat distribution for a wide-range wildlife species and economic valuation of ecosystem services in the Taninthayi Range										
	Conduct basic line survey for biodiversity in TNP	21	2	2	2	Time	10000	60000	20000	20000	20000
	Study on economic valuation of ecosystem services	23	1	1	1	Time	10000	30000	10000	10000	10000
	Sub-total							90000	30000	30000	30000

Outputs/ Activities	Description	Bud. Component	Quantity			Units	Unit cost	Total costs	ITTO Phase II		
			Y4	Y5	Y6				Y4	Y5	Y6
A.2.3	Develop and promote community-based conservation programs to support the transboundary conservation in and around the Taninthayi Range										
	Consultation meetings to identify target local communities and NGOs to promote community-based conservation in the Taninthayi Range in particular in the TNP	35	1	1	1	Time	2000	6000	2000	2000	2000
	Social development activities in the selected villages to facilitate their participation in conservation	24	1	1	1	Time,fund	10000	30000	10000	10000	10000
	Sub-total							36000	12000	12000	12000
A.2.4	Organize national and regional workshops on transboundary biodiversity conservation with relevant stakeholders in collaboration with regional and international organizations										
	National workshops	33	1	1	1	Time	10000	45000	15000	15000	15000
	Regional workshops	34			1	Time	30000	50000			50000
	Sub-total							95000	15000	15000	65000
A.2.5	Widely disseminate the outcomes, experiences and lessons from the implementation of the project to the interested parties and at relevant national, regional and international events										
	Reporting on implementation and dissemination	510	2	2	2	Time	4000	30000	10000	10000	10000
	Sub-total							30000	10000	10000	10000
A.2.6	Publish the results of joint research findings in relevant national/regional/international journals										
	Publications of the results	511	2	2	2	Time	2500	15000	5000	5000	5000
	Sub-total							15000	5000	5000	5000
	Sub-total output 2							285500	78500	78500	128500
Output 3:	Strengthening of local stakeholder participation and livelihoods of forest-dependent local communities in the proposed Taninthayi National Park and its										

Outputs/ Activities	Description	Bud. Component	Quantity			Units	Unit cost	Total costs	ITTO Phase II		
			Y4	Y5	Y6				Y4	Y5	Y6
	surrounding areas										
A 3.1	Raise awareness of local communities and other local stakeholders through meetings and consultations to discuss the biodiversity conservation and the purposes of transboundary biodiversity conservation in the Taninthayi Range										
	Consultation meetings at the local community	36	3	3	4	Time	1000	10000	3000	3000	4000
	Materials for education programs (computer and accessories, projector, handheld generator, digital camera, printer, pamphlet and posters)	512		1		Unit	10000	10000		10000	
	Conducting education programs	310	12	12	12	Time	500	18000	6000	6000	6000
	Sub-total							38000	9000	19000	10000
A 3.2	Plan and conduct a comprehensive sustainable livelihoods assessment, a potential eco-tourism development assessment, and a training needs assessment										
	Surveying the socio-economic condition of local communities and conducting analyses for needs assessments	210	1			Time		20000	20000		
	Conduct village consultations, village zonings and development of community-based natural resource management plans to support the establishment of the TNP	211	2	1	1	Time		80000	40000	20000	20000
	Assessments for eco-tourism development	212		1	1	Time		10000		5000	5000
	Sub-total							110000	60000	25000	25000
A 3.3	Provide training in plantations, sustainable agro-forestry, the promotion of selected non-timber forest products development, and community-based ecotourism										
	Trainings for agro-forestry	25	2	2	2	Time		12000	4000	4000	4000
	Trainings for non-timber forest products development	26	2	2	2	Time		12000	4000	4000	4000
	Livelihood development	27	2	2	2	Time		60000	20000	20000	20000

Outputs/ Activities	Description	Bud. Component	Quantity			Units	Unit cost	Total costs	ITTO Phase II		
			Y4	Y5	Y6				Y4	Y5	Y6
	activities in the selected villages (agro-forestry, bee keeping or other income generating activities)										
	Trainings for community-based ecotourism	28	2	2	2	Time		12000	4000	4000	4000
	Sub-total							96000	32000	32000	32000
A 3.4	Scale up local community organizations and networks and community forestry to facilitate biodiversity conservation, forest fire protection and avoid illegal activities in the proposed Taninthayi National Park and its surrounding areas										
	Facilitate strengthening community-based organizations (CBOs) in conservation	37	2	2	2	Time		30000	10000	10000	10000
	Sub-total							30000	10000	10000	10000
A 3.5	Organize fundraising meetings for potential donors and NGOs to sustain livelihood improvement activities and biodiversity conservation										
	Fundraising meetings	32		2	2	Time		20000		10000	10000
	Sub-total							20000	0	10000	10000
	Sub-total output 3							294000	111000	96000	87000
	Sub-total (output 1+2+3)							1163110			
	Project monitoring & administration										
	ITTO monitoring and review	81						12500			
	ITTO midterm evaluation	82						20000			
	Sub-total (ITTO M&E)							32500			
	ITTO program support costs (12% on items 10-82)	83						143473.2			
	GRAND TOTAL	100						1339083.2			

3.4.2 Consolidate budget by component (Phase I and Phase II)

Category	Description	Total costs	Phase I			Phase II		
			Y1	Y2	Y3	Y4	Y5	Y6
10	**Personnel**							
11	Project Manager (1)	72000	12000	12000	12000	12000	12000	12000
12	Project Secretary (1)	28800	4800	4800	4800	4800	4800	4800
13	Project Director/Coordinator	12960	2160	2160	2160	2160	2160	2160
14	Deputy Project Director	11520	1920	1920	1920	1920	1920	1920
15	Head of Nature and Wildlife Conservation Division	11520	1920	1920	1920	1920	1920	1920
16	Head of Forest Research Institute	11520	1920	1920	1920	1920	1920	1920
17	Head of Administrative Division	10080	1680	1680	1680	1680	1680	1680
18	Field Assistance (5)	108000	18000	18000	18000	18000	18000	18000
110	GIS Consultant (1)	12000	2000	2000	2000	2000	2000	2000
111	Wildlife Survey Consultant (1)	12000	2000	2000	2000	2000	2000	2000
112	Ecology Consultant (1)	12000	2000	2000	2000	2000	2000	2000
113	Social-economic consultant (1)	12000	2000	2000	2000	2000	2000	2000
114	Economic Valuation of Ecosystem Services Consultant (1)	12000	2000	2000	2000	2000	2000	2000
115	Project Accountant (1)	14400	2400	2400	2400	2400	2400	2400
116	Independent Auditor (1)	6000	1500	1500	1500	500	500	500
117	Driver (200 per person per month for 72 months)	14400	2400	2400	2400	2400	2400	2400
118	Driver (200 per person per month for 36 months)	7200				2400	2400	2400
120	Training courses	99000	10000	10000	10000	23000	23000	23000
121	Diploma course for wildlife conservation and field biology at WII, India	20000				20000		
19	**Sub-total**	**487400**	**70700**	**70700**	**70700**	**105100**	**85100**	**85100**
20	**Sub-contract**							
21	Conduct basic line survey for biodiversity in TNP	80000	10000	10000		20000	20000	20000
23	Study on economic valuation of ecosystem services	50000	10000		10000	10000	10000	10000
24	Social development activities in the selected villages to facilitate their participation in conservation	60000	10000	10000	10000	10000	10000	10000
25	Trainings for agro-forestry	12000				4000	4000	4000

Category	Description	Total costs	Phase I			Phase II		
			Y1	Y2	Y3	Y4	Y5	Y6
26	Trainings for non-timber forest products development	12000				4000	4000	4000
27	Livelihood development activities in selected villages (agro-forestry, beekeeping or other income generating activities)	60000				20000	20000	20000
28	Trainings for community-based ecotourism	12000				4000	4000	4000
210	Surveying socio-economic conditions of local communities and analyses for needs assessments	20000				20000		
211	Conduct village consultations, village zonings and development of community-based natural resource management plans to support the establishment of the TNP	80000				40000	20000	20000
212	Assessments for eco-tourism development	10000					5000	5000
213	Establish a regular patrolling system	4000	4000					
214	Conduct SMART patrolling trainings	24000	4000	4000	4000	4000	4000	4000
29	**Sub-total**	**424000**	**38000**	**24000**	**24000**	**136000**	**101000**	**101000**
30	**Travel**							
31	Organize meetings to develop institutional mechanisms for the transboundary biodiversity conservation and form a joint body	39000	6500	6500	6500	6500	6500	6500
32	Fundraising meetings	20000					10000	10000
33	National workshops	75000	10000	10000	10000	15000	15000	15000
34	Regional workshops	80000			30000			50000
35	Consultation meetings to identify target local communities and NGOs to promote community-based conservation in the Taninthayi Range in particular in the TNP	18000	6000	4000	2000	2000	2000	2000
36	Consultation meetings at the local community	20000	3000	3000	4000	3000	3000	4000
37	Facilitate strengthening community-based organizations (CBOs) in conservation	30000				10000	10000	10000
308	Conduct patrolling (4 times of 5-day patrolling in a month, 5 persons will be in each time with four teams in the National Park)	38400		7680	7680	7680	7680	7680
310	Conducting education programs	24000	2000	2000	2000	6000	6000	6000

Category	Description	Total costs	Phase I			Phase II		
			Y1	Y2	Y3	Y4	Y5	Y6
311	Local travel cost	10440	1740	1740	1740	1740	1740	1740
39	**Sub-total**	**354840**	**29240**	**34920**	**63920**	**51920**	**61920**	**112920**
40	**Capital items**							
43	Project vehicles (Pick-up Van)	38000	38000					
46	Environmental education centre	50000				50000		
47	Research centre (Biodiversity lab)	123250				123250		
410	Project vehicles (Pick-up Van)	38000				38000		
411	Laptop	2000				1000		1000
412	Desktop	3000				1500		1500
413	GPS	6400				3200		3200
414	Camera	2500				1000		1500
415	Camera trap	5000				2500		2500
416	Projector	6000				3000		3000
417	Printer- monochrome laser	800				400		400
418	Printer- color laser	1000				500		500
419	Air conditioning	2000				1000		1000
420	Tables for meeting rooms	1000				1000		
421	Chairs for meeting rooms	1800				1800		
422	Photocopy machine	4000				4000		
423	Motorbikes	15000	6000	3000	1500	1500	1500	1500
424	1 Project office	14400	2400	2400	2400	2400	2400	2400
425	1 Park office	7200	1200	1200	1200	1200	1200	1200
49	**Sub-total**	**321350**	**47600**	**6600**	**5100**	**237250**	**5100**	**19700**
50	**Consumable items**							
52	Field equipment for conservation (campus, binocular, counter, sleeping bed, backpack, tripod. etc.)	40000	10000		10000	10000		10000
57	Preparing technical guidelines/ operational manuals	12000		2000	2000	2000	2000	4000
58	Publishing and disseminating guidelines/ manuals	12000		2000	2000	2000	2000	4000
510	Reporting on implementation and dissemination	42000	4000	4000	4000	10000	10000	10000
511	Publications of the results	27500	2500	5000	5000	5000	5000	5000
512	Materials for education programs (computer and	20000	5000		5000		10000	

Category	Description	Total costs	Phase I			Phase II		
			Y1	Y2	Y3	Y4	Y5	Y6
	accessories, projector, handheld generator, digital camera, printer, pamphlet and posters)							
59	**Sub-total**	**153500**	**21500**	**13000**	**28000**	**29000**	**29000**	**33000**
60	**Miscellaneous**							
61	Petrol and Maintenance for Phase I and II	9600	1600	1600	1600	1600	1600	1600
62	Petrol and Maintenance for Phase I and II	4800				1600	1600	1600
69	**Sub-total**	**14400**	**1600**	**1600**	**1600**	**3200**	**3200**	**3200**
70	**National management costs**							
71	National management costs	4200	700	700	700	700	700	700
79	**Sub-total**	**4200**	**700**	**700**	**700**	**700**	**700**	**700**
80	**Project monitoring & administration**							
81	ITTO monitoring and review	25000	12500			12500		
82	ITTO midterm evaluation	30000	10000			20000		
	Sub-total (ITTO M&E)	55000	22500			32500		
83	ITTO program support costs (12% on items 10-82)	217258.8	69033.6			148225.2		
89	**Sub-total**	327258.8	114033.6			213225.2		
100	**Grand Total (19-89)**	**2032452.8**	**646665.6**			**1385787.2**		

3.4.2 Consolidate budget by component (Phase I)

Category	Description	Total costs	Phase I		
			Y1	Y2	Y3
10	**Personnel**				
11	Project Manager (1)	36000	12000	12000	12000
12	Project Secretary (1)	14400	4800	4800	4800
13	Project Director/Coordinator	6480	2160	2160	2160
14	Deputy Project Director	5760	1920	1920	1920
15	Head of Nature and Wildlife Conservation Division	5760	1920	1920	1920
16	Head of Forest Research Institute	5760	1920	1920	1920
17	Head of Administrative Division	5040	1680	1680	1680
18	Field Assistance (5)	54000	18000	18000	18000
110	GIS Consultant (1)	6000	2000	2000	2000
111	Wildlife Survey Consultant (1)	6000	2000	2000	2000
112	Ecology Consultant (1)	6000	2000	2000	2000
113	Social-economic consultant (1)	6000	2000	2000	2000
114	Economic Valuation of Ecosystem Services Consultant (1)	6000	2000	2000	2000
115	Project Accountant (1)	7200	2400	2400	2400
116	Independent Auditor (1)	4500	1500	1500	1500
117	Driver (200 per person per month for 72 months)	7200	2400	2400	2400
118	Driver (200 per person per month for 36 months)				
120	Training courses	30000	10000	10000	10000
121	Diploma course for wildlife conservation and field biology at WII, India				
19	**Sub-total**	**212100**	**70700**	**70700**	**70700**
20	**Sub-contract**				
21	Conduct basic line survey for biodiversity in TNP	20000	10000	10000	
23	Study on economic valuation of ecosystem services	20000	10000		10000

