INTERNATIONAL TROPICAL TIMBER ORGANIZATION (ITTO)

Reducing Deforestation and Forest Degradation and Enhancing Environmental Services in Tropical Forests (REDDES)

PROJECT DOCUMENT

TITLE	DEMONSTRATION ON INVESTIGATION AND ASSESSMENT OF TROPICAL FOREST ECOTOURISM RESOURCES IN HAINAN PROVINCE, CHINA
SERIAL NUMBER	RED-SPD 075/12 Rev.1 (F)
SUBMITTED BY	GOVERNMENT OF THE PEOPLE'S REPUBLIC OF CHINA
ORIGINAL LANGUAGE	ENGLISH

SUMMARY

Forest ecotourism is an important part of the construction of Hainan International Tourism Island. Forest ecotourism is an important and effective effort to enhance environmental services and local livelihoods in Hainan Province. Investigation and assessment of tropical forest ecotourism resources is the most important step for implementing and promoting tropical forest ecotourism in Hainan Province. Six typical tropical forest ecotourism resources (forest landscape and/or forest community level) in Hainan Province will be selected as demonstrative objects to assess the potential of developing tropical forest tourism. A sound methodology for investigating and assessing tropical forest ecotourism resources in Hainan Province will be developed through reviewing relevant knowledge and best practices and participatory multi-stakeholders consultation process. A comprehensive assessment report on six typical forest ecotourism resources will be published and distributed to interested parties in China. The project originates from the ITTO Thematic Programme on Reducing Deforestation and Forest Degradation and Enhancing Environmental Services in Tropical Forests (REDDES).

EXECUTING INSTITUTE OF FOREST RESOURCE INFORMATION TECHNIQUES,

AGENCY CHINESE ACADEMY OF FORESTRY (CAF)

COOPERATING -

GOVERNMENTS

DURATION 18 MONTHS

APPROXIMATE TO BE DETERMINED

STARTING DATE

BUDGET AND PROPOSED Contribution Local Currency SOURCES OF FINANCE Source in US\$ Equivalent

 ITTO
 145,800

 Gov't of China
 53,200

TOTAL 199,000

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LIST OF ABBREVIATIONS AND ACRONYMS

CAF	Chinese Academy of Forestry
CCFP	Conversion of Cropland to Forest Program
CSPCP	Coastal Shelterbelt Protection and Construction Program
EA	Executing Agency
FIBDP	Fast-growing and High-yield Timber Plantations
FMU	Forest Management Unit
ITTA	International Tropical Timber Agreement
ITTO	International Tropical Timber Organization
NFPCP	Non-commercial Forest Protection and Construction Program
NFPP	Natural Forest Protection Program
REDD	Reduced Emissions from Deforestation and Degradation
REDDES	Reducing Deforestation and Forest Degradation and Enhancing Environmental Services
SAF	State Forestry Administration
SFEBCF	Scheme of Forest Ecological Benefit Compensation Fund
SFM	Sustainable Forest Management

PART I: PROJECT CONTEXT

1.1 Origin

The project originates from the ITTO Thematic Programme on Reducing Deforestation and Forest Degradation and Enhancing Environmental Services in Tropical Forests (REDDES). The general objective of the REDDES is to reduce deforestation and forest degradation, enhance environmental services and help improve forest dependent livelihoods through sustainable management of tropical forests, forest restoration and other related activities.

The construction of Hainan International Tourist Island became a national strategy after Several Suggestions on the Advancement of Construction and Development for Hainan International Tourism Island issued by State Council in December 2009. The government of Hainan Province developed outline of Construction and Development for Hainan International Tourism Island in June 2010 and issued Decisions on Accelerating Development of Hainan Tropical Forest Tourism in July 2011. In the Decisions, the development of Hainan tropical forest tourism was recognized as an important measure to ensure the ecological security of Hainan Province and an important approach to improve local livelihoods in central and west part of Hainan Province, because of important ecological and economic values and unique tourism values of tropical forest resources. Forest ecotourism is an important part of the construction of Hainan International Tourism Island. Forest ecotourism is an important and effective effort to enhance environmental services and local livelihoods in Hainan Province. Investigation and assessment of typical forest ecotourism resources in Hainan Province is the most important step for implementing and promoting forest ecotourism in Hainan Province.

Hainan Province is a major tourism province in China because of its tropical climate and ocean scenery. There were 30,013,400 person-time of overnight tourists visited in Hainan Province and total tourism income was 32.404 billion RMB (4.984 billion US\$) in 2011 (from *Hainan Statistical Yearbook 2012*). But the total income from forest tourism in Hainan Province was only about 1.500 billion RMB (0.231 billion US\$) in 2011, less than 5% (only 4.63%) of total tourism income in Hainan Province. The forest ecotourism in Hainan Province is still weak, but should have great potential because of 60.2% of tropical forest coverage (especially 0.659 million hectare of natural tropical forests) and unique minorities cultures etc. Besides weakness in the infrastructure for forest ecotourism, there main problem for forest ecotourism in Hainan Province was that tourists visited Hainan were not interests in tropical forests (including rain forest). In other words, the results and their dissemination from existing extensive investigation and assessment of forest ecotourism values of tropical forest ecotourism resources in Hainan Province have not obviously attracted the tourists and public. The important and unique ecotourism values of tropical forest ecotourism resources in Hainan Province should be introduced to public by sound investigation and assessment methods.

1.2 Relevance

1.2.1 Conformity with ITTO's objectives and priorities

Compliance with Objectives of ITTA 2006

The project complies with ITTO objectives (c), (f), (j), (m), (q) and (r) established in Article 1 Objectives of the International Tropical Timber Agreement (ITTA 2006):

- (c) Contributing to sustainable development and to poverty alleviation;
- (f) Promoting and supporting research and development with a view to improving forest management and efficiency of wood utilization as well as increasing the capacity to conserve and enhance other forest values in timber producing tropical forests.
- (j) Encouraging members to support and develop tropical timber reforestation, as well as rehabilitation and restoration of degraded forest land, with due regard for the interests of local communities dependent on forest resources.

- (m) Encouraging members to develop national policies aimed at sustainable utilization and conservation of timber producing forests and maintaining ecological balance, in the context of tropical timber trade;
- (q) Promoting better understanding of contribution of non-timber forest products and environmental services to the sustainable management of tropical forests with the aim of enhancing the capacity of members to develop strategies to strengthen such contributions in the context of sustainable forest management, and cooperating with relevant institutions and processes to this end;
- (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 these communities to sustainable manage tropical timber producing forests.