Category	Description	Total costs	Phase I		
			Y1	Y2	Y3
24	Social development activities in the selected villages to facilitate their participation in conservation	30000	10000	10000	10000
25	Trainings for agro-forestry				
26	Trainings for non-timber forest products development				
27	Livelihood development activities in selected villages (agro-forestry, beekeeping or other income generating activities)				
28	Trainings for community-based ecotourism				
210	Surveying socio-economic conditions of local communities and analyses for needs assessments				
211	Conduct village consultations, village zonings and development of community-based natural resource management plans to support the establishment of the TNP				
212	Assessments for eco-tourism development				
213	Establish a regular patrolling system	4000	4000		
214	Conduct SMART patrolling trainings	12000	4000	4000	4000
29	**Sub-total**	**86000**	**38000**	**24000**	**24000**
30	**Travel**				
31	Organize meetings to develop institutional mechanisms for the transboundary biodiversity conservation and form a joint body	19500	6500	6500	6500
32	Fundraising meetings				
33	National workshops	30000	10000	10000	10000
34	Regional workshops	30000			30000
35	Consultation meetings to identify target local communities and NGOs to promote community-based conservation in the Taninthayi Range in particular in the TNP	12000	6000	4000	2000
36	Consultation meetings at the local community	10000	3000	3000	4000
37	Facilitate strengthening community-based organizations (CBOs) in conservation				
308	Conduct patrolling (4 times of 5-day patrolling in a month, 5 persons will be in each time with four teams in the National Park)	15360		7680	7680
310	Conducting education programs	6000	2000	2000	2000
311	Local travel cost	5220	1740	1740	1740

Category	Description	Total costs	Phase I		
			Y1	Y2	Y3
39	**Sub-total**	**128080**	**29240**	**34920**	**63920**
40	**Capital items**				
43	Project vehicles (Pick-up Van)	38000	38000		
46	Environmental education centre				
47	Research centre (Biodiversity lab)				
410	Project vehicles (Pick-up Van)				
411	Laptop				
412	Desktop				
413	GPS				
414	Camera				
415	Camera trap				
416	Projector				
417	Printer- monochrome laser				
418	Printer- color laser				
419	Air conditioning				
420	Tables for meeting rooms				
421	Chairs for meeting rooms				
422	Photocopy machine				
423	Motorbikes	10500	6000	3000	1500
424	1 Project office	7200	2400	2400	2400
425	1 Park office	3600	1200	1200	1200
49	**Sub-total**	**59300**	**47600**	**6600**	**5100**
50	**Consumable items**				
52	Field equipment for conservation (campus, binocular, counter, sleeping bed, backpack, tripod. etc.)	20000	10000		10000
57	Preparing technical guidelines/ operational manuals	4000		2000	2000
58	Publishing and disseminating guidelines/ manuals	4000		2000	2000

Category	Description	Total costs	Phase I		
			Y1	Y2	Y3
510	Reporting on implementation and dissemination	12000	4000	4000	4000
511	Publications of the results	12500	2500	5000	5000
512	Materials for education programs (computer and accessories, projector, handheld generator, digital camera, printer, pamphlet and posters)	10000	5000		5000
59	**Sub-total**	**62500**	**21500**	**13000**	**28000**
60	**Miscellaneous**				
61	Petrol and Maintenance for Phase I and II	4800	1600	1600	1600
62	Petrol and Maintenance for Phase I and II				
69	**Sub-total**	**4800**	**1600**	**1600**	**1600**
70	**National management costs**				
71	National management costs	2100	700	700	700
79	**Sub-total**	**2100**	**700**	**700**	**700**
80	**Project monitoring & administration**				
81	ITTO monitoring and review	12500			
82	ITTO midterm evaluation	10000			
	Sub-total (ITTO M&E)	22500			
83	ITTO program support costs (12% on items 10-82)	69285.6			
89	**Sub-total**	327258.8			
100	**Grand Total (19-89)**	**646665.6**			

3.4.2 Consolidate budget by component (Phase I)

Category	Description	Total costs	Phase I		
			Y1	Y2	Y3
10	**Personnel**				
11	Project Manager (1)	36000	12000	12000	12000
12	Project Secretary (1)	14400	4800	4800	4800
13	Project Director/Coordinator	6480	2160	2160	2160
14	Deputy Project Director	5760	1920	1920	1920
15	Head of Nature and Wildlife Conservation Division	5760	1920	1920	1920
16	Head of Forest Research Institute	5760	1920	1920	1920
17	Head of Administrative Division	5040	1680	1680	1680
18	Field Assistance (5)	54000	18000	18000	18000
110	GIS Consultant (1)	6000	2000	2000	2000
111	Wildlife Survey Consultant (1)	6000	2000	2000	2000
112	Ecology Consultant (1)	6000	2000	2000	2000
113	Social-economic consultant (1)	6000	2000	2000	2000
114	Economic Valuation of Ecosystem Services Consultant (1)	6000	2000	2000	2000
115	Project Accountant (1)	7200	2400	2400	2400
116	Independent Auditor (1)	4500	1500	1500	1500
117	Driver (200 per person per month for 72 months)	7200	2400	2400	2400
118	Driver (200 per person per month for 36 months)				
120	Training courses	30000	10000	10000	10000
121	Diploma course for wildlife conservation and field biology at WII, India				
19	**Sub-total**	**212100**	**70700**	**70700**	**70700**
20	**Sub-contract**				
21	Conduct basic line survey for biodiversity in TNP	20000	10000	10000	
23	Study on economic valuation of ecosystem services	20000	10000		10000

Category	Description	Total costs	Phase I		
			Y1	Y2	Y3
24	Social development activities in the selected villages to facilitate their participation in conservation	30000	10000	10000	10000
25	Trainings for agro-forestry				
26	Trainings for non-timber forest products development				
27	Livelihood development activities in selected villages (agro-forestry, beekeeping or other income generating activities)				
28	Trainings for community-based ecotourism				
210	Surveying socio-economic conditions of local communities and analyses for needs assessments				
211	Conduct village consultations, village zonings and development of community-based natural resource management plans to support the establishment of the TNP				
212	Assessments for eco-tourism development				
213	Establish a regular patrolling system	4000	4000		
214	Conduct SMART patrolling trainings	12000	4000	4000	4000
29	**Sub-total**	**86000**	**38000**	**24000**	**24000**
30	**Travel**				
31	Organize meetings to develop institutional mechanisms for the transboundary biodiversity conservation and form a joint body	19500	6500	6500	6500
32	Fundraising meetings				
33	National workshops	30000	10000	10000	10000
34	Regional workshops	30000			30000
35	Consultation meetings to identify target local communities and NGOs to promote community-based conservation in the Taninthayi Range in particular in the TNP	12000	6000	4000	2000
36	Consultation meetings at the local community	10000	3000	3000	4000
37	Facilitate strengthening community-based organizations (CBOs) in conservation				
308	Conduct patrolling (4 times of 5-day patrolling in a month, 5 persons will be in each time with four teams in the National Park)	15360		7680	7680
310	Conducting education programs	6000	2000	2000	2000
311	Local travel cost	5220	1740	1740	1740

Category	Description	Total costs	Phase I		
			Y1	Y2	Y3
39	**Sub-total**	**128080**	**29240**	**34920**	**63920**
40	**Capital items**				
43	Project vehicles (Pick-up Van)	38000	38000		
46	Environmental education centre				
47	Research centre (Biodiversity lab)				
410	Project vehicles (Pick-up Van)				
411	Laptop				
412	Desktop				
413	GPS				
414	Camera				
415	Camera trap				
416	Projector				
417	Printer- monochrome laser				
418	Printer- color laser				
419	Air conditioning				
420	Tables for meeting rooms				
421	Chairs for meeting rooms				
422	Photocopy machine				
423	Motorbikes	10500	6000	3000	1500
424	1 Project office	7200	2400	2400	2400
425	1 Park office	3600	1200	1200	1200
49	**Sub-total**	**59300**	**47600**	**6600**	**5100**
50	**Consumable items**				
52	Field equipment for conservation (campus, binocular, counter, sleeping bed, backpack, tripod. etc.)	20000	10000		10000
57	Preparing technical guidelines/ operational manuals	4000		2000	2000
58	Publishing and disseminating guidelines/ manuals	4000		2000	2000

Category	Description	Total costs	Phase I		
			Y1	Y2	Y3
510	Reporting on implementation and dissemination	12000	4000	4000	4000
511	Publications of the results	12500	2500	5000	5000
512	Materials for education programs (computer and accessories, projector, handheld generator, digital camera, printer, pamphlet and posters)	10000	5000		5000
59	**Sub-total**	**62500**	**21500**	**13000**	**28000**
60	**Miscellaneous**				
61	Petrol and Maintenance for Phase I and II	4800	1600	1600	1600
62	Petrol and Maintenance for Phase I and II				
69	**Sub-total**	**4800**	**1600**	**1600**	**1600**
70	**National management costs**				
71	National management costs	2100	700	700	700
79	**Sub-total**	**2100**	**700**	**700**	**700**
80	**Project monitoring & administration**				
81	ITTO monitoring and review	12500			
82	ITTO midterm evaluation	10000			
	Sub-total (ITTO M&E)	22500			
83	ITTO program support costs (12% on items 10-82)	69285.6			
89	**Sub-total**	327258.8			
100	**Grand Total (19-89)**	**646665.6**			

3.4.2.1 Consolidate budget by component (Stage 1 of Phase I)

Category	Description	Total costs	Stage 1	
			Y1	Y2
10	**Personnel**			
11	Project Manager (1)	24000	12000	12000
12	Project Secretary (1)	12000	6000	6000
13	Project Director/Coordinator	3360	1680	1680
15	Head of Nature and Wildlife Conservation Division	3360	1680	1680
18	Field Assistance (5)	7200	3600	3600
110	GIS Consultant (1)	4000	2000	2000
111	Wildlife Survey Consultant (1)	4000	2000	2000
113	Social-economic consultant (1)	4000	2000	2000
116	Independent Auditor (1)	3000	1500	1500
120	Training courses	2000	1000	1000
19	**Sub-total**	**66920**	**34460**	**34460**
20	**Sub-contract**			
21	Conduct basic line survey for biodiversity in TNP	4000	4000	
213	Establish a regular patrolling system	2000	1000	1000
214	Conduct SMART patrolling trainings	3000	1500	1500
29	**Sub-total**	**9000**	**6500**	**2500**
30	**Travel**			
31	Organize meetings to develop institutional mechanisms for the transboundary biodiversity conservation and form a joint body	4000		4000
33	National workshops	8000	8000	
34	Regional workshops	5000		5000
35	Consultation meetings to identify target local communities and NGOs to promote community-based conservation in the Taninthayi Range in particular in the TNP	4000	2000	2000
36	Consultation meetings at the local community	2000	1000	1000
308	Conduct patrolling (4 times of 5-day patrolling in a month, 5 persons	6000	1500	4500

Category	Description	Total costs	Stage 1	
			Y1	Y2
	will be in each time with four teams in the National Park)			
310	Conducting education programs	2000	1000	1000
311	Local travel cost	4000	2000	2000
39	**Sub-total**	**35000**	**15500**	**19500**
40	**Capital items**			
413	GPS	450	450	
414	Camera	1200	1200	
420	Tables for meeting rooms	700	700	
421	Chairs for meeting rooms	450	450	
424	1 Project Office	3000	1500	1500
49	**Sub-total**	**5800**	**4300**	**1500**
50	**Consumable items**			
52	Field equipment for conservation (campus, binocular, counter, sleeping bed, backpack, tripod. etc.)	1000	500	500
57	Preparing technical guidelines/ operational manuals	2000	1000	1000
58	Publishing and disseminating guidelines/ manuals	2000	1000	1000
510	Reporting on implementation and dissemination	2000	1000	1000
511	Publications of the results	3000	1500	1500
512	Materials for education programs (computer and accessories, projector, handheld generator, digital camera, printer, pamphlet and posters)	2000	1000	1000
59	**Sub-total**	**12000**	**6000**	**6000**
60	**Miscellaneous**			
61	Travelling allowance for FRI staff	3000	1500	1500
69	**Sub-total**	**3000**	**1500**	**1500**
70	**National management costs**			
71	National management costs	4180	2090	2090
79	**Sub-total**	**4180**	**2090**	**2090**
80	**Project monitoring & administration**			

Category	Description	Total costs	Stage 1		
			Y1		Y2
81	ITTO monitoring and review	3000			
82	ITTO midterm evaluation				
	Sub-total (ITTO M&E)	3000			
83	ITTO program support costs (12% on items 10-82)	15000			
80	**Sub-total**	**18000**			
100	**Grand Total (19-80)**	**153900**			

3.4.2 Consolidate budget by component (Phase II)

Category	Description	Total costs	Phase II		
			Y4	Y5	Y6
10	**Personnel**				
11	Project Manager (1)	36000	12000	12000	12000
12	Project Secretary (1)	14400	4800	4800	4800
13	Project Director/Coordinator	6480	2160	2160	2160
14	Deputy Project Director	5760	1920	1920	1920
15	Head of Nature and Wildlife Conservation Division	5760	1920	1920	1920
16	Head of Forest Research Institute	5760	1920	1920	1920
17	Head of Administrative Division	5040	1680	1680	1680
18	Field Assistance (5)	54000	18000	18000	18000
110	GIS Consultant (1)	6000	2000	2000	2000
111	Wildlife Survey Consultant (1)	6000	2000	2000	2000
112	Ecology Consultant (1)	6000	2000	2000	2000
113	Social-economic consultant (1)	6000	2000	2000	2000
114	Economic Valuation of Ecosystem Services Consultant (1)	6000	2000	2000	2000
115	Project Accountant (1)	7200	2400	2400	2400
116	Independent Auditor (1)	1500	500	500	500
117	Driver (200 per person per month for 72 months)	7200	2400	2400	2400
118	Driver (200 per person per month for 36 months)	7200	2400	2400	2400
120	Training courses	69000	23000	23000	23000
121	Diploma course for wildlife conservation and field biology at WII, India	20000	20000		
19	**Sub-total**	**275300**	**105100**	**85100**	**85100**
20	**Sub-contract**				
21	Conduct basic line survey for biodiversity in TNP	60000	20000	20000	20000
23	Study on economic valuation of ecosystem services	30000	10000	10000	10000

Category	Description	Total costs	Phase II		
			Y4	Y5	Y6
24	Social development activities in the selected villages to facilitate their participation in conservation	30000	10000	10000	10000
25	Trainings for agro-forestry	12000	4000	4000	4000
26	Trainings for non-timber forest products development	12000	4000	4000	4000
27	Livelihood development activities in selected villages (agro-forestry, beekeeping or other income generating activities)	60000	20000	20000	20000
28	Trainings for community-based ecotourism	12000	4000	4000	4000
210	Surveying socio-economic conditions of local communities and analyses for needs assessments	20000	20000		
211	Conduct village consultations, village zonings and development of community-based natural resource management plans to support the establishment of the TNP	80000	40000	20000	20000
212	Assessments for eco-tourism development	10000		5000	5000
213	Establish a regular patrolling system				
214	Conduct SMART patrolling trainings	12000	4000	4000	4000
29	**Sub-total**	**338000**	**136000**	**101000**	**101000**
30	**Travel**				
31	Organize meetings to develop institutional mechanisms for the transboundary biodiversity conservation and form a joint body	19500	6500	6500	6500
32	Fundraising meetings	20000		10000	10000
33	National workshops	45000	15000	15000	15000
34	Regional workshops	50000			50000
35	Consultation meetings to identify target local communities and NGOs to promote community-based conservation in the Taninthayi Range in particular in the TNP	6000	2000	2000	2000
36	Consultation meetings at the local community	10000	3000	3000	4000
37	Facilitate strengthening community-based organizations (CBOs) in conservation	30000	10000	10000	10000
308	Conduct patrolling (4 times of 5-day patrolling in a month, 5 persons will be in each time with four teams in the National Park)	23040	7680	7680	7680
310	Conducting education programs	18000	6000	6000	6000
311	Local travel cost	5220	1740	1740	1740

Category	Description	Total costs	Phase II		
			Y4	Y5	Y6
39	**Sub-total**	**226760**	**51920**	**61920**	**112920**
40	**Capital items**				
43	Project vehicles (Pick-up Van)				
46	Environmental education centre	50000	50000		
47	Research centre (Biodiversity lab)	123250	123250		
410	Project vehicles (Pick-up Van)	38000	38000		
411	Laptop	2000	1000		1000
412	Desktop	3000	1500		1500
413	GPS	6400	3200		3200
414	Camera	2500	1000		1500
415	Camera trap	5000	2500		2500
416	Projector	6000	3000		3000
417	Printer- monochrome laser	800	400		400
418	Printer- color laser	1000	500		500
419	Air conditioning	2000	1000		1000
420	Tables for meeting rooms	1000	1000		
421	Chairs for meeting rooms	1800	1800		
422	Photocopy machine	4000	4000		
423	Motorbikes	4500	1500	1500	1500
424	1 Project office	7200	2400	2400	2400
425	1 Park office	3600	1200	1200	1200
49	**Sub-total**	**262050**	**237250**	**5100**	**19700**
50	**Consumable items**				
52	Field equipment for conservation (campus, binocular, counter, sleeping bed, backpack, tripod. etc.)	20000	10000		10000
57	Preparing technical guidelines/ operational manuals	8000	2000	2000	4000
58	Publishing and disseminating guidelines/ manuals	8000	2000	2000	4000

Category	Description	Total costs	Phase II		
			Y4	Y5	Y6
510	Reporting on implementation and dissemination	30000	10000	10000	10000
511	Publications of the results	15000	5000	5000	5000
512	Materials for education programs (computer and accessories, projector, handheld generator, digital camera, printer, pamphlet and posters)	10000		10000	
59	**Sub-total**	**91000**	**29000**	**29000**	**33000**
60	**Miscellaneous**				
61	Petrol and Maintenance for Phase I and II	4800	1600	1600	1600
62	Petrol and Maintenance for Phase I and II	4800	1600	1600	1600
69	**Sub-total**	**9600**	**3200**	**3200**	**3200**
70	**National management costs**				
71	National management costs	2100	700	700	700
79	**Sub-total**	**2100**	**700**	**700**	**700**
80	**Project monitoring & administration**				
81	ITTO monitoring and review	12500			
82	ITTO midterm evaluation	20000			
	Sub-total (ITTO M&E)	32500			
83	ITTO program support costs (12% on items 10-82)	148477.2			
89	**Sub-total**	180977.2			
100	**Grand Total (19-89)**	**1385787**			

3.4.3 ITTO budget by component (Phase I and Phase II)

Category	Description	Total costs	Phase I			Phase II		
			Y1	Y2	Y3	Y4	Y5	Y6
10	**Personnel**							
11	Project Manager (1)	72000	12000	12000	12000	12000	12000	12000
12	Project Secretary (1)	28800	4800	4800	4800	4800	4800	4800
18	Field Assistance (5)	108000	18000	18000	18000	18000	18000	18000
110	GIS Consultant (1)	12000	2000	2000	2000	2000	2000	2000
111	Wildlife Survey Consultant (1)	12000	2000	2000	2000	2000	2000	2000
112	Ecology Consultant (1)	12000	2000	2000	2000	2000	2000	2000
113	Social-economic consultant (1)	12000	2000	2000	2000	2000	2000	2000
114	Economic Valuation of Ecosystem Services Consultant (1)	12000	2000	2000	2000	2000	2000	2000
115	Project Accountant (1)	14400	2400	2400	2400	2400	2400	2400
116	Independent Auditor (1)	6000	1500	1500	1500	500	500	500
117	Driver (200 per person per month for 72 months)	14400	2400	2400	2400	2400	2400	2400
118	Driver (200 per person per month for 36 months)	7200				2400	2400	2400
120	Training courses	99000	10000	10000	10000	23000	23000	23000
121	Diploma course for wildlife conservation and field biology at WII, India	20000				20000		
19	**Sub-total**	**429800**	**61100**	**61100**	**61100**	**95500**	**75500**	**75500**
20	**Sub-contract**							
21	Conduct basic line survey for biodiversity in TNP	80000	10000	10000		20000	20000	20000
23	Study on economic valuation of ecosystem services	50000	10000		10000	10000	10000	10000
24	Social development activities in the selected villages to facilitate their participation in conservation	60000	10000	10000	10000	10000	10000	10000
25	Trainings for agro-forestry	12000				4000	4000	4000
26	Trainings for non-timber forest products development	12000				4000	4000	4000

Category	Description	Total costs	Phase I			Phase II		
			Y1	Y2	Y3	Y4	Y5	Y6
27	Livelihood development activities in selected villages (agro-forestry, beekeeping or other income generating activities)	60000				20000	20000	20000
28	Trainings for community-based ecotourism	12000				4000	4000	4000
210	Surveying socio-economic conditions of local communities and analyses for needs assessments	20000				20000		
211	Conduct village consultations, village zonings and development of community-based natural resource management plans to support the establishment of the TNP	80000				40000	20000	20000
212	Assessments for eco-tourism development	10000					5000	5000
213	Establish a regular patrolling system	4000	4000					
214	Conduct SMART patrolling trainings	24000	4000	4000	4000	4000	4000	4000
29	**Sub-total**	**424000**	**38000**	**24000**	**24000**	**136000**	**101000**	**101000**
30	**Travel**							
31	Organize meetings to develop institutional mechanisms for the transboundary biodiversity conservation and form a joint body	39000	6500	6500	6500	6500	6500	6500
32	Fundraising meetings	20000					10000	10000
33	National workshops	75000	10000	10000	10000	15000	15000	15000
34	Regional workshops	80000			30000			50000
35	Consultation meetings to identify target local communities and NGOs to promote community-based conservation in the Taninthayi Range in particular in the TNP	18000	6000	4000	2000	2000	2000	2000
36	Consultation meetings at the local community	20000	3000	3000	4000	3000	3000	4000
37	Facilitate strengthening community-based organizations (CBOs) in conservation	30000				10000	10000	10000
308	Conduct patrolling (4 times of 5-day patrolling in a month, 5 persons will be in each time with four teams in the National Park)	38400		7680	7680	7680	7680	7680
310	Conducting education programs	24000	2000	2000	2000	6000	6000	6000

Category	Description	Total costs	Phase I			Phase II		
			Y1	Y2	Y3	Y4	Y5	Y6
311	Local travel cost	10440	1740	1740	1740	1740	1740	1740
39	**Sub-total**	**354840**	**29240**	**34920**	**63920**	**51920**	**61920**	**112920**
40	**Capital items**							
43	Project vehicles (Pick-up Van)	38000	38000					
46	Environmental education centre	50000				50000		
47	Research centre (Biodiversity lab)	123250				123250		
410	Project vehicles (Pick-up Van)	38000				38000		
411	Laptop	2000				1000		1000
412	Desktop	3000				1500		1500
413	GPS	6400				3200		3200
414	Camera	2500				1000		1500
415	Camera trap	5000				2500		2500
416	Projector	6000				3000		3000
417	Printer- monochrome laser	800				400		400
418	Printer- color laser	1000				500		500
419	Air conditioning	2000				1000		1000
420	Tables for meeting rooms	1000				1000		
421	Chairs for meeting rooms	1800				1800		
422	Photocopy machine	4000				4000		
423	Motorbikes	15000	6000	3000	1500	1500	1500	1500
49	**Sub-total**	**299750**	**44000**	**3000**	**1500**	**233650**	**1500**	**16100**
50	**Consumable items**							
52	Field equipment for conservation (campus, binocular, counter, sleeping bed, backpack, tripod. etc.)	40000	10000		10000	10000		10000
57	Preparing technical guidelines/ operational manuals	12000		2000	2000	2000	2000	4000
58	Publishing and disseminating guidelines/ manuals	12000		2000	2000	2000	2000	4000

Category	Description	Total costs	Phase I			Phase II		
			Y1	Y2	Y3	Y4	Y5	Y6
510	Reporting on implementation and dissemination	42000	4000	4000	4000	10000	10000	10000
511	Publications of the results	27500	2500	5000	5000	5000	5000	5000
512	Materials for education programs (computer and accessories, projector, handheld generator, digital camera, printer, pamphlet and posters)	20000	5000		5000		10000	
59	**Sub-total**	**153500**	**21500**	**13000**	**28000**	**29000**	**29000**	**33000**
60	**Miscellaneous**							
61	Petrol and Maintenance for Phase I and II	9600	1600	1600	1600	1600	1600	1600
62	Petrol and Maintenance for Phase I and II	4800				1600	1600	1600
69	**Sub-total**	**14400**	**1600**	**1600**	**1600**	**3200**	**3200**	**3200**
70	**National management costs**							
79	**Sub-total**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
80	**Project monitoring & administration**							
81	ITTO monitoring and review	25000	12500			12500		
82	ITTO midterm evaluation	30000	10000			20000		
	Sub-total (ITTO M&E)	55000	22500			32500		
83	ITTO program support costs (12% on items 10-82)	207754.8	64281.6			143473.2		
89	**Sub-total**	262754.8	86781.6			175973.2		
100	**Grand Total (19-89)**	**1939044.8**	**599961.6**			**1339083.2**		

3.4.3 ITTO budget by component (Phase I)

Category	Description	Total costs	Phase I		
			Y1	Y2	Y3
10	**Personnel**				
11	Project Manager (1)	36000	12000	12000	12000
12	Project Secretary (1)	14400	4800	4800	4800
18	Field Assistance (5)	54000	18000	18000	18000
110	GIS Consultant (1)	6000	2000	2000	2000
111	Wildlife Survey Consultant (1)	6000	2000	2000	2000
112	Ecology Consultant (1)	6000	2000	2000	2000
113	Social-economic consultant (1)	6000	2000	2000	2000
114	Economic Valuation of Ecosystem Services Consultant (1)	6000	2000	2000	2000
115	Project Accountant (1)	7200	2400	2400	2400
116	Independent Auditor (1)	4500	1500	1500	1500
117	Driver (200 per person per month for 72 months)	7200	2400	2400	2400
120	Training courses	30000	10000	10000	10000
19	**Sub-total**	**183300**	**61100**	**61100**	**61100**
20	**Sub-contract**				
21	Conduct basic line survey for biodiversity in TNP	20000	10000	10000	
23	Study on economic valuation of ecosystem services	20000	10000		10000
24	Social development activities in the selected villages to facilitate their participation in conservation	30000	10000	10000	10000
213	Establish a regular patrolling system	4000	4000		
214	Conduct SMART patrolling trainings	12000	4000	4000	4000
29	**Sub-total**	**86000**	**38000**	**24000**	**24000**
30	**Travel**				
31	Organize meetings to develop institutional mechanisms for the transboundary biodiversity conservation and form a joint body	19500	6500	6500	6500
33	National workshops	30000	10000	10000	10000
34	Regional workshops	30000			30000

Category	Description	Total costs	Phase I		
			Y1	Y2	Y3
35	Consultation meetings to identify target local communities and NGOs to promote community-based conservation in the Taninthayi Range in particular in the TNP	12000	6000	4000	2000
36	Consultation meetings at the local community	10000	3000	3000	4000
37	Facilitate strengthening community-based organizations (CBOs) in conservation				
308	Conduct patrolling (4 times of 5-day patrolling in a month, 5 persons will be in each time with four teams in the National Park)	15360		7680	7680
310	Conducting education programs	6000	2000	2000	2000
311	Local travel cost	5220	1740	1740	1740
39	**Sub-total**	**128080**	**29240**	**34920**	**63920**
40	**Capital items**				
43	Project vehicles (Pick-up Van)	38000	38000		
423	Motorbikes	10500	6000	3000	1500
49	**Sub-total**	**48500**	**44000**	**3000**	**1500**
50	**Consumable items**				
52	Field equipment for conservation (campus, binocular, counter, sleeping bed, backpack, tripod. etc.)	20000	10000		10000
57	Preparing technical guidelines/ operational manuals	4000		2000	2000
58	Publishing and disseminating guidelines/ manuals	4000		2000	2000
510	Reporting on implementation and dissemination	12000	4000	4000	4000
511	Publications of the results	12500	2500	5000	5000
512	Materials for education programs (computer and accessories, projector, handheld generator, digital camera, printer, pamphlet and posters)	10000	5000		5000
59	**Sub-total**	**62500**	**21500**	**13000**	**28000**
60	**Miscellaneous**				
61	Petrol and Maintenance for Phase I and II	4800	1600	1600	1600
62	Petrol and Maintenance for Phase I and II				
69	**Sub-total**	**4800**	**1600**	**1600**	**1600**
70	**National management costs**				

Category	Description	Total costs	Phase I		
			Y1	Y2	Y3
79	**Sub-total**	**0**	**0**	**0**	**0**
80	**Project monitoring & administration**				
81	ITTO monitoring and review	12500			
82	ITTO midterm evaluation	10000			
	Sub-total (ITTO M&E)	22500			
83	ITTO program support costs (12% on items 10-82)	64281.6			
89	**Sub-total**	86781.6			
100	**Grand Total (19-89)**	**599961.6**			

3.4.3.1 ITTO budget by component (Stage 1 of Phase I)

Category	Description	Total costs	Stage 1	
			Y1	Y2
10	**Personnel**			
11	Project Manager (1)	24000	12000	12000
12	Project Secretary (1)	12000	6000	6000
18	Field Assistance (5)	7200	3600	3600
110	GIS Consultant (1)	4000	2000	2000
111	Wildlife Survey Consultant (1)	4000	2000	2000
113	Social-economic consultant (1)	4000	2000	2000
116	Independent Auditor (1)	3000	1500	1500
120	Training courses	2000	1000	1000
19	**Sub-total**	**60200**	**30100**	**30100**
20	**Sub-contract**			
21	Conduct basic line survey for biodiversity in TNP	4000	4000	0
213	Establish a regular patrolling system	2000	1000	1000
214	Conduct SMART patrolling trainings	3000	1500	1500
29	**Sub-total**	**9000**	**6500**	**2500**
30	**Travel**			
31	Organize meetings to develop institutional mechanisms for the transboundary biodiversity conservation and form a joint body	4000	0	4000
33	National workshops	8000	8000	0
34	Regional workshops	5000	0	5000
35	Consultation meetings to identify target local communities and NGOs to promote community-based conservation in the Taninthayi Range in particular in the TNP	4000	2000	2000
36	Consultation meetings at the local community	2000	1000	1000
308	Conduct patrolling (4 times of 5-day patrolling in a month, 5 persons will be in each time with four teams in the National Park)	6000	1500	4500
310	Conducting education programs	2000	1000	1000