Compliance with ITTO Action Plan

The project complies with the priorities and operational activities of Reforestation and Forest Management in *ITTO Action Plan 2008~2011 (2008)*:

Expected outcome 5: Tropical forest resource better secured

- (D) In cooperation with relevant organizations, support studies and activities related to reducing deforestation and degradation and enhancing carbon sinks
- (E) Assess opportunities for, and promote the development of, non-timber forest products and forest environmental services that can improve the economic attractiveness of maintaining the tropical timber resource base under SFM
- (F) Support studies and other activities for the effective role of forest-dependent indigenous and local communities in securing the PFE as the tropical timber resource base and contributing to poverty alleviation
- (G) Support an understanding of the impact of emerging issues such as carbon sequestration and reduced emissions from deforestation and forest degradation (REDD) on tropical forest development

Expected outcome 6: Tropical forest resource sustainably managed

- (C) Review progress on and new opportunities (e.g. REDD) for the management of secondary tropical forests, the restoration of degraded tropical forests and the rehabilitation of degraded tropical forest land;
- (D) Monitor and assess the social, economic and environmental costs and benefits of the sustainable management of natural and planted forests
- (F) Provide guidance on improving the sustainable yield of timber and non-timber products and services by intensifying the silvicultural management of natural tropical production forests and by restoring degraded forests

Compliance with scope and objectives of REDDES

The project complies with the general objectives of REDDES:

To reduce deforestation and forest degradation, enhance environmental services and help improve forest dependant livelihoods through sustainable management of tropical forests, forest restoration and other related activities.

The project complies with the scope of REDDES:

- (iv) Ecotourism, amenity and recreation values;
- (vi) Combination of various environmental services and other outputs within the SFM implementation.

The project complies with most of the activities of REDDES, especially complies with in Assessment and Diagnosis of REDDES:

(d) Estimation and quantification of diverse forest environmental services and their values, including using forest accounting.

The project complies with this call (Call for Proposals – Spring Cycle 2012):

Priority (iv) Demonstration activities enhancing environmental services and local livelihoods in tropical forests including

PES (see TPD Chapter 6 D)

Conformity with TP deliverables and association of results with the Monitoring Protocol including Means of Verification

Because forest recreation service is an important one of forest environmental services, the project conforms to TP deliverables:

- Valuations of environmental services conducted
- Potential for income generation activities realized from forest-related environmental services and other outputs in Programme impact areas

Because forest recreation service is an important one of forest environmental services, the project conforms to the Monitoring Protocol including Means of Verification:

In particular, the project will contribute to the achievement of "increased recognition of the values of tropical forests and their environmental services (Outputs)"

- "Increased public awareness (Output Indicator)" and "Existence of appropriate methodology to value Environmental Services and ability to apply (Output Indicator)" as the project outcome which will be a comprehensive assessment report includes the development of an appropriate valuation method for forest ecotourism resources in Hainan Province.

1.2.2 Relevance to the submitting country's policies

The project accords with item 9, item 10, item 14, item 20 and item 26 of the *Constitution of the People's Republic of China* respectively on "reasonable utilization of natural resources and protection of precious animals and vegetation", on "reasonable utilization of land resources", on "extent of advanced technology, raising of labor productivity and economic benefit and improvement of people's living level", on "popularization of scientific and technical knowledge", and on "amelioration of ecological environment and protection of forest". The project also conforms to the *Law of Forest*, the *Law of Land Administration*, the *Law of Environment Protection*, and the *Law of Wild Animal Protection*.

The project conforms to Forestry action plan of China 21 Century Agenda and the Action Plan for the protection of Biodiversity of China, especially tallies with the Decisions on Protection of Natural Resources of the State Council. The project also conforms to the Natural Forest Protection Program (NFPP), the Conversion of Cropland to Forest Program (CCFP), the Wildlife Conservation and Nature Reserves Development Program, the Non-commercial Forest Protection and Construction Program (NFPCP), the Coastal Shelterbelt Protection and Construction Program (CSPCP) and the Forest Industrial Base Development Program with a Focus on Fast-growing and High-yield Timber Plantations (FIBDP) etc.

1.3 Target area

Geographic location of project area



Social, cultural, economic and environmental aspects of project area

Hainan Province is situated within $18^{\circ}9^{\prime} \sim 20^{\circ}11^{\prime}N$, $108^{\circ}36^{\prime} \sim 111^{\circ}3^{\prime}E$, surrounded by sea at all sides, with an area of 33,920 square kilometers. The topography is high in the middle and low in four sides, with elevation from 0-1,867 m. The top point is Wuzhi (five fingers) mountain. 70% of the lands are plain, tableland and hills, with 200 \sim 500 m low hills accounting for 20.2%, and mountains of above 500 m accounting for 9.8%.

The annual average sunshine amounts to 2,000 hours, and the annual average temperature is $23\sim28^{\circ}$ C. The extremely lowest temperature is $1.4\sim7^{\circ}$ c. The season with monthly average temperature above 20° C lasts for 9 months. Hainan Province is rich in rainfall, yet not even either in space or in time. The rainfall concentrates in summer and autumn, rich in eastern part, yet less in western part, with a precipitation of $1,500\sim2,000$ mm. The soil types in the Island include yellow earth, crimson earth, laterite, fluviogenic soil, alluvial soil and sand around beach. Different topography is distributed and related with their different soil types, temperature, moisture and sun illumination etc.

There are 4,600 species of vegetation with vascular bundle, which belong to 259 families and 1,347 genus. There are 1,400 species of conifers and broadleaves, among which 800 species are of arbors, and 458 species are listed for commercially valuable timber. There are 85 tree species of high quality timber value, and 45 precious and rare tree species, among which 32 species are listed as rare and endangered species. There are 600 species of mammal and amphibians, birds and fishes. There is 2,072,000 ha of tropical forests (659,333 ha of natural tropical forests). The forest coverage is 60.2%. The total forest stock volume is 125,000,000 m³. The typical forest ecotourism resources are distributed in the forest parks and natural reserves in different levels. There are 8 national forest parks (including Jianfengling, Bawangling, diaoluoshan and Limushan etc. national forest parks), 3 provincial forest parks and 1 county-level forest park. There are 8 national natural reserves (including Jianfengling, Bawangling, diaoluoshan and Limushan etc. national natural reserves which cover 240,000 ha (from *Hainan Statistical Yearbook 2012*).