Category	Description	Total costs	Stage 1	
			Y1	Y2
311	Local travel cost	4000	2000	2000
39	**Sub-total**	**35000**	**15500**	**19500**
40	**Capital items**			
413	GPS	450	450	0
414	Camera	1200	1200	0
420	Tables for meeting rooms	700	700	0
421	Chairs for meeting rooms	450	450	0
49	**Sub-total**	**2800**	**2800**	**0**
50	**Consumable items**			
52	Field equipment for conservation (campus, binocular, counter, sleeping bed, backpack, tripod. etc.)	1000	500	500
57	Preparing technical guidelines/ operational manuals	2000	1000	1000
58	Publishing and disseminating guidelines/ manuals	2000	1000	1000
510	Reporting on implementation and dissemination	2000	1000	1000
511	Publications of the results	3000	1500	1500
512	Materials for education programs (computer and accessories, projector, handheld generator, digital camera, printer, pamphlet and posters)	2000	1000	1000
59	**Sub-total**	**12000**	**6000**	**6000**
60	**Miscellaneous**			
61	Travelling allowance for FRI staff	3000	1500	1500
69	**Sub-total**	**3000**	**1500**	**1500**
70	**National management costs**			
79	**Sub-total**	**0**	**0**	**0**
080	**Project monitoring & administration**			
81	ITTO monitoring and review	3000		
82	ITTO midterm evaluation	0		

Category	Description	Total costs	Stage 1	
			Y1	Y2
	Sub-total (ITTO M&E)	3000		
83	ITTO program support costs (12% on items 10-82)	15000		
89	**Sub-total**	18000		
100	**Grand Total (19-89)**	**140000**		

3.4.3 ITTO budget by component (Phase II)

Category	Description	Total costs	Phase II		
			Y4	Y5	Y6
10	**Personnel**				
11	Project Manager (1)	36000	12000	12000	12000
12	Project Secretary (1)	14400	4800	4800	4800
18	Field Assistance (5)	54000	18000	18000	18000
110	GIS Consultant (1)	6000	2000	2000	2000
111	Wildlife Survey Consultant (1)	6000	2000	2000	2000
112	Ecology Consultant (1)	6000	2000	2000	2000
113	Social-economic consultant (1)	6000	2000	2000	2000
114	Economic Valuation of Ecosystem Services Consultant (1)	6000	2000	2000	2000
115	Project Accountant (1)	7200	2400	2400	2400
116	Independent Auditor (1)	1500	500	500	500
117	Driver (200 per person per month for 72 months)	7200	2400	2400	2400
118	Driver (200 per person per month for 36 months)	7200	2400	2400	2400
120	Training courses	69000	23000	23000	23000
121	Diploma course for wildlife conservation and field biology at WII, India	20000	20000		
19	**Sub-total**	**246500**	**95500**	**75500**	**75500**
20	**Sub-contract**				
21	Conduct basic line survey for biodiversity in TNP	60000	20000	20000	20000
23	Study on economic valuation of ecosystem services	30000	10000	10000	10000
24	Social development activities in the selected villages to facilitate their participation in conservation	30000	10000	10000	10000
25	Trainings for agro-forestry	12000	4000	4000	4000
26	Trainings for non-timber forest products development	12000	4000	4000	4000
27	Livelihood development activities in selected villages (agro-forestry, beekeeping or other income generating activities)	60000	20000	20000	20000
28	Trainings for community-based ecotourism	12000	4000	4000	4000

Category	Description	Total costs	Phase II		
			Y4	Y5	Y6
210	Surveying socio-economic conditions of local communities and analyses for needs assessments	20000	20000		
211	Conduct village consultations, village zonings and development of community-based natural resource management plans to support the establishment of the TNP	80000	40000	20000	20000
212	Assessments for eco-tourism development	10000		5000	5000
213	Establish a regular patrolling system				
214	Conduct SMART patrolling trainings	12000	4000	4000	4000
29	**Sub-total**	**338000**	**136000**	**101000**	**101000**
30	**Travel**				
31	Organize meetings to develop institutional mechanisms for the transboundary biodiversity conservation and form a joint body	19500	6500	6500	6500
32	Fundraising meetings	20000		10000	10000
33	National workshops	45000	15000	15000	15000
34	Regional workshops	50000			50000
35	Consultation meetings to identify target local communities and NGOs to promote community-based conservation in the Taninthayi Range in particular in the TNP	6000	2000	2000	2000
36	Consultation meetings at the local community	10000	3000	3000	4000
37	Facilitate strengthening community-based organizations (CBOs) in conservation	30000	10000	10000	10000
308	Conduct patrolling (4 times of 5-day patrolling in a month, 5 persons will be in each time with four teams in the National Park)	23040	7680	7680	7680
310	Conducting education programs	18000	6000	6000	6000
311	Local travel cost	5220	1740	1740	1740
39	**Sub-total**	**226760**	**51920**	**61920**	**112920**
40	**Capital items**				
43	Project vehicles (Pick-up Van)				
46	Environmental education centre	50000	50000		
47	Research centre (Biodiversity lab)	123250	123250		
410	Project vehicles (Pick-up Van)	38000	38000		
411	Laptop	2000	1000		1000

Category	Description	Total costs	Phase II		
			Y4	Y5	Y6
412	Desktop	3000	1500		1500
413	GPS	6400	3200		3200
414	Camera	2500	1000		1500
415	Camera trap	5000	2500		2500
416	Projector	6000	3000		3000
417	Printer- monochrome laser	800	400		400
418	Printer- color laser	1000	500		500
419	Air conditioning	2000	1000		1000
420	Tables for meeting rooms	1000	1000		
421	Chairs for meeting rooms	1800	1800		
422	Photocopy machine	4000	4000		
423	Motorbikes	4500	1500	1500	1500
49	**Sub-total**	**251250**	**233650**	**1500**	**16100**
50	**Consumable items**				
52	Field equipment for conservation (campus, binocular, counter, sleeping bed, backpack, tripod. etc.)	20000	10000		10000
57	Preparing technical guidelines/ operational manuals	8000	2000	2000	4000
58	Publishing and disseminating guidelines/ manuals	8000	2000	2000	4000
510	Reporting on implementation and dissemination	30000	10000	10000	10000
511	Publications of the results	15000	5000	5000	5000
512	Materials for education programs (computer and accessories, projector, handheld generator, digital camera, printer, pamphlet and posters)	10000		10000	
59	**Sub-total**	**91000**	**29000**	**29000**	**33000**
60	**Miscellaneous**				
61	Petrol and Maintenance for Phase I and II	4800	1600	1600	1600
62	Petrol and Maintenance for Phase I and II	4800	1600	1600	1600
69	**Sub-total**	**9600**	**3200**	**3200**	**3200**
70	**National management costs**				

Category	Description	Total costs	Phase II		
			Y4	Y5	Y6
79	**Sub-total**	**0**	**0**	**0**	**0**
80	**Project monitoring & administration**				
81	ITTO monitoring and review	12500			
82	ITTO midterm evaluation	20000			
	Sub-total (ITTO M&E)	32500			
83	ITTO program support costs (12% on items 10-82)	143473.2			
89	**Sub-total**	175973.2			
100	**Grand Total (19-89)**	**1339083.2**			

3.4.4Executing Agency budget by component (Phase I & Phase II)

Category	Description	Total costs	Phase I			Phase II		
			Y1	Y2	Y3	Y4	Y5	Y6
10	**Personnel**							
13	Project Director/Coordinator	12960	2160	2160	2160	2160	2160	2160
14	Deputy Project Director	11520	1920	1920	1920	1920	1920	1920
15	Head of Nature and Wildlife Conservation Division	11520	1920	1920	1920	1920	1920	1920
16	Head of Forest Research Institute	11520	1920	1920	1920	1920	1920	1920
17	Head of Administrative Division	10080	1680	1680	1680	1680	1680	1680
19	**Sub-total**	**57600**	**9600**	**9600**	**9600**	**9600**	**9600**	**9600**
20	**Sub-contract**							
29	**Sub-total**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
30	**Travel**							
39	**Sub-total**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
40	**Capital items**							
424	1 Project office	14400	2400	2400	2400	2400	2400	2400
425	1 Park office	7200	1200	1200	1200	1200	1200	1200
49	**Sub-total**	**21600**	**3600**	**3600**	**3600**	**3600**	**3600**	**3600**
50	**Consumable items**							
59	**Sub-total**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
60	**Miscellaneous**							
69	**Sub-total**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	Sub - Total (11-69)	**79200**						
70	**National management costs**							
71	National management costs	4200	700	700	700	700	700	700
79	**Sub-total**	**4200**	**700**	**700**	**700**	**700**	**700**	**700**
100	**Grand Total (19-79)**	**83400**						

3.4.4Executing Agency budget by component (Phase I)

Category	Description	Total costs	Phase I		
			Y1	Y2	Y3
10	**Personnel**				
13	Project Director/Coordinator	6480	2160	2160	2160
14	Deputy Project Director	5760	1920	1920	1920
15	Head of Nature and Wildlife Conservation Division	5760	1920	1920	1920
16	Head of Forest Research Institute	5760	1920	1920	1920
17	Head of Administrative Division	5040	1680	1680	1680
19	**Sub-total**	**28800**	**9600**	**9600**	**9600**
20	**Sub-contract**				
29	**Sub-total**	**0**	**0**	**0**	**0**
30	**Travel**				
39	**Sub-total**	**0**	**0**	**0**	**0**
40	**Capital items**				
424	1 Project office	7200	2400	2400	2400
425	1 Park office	3600	1200	1200	1200
49	**Sub-total**	**10800**	**3600**	**3600**	**3600**
50	**Consumable items**				
59	**Sub-total**	**0**	**0**	**0**	**0**
60	**Miscellaneous**				
69	**Sub-total**	**0**	**0**	**0**	**0**
	Sub - Total (11-69)	**39600**			
70	**National management costs**				
71	National management costs	2100	700	700	700
79	**Sub-total**	**2100**	**700**	**700**	**700**
100	**Grand Total (19-79)**	**41700**			

3.4.4.1 Executing Agency budget by component (Stage 1 of Phase I)

Category	Description	Total costs	Stage 1	
			Y1	Y2
10	**Personnel**			
13	Project Director/Coordinator	3360	1680	1680
15	Head of Nature and Wildlife Conservation Division	3360	1680	1680
19	**Sub-total**	**6720**	**3360**	**3360**
20	**Sub-contract**			
29	**Sub-total**	**0**	**0**	**0**
30	**Travel**			
39	**Sub-total**	**0**	**0**	**0**
40	**Capital items**			
424	1 Project office	3000	1500	1500
49	**Sub-total**	**3000**	**1500**	**1500**
50	**Consumable items**			
59	**Sub-total**	**0**	**0**	**0**
60	**Miscellaneous**			
69	**Sub-total**	**0**	**0**	**0**
	Sub - Total (11-69)	**9720**		
70	**National management costs**			
71	National management costs	4180	2090	2090
79	**Sub-total**	**4180**	**2090**	**2090**
100	**Grand Total (19-79)**	**13900**		

3.4.4Executing Agency budget by component (Phase II)

Category	Description	Total costs	Phase II		
			Y4	Y5	Y6
10	**Personnel**				
13	Project Director/Coordinator	6480	2160	2160	2160
14	Deputy Project Director	5760	1920	1920	1920
15	Head of Nature and Wildlife Conservation Division	5760	1920	1920	1920
16	Head of Forest Research Institute	5760	1920	1920	1920
17	Head of Administrative Division	5040	1680	1680	1680
19	**Sub-total**	**28800**	**9600**	**9600**	**9600**
20	**Sub-contract**				
29	**Sub-total**	**0**	**0**	**0**	**0**
30	**Travel**				
39	**Sub-total**	**0**	**0**	**0**	**0**
40	**Capital items**				
424	1 Project office	7200	2400	2400	2400
425	1 Park office	3600	1200	1200	1200
49	**Sub-total**	**10800**	**3600**	**3600**	**3600**
50	**Consumable items**				
59	**Sub-total**	**0**	**0**	**0**	**0**
60	**Miscellaneous**				
69	**Sub-total**	**0**	**0**	**0**	**0**
	Sub - Total (11-69)	**39600**			
70	**National management costs**				
71	National management costs	2100	700	700	700
79	**Sub-total**	**2100**	**700**	**700**	**700**
100	**Grand Total (19-79)**	**41700**			

3.4.5 List of Capital Items

The capital equipment and other resources currently available to the Myanmar FRI and the Taninthayi National Park are considered to be inadequate to withstand increased pressures on forests and forest resources. Those limitations are especially reflected in requirements for transportations and field equipment because there will be many sites to inspect with limited means to support such inspections. In order to effectively address such challenges, it has become an urgent matter to secure those resources. The limitations on current on-the-ground monitoring activities have been important factors affecting the knowledge of habitats of the wide-ranging species. A detailed list of capital items are shown below.