The total population of Hainan Province was 8,773,800 in 2011, mainly comprised of nations Han, Li, Miao, Zhuang and Hui. The population percent of 0-14 year old, 15-64 year old and above 65 year old were 19.56%, 72.36% and 8.08% respectively. In 2011, the GDP was 38.685 billion US\$, the average GDP per person was 4,429 US\$, the average income per habitant in town was 2,825 US\$, and the average annual income per farmer was 991 US\$. The percent of primary, secondary and tertiary industries were 26.2%, 28.4% and 45.4% respectively. There were 415,000 people of minimum living security. There were 30,013,400 person-time of overnight tourists visited in Hainan Province and total tourism income was 32.404 billion RMB (4.984 billion US\$) in 2011. There were 29,198,800 person-time of overnight domestic tourists visited in Hainan Province and total tourism income was 29.947 billion RMB (4.606 billion US\$). There were 814,600 person-time of overnight foreign tourists visited in Hainan Province and total tourism income was 2.457 billion RMB (0.378 billion US\$). There were 209 hotels which included 22 5-start hotels, 54 4-star hotel and 103 3-star hotel in 2011. There were 2 cities at prefectural level, 6 cities at county level, 4 counties, 6 autonomous counties and 204 townships (towns) (from Hainan Statistical Yearbook 2012). The highway in Hainan Province was well developed. The round-Island expressway and the first, second, third level highways form a highway network on the Island. The round-Island railway and high speed railway was well constructed. All these provide a convenient and good condition for the successful implementation of the project.

1.4 Outcomes at project completion

Intended situation (including environmental, social and economic effects) after project completion will be as follows:

- (1) Local forest community, forest management unit, local forestry agency and research institution will improve the methods of investigating and assessing tropical forest ecotourism resources;
- (2) Local forest community, forest management unit, local forestry agency and research institution will improve the quality

of the assessment report of tropical forest ecotourism resources, especially the assessment report will be attracted by the tourists and public;

- (3) Public and tourists (all stakeholders) will raise the understanding, awareness and interests to the tropical forest and their recreation and ecotourism service;
- (4) Local villager, indigenous group, local forest community, forest management unit, local forestry agency and local government agency will improve capacities to develop and implement the investigating and assessing of tropical forest ecotourism resources and the planning of tropical forest ecotourism.

The project results will be made useful to interested parties and users by publishing and distributing investigation and assessment report and by different internet websites.

PART II: PROJECT RATIONALE AND OBJECTIVES

2.1 Stakeholder analysis

Local villager and indigenous group (for the collective forests), local forest community (for the collective forests) and forest management unit (for the state forests), local forestry agency, project staff, local government agency, civil society organization, private sector, education and research institution, and donor might be stakeholders in the project.

Local villager, indigenous group, local forest community and forest management unit in project area will concern about and benefit from the project. The project will help them to improve capacities to develop and implement the investigating and assessing of tropical forest ecotourism resources.

Local forest community, forest management unit, local forestry agency and research institution that participate in investigating and assessing typical forest ecotourism resources will be directly employed to conduct the fieldwork of the project. They will get experience on how to improve the methods of investigating and assessing tropical forest ecotourism resources.

Local government agency is lack of information for policy decisions concerning investigating, assessing and planning of tropical forest ecotourism resources. The project will provide them relevant information on investigating and assessing for forest ecotourism resources and help them to improve implementation capacity.

Civil society organization and private sector involved in implementing project activities will benefit from improved capacity to participate in policy development and strengthen capability to support forest community in investigating and assessing for forest ecotourism resources.

Donors will get valuable information and new knowledge on how to improve existing methods and develop sound methods of investigating and assessing of tropical forest ecotourism resources to suit local conditions in China.

The project proposal was developed after discussing, consulting and identifying with Forestry Department of Hainan Province, some local forest bureaus, some local governments, some FMUs and local forest communities.

Stakeholder analysis table

Stakeholder group	Characteristics	Problems, needs, interests	Potentials	Involvement in project
Primary stakeholders	S			l
Local villager, indigenous group (for the collective forests)	Forest owner, income mainly derived from forests, active group	Under poverty, lack of alternative economic source	Desire to receive assistance, possess of local knowledge, belief in governments	Directly involved in project implementation, primary project beneficiary
Local forest community (for the collective forests) and forest management unit (for the state forests)	Forest owner, depend on forest, active group, responsible for sustainable forest management	Threatened on base for community development, ,lack of economic source	Desire to receive assistance; possess of local knowledge, belief in governments	Directly involved in project implementation, primary project beneficiary

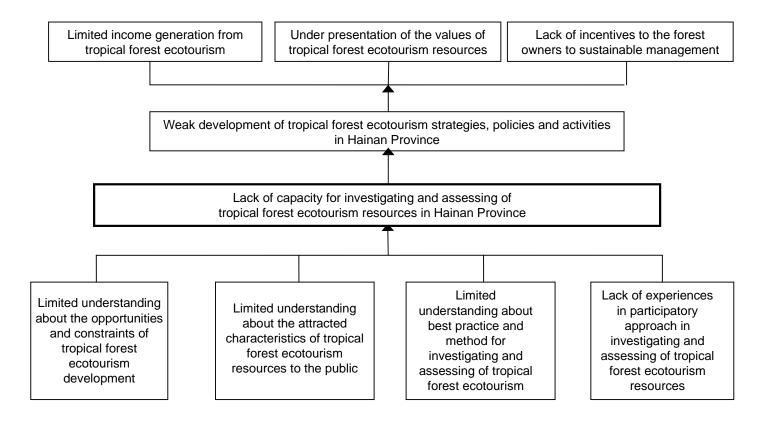
	1	1	1	1
Local forestry agency	Responsible for sustainable forest management and administration	Insufficient capacity for enhancing local livelihoods	Experienced in forest inventory and working with villagers	Directly involved in project implementation
Local government agency	Responsible for making and implementing community development plans	Lack of information on forest environment service and forest ecotourism	Authority and influence in community, develop forest ecotourism plan	Directly involved in project implementation
Secondary stakehold	ers			
Civil-society organization	Actively involved in implementing and providing advice to rural development activities	Lack skills for advice on village development and planning	Experienced in working with villages and FMU	assist the project to implement relevant activities
Private sector	Owners of high-yield production plantation	Lack of information on forest environment service, needs to seek new investment opportunities	Experienced in logging, investment capacity	assist the project to implement relevant activities
Tertiary stakeholders		,		
Education and research institution	Have education and research missions	Lack means to collaboration	Competence in research, studies and surveys	Might collaborate in implementing relevant activities
Donor	Finance local development activities	Lack means to finance and collaboration	Experience in providing local development funds	Might collaborate in implementing relevant activities

2.2 Problem analysis

Up to now, only small proportion of tourists visiting Hainan went to forests for forest ecotourism. The income generated from tropical forest ecotourism was limited, the values of tropical forest ecotourism resources under presented, and the incentives to the forest owners to sustainable management was lacking. Development of tropical forest ecotourism strategies, policies and activities in Hainan Province is still weak. The key problem for tropical forest ecotourism in Hainan Province is lack of capacity for investigating and assessing of tropical forest ecotourism resources. The important and unique ecotourism values of forest ecotourism resources should be introduced to public by sound investigation and assessment methods. There is not specific method of investigation and assessment for tropical forest ecotourism resources in China. The existing methods are simple, extensive and no specific. They are introduced from universal methods, mainly from "Classification, Investigation and Evaluation of Tourism Resources" (GB/T 18972-2003, National Standard of the People's Republic of China) and "China Landscape Resources Grade Evaluation of Forest Park in China" (GB/T 18005-1999, National Standard of the People's Republic of China).

The key problems for Lack of capacity for investigating and assessing of tropical forest ecotourism resources in Hainan Province are as follows: (1) Limited understanding about the opportunities and constraints of tropical forest ecotourism development; (2) Limited understanding about the attracted characteristics of tropical forest ecotourism resources to the public; (3) Limited understanding about best practice and method for investigating and assessing of tropical forest ecotourism; (4) Lack of experiences in participatory approach in investigating and assessing of tropical forest ecotourism resources;

It is hopeful to solve these problems through the implementation of the project.



Problem Tree

2.3 Objectives

2.3.1 Development objective and impact indicators

To promote tropical forest ecotourism in support of a sound assessment method in Hainan Province

The long-term impact indicators are:

- (1) Public interest and participation in tropical forest ecotourism in Hainan Province will be enhanced obviously;
- (2) The capacity to develop tropical forest ecotourism in Hainan Province will be enhanced obviously;
- (3) One tropical forest ecotourism demonstration site will be developed and sustained management after the completion of the project.

2.3.2 Specific objective and outcome indicators

To strengthen the capacity of local stakeholders in fully assessing the potential of developing tropical forest ecotourism through the formulation of a sound assessment method in Hainan Province

The outcome indicators are:

- (1) The understanding about the attracted characteristics of tropical forest ecotourism resources in Hainan Province to the public will be enhanced obviously by the end of the first year of the project;
- (2) Sound methods for investigating and assessing tropical forest ecotourism resources will be widely extended in Hainan Province by the end of the project.
- (3) Policy recommendations with the assessment report of ecotourism development for six tropical forest resources will be accepted by the Forestry Department of Hainan Province and widely distributed to interested parties by websites by the end of the project.

PART 3: DESCRIPTION OF PROJECT INTERVENTIONS

3.1 Outputs

Output 1: Methodology for investigating and assessing tropical forest ecotourism resources based on stakeholders' participation

Output 2: Investigation and assessment report on 6 typical forest ecotourism resources in Hainan Province based on stakeholders' participation

3.2 Activities and inputs

Output/Activities	<u>Inputs</u>
Output 1: Methodology for investigating and assessing tropical forest ecotourism resources based	
on stakeholders participatory	9PM, 80PD
Activity 1.1: Collect and analyze the relevant international and national literature and cases on	
tropical forest ecotourism	3PM, 10PD
Activity 1.2: Develop draft methodology for investigating and assessing tropical forest	
ecotourism resources in Hainan Province	3PM, 20PD
Activity 1.3: Discuss, consult and identify methodology for investigating and assessing tropical	0014 =000
forest ecotourism resources in Hainan Province	3PM, 50PD
Output 2: Investigation and assessment report on 6 typical forest ecotourism resources in Hainan	00000
Province based on stakeholders' participation	26PM, 290PD
Activity 2.1: Choose 6 typical objects of forest ecotourism resources (forest landscape or forest	SDM FODD
community level) in Hainan Province	3PM, 50PD
Activity 2.2: Investigate the comprehensive factors of 6 typical objects of forest ecotourism resources	5PM, 50PD
Activity 2.3: Analyze the fascinating and distinguishing characteristics of 6 typical objects of forest	31 IVI, 301 D
ecotourism resources	4PM, 60PD
Activity 2.4: Develop draft investigation and assessment report on 6 typical forest ecotourism	41 IVI, 001 D
resources in Hainan Province	5PM, 40PD
Activity 2.5: Discuss, consult and identify investigation and assessment report on 6 typical forest	or, B
ecotourism resources in Hainan Province	5PM, 30PD
Activity 2.6: Publish and distribute the investigation and assessment report on 6 typical forest	- ,
ecotourism resources in Hainan Province	4PM, 60PD

Note: PM-Person and Month (Project Personnel); PD-Person and Day (Duty Travel)

3.3 Strategic approach and methods

The project will work collaboratively with all stakeholders directly or indirectly interested in investigation and assessment of typical forest ecotourism resources in Hainan Province. The potential stakeholders might be local villager and indigenous group (for the collective forests), local forest community (for the collective forests) and forest management unit (for the state forests), local forestry agency, project staff, local government agency, civil society organization, private sector, education and research institution and donor. Using participatory approach will help interested groups to participate equally. It is necessary to raise awareness of different stakeholders on tropical forest ecotourism, to gain the support on policy and finance from local governments, local forestry agency and private sectors by propagandizing and consulting meetings. The following steps will be taken to implement this participatory approach in project area.

Methodology for investigating and assessing tropical forest ecotourism resources: relevant international literature and cases on tropical forest ecotourism will be collected and analyzed by project staff. Participatory workshop will be held among different stakeholders to develop the methodology. Special attention will be given to possible conflicting interests

among different stakeholders.

Draft investigation and assessment report: participatory investigation and assessment on 6 typical forest ecotourism resources will be undertaken. Meanwhile, the investigation and assessment will help different stakeholders to improve the awareness and knowledge on tropical forest ecotourism.

Investigation and assessment report: participatory discussion and consultation will be undertaken to identify the investigation and assessment report on 6 typical forest ecotourism resources in Hainan Province.