No.	Capital Items	Units	Cost / Unit	Total	Use in Output			Spec.	Remarks
					1	2	3		
1	Project vehicles (Pick-up Van)	1	38000	38000	√	√	√	Pick-up diesel engine 3,000 cc, 4 wheel drive, 4 door, equipped with air conditioner, fiber roof and seats at the rear section	Provide necessary equipment and facilities for effective study and protection
2	Project vehicles (Pick-up Van)	1	43000	43,000	√	√	√	Pick-up diesel engine 3,000 cc, 4 wheel drive, 4 door, equipped with air conditioner, fiber roof and seats at the rear section	Provide necessary equipment and facilities for effective study and protection
3	Environmental education centre	1	50000	50,000	√	√	√	to be consulted with experts	Provide facility to TNP
4	Research centre (Biodiversity lab)	1	123250	123,250	√	√		See the Table 7 for detail specification	Provide facility to TNP
5	Laptop	2	1000	2,000	√	√	√	HDD: 500GB or more Memory: 4GB or more CPU: Intel Core i7 or equivalent Optical Drive: DVD/RW Read & Write Display: Color LCD, 14 inch or more Wireless LAN: 802.11a/b/g/n Software: MS Office 2007 Pro, Windows 7 Pro	Provide necessary equipment and facilities to the TNP
6	Desktop	2	1500	3,000	√	√	√	Intel Core 2 Quad processor Q8400 (2.66GH, 4MB L2 Cache, 1333MHz FSB) NVIDIA GeForce GT220 Graphic Memory 4GB DDR3 / 1000GB HDD DVD±RW/±R Super multi Drive with Light scribe Technology, Double Layer, 19"LCD Monitor MS Office 2007 Pro, Windows 7 Pro	Provide necessary equipment and facilities to the TNP
7	GPS	8	800	6,400		√		Garmen GPS 60csx or higher	Provide necessary equipment and facilities to the TNP

No.	Capital Items	Units	Cost / Unit	Total	Use in Output			Spec.	Remarks
					1	2	3		
8	Camera	5	500	2,500	√	√	√	Digital camera with 12 MP or higher	Provide necessary equipment and facilities to the TNP
9	Camera trap	20	250	5,000		√		Color camera trap with night vision, motion detection	Provide necessary equipment and facilities to the TNP
10	Projector	2	3000	6,000	√	√	√	Panasonic Projector	Provide necessary equipment and facilities to the TNP
11	Printer-monochrome laser	2	400	800	√	√	√	A4 Multi-function black and white laser printer	Provide necessary equipment and facilities to the TNP
12	Printer- laser color	2	500	1,000	√	√	√	A4 Color laser printer	Provide necessary equipment and facilities to the TNP
13	Air conditioning	4	500	2,000	√	√	√	Panasonic or Mitsubishi 1 HP or higher	Provide necessary equipment and facilities to the TNP
14	Photocopy machine	1	4000	4,000				A3 size, Black & White 2 drawers	Provide necessary equipment and facilities to the TNP
15	Motorbikes	10	1500	15,000	√	√	√	Yamaha or Suzuki	Provide necessary equipment and facilities to the TNP
16	Tables for meeting rooms	10	100	1,000	√	√	√	50x200 cm collapsible table-vinyl top, stainless steel frame	Office, meetings, workshops
17	Chairs for meeting rooms	60	30	1,800	√	√	√	Standard meeting room chairs	Office, meetings, workshops
	Total			**304,750**					

3.5 Assumptions, risks and sustainability

3.5.1 Assumptions and risks

The ultimate success of the project depends on the continued shared commitment and political will of Myanmar 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 and the lessons learned from the Emerald Triangle Protected Forest Complex project lessen the risk of weakening that commitment and political will by providing a catalytic mechanism to guide the establishment of an appropriate environmentalpolicy for the planning and execution of trans-boundary agreements. Moreover, Myanmar has ratified a number of international conventions related to biodiversity and the environment and each of the countries is committed to the United Nations Millennium Development Goals to eradicate poverty and ensure environmental sustainability, as well as to the 2020 biodiversity target to significantly reduce the current rate of biodiversity loss at global, regional and national levels.

One of the critical underlying assumptions of the project is that the executing agency will provide qualified staff to participate in project activities, both at national and local levels, especially with regard to the collaborative research that is planned to be conducted on wide-ranging wildlife species distribution. It is anticipated, as well, that the involvement of WCS in Myanmar and other donors to sustain ICDP and wildlife monitoring activities will increase the livelihoods of local communities and reduce their dependence on natural resources, and obtain occurrences of important wildlife in the Taninthayi Range, respectively.

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

- Conflicts along the border of Myanmar between Myanmar's army and minority groups might arise so that park rangers and scientists are too alarmed to visit project sites. These are also external risks over which the project has little or no control, but their impacts might be mitigated to some extent by understanding that their occurrences are irregular and oftentimes transitory and by redoubling project efforts during those periods so that they are inactive. Currently, a peace agreement between Myanmar government and minority groups has been signed in the northern part of proposed project site with engagement from NGOs. It is believed that this mechanism will be extended to cover all areas.
- The government agencies responsible for executing of the project (FD, MOECAF) might be unable to provide sufficient incentives for the staff to commit themselves to the project or they may be unable to provide adequate resources to the proposed TNP to ensure effective protection and management. Its mitigation actions will take place by reviewing the terms of references for the PSC and the PTC and other bodies by ensuring that the most industrious, responsible and committed staff of those agencies are assigned to the project.
- Significant infrastructure may be developed under the GMS Economic Corridor Development program which would fragment and damage critical ecosystems in the Taninthayi Range. This is also an external risk over which the project would have little control, but its impacts might be mitigated to some extent by efforts to influence the location of infrastructure development and restrict such development to the greatest extent possible to less critical areas of wildlife habitat that are located outside of primary animal migration paths. The GMS/Environmental Operation Center (EOC) developed strategic environment framework to lessen those impacts.
- Some local communities might choose to not actively participate in either ICDP livelihood activities, but rather cling to clearing forest to support unsustainable agricultural practices and large scale rubber plantation. The impacts of this risk will be mitigated by screening procedures intended to exclude more disinterested communities as part of the Sustainable Livelihood Assessments and regular monitoring that will be conducted. In addition, the compensation program to minimize crop damaged by elephants may not be accepted by local communities.
- Market incentives might be too strong for local communities to abstain from forest encroachment and unsustainable agriculture practices. The impacts of this risk would be mitigated by ensuring that the ICDP activities respond to local communities' income requirements, as reflected in the Sustainable Livelihoods Assessments that are conducted in Myanmar, to the greatest extent possible.
- Project activities might not be implemented as scheduled in the work plan because of the complexities of administrative procedures and regulations. The impacts of these risks would be mitigated by recognizing that impediments such as those that are not necessarily uncommon, anticipating the timing of their potential occurrences, and redoubling efforts during more productive periods of project

implementation to ensure that the activities that are described in the work plan are implemented as envisioned in the project document.

3.5.2 Sustainability

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

1) Political will and policy arrangement

- At the international level, the Taninthayi (Tenasserim) Mountain Range, along the border between Myanmar and Thailand, has been recognized as a global important terrestrial eco-region containing some of the highest diversity of both bird and mammal species found in the Indo-Pacific region as an important biodiversity hotspot by the IUCN. At the regional level, the ADB with consultation from GMS countries and endorsement from GMS Environmental Ministers has recognized the Taninthayi Range as one of the important priority biodiversity corridors in GMS countries.
- The Ministry of Environmental Conservation and Forestry of Myanmar already made a presentation on the importance of Taninthayi Range as a high potential transboundary biodiversity conservation area at the 18th Annual Meeting of GMS which took place on 17th of May, 2012 in Jinghong, Yunnan, China. In addition to the Taninthayi Nature Reserve, and the Taninthayi National Park (Proposed), this transboundary cooperation initiative includes Lenya National Park (Proposed) in the southern part of Myanmar. In addition, the Taninthayi Range, the Sundaic Subregion has been included as a priority corridor for biodiversity conservation in the Myanmar National Biodiversity Strategy and Action Plan (NBSAP) which was formulated by the Forest Department in cooperation with UNEP/GEF and was adopted by the Government Meeting No. 16/2012 on the 3rd of May, 2012. Therefore, it is most likely that the Government will continuously expand biodiversity conservation in the Taninthayi Range based on the outcome of the project in the context of sustainable biodiversity conservation and management.

2) Institutional arrangements

- Through the project, several effective institutional arraignments for the transboundary biodiversity conservation in the Taninthayi Range,will take place at the national government level through the Forest Department of the Ministry of Environment and Forestry of Myanmar.
- At the NGOs level, Wildlife Conservation Society (WCS) will be engaged in project implementation as they have long worked in the Taninthayi Range due to outstanding high biodiversity and abundance of tiger population. A lot of resources, including budgeting and manpower have been allocated to implement their programs. Therefore, the sustainability of the project will be enhanced at the government and non-government organization level.

3) Socio-economic arrangement

- An Integrated Community Development Program (ICDP) will be initiated with community-based natural resource management plans, and nature-based tourism activities are recommended in some areas to increase livelihood opportunities for local residents in order to reduce pressures on the use of forests to support subsistence with agricultural practices. Concerted efforts will be extendedto strengthen the long-term viability of the livelihood initiatives which have been introduced by establishing closer program linkages with civil society, including non-governmental organizations (NGOs) and rural credit programs. Co-management with local communities and provisions of tangible benefits to rural inhabitants are among the mechanisms advocated to reduce conflicts. Garnered by whatever means, the acceptance and support of local peoples are especially important for the long-term effectiveness in conservation of protected areas. An understanding of factors leading to local support is consequently a first step in the process of developing policies to achieve this end (Technical Report of TNR)
- A number of NGOs and private sectors are implementing livelihood projects to eliminate local poverty in some villages and provide income opportunities. With engagement and outreach programs conducted by the project over the next four years, it is promising that the current and forthcoming project will contribute to transboundary biodiversity conservation and private sectors will contribute more budgets through CSR activities.

- With co-management, an involvement of local villagers and local administration to solve human-elephant conflict issues would be sustained if the management activities lead to their livelihood enhancement. An increase in income earnings from tourism activities to local communities is particularly challenged.
- It is expected that several community livelihood activities supported through the ICDP programs of Myanmar, especially those associated with wildlife eco-tourism will be able to achieve self-sufficiency and will naturally spread to other communities by the close of the project. The project team will regularly monitor the status of livelihood activities and explore other potential sources of funding, including the private sector through corporate social responsibility programs, to sustain those activities until they are able to become self-sufficient.

4) Financing mechanism

- After the completion of the project, all project facilities allocated to the central office, filed offices and protected areas will be transferred from ITTO to the respected research and national parks of Myanmar. Therefore, the equipment and facilities will be continuously operated and maintained by using a government budget in order to enhance professional biodiversity conservation research, management and monitoring.
- Since the trans-boundary biodiversity conservation initiative, especially lessons learned from the Emerald Triangle project, is proving to be a model for forest resources management, its vision is consistent with government policies and the initiative will be integrated into other government programs, which will provide several other possible funding sources to sustain the project.
- While annual government allocations and other related funding sources may be insufficient to sustain effective wildlife monitoring, WCS programs in Myanmar have a long-term plan to conduct wildlife monitoring and research in the Taninthayi Range and will use it as a hub for Smart Training in SEA. Meanwhile, there are several promising opportunities to support sustainable financing, such as the Small Grants Program (SGP) under the United Nations Development Program (UNDP), private companies and biodiversity offsets mechanisms or payments, for ecosystem services.

PART IV: IMPLEMENTATION ARRANGEMENTS

4.1 Organizational structure and stakeholder involvement mechanisms

4.1.1 Executing agency and partners

Upon signing the contract of the project with ITTO, the Project Steering Committee (PSC) and the Project Technical Committee (PTC) will be established to ensure an efficient and successful implementation of the project in accordance with the rules and procedures of ITTO and the Ministry of Environmental Conservation and Forestry of Myanmar.

The Executing Agency of the project will be Forest Department of the Ministry of Environmental Conservation and Forestry which will responsible for coordinating and implementing the project activities and also managing the ITTO fund. The Executing Agency will be involved in the project from the preparation until completion of the project. The Executing Agency will work together with Forest Research Institute, universities, local community groups, local NGOs such as WCS-Myanmar and other relevant institutions, to implement the project activities. In order to receive professional expertise, some of the activities will be implemented through sub-contracts with local NGOs and consultancies.

Planning and Statics Division, Nature and Wildlife Conservation Division and Forest Research Institute of the Forest Department will be implementing the Project activities. Planning and Statics Division will take the responsibilities of administration role and Nature and Wildlife Conservation Division will take the technical role in implementing the Project. Forest Research Institute will be responsible for overall research components, capacity building activities and institutional strengthening.

Partners' organizations include Wildlife Conservation Society-Myanmar and other conservation NGOs like Bird Life International-Myanmar which have long worked for the planning, management and expansion of the national protected areas in the country. In addition, the project will seek collaboration with relevant regional initiatives like ASEAN-WEN.
The Forest Department of the Ministry of Environmental Conservation and Forestry will be the Executing Agency and will fulfill its mandate towards the effective and successful implementation of the project in accordance with relevant rules and procedures.

Specifically, Planning and Statics Division and Nature and Wildlife Conservation Division of the Forest Department will be implementing the Project activities. Planning and Statics Division will take the responsibilities of administration role and Nature and Wildlife Conservation Division will take the technical role in implementing the Project. Forest Research Institute will be responsible for overall research components, capacity building activities and institutional strengthening.

Executing Agency (FD) will also be working together existing partner international organizations and NGOs including Wildlife Conservation Society-Myanmar, Bird Life International-Myanmar, World Wildlife Fund, Biodiversity and Nature Conservation Association (BANCA), Flora & Fauna Institute (FFI), Makino Botanical Garden, National Institute of Biological Resources (NIBR-Korea), National Arboretum of Korea, Korea Forest Research Institute, Seoul National University and of course Royal Forest Department, Thailand.In addition, the project will seek collaboration with relevant regional initiatives like ASEAN-WEN.

Under the Forest Department, two divisions, namely, (i) the Planning and Statistics Division, and (iii) theNature and Wildlife Conservation Division, will be fully engaged to fulfill the duty of the Executing Agency. The Director General of the Forest Department will assign the Director of the Nature and Wildlife Conservation Division or another Director of the Forest Department, as the National Project Manager who will be fully responsible for the management of the project. In addition, the DG of Forest Department will hire a qualified full-time Project Coordinator to assist the work of the National Project Manager. In addition, the DG of Forest Department will assign qualified team leaders from qualified Deputy Directors or Assistant Directors at Forest Department and FRI to advance the implementation of the respected activities. The Project implementation team will be formed with experts and scientists from the above mentioned Divisions mainly form the Nature and Wildlife Conservation Division, the Forest Research Institute and the University of Forestry under the close supervision of Project Steering Committee. The Director General of the Forest Department will provide close supervision and continuous guidance to the national project manager to achieve the project objective.