The project results will be made useful to interested parties and users by publishing and distributing the investigation and assessment report and by different internet websites.

3.4 Work plan

Outputs/Activities							Sch	edul	es (in m	onth	ns)						
Outputs/Activities	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6
Output 1: Methodology for investigating and assessing tropical forest ecotourism resources based on stakeholders participatory																		
Activity 1.1: Collect and analyze the relevant international and national literature and cases on tropical forest ecotourism																		
Activity 1.2: Develop draft methodology for investigating and assessing tropical forest ecotourism resources in Hainan Province			_	_														
Activity 1.3: Discuss, consult and identify methodology for investigating and assessing tropical forest ecotourism resources in Hainan Province						_	—											
Output 2: Investigation and assessment report on 6 typical forest ecotourism resources in Hainan Province based on stakeholders participatory																		
Activity 2.1: Choose 6 typical objects of forest ecotourism resources (forest landscape or forest community level) in Hainan Province																		
Activity 2.2: Investigate the comprehensive factors of 6 typical objects of forest ecotourism resources									_		_							
Activity 2.3: Analyze the fascinating and distinguishing characteristics of 6 typical objects of forest ecotourism resources																		
Activity 2.4: Develop draft investigation and assessment report on 6 typical forest ecotourism resources in Hainan Province																		
Activity 2.5: Discuss, consult and identify investigation and assessment report on 6 typical forest ecotourism resources in Hainan Province																		
Activity 2.6: Publish and distribute the investigation and assessment report on 6 typical forest ecotourism resources in Hainan Province																		

3.5 Budget

Consolidated Yearly Project Budget

Budge	et Components	Input	Unit Costs	TOTAL	YEAR1	YEAR2
10.	Project Personal					
	11.National Experts					
	1.1.1.Project Coordinator	6PM	1,000	6,000	4,000	2,000
	1.1.2.Forester 1	5PM	8,00	4,000	3,200	800
	1.1.3 Forester 2, etc.	0	0	0	0	0
	1.1.4.Adminstrator	0	0	0	0	0
	1.2.Other Labor					
	1.2.1.Assistant 1	7PM	1,000	7,000	4,000	3,000
	1.2.2.Assistant 2	6PM	1,000	6,000	4,000	2,000
	1.2.3.Other labour	15PM	800	12,000	6,400	5,600
	1.3.National Consultants (Short term)	0	0	0	0	0
	1.4.International Consultants	0	0	0	0	0
	15.Fellowship and Training	0	0	0	0	0
20	19.Component Total			35,000	21,600	13,400
20.	Sub-contracts			20,000	20,000	0
	21. Sub-contracts (Mapping and Investigating)			30,000	30,000	0
	22.Sub-contracts (Publishing)			10,000	0	10,000
30.	29.Componment Total Duty Travel			40,000	30,000	10,000
30.	31.Daily Subsistence Allowance					
	31.1.National Experts/ Consultants	105PD	250	12 ,000	9,000	3,000
	31.2.International Consultants	0	250	12 ,000	9,000	3,000
	31.3.Others	80PD	100	8,000	5,000	3,000
	32.International Travel	001 D	100	0,000	3,000	3,000
	32.1.National Experts/ Consultants	3PT	2,000	6,000	6,000	0
	32.2.International Consultants	0	0	0	0,000	0
	32.3.Others	0	ő	0	ő	ő
	33.Local Transport Costs		Ů	Ü		
	33.1. National Experts/ Consultants	15PT	600	9,000	6,000	3,000
	33.2.International Consultants	0	0	0	0	0
	33.3.Others	10PT	200	2,000	2,000	0
	39.Component Total			37,000	28,000	9,000
40.	Capital Items					
	41.premises	0	0	0	0	0
	42.Land	0	0	0	0	0
	43.Vehicle	0	0	0	0	0
	44.Capital Equipment					
	44.1.Computer Equipments	3Set	2,000	6,000	6,000	0
	44.2.Forestry Equipments	4.5Set	2,000	9,000	9,000	0
	49.Component Total			15,000	15,000	0
50.	Consumable Items					
	51.Raw materials			9,000	7,000	2,000
	52.Spare			7,000	5,000	2,000
	53.Utilities			7,000	5,000	2,000
	54.Offoce Supplies			7,000	5,000	2,000
60.	59.Component Total Miscellaneous			30,000	22,000	8,000
ου.	Miscellaneous 61.Sundry			12,000	9,000	3,000
	62 Auditing			1,000	500	500
	63 Contingencies			0	0	0
	69.Component Total			13,000	9,500	3,500
	•			10,000	3,500	5,500
70.	National Management Cost			40.000	0.400	4.000
	71.Executing Agency Management Cost			13,200	8,400	4,800
	72.Focal Point Monitoring			0	0	0
	79.Componenrt Total			13,200	8,400	4,800
00	SUBTOTAL Desired Manifesting and Administration			-	-	-
80.	Project Monitoring and Administration			E 000		
	81.ITTO Monitoring and Review			5,000		
	82.ITTO midterm, final, ex-post Evaluation Costs			0		
	83.ITTO Programme Support Cost (8% on items			10,800		
	10 to 82 above)			_		
	84. Donor Monitoring Costs			0 15 900		
	89.Component Total GRAND TOTAL			15,800 199,000		
100.						

Consolidated Yearly Project Budget by Source - ITTO

Budge	et Components	Input	Unit Costs	TOTAL	YEAR1	YEAR2
10.	Project Personal					
	11.National Experts					
	1.1.1.Project Coordinator	0	0	0	0	0
	1.1.2.Forester 1	0	0	0	0	0
	1.1.3 Forester 2, etc.	0	0	0	0	0
	1.1.4.Adminstrator	0	0	0	0	0
	1.2.Other Labor					
	1.2.1.Assistant 1	7PM	1,000	7,000	4,000	3,000
	1.2.2.Assistant 2	6PM	1,000	6,000	4,000	2,000
	1.2.3.Other labour	15PM	800	12,000	6,400	5,600
	1.3.National Consultants (Short term)	0	0	0	0	0
	1.4.International Consultants	0	0	0	0	0
	15.Fellowship and Training	0	0	0	0	0
	19.Component Total			25,000	14,400	10,600
20.	Sub-contracts					
	21.Sub-contracts (Mapping and Investigating)			30,000	30,000	0
	22.Sub-contracts (Publishing)			10,000	Ô	10,000
	29.Componment Total			40,000	30,000	10,000
30.	Duty Travel			,		,
	31.Daily Subsistence Allowance					
	31.1.National Experts/ Consultants	130PD	225	12,000	9,000	3,000
	31.2.International Consultants	0	0	0	0	0
	31.3.Others	80PD	100	8,000	5,000	3,000
	32.International Travel			-,	-,	-,,,
	32.1.National Experts/ Consultants	3PT	2,000	6,000	6,000	0
	32.2.International Consultants	0	0	0	0	0
	32.3.Others	0	0	0	0	0
	33.Local Transport Costs			_		
	33.1. National Experts/ Consultants	15PT	600	9,000	6,000	3,000
	33.2.International Consultants	0	0	Ô	0	0
	33.3.Others	10PT	200	2,000	2,000	0
	39.Component Total	-		37,000	28,000	9,000
40.	Capital Items			,	,	,
-	41.premises	0	0	0	0	0
	42.Land	0	0	0	0	0
	43. Vehicle	0	0	0	0	0
	44.Capital Equipment			_		
	44.1.Computer Equipments	3Set	2,000	6,000	6,000	0
	44.2.Forestry Equipments	4.5Set	2,000	9,000	9,000	0
	49.Component Total			15,000	15,000	0
50.	Consumable Items			·		
	51.Raw materials			0	0	0
	52.Spare			0	0	0
	53.Utilities			0	0	0
	54.Offoce Supplies			Ö	Ö	Ö
	59.Component Total			0	0	0
60.	Miscellaneous					
	61.Sundry			12,000	9,000	3,000
	62 Auditing			1,000	500	500
	63 Contingencies			0	0	0
	69.Component Total			13,000	9,500	3,500
70.	•		L	-,	,	,
70.	National Management Cost					
	71.Executing Agency Management Cost					
	72. Focal Point Monitoring					
	79.Componenrt Total			-	-	-
00	SUBTOTAL Subject of Management Administration			130,000	96,900	33,100
80.	Project Monitoring and Administration					
	81.ITTO Monitoring and Review			5,000		
	82.ITTO midterm, final, ex-post Evaluation Costs			0		
	83.ITTO Programme Support Cost (8% on items			10,800		
	10 to 82 above)					
	84. Donor Monitoring Costs			0		
	89.Component Total			15,800		
100.	GRAND TOTAL			145,800		

Consolidated Yearly Project Budget by Source - E. Agency (Chinese Government)

10. Project Personal 11. National Experts 11.1. Project Coordinator 11.2. Forester 1 5PM 8,00 4,000 1.1.2. Forester 2, etc. 0 0 0 0 0 0 1.1.3. Forester 2, etc. 0 0 0 0 0 0 0 1.2. Other Labor 12. 1. Assistant 1 0 0 0 0 0 0 0 0 0	4,000 3,200 0 0 0 0 0 0 0 0 7,200	2,000 800 0 0 0 0 0 0 0 2,800
11.National Experts	3,200 0 0 0 0 0 0 0 0 7,200 0 0 0	800 0 0 0 0 0 0 0 2,800 0 0 0
1.1.1.Project Coordinator	3,200 0 0 0 0 0 0 0 0 7,200 0 0 0	800 0 0 0 0 0 0 0 2,800 0 0 0
1.1.2 Forester 1	0 0 0 0 0 0 0 0 7,200	800 0 0 0 0 0 0 0 2,800 0 0 0
1.1.3 Forester 2, etc.	0 0 0 0 0 0 0 7,200	0 0 0 0 0 0 0 2,800
1.2.Other Labor 1.2.1.Assistant 1	0 0 0 0 0 0 7,200	0 0 0 0 0 0 2,800
1.2.1.Assistant 1	0 0 0 0 0 7,200	0 0 0 0 2,800
1.2.2.Assistant 2	0 0 0 0 0 7,200	0 0 0 0 2,800
1.2.3.Other labour	0 0 0 7,200 0 0 0	0 0 0 2,800 0 0 0
1.3.National Consultants (Short term)	0 0 7,200 0 0 0 0	0 0 0 2,800 0 0 0
1.4.International Consultants	0 0 7,200 0 0 0 0	0 0 2,800 0 0 0 0
15.Fellowship and Training	0 7,200 0 0 0 0	0 2,800 0 0 0 0
19.Component Total	7,200 0 0 0 0	2,800 0 0 0 0 0 0
20. Sub-contracts 21. Sub-contracts (Mapping and Investigating) 0 22. Sub-contracts (Publishing) 0 29. Componment Total 0 30. Duty Travel 31. Daily Subsistence Allowance 31.1. National Experts/ Consultants 31.2. International Consultants 0 31.3. Others 0 32. International Travel 0 32. International Experts/ Consultants 0 32. International Consultants 0 32. Others 0 33. Local Transport Costs 33.1. National Experts/ Consultants 0 33.2. International Consultants 0 33.2. International Consultants 0 33.2. International Consultants 0 33.2. International Consultants 0 0 0 33.2. International Consultants 0 0 0 33.2. International Consultants 0 0 0 33.1. National Experts/ Consultants 0 0 0 33.2. International Consu	0 0 0	0 0 0 0 0 0
21.Sub-contracts (Mapping and Investigating) 22.Sub-contracts (Publishing) 0 0 0 0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
22.Sub-contracts (Publishing)	0 0 0 0 0	0 0 0 0 0
29.Componment Total 0	0 0 0 0	0 0 0 0
30. Duty Travel 31. Daily Subsistence Allowance 31.1. National Experts/ Consultants 0 0 0 31.2. International Consultants 0 0 0 0 31.3. Others 0 0 0 0 32. International Travel 32.1. National Experts/ Consultants 0 0 0 32.2. International Consultants 0 0 0 0 33. Local Transport Costs 33.1. National Experts/ Consultants 0 0 0 33.1. National Experts/ Consultants 0 0 0 0 33.3. Others 0 0 0 0 33.3. Others 0 0 0 0 39. Component Total 0 0 0 40. Capital Items 0 0 0 41. premises 0 0 0 0 42. Land 0 0 0 0 43. Vehicle 0 0 0 0 44. Capital	0 0 0	0 0 0
31.Daily Subsistence Allowance 31.1.National Experts/ Consultants 0 0 0 0 0 31.2.International Consultants 0 0 0 0 0 0 31.3.Others 0 0 0 0 0 0 0 32.1nternational Travel 32.1.National Experts/ Consultants 0 0 0 0 0 0 32.2.International Consultants 0 0 0 0 0 0 33.1.Ocal Transport Costs 33.1. National Experts/ Consultants 0 0 0 0 33.2.International Consultants 0 0 0 0 0 33.3.Others 0 0 0 0 0 39.Component Total 0 0 0 0 0 40. Capital Items 41.premises 0 0 0 0 0 43.Vehicle 44.Capital Equipment 0 0 0 0 0 0 0 0 0	0 0 0	0 0 0
31.1.National Experts/ Consultants 0 0 0 0 0 0 0 0 0	0 0 0	0 0 0
31.2.International Consultants 0 0 0 0 0 0 0 31.3.Others 32.International Travel 32.1.National Experts/ Consultants 0 0 0 0 0 0 0 0 0	0 0 0	0 0 0
31.3.Others 0 0 0 0 0	0 0 0	0 0 0
32.International Travel 32.1.National Experts/ Consultants 0 0 0 0 32.2.International Consultants 0 0 0 0 0 32.3.Others 0 0 0 0 0 33.1. National Experts/ Consultants 0 0 0 0 0 33.2.International Consultants 0 0 0 0 0 0 33.3.Others 0 0 0 0 0 0 0 0 0	0	0
32.1.National Experts/ Consultants 0 0 0 0 32.2.International Consultants 0 0 0 0 0 32.3.Others 0 0 0 0 0 0 33.2.Others 33.1. National Experts/ Consultants 0 0 0 0 0 33.2.International Consultants 0 0 0 0 0 0 0 0 0	0	0
32.2.International Consultants 0 0 0 0 0 0 0 0 0	0	0
32.3.Others 0 0 0 0		_
33.Local Transport Costs 33.1. National Experts/ Consultants 0 0 0 0 0 33.2. International Consultants 0 0 0 0 0 0 0 0 0	0	0
33.1. National Experts/ Consultants 0 0 0 0 0 0 0 0 0		. ~
33.2.International Consultants 0 0 0 0 0 0 0 0 0		
33.3.Others 0 0 0 0	0	0
39.Component Total	0	0
40. Capital Items 41.premises 0 0 0 42.Land 0 0 0 43.Vehicle 0 0 0 44.Capital Equipment 0 0 0	0	0
41.premises 0 0 42.Land 0 0 43.Vehicle 0 0 44.Capital Equipment	0	0
42.Land 0 0 0 43.Vehicle 0 0 0 0 0 44.Capital Equipment		
43.Vehicle 0 0 0 44.Capital Equipment	0	0
44.Capital Equipment	0	0
	0	0
1 141 Computer Equipments		
44.1.Computer Equipments 0 0 0	0	0
44.2.Forestry Equipments 0 0 0	0	0
49.Component Total 0	0	0
50. Consumable Items		
51.Raw materials 9,000	7,000	2,000
52.Spare 7,000	5,000	2,000
53.Utilities 7,000	5,000	2,000
54.Offoce Supplies 7,000	5,000	2,000
59.Component Total 30,000	22,000	8,000
60. Miscellaneous	0	
61.Sundry 0	0	0
62 Auditing 0	0	0
63 Contingencies 0	0	0
69.Component Total 0	0	0
70. National Management Cost		
71.Executing Agency Management Cost 13,200	8,400	4,800
72.Focal Point Monitoring 0	0	0
79.Componenrt Total 13,200	8,400	4,800
SUBTOTAL -	-	-
80. Project Monitoring and Administration		
81.ITTO Monitoring and Review -		
82.ITTO midterm, final, ex-post Evaluation Costs -		
83.ITTO Programme Support Cost (8% on items		
10 to 82 above) -		
84. Donor Monitoring Costs -		
89.Component Total -		
100. GRAND TOTAL 53,200		