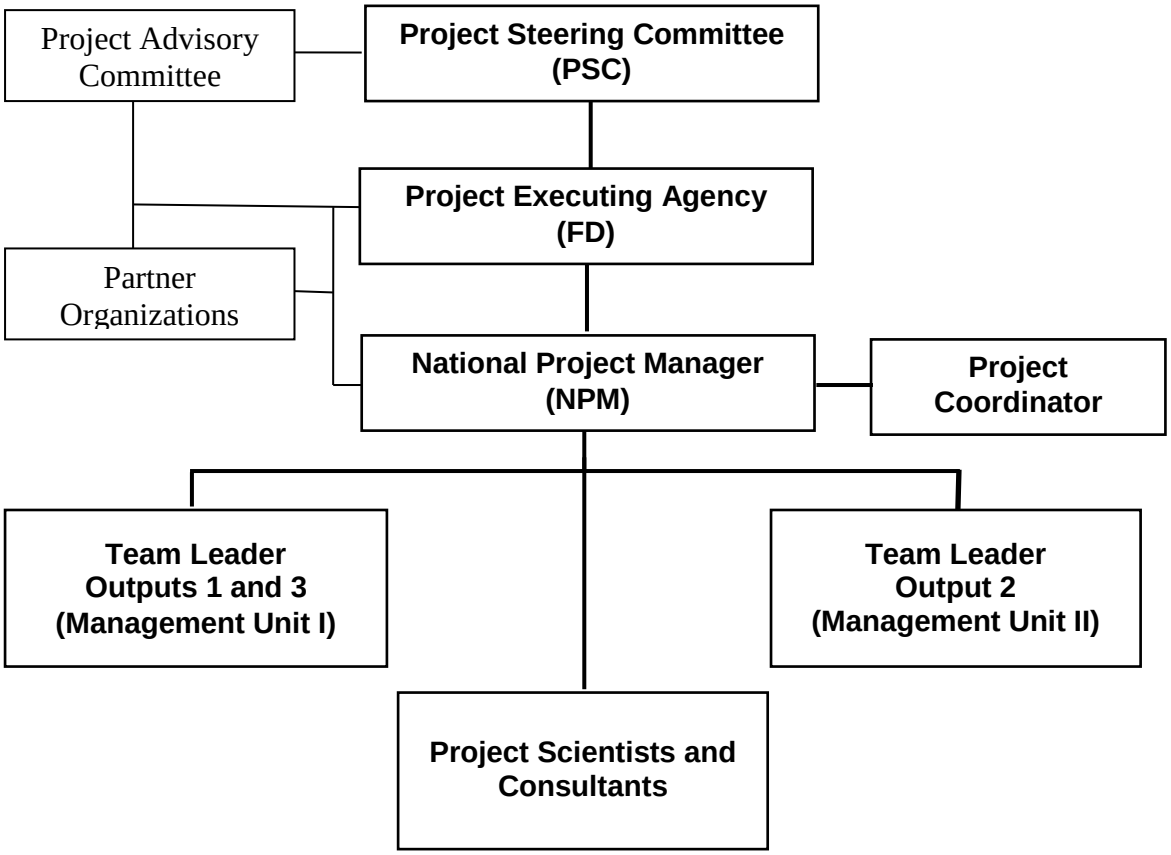


Figure3 **Organizational structure of Transboundary Biodiversity Conservation in the Taninthayi Mountain Range,in Myanmar.**

4.1.2 Project management team

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

- Project Manager (One, Myanmar nationality, 48 months)
- Project Secretary (One, Myanmar nationality, 48 months)
- Field Assistance (Five, Myanmar nationality,48 months)
- GIS Consultant (One, Myanmar nationality, 3 months a year and total 12 months)
- Auditor (One, Myanmar nationality, 3 months a year and total 12 months)
- Wildlife Survey Consultant (One, Myanmar nationality, 3 months a year and total 12 months)
- Ecology Consultant(One, Myanmar nationality, 3 months a year and total 12 months)
- Social-economic Consultant (One, Myanmar nationality, 3, months a year and total 12 months)
- Economic Valuation of Ecosystem Services Consultant (One, Myanmar nationality (International consultant is also favorable, 3 months a year and total 12 months)
- Project Accountant (One, Myanmar nationality, 48 months)

The proposed organization is attached in Appendix 1 and the Terms of Reference for key staff members are provided in Appendix 2 and 3.

4.1.3 Project steering committee

The PSC members will include Director General, a Project Coordinator, representatives of ITTO, donors and other organizations as might be agreed upon. The first PSC meeting will be organized no later than the end of

the third month after the start of the project to approve the operational plan and the terms of reference for all consultants. Specific functions of the PSC will include the following duties:

- Meet at least more than once a year.
- Oversee project implementation and approve work plans and budgets.
- Review project progress and provide guidelines.
- Secure international collaborations of participating countries.

The Project Steering Committee will comprise representatives from:

- Donor countries
- ITTO
- Forest Department and Ministry of Environmental Conservation and Forestry
- National Forest Research Institute
- University of Forestry
- Conservation NGOs – WCS-Myanmar/Birdlife International
- Community development NGOs
- Royal Forest Department/Department of National Park and Wildlife of Thailand
- Others (local communities)

In addition, the Project Technical Committee will be established to legally review the technical achievement of the project to support the work of the PSC. An advisory body will also be established a platform for receiving information and giving advice to project management through the project steering committee.

4.1.4. Project Advisory Committee

Project Advisory Committee will be formed in order to make necessary advices directly to the Project Steering Committee and Executing Agency. In addition, the Project Advisory Committee will also facilitate among three groups of Project Steering Committee, Executing Agency and Partner Organizations. Specific functions of the PSC will include the following duties:

- **Meet at least once a year.**
- **Review project progress and provide necessary advices**
- **Facilitate among PSC, EA and Partner organizations**

Therefore, the Project Advisory Committee will compose of the representatives of the following Organizations and knowledgeable persons:

- **Director General of Planning and Statistics Department**
- **Director General of Forest Department**
- **Representative from local government**
- **Representatives from UN-agencies such as UNDP, FAO etc.**
- **ITTO**
- **Representative of Conservation NGOs Network (eg. ECCDI)**
- **Retired Director General of the Forest Department**
- **Community development NGOs**
- **Royal Forest Department/Department of National Park and Wildlife of Thailand**
- **Others (if appropriate)**

4.2 Reporting, review, monitoring and evaluation

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

An ITTO monitoring mission will be also organized regularly and the government of Myanmar will organize monitoring missions in accordance with their own rules and procedures.

4.3 Dissemination and mainstreaming of project learning

4.3.1 Dissemination of project results

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

- PROJECT WEB SITE within the Forest Department web site.
- PROJECT BULLETIN which will be regularly updated and distributed to those without e-mail.
- Scientific publications in national and international journals and bulletins, such as the *ITTO Tropical Forest Update*, *e-Transboundary Protected Areas Bulletin*, *ASEAN Biodiversity*, *Parks*, and *The International Journal of Tropical Ecology*.
- *National and International Conferences* related to biodiversity and natural resource conservation and management.
- Dissemination of technical reports and project results sent to the ITTO, the IUCN, FAO, the Mekong River Commission, the ADB, the MOECAF and the Ministries of Environment in GMS countries.
- Dissemination of brochures and leaflets to provincial and local communities to increase awareness of the TBCA.

4.3.2 Mainstreaming of project learning

Prior to the completion of the project, the Project Management willorganize a workshop for decision-makers, multi-stakeholders and potential private sectors at which consultants and key project staff will have opportunities to share lessons learned from the implementation of project activities. There will be opportunities at that workshop to provide recommendations for sustaining the project activities.

The Forest Department is responsible for operating, maintaining and developing the biodiversity conservation framework for the Taninthayi Range, and expects to be able to replicate the model conservation approach in other protected areas in the country. The Forest Department will be responsible for mainstreaming project results into national policies and plans, and the:

- Nature and Wildlife Conservation Division will update the National Biodiversity Strategy and Action Plan as required by CBD and others taking into account experiences and lessons of the project in terms of policy development;

- Planning and Statistics Division will update the National Forest Policy by incorporating biodiversity conservation and social safeguards based on the project's achievements as appropriate.

DOCUMENTS CONSULTED

ADB. 2005. Greater Mekong Subregion Biodiversity Conservation Corridors Initiative: Strategic Framework and Assessment, ADB, Philippines.

Aung, T. Win, L. and Zaw, S.M. Gurney's Pitta (Pitta gurneyi) Survey in Taninthayi Division, Southern Myanmar. 2010.

Department of National Park, Wildlife and Plan Conservation (DNP). 2009. Nomination of the Kaeng Krachan Forest Complex (KKFC) for Inscription of the World Heritage List. Department of National Park, Wildlife and Plan Conservation, Bangkok.

Galt**,** A., Sigaty, T., and Vinton, M. (Eds). *The World Commission on Protected Areas, 2nd Southeast Asia Regional Forum, Pakse,Lao PDR: Volume I: executive summary.* Vientiane: IUCN. 2000.

International Tropical Timber Organization. *ITTO Yokohama Action Plan 2013- 2018. ITTO Development Series, No. 18*. 2008.

ITTO/RFD. *ProjectDocument PD 15/00 Rev.2 (F): Management of the Pha Taem Protected Forest Complex to Promote Cooperation for Trans-boundary Biodiversity Conservation between Thailand, Cambodia and Laos (Phase I).* Bangkok: International Tropical Timber Organization and Royal Forest Department. 2000.

Lynam, A and Rao, M. A management framework and conservation workplan for the Taninthayi Nature Reserve, Myanmar. 2008

NESDB. 2012. The Eleventh National Economic and Social Development Plan (2012-2016). Office of National Economic and Social Development Board, Prime Minister Office, Bangkok, Thailand.

Ministry of Environmental Conservation and Forestry. National Biodiversity Strategy and Action Plan. 2011.

Royal Forest Department. *Thai Forestry Sector Master Plan, Bangkok 1993 Vol. 1-5.* 1993.

Sandwith**,** T., Shine, C., Hamilton, L, and Sheppard, D. *Trans-boundary Protected Areas for Peace and Cooperation*. Gland and Cambridge: IUCN-The World Conservation Union. 2001.

Trisurat, Y. *Management of the Pha Taem Protected Forest Complex to Promote Cooperation for Trans-boundary Biodiversity Conservation between Thailand, Cambodia and Laos (Phase I): GIS database* and Its Implications for Trans-boundary Conservation. Bangkok: Faculty of Forestry, Kasetsart University. 2003a.

Trisurat, Y. Defusing the Transboundary Minefield. *ITTO Tropical Forest Update*. 13, 10-12. 2003b.

Trisurat, Y. The Emerald Triangle Protected Forests Complex: An Opportunity for Regional Collaboration on Trans-boundary Biodiversity Conservation in Indochina. In S. Ali (Ed.). *Peace Parks: Trans-boundary Issues and Conflict Resolution*. MIT Press, Washington, D.C. 2007.

Trisurat, Y. *Management of the Emerald Triangle Emerald Protected Forest Complex to Promote Cooperation for Trans-boundary Biodiversity Conservation between Thailand, Cambodia and Laos (PhaseI I): GIS database* and Its Implications for Trans-boundary Conservation. Bangkok: Faculty of Forestry, Kasetsart University. 2010.

University of Forestry of Myanmar. Report of Terminal Evaluation of Taninthayi Nature Reserve Project. 2009.

Western Forest Complex Project. 2004. GIS Database and Its Applications for Ecosystem Management. Department of National Park, Wildlife and Plant Conservation, Bangkok.

Wikramanayake, E., Boonratana, R., Rundel, P. and Aggimarangsee, N. *Terrestrial ecoregions of the Indo-Pacific: a conservation assessment*. Island Press, Washington, D.C. 2000.

Wildlife Conservation Society. 2013. Myanmar Biodiversity Action Plan. Wildlife Conservation Society, Rangon, Myanmar.

Win, S. Pyone, M.M. and Theint, P.M. Report of Mid-term Evaluation of Taninthayi Nature Reserve Project. 2011.

APPENDIX 1. PROFILES OF THE EXECUTING AND COLLABORATING AGENCIES

PROFILE OF THE EXECUTING AGENCY - FOREST DEPARTMENT, MINISTRY OF ENVIRONMENTAL CONSERVATION AND FORESTRY

The Ministry of Environmental Conservation and Forestry (MOECAF) of Myanmar is the most responsible institution for managing the forests and forest resources while ensuring conservation of biodiversity and ecological functions of the forests in the country. Diverse forest ecosystems exist due to different natural settings. Mixed deciduous forests and hills and temperate evergreen forests constitute 37% and 25% respectively as the major forest types. The Forest Department (FD) is one of the four institutions under the MOF responsible for protection and conservation of biodiversity and sustainable management of the forest resources in the country. The FD has applied Myanmar Selection System (MSS) for more than a century and a half since 1856. As a result, about 50% of the country's total area is still forested. Policy, legislations and institutional framework are well in place. Within the FD, many divisions are formed with specific duties and responsibilities. It has more than 15,000 staff personnel engaged in different forestry-related activities.

At present, reserved forests (18.23%), protected public forests (5.89%) and protected area systems (3.93%) constitute its permanent forest estate – PFE (28.06% of total land area of the country). While conserving the natural forests, the FD has been establishing different types of forest plantations for particular objectives basically to complement the decreasing yield from natural forests. Today, private ventures in forest plantations are increasingly encouraged by the State to promote the active involvement of the private sector in the forestry sector. The valuable forest resources of the country are well managed and utilized in accordance with the long-term plan (National Forest Master Plan), the medium-term plan (district forest management plan) and the short-term plan (annual work plans).

The FD is taking environmental measures such as greening the *Bago Yomas* (home of premier natural teak), promoting forestry development in border areas, stabilizing shifting cultivation, managing watersheds, ecosystem restoration of Inlay Lake, and conservation of mangrove ecosystems. Biodiversity conservation is always prioritized at the national level as it was stipulated in1995 by Myanmar'sforest policy that up to 5% of the country's landmass in the short term and 10% in the long term will be placed under PAs for conserving biodiversity, both flora and fauna. Myanmar has made commitments to several international agreements and organizations and carried out relevant activities by itself or with the collaboration and coordination with national and international organizations. With regard to forestry education, research and development, the University of Forestry (UOF), the Forest Research Institute (FRI), the Myanmar Forest School, and several training centers have been established with a specific mandates to produce competent foresters, trained forest technicians and carry out research activities.

The FD has achieved major developments towards sustainable forest management (SFM) which is the key mandate in Myanmar forestry. Some others are: developing community forests, promoting herbal and medicinal plants, formulating district forest management plans covering the whole country, formulating a national forest master plan, promoting the concepts of model forests, and identifying Myanmar's Criteria and Indicators (C&Is) for SFM.