Yearly Project Budget by Source - ITTO

really i loject Budget by Cource - 11 TO								
Annual Disbursements	Total	Year1	Year2					
Budget Component								
10. Project Personnel	25,000	14,400	10,600					
20. Sub-contracts	40,000	30,000	10,000					
30. Duty travel	37,000	28,000	9,000					
40. Capital items	15,000	15,000	0					
50. Consumable items	0	0	0					
60. Miscellaneous	13,000	9,500	3,500					
Subtotal 1	130,000	96,900	33,100					
80. ITTO Monitor, Evaluation Costs	5,000							
81. Monitoring and Review Costs	5,000							
82. Evaluation Costs	0							
Subtotal 2	135,000							
83. Programme Support Costs (8% of Overall Budget)	10,800							
84. Donor Monitoring Costs	0							
90. Refund of Pre-project Costs	0							
99. ITTO Total	145,800							

Yearly Project Budget by Source - E. Agency/Host Government

Annual Disbursements			
	Total	Year1	Year2
Budget Component			
10. Project Personnel	10,000	7,200	2,800
20. Sub-contracts	0	0	0
30. Duty travel	0	0	0
40. Capital items	0	0	0
50. Consumable items	30,000	22,000	8,000
60. Miscellaneous	0	0	0
70. Executing Agency Management Cost	13,200	8,400	4,800
EXECUTING AGENCY/HOST GOVT. TOTAL	53,200	37,600	15,600