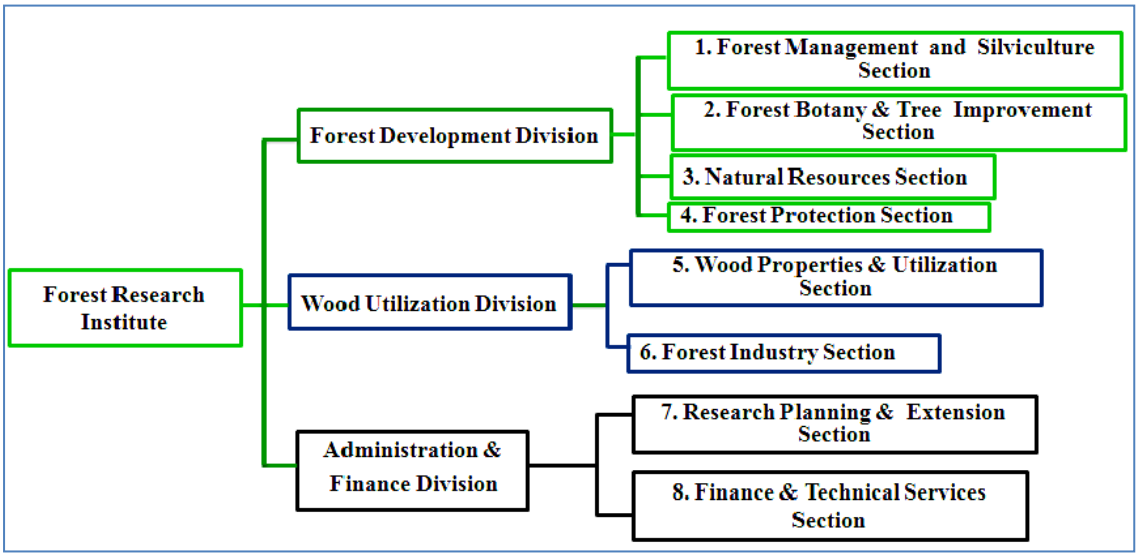
Like other developing countries in the tropics, Myanmar is being faced with several challenges and issues. Among them, deforestation, forest degradation and poverty of rural communities are the most challenging issues in conserving the forests in Myanmar. The FD has given serious attention to institutional strengthening, effective and efficient planning, capacity building, awareness raising, stakeholders' involvement in forest conservation, and livelihood improvement for forest dwellers.

PROFILES OF FOREST RESEARCH INSTITUTE

The Ministry of Environmental Conservation and Forestry (MOECAF) is the responsible ministry for all forestry matters in Myanmar. Under the same umbrella of the Ministry, the Planning and Statistics Department coordinates and facilitates the activities of the Forest Department, the Dry Zone Greening Department and the Myanmar Timber Enterprise. Of them, the Forest Department is responsible for the protection and conservation of biodiversity and sustainable development of all forest resources. The project proposed by the Forest Department (FD) as an Executing Agency (EA) is in view of building efficient capacity for implementing the project and meeting its objective in a given period.

Being established since colonial time, the FD has been the oldest well organized department among the government organizations. The FD has accumulated huge experiences on protection and conservation of forests in a sustainable manner, contributing to national development as well.

Under the administrative control of the Director General of the Forest Department, the Forest Research Institute (FRI) was established in 1978. The main objective of the Forest Research Institute is to provide technical information for all aspects of forestry and forest-based activities to increase the contribution of the forest and forest-lands to the well-being of the nation. Now the FRI is conducting research activities with the strength of 77 researchers and 202 supporting staff equipped with research facilities. Up to now, about 200 research papers have been documented; some 26 research studies in diverse fields of forestry are on-going. They are possessing advanced education and expertise in various forestry operations the FD and the FRI, as well. A total of 231 research papers (basic and applied) were already submitted to the Annual Research Congress, beginning in 1978 and continuing today. The Institute is formed with three divisions, namely the Forest Development Division, theAdministration and Finance Division, and the Wood Utilization Division, which are divided into eight sections under the supervision of a director. Eight research stations are settled in areas of different ecological zones to conduct field research activities throughout the country. The FRI has at present 69 researchers and 133 support staff out of a total of 279 sanctioned staff. In the 69 researchers, included are 2 Ph.D. holders, 22 M.Sc. holders, 34 B.Sc. and diploma holders.



Under the technical guidance of the Research Supervising Committee, the FRI has prioritized the following research programs based primarily on the anticipated development in the forestry sector.

(i) Sustainable forest management in natural forests
(ii) Development of plantation forests
(iii) Reforestation in the central dry zone
(iv) Efficient utilization of timber
(v) Systematic utilization of the non-wood forest products
(vi) Fuelwood resource development and wood energy conservation measures

The FRI does not have a biodiversity conservation division and the current programs do not specify biodiversity conservation, management and monitoring.

The FRI's permanent offices and laboratories are located at Yezin, Nay Pyi Taw. It has eight research stations distributed in different ecological zones of the country.

Services and extension activities

Some staff from the FRI were sent to the University of Forestry (UOF), in Yezin, Myanmar for part time teaching at theCentral Forest Training Development Centre (CFDTC) to contribute expertise and experiences to the training programat CFDTC. The FRI is responsible for disseminating the research findings to related institutions and private firms.

Membership to international organizations

The FRI is also a member of

- Asia-Pacific Association of Forestry Research Institutions (APAFRI);
- The International Union of Forest Research Organization (IUFRO);
- The International Tropical Timber Organization (ITTO);
- The International Network for Bamboo and Rattan (INBAR); and
- The International Center for Integrated Mountain Development (ICMOD)

With regards to international collaboration, the International Tropical Timber Organization (ITTO) has granted four projects to the FD of Myanmar. The first project, namely "Introducing Myanmar's Lesser-Used Timber Species to the World Market" has already been completed. The second project, the "Teak-based Multistoried Agro-forestry System: *An Integrated Approach Towards Sustainable Development of Forests"* was successfully accomplished. The third project, the "*Promotion of Sustainable Utilization of Bamboo through Community Participation in Sustainable Forest Management"*, was completed in March 2007. The fourth project, "*Ex-situ* and *In-situ* Conservation of Teak (*Tectona grandis* Linn f.) to support Sustainable Forest Management" was launched in April 2006. Last but not least, the Forest Research Institute of Forest Department implemented a pre-project, entitled "Assessment of Mangrove Forest Affected by Cyclone Nargis to Facilitate the Development of an Integrated Mangrove Ecosystem Management in Ayeyawady Delta, Myanmar PPD 143/09 (F)**"**. At present, the Forest Department has implemented a project entitled "Capacity building for developing REDD+ in context of sustainable forest management RED-PD 038/11 Rev.3 (F)". Successful completion of these projects reflects a good efficiency by the FD in implementing ITTO projects.

APPENDIX 2. Tasks and responsibilities of key experts provided by the executing agency.

National Project Manager

The National Project Manager (NPM) will be appointed by the Executing Agency to be in charge of general management and reporting of the project. He/she should be a professional with M.Sc. or preferably Ph.D. degree in Forestry or one of the forestry-related disciplines with an extensive knowledge and expertise in management and conservation of forest resources. He/she should have a minimum of 10 years of experience in forestry issues with sound technical knowledge and expertise in project areas and particularly have skills for the management of project activities and should be in constant coordination with all relevant stakeholders in order to accomplish the objectives of the project within the time frame. He/she should have an ability to interact with sectorial authorities at regional and national levels.

Duties include:

- Coordinate with the project staff and provide technical and administrative guidance for the implementation of planned activities
- Ensure effective collaboration and full participation of all relevant stakeholders as well as strong project linkage with national forestry programs
- Prepare project annual operational plans
- Ensure proper financial accounting of project funds
- Identify and supervise project consultants
- Ensure timely delivery of progress outputs
- Prepare project reports
- Implement the recommendations of the Project Steering Committee
- Promote the dissemination of project results

Project Administrative Officer

An administrative officer must be a B.Sc. (Forestry) degree holder with extensive experience in forest conservation and management with knowledge in project management and distributing financial resources.

The main responsibilities of the administrative officer will include:

- Direct communication and administrative support with and for the National Project Manager to implement project activities.
- Preparing monthly financial statements for the project and providing updated information to the technical team for adequate decision-making.
- Preparing progress reports to ensure their timely submission.
- Making logistic arrangements as required for optimal implementation of project activities.
- Being responsible for the acquisition of materials and supplies (ensuring a timely supply of goods).
- Preparing documentation for the delivery of tools and materials to target beneficiaries.

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

Position	Man-months and Rates (US$)
Project Manager (PM)	48 months; US$ 1,000/month
Qualifications • Myanmar citizen fluent in English. • University degree in Forestry or Natural Resources (M.Sc. degree is an advantage). • A minimum of 5 years experience in natural resourcesmanagement and managing donor projects. • Knowledge of institutional analysis and proven leadership and team work.	Responsibilities • Overall responsibility for project implementation. • Day-to-day project administration. • Works closely with the Forest Department (FD) of Myanmar, Royal Forest Department (RFD) of Thailand and project staff to ensure effective implementation. • Equipment procurement. • Prepare progress reports and work plans as required by the ITTO and the FD. • Present results to the PSC. • Monitor the progress of project activities. • Seek other funding support nationally and internationally to sustain the project.
Project Secretary	48 months; US$ 400/month
Qualifications • Myanmar citizen (fluent in English is an advantage). • University degree. • A minimum of 3 years of experience in natural resources management. • Experience in logistics and meeting arrangements. • Good understanding of institutions. • Proven ability to work with teams of local people and other specialists. • Good evaluation, analysis, report writing and presentation skills. • Good English language and computer skills.	Responsibilities • Overall responsibility for project logistics and funding. • Assist the PM in day-to-day project administration. • Collaborate with consultants, field assistances and contractors to ensure effective project implementation. • Assist the PM in arranging meetings, workshops, training, and study tours. • Provide regular reports, recommendations, and interpretations to the PM.
Field Assistance (five)	48 months; US$ 300/month
Qualifications • Myanmar citizen (fluent in English an advantage). • University degree. • A minimum of 3 years experience in natural resources management. • Experience in logistics and meeting arrangements. • Good understanding of institutions. • Proven ability to work with teams of local people and other specialists.	Responsibilities • Overall responsibility for project implementation. • Assist the PM in day-to-day project administration. • Collaborate with consultants and contractors to ensure effective project implementation. • Assist the PM in arranging meetings, workshops, training, and study tours. • Gather information on the progress of projectactivities and report to the PM. • Assist in the formulation of a work plan. • Collaborate with consultants, the project secretary and contractors to ensure effective project implementation. • Oversee equipment, vehicle acquisition and maintenance.
GIS Consultant	3 months a year and total 12 months (US$ 1000/month)
Qualifications • Myanmar citizen (fluent in English is an advantage). • Advanced degree (M.Sc. or higher) with knowledge in GIS and natural resources management. • A minimum of 5 years experience in applications of GIS and remote sensing of spatial data. • Experience in report writing, oral	Responsibilities • Work with the project team and other consultants to develop additional GIS databases as required. • Continue updating data. • Work with GIS consultants in Thailand to ensure that both countries develop GIS using a standardized design. • Propose mechanisms and guidelines for joint research activities among the two countries. • Conduct GIS training. • Assist in formulating protection measures to prevent future

Position	Man-months and Rates (US$)
communications and preparing presentations. • Proven ability to work with teams and other specialists (experience with donor projects is an advantage).	land use changes. • Prepare reports.
Independent Auditor	3 months a year and total 12 months (US$ 500/month)
Qualifications • Myanmar citizen (experiences in working in ITTO projects are an advantage). • A minimum of 5 years experience in auditing the international funded project. • A university degree (Accounting), or a CPA or another diploma or certification as an accountant. • Good at reporting writing in English and with good computer skills as well.	Responsibilities • Monitoring the funding expenditures of the project in line with the budget lines prescribed in the project document. • Preparing financial reports (two 6-month and annual reports) in accordance with formats of the ITTO and the FD. • Collaborate with the project accountant.
Wildlife Survey Consultant	3 months a year and total 12 months (US$ 1000/month)
Qualifications • Myanmar citizen (expert in related field). • Advanced degree (M.Sc. or higher) with knowledge in forest ecology and natural resources management. • A minimum of 5 years experience in the related field. • Good at reporting writing in English and good computer skills and presentation skills.	Responsibilities • Lead in the study of populations and distributions of key wildlife species in the TNP. • Prepare the list of fauna of the TNP. • Collaborate with other consultants, especially with the GIS expert. • Reporting the status of wildlife of TNP together with recommendations for effective wildlife conservation in the TNP. • Assist the PM in arranging meetings, workshops, training, and study tours.
Ecology Consultant	3 months a year and total 12 months (US$ 1000/month)
Qualifications • Myanmar citizen (expert in related field). • Advanced degree (M.Sc. or higher) in forest ecology and natural resources management). • A minimum of 5 years experience in the related field. • Good in reporting writing in English and good in computer skills and presentation skills.	Responsibilities • Lead in the analysis of the full picture of the vegetative/ ecological condition of the TNP. • Conduct on phyto analysis including stand structure, composition, diversity and carbon stock. • Collaborate with the other consultants, especially with the GIS expert. • Prepare the list of flora of the TNP. • Report the vegetative/ecological condition of the TNP together with recommendations of silvicultural improvement. • Assist the PM in arranging meetings, workshops, training, and study tours.
Social-economic Consultant	3 months a year and total 12 months (US$ 1000/month)
Qualifications • Myanmar citizen (expert in related field). • Advanced degree (M.Sc. or higher) with knowledge in social science and natural resources management. • A minimum of 5 years experience in the related field. • Good inreport writing in English and good computer skills and presentation skills.	Responsibilities • Lead in the analysis of the full picture of the socio-economic condition of communities living in and around the TNP. • Conduct needs assessment for livelihood development. • Collaborate with the other consultants. • Assist in the livelihood development program. • Assess the traditional land resource utilization and knowledge on the natural resources, and if possible link with CBD article 8 (j) and 10 (c). • Report the socio-economic conditions, traditional knowledge, and traditional utilization, together with recommendations for livelihood development in an ecologically friendly manner. • Assist the PM in arranging meetings, workshops, training, and study tours.
Economic Valuation of Ecosystem Services Consultant	3 months a year and total 12 months (US$ 1000/month)

Position	Man-months and Rates (US$)
Qualifications • Expert in related field (Myanmar citizen is an advantage). • A minimum of 3 years experience in economic valuation of ecosystem services and biodiversity field. • A university degree and good at report writing in English. • Good computer and presentation skills.	Responsibilities • Lead in the analysis of the economic valuation of ecosystems and biodiversity in the TNP. • Conduct analysis on the economic value from ecotourism for local communities in selected areas. • Develop the pilot program for payment for ecosystem services (PES) in the TNP. • Writing a report of economic values of ecosystem services consults link with the CBD program of the Economics of Ecosystems and Biodiversity (TEEB). • Collaborate with the other consultants. • Assist in developing recommendations for National TEEB mechanism. • Assist the PM in arranging meetings, workshops, training, and study tours, particularly for TEEB.
Project Accountant	48 months; US$ 300/month
Qualifications • University degree in Accounting and/orFinance. • A minimum of 3 years experience in financial management in the international funded project. • Good English language and computer skills. • Good evaluation, analysis, report writing and presentation skills.	Responsibilities • Control and monitor project disbursements and expenditures consistent with sound financial procedures. • Provide regular reports, recommendations, and interpretations to the PM. • Assist in organizing meetings, workshops, training, and study tours. • Oversee equipment and vehicle acquisition and maintenance. • Collaborate with the auditor. • Prepare financial and expenditure reports as necessary.

APPENDIX 4. DETAILS OF SOME OF THE PROPOSED FELLOWSHIP, TRAINING COURSES AND JOINT RESEARCH ACTIVITIES

<table>
<tr><td colspan="2">Training courses (Budget item 120)</td></tr>
<tr><td>Target groups
• 10-15 staff working on biodiversity related research and protected area management in a government institution or university.
• Myanmar citizen fluent in English.
• Experience in field work, report writing, oral communications and preparing presentations.
• Proven interest and ability to work biodiversity after studies.</td><td>Main training subjects:
• GIS mapping;
• Land-use planning;
• Forest management planning;
• Habitat suitability analysis;
• Environmental education, and;
• Basic wildlife survey.

Cost: US$ 11,500 per each training courses, 3 training courses per year, and total cost is US$ 138,000 for four years</td></tr>
<tr><td colspan="2">Conduct Joint Biodiversity Researches in the TR with Thailand Scientists (Budget item 22 under Sub-contract)</td></tr>
<tr><td>Qualifications
• Thai citizen fluent in English.
• Advanced degree (M.Sc. or higher) with knowledge in GIS, natural resources management and wildlife ecology.
• A minimum of 10 years experience in GIS applications for biodiversity and protected areas and wildlife ecology (experience with donor projects is an advantage).
• Experience in field work, report writing, oral communication and preparing presentations.
• Good understanding of land-use changes, transboundary biodiversity conservation and species distribution modeling.
• Proven ability to work with teams and other specialists (experience with donor projects is an advantage).</td><td>Responsibilities
• Work with a wildlife consultant in Myanmar to develop a systematic wildlife survey in Taninthayi Range.
• Gather and conduct an additional wildlife survey in the Kaeng Krachan forest complex and corridor areas between Kaeng Krachan , Kui Buri and Sai Yok, and Thong Phaphum.
• Work with GIS consultants in Myanmar to ensure that both countries develop GIS using the same standardized design.
• Work with the project team and other consultants in Myanmar to conduct wildlife and GIS training for Myanmar scientists and professional staff.
• Work with the project team in Myanmar to conduct joint research on wide-ranging wildlife species in the framework of transboundary biodiversity conservation in the Taninthayi Range.
• Work with the project team in Myanmar to prepare a technical report on the wildlife ecology, a distribution survey and a joint research report.
• Disseminate research results to authorized agencies and the international community at national and international levels.

Cost: US$ 100,000
Estimated Details for Thailand Scientists
• GIS consultant - 12 months; US$ 25,000
• Wildlife consultant – 12 months; US$ 20,000
• Field work/consumable expense; US$ 30,000
• International travel (Thailand-Myanmar) (US$ 500 * 3 trips * 2 persons); US$ 3,000
• Per diem & accomm. for Myanmar missions (US$ 200 * 3 trips * 5 days * 2 persons);US$ 6,000
• International conferences (US$ 3,000 * 2); US$ 6,000
• Others; US$ 10,000</td></tr>
<tr><td colspan="2">Social development activities in the selected villages (Budget item 24)</td></tr>
<tr><td>Target groups
• Four villages will be selected based on the high dependency on natural forest resources for livelihood.
• From each village, marginalized people will be chosen for the livelihood development program.</td><td>Main activities:
• Facilitating the school.
• Facilitating health care program.
• Facilitating water supply and sanitation.
• Conduct trainings for a more ecofriendly livelihood such as with agro-forestry, and beekeeping.
• Establish a community forestry model.</td></tr>
</table>

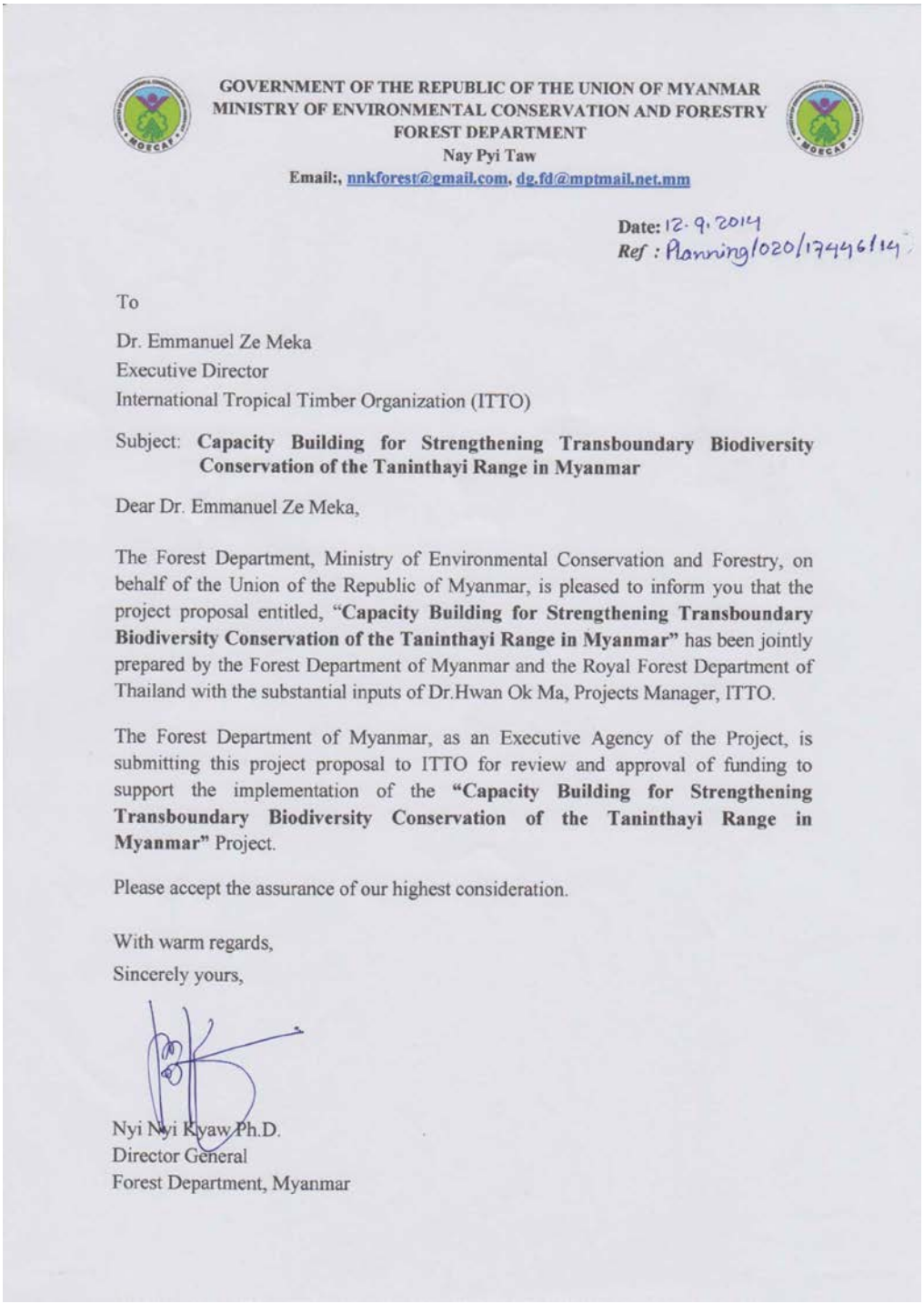
<table>
<tr><td></td><td>Cost: One village a year, and US$ 30000 per a village</td></tr>
<tr><td colspan="2">Conduct village consultations, village zonings and development of community-based natural resource management plans in the TNP (Budget item 211)</td></tr>
<tr><td>Qualifications
• Myanmar citizen fluent in English.
• University degree(s) in Forestry, Natural Resource Management and/or Sociology.
• A minimum of 10 years experience in community consultation practices and management planning (experience with donor projects is an advantage).
• Experience in field work, report writing, oral communications and preparing presentations.
• Good understanding of biodiversity conservation and the establishment of a protected area as a national park/wildlife sanctuary/nature reserve in Myanmar.
• Good willingness to work closely with the project team and other specialists (experience with donor projects is an advantage).</td><td>Responsibilities
Village Consultation Process
• Natural Resource Listing
• Natural Resource Ranking
• Natural Resource Trends
• Wealth Ranking
• Income and Expenditure Analysis
• Sketch Mapping
• Basic Socio-economic Data
Village Development Zonation
• Village Revisit Discussion --Detailed Boundary Sketch Mapping
• Boundary survey
• Village Area survey
• Rice Field survey
• GPS data download and draft boundary map
• Draft village land use planning
Community Based Natural Resource Management (CBNRM)
• Participatory boundary demarcation between the wildlife sanctuary and the village.
• Village level land use plan development.
• Participatory rule and regulation development for natural resources within village areas.
• Establishment of minor forest product nurseries and pilot programs for their propagation close to the village to reduce the need to travel deep into the national park.

Cost: US$ 175,000
• Personnel for team (5 persons-leader, two experts, one local gov’t staff and one local guide) 24 months; US$ 60,000
• Operational costs in the field for team 24 month; US$ 60,000
• Transportation (5 time to project site); US$15,000
• Field work/consumable expense; US$ 15,000
• Others; US$ 25,000</td></tr>
</table>

APPENDIX 5: OFFICIAL LETTERS FROM THE GOVERNMENTS OF MYANMAR AND THAILAND TO SUPPORT THE TRANSBOUNDARY BIODIVERSITY CONSERVATION OF THE TANINTHAYI RANGE IN MYANMAR AND THAILAND

(Note: The current proposal has been focused on the Taninthayi Range in Myanmar although experts in Myanmar and Thailand have developed a joint project proposal entitled "Transboundary Conservation in the Taninthayi Range between Myanmar and Thailand. However, Thailand component was excluded as Thailand did not complete their ratification of the International Tropical Timber Agreement, 2006 at the submission time of the project proposal)

A. Letter from Myanmar



GOVERNMENT OF THE REPUBLIC OF THE UNION OF MYANMAR
MINISTRY OF ENVIRONMENTAL CONSERVATION AND FORESTRY
FOREST DEPARTMENT
Nay Pyi Taw
Email:, nnkforest@gmail.com, dg.fd@mptmail.net.mm

Date: 12.9.2014
Ref : Planning/020/174461/14

To

Dr. Emmanuel Ze Meka
Executive Director
International Tropical Timber Organization (ITTO)

Subject: **Capacity Building for Strengthening Transboundary Biodiversity Conservation of the Taninthayi Range in Myanmar**

Dear Dr. Emmanuel Ze Meka,

The Forest Department, Ministry of Environmental Conservation and Forestry, on behalf of the Union of the Republic of Myanmar, is pleased to inform you that the project proposal entitled, "**Capacity Building for Strengthening Transboundary Biodiversity Conservation of the Taninthayi Range in Myanmar"** has been jointly prepared by the Forest Department of Myanmar and the Royal Forest Department of Thailand with the substantial inputs of Dr.Hwan Ok Ma, Projects Manager, ITTO.

The Forest Department of Myanmar, as an Executive Agency of the Project, is submitting this project proposal to ITTO for review and approval of funding to support the implementation of the **"Capacity Building for Strengthening Transboundary Biodiversity Conservation of the Taninthayi Range in Myanmar"** Project.

Please accept the assurance of our highest consideration.

With warm regards,
Sincerely yours,

Nyi Nyi Kyaw Ph.D.
Director General
Forest Department, Myanmar

B. Letter from Thailand

URGENT

No. 1614.3/ 8635

Royal Forest Department
61 Paholyothin Road, Latyao,
Chatuchak, Bangkok 10900

31 May B.E. 2556 (2013)

Dear Mr. Emmanuel Ze Meka,

Subject: Trans-boundary Biodiversity Conservation in the Taninthayi Mountain Range between Myanmar and Thailand

It is my great pleasure to inform you that Thailand and Myanmar has jointly developed a project proposal, namely; Trans-boundary Biodiversity Conservation in the Taninthayi Mountain Range between Myanmar and Thailand. The project area which covers Taninthayi (Tenasserim) Mountain Range along the border of Myanmar and Thailand covers a global important terrestrial eco-region with a transition zone from continental dry evergreen forests common in the north to semi-evergreen rain forests to the south. As the consequence, the area contains some of the highest bio-diversity of bird and mammal species found in the Indo-Pacific region such as Kitti's hog-nosed bat (the world smallest mammal), Asiatic elephant, tiger, tapir, etc. Besides biodiversity features, the rugged watersheds of the Tenasserim, Dawna, and other mountain ranges drain into the mighty Tenasserim, Salween, and Chao Phraya rivers, supporting globally endangered and endemic species as well as a diversity of human cultures. Karen and Mon people live in the Tenasserim Range and many other indigenous cultures call this area home. In many ways, the traditional practices of these groups provide a template for sustainable use of the region's rich natural resources.

However, the outstanding biodiversity features and cultural diversity of the Tenasserim Range are vulnerable due to poaching, fragmentation & encroachment for agriculture, illegal logging, settlements inside and around the park, and human-elephant conflicts. In addition, intensive hunting of wildlife occurs in both Myanmar and Thailand. Unsustainable harvesting of non-timber forest products is prevalent throughout the eco-region. Some areas have been subjected to seasonal forest fires, the impacts of which are unclear. Therefore, long-term viable of biodiversity in the Tenasserim depends on concrete collaboration between Thailand and Myanmar

to create...

to create biodiversity corridors in a framework of the trans-boundary biodiversity conservation area (TBCA). The project aims at promoting biodiversity conservation corridors between Taninthayi (Tenasserim) Range along the border between Myanmar and Thailand through: 1) conserving habitat for species movement and for the maintenance of viable populations, 2) conserving and enhancing ecosystem services, and 3) promoting and enhancing local community welfare through the conservation and sustainable use of natural resources.

The Royal Forest Department and the Department of National Park, Wildlife and Plant Conservation are jointly implementing this project together with the Forest Department of Myanmar, Ministry of Environmental Conservation and Forestry of Myanmar to implement this project. Please be assured that Thailand by the RFD and DNP will fully support the implementation of this project as indicated in the project document attached herewith. In this light, the Royal Forest Department is seeking your kind cooperation and support the implementation of this project.

I am looking forward to the cooperation with Myanmar and ITTO under the implementation of the proposed project.

Yours sincerely,

Prayut Lorsuwansiri

(Mr.Prayut Lorsuwansiri)
Deputy Director General
Acting Director General

Mr. Emmanuel Ze Meka
Executive Director
International Tropical Timber Organization
International Organizations Center, 5th Floor
Pacifico-Yokohama 1-1-1, Minato-Mirai
Nishi-ku, Yokohama, 220-00120 Japan.
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