Overall Project Budget by Activity

Outputs/Activities		Budget Components							
		20.Sub-C ontract	30.Duty Travel	40.Capital Items	50.Consu mable Items	60.Miscell aneous	Year	Grand Total	
Output 1: Methodology for investigating and assessing tropical forest ecotourism resources based on stakeholders participatory									
Activity 1.1: Collect and analyze the relevant international and national literature and cases on tropical forest ecotourism Activity 1.2: Develop draft methodology for investigating and	3,000(I/E)	0	1,000	5,000	2,000(E)	0	Y1	11,000	
assessing tropical forest ecotourism resources in Hainan Province	3,000(I/E)	0	2,000	5,000	2,000(E)	0	Y1	12,000	
Activity 1.3: Discuss, consult and identify methodology for investigating and assessing tropical forest ecotourism resources in Hainan Province	3,000(I/E)	5,0000	5,000	5,000	2,000(E)	1,000	Y1	21,000	
Subtotal 1	9,000(I/E)	5,000	8,000	15,000	6,000(E)	1,000		44,000	
Output 2: Investigation and assessment report on 6 typical fores	. ,	•			, ,	,	s participa		
- Carpar 21 mroonganon and accessment report on a typical relati							o partioipa		
Activity 2.1: Choose 6 typical objects of forest ecotourism resources (forest landscape or forest community level) in Hainan Province Activity 2.2: Investigate the comprehensive factors of 6 typical	3,000(I/E)	0	5,000	0	4,000(E)	4,000	Y1	16,000	
objects of forest ecotourism resources Activity 2.3: Analyze the fascinating and distinguishing	5,000(I/E)	20,000	5,000	0	4,000(E)	0	Y1	34,000	
characteristics of 6 typical objects of forest ecotourism resources Activity 2.4: Develop draft investigation and assessment report on 6	4,000(I/E)	5,000	6,000	0	4,000(E)	0	Y1	19,000	
typical forest ecotourism resources in Hainan Province Activity 2.5: Discuss, consult and identify assessment report on 6	5,000(I/E)	0	4,000	0	4,000(E)	0	Y1Y2	13,000	
typical forest ecotourism resources in Hainan Province Activity 2.6: Publish and distribute the investigation and assessment	5,000(I/E)	0	3,000	0	4,000(E)	4,000	Y2	16,000	
report on 6 typical forest ecotourism resources in Hainan Province	4,000(I/E)	10,000	6,000	0	4,000(E)	4,000	Y2	28,000	
Subtotal 2	26,000(I/E)	35,000	29,000	0	24,000(E)	12,000		126,000	
Subtotal (ITTO)	25,000	40,000	37,000	15,000	0	13,000		130,000	
Subtotal (E. Agency)	10,000	0	0	0	30,000	0		40,000	
Subtotal (Others)	0	0	0	0	0	0		0	
Total	35000	40,000	37,000	15,000	30,000	13,000		170,000	

⁽I) – contribution of the ITTO

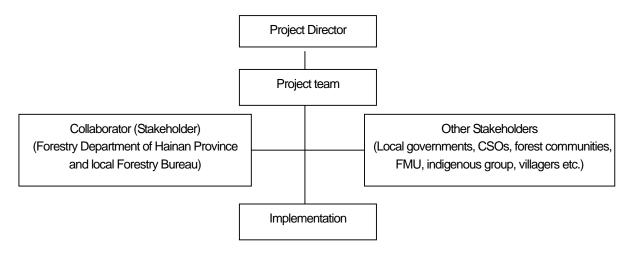
⁽E) – contribution of the Executing Agency / Host Government

⁽o) - Contribution from Other Sources

PART 4: IMPLEMENTATION ARRANGEMENTS

4.1 Executing agency and organizational structure

The executing agency is the Institute of Forest Resource Information Techniques of Chinese Academy of Forestry (CAF). The Profile of the Executing Agency is showed in ANNEX 1. The project will be implemented under the overall supervision of the Ministry of Commerce of the Peoples' Republic of China, the State Forestry Administration (SAF) of the Peoples' Republic of China, and ITTO. Project organizational structure is as follows:



4.2 Project management

The profile of the key experts is showed in ANNEX 2. The Key team members and their duties are as follows:

Name	Title and Institution	Duties in Project
Huang Qinglin	Professor, Ph.D.,	Project director
Trualing Willight	IFRIT of CAF	In charge of activity 1.3 and 2.5
Huang Jingcheng	Ph.D., Senior engineer, Vice Director of Forestry Bureau of Hainan Province	In charge of activity 2.1 and 2.6
Dong Dong	Postdoctoral fellow, Ph.D., IFRIT of CAF	In charge of activity 1.1 and 1.2
Zhang Yin	Master, Ph.D. candidate, IFRIT of CAF	In charge of activity 2.2 and 2.3
Peng Wencheng	Senior engineer of Hainan Forestry Institute; Master; Ph.D. candidate of IFRIT of CAF	Participate in activity 2.2 and 2.3
He Chulin	Senior engineer, Master, Forestry Bureau of Hainan Province	In charge of activity 2.4

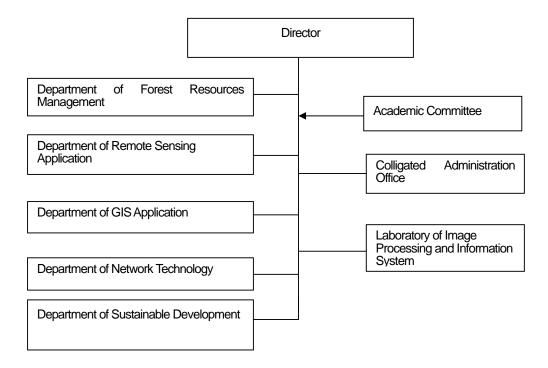
4.3 Monitoring and reporting

A project progress report will be submitted to ITTO every six month during the process of project implementation. Enough copies of project completion report will be composed, printed and submitted to ITTO in three months after completion of the project as ITTO may require. A project technique report will be submitted to ITTO in three months after completion of the project as ITTO may require. Key technique reports will be submitted during the process of project implementation. Specific monitoring and review by ITTO can be carried out at any moment during the process of project implementation.

ANNEX 1: PROFILE OF THE EXECUTING AGENCY

1. The Expertise of Executing Agency

The Chinese Academy of Forestry (CAF) is an academic forestry organization of national level and is subordinate to the State Forestry Administration. The executing agency, the Research Institute of Forest Resources Information Techniques is a research institute affiliated to the CAF. The institute is a scientific research organization to develop satellite remote sensing application and forest resources management, its professional business refers to management of forest resources, research and application of remote sensing and GIS, monitoring of forest pests and fires, environment evaluation, exploitation of computer application software, network and communication techniques etc. Its framework is illustrated as follows:



The institute mainly undertakes national projects and researches on aspects of forest resources, remote sensing monitoring of forest disasters, information sharing and others. In recent three years, the institute altogether obtained 68 projects, among which 55 projects were subsidized by the government and 13 projects were of international cooperation. The major projects are:

- (1) Gathering of Basic Data of Forest Resources and Construction of Information Network (subsidized by the Ministry of Science and Technology)
- (2) Construction of National Digital Forestry (subsidized by the State Forestry Administration)
- (3) Application of Remote Sensing and GIS Techniques to Spatial, Dynamic and Quantitative Method on Forest Resources Forecast (supported by State Natural Science Fund)
- (4) National Forecast System of Forest Fire Danger (supported by the State Forestry Administration)
- (5) Research and Construction of "China Forestry Academic Network" (network system at CAF) (subsidized by the Ministry of Science and Technology)

There are 6 ITTO projects applied and executed by the institute:

- (1) Demonstration of Sustainable Utilization of Tropical Forests by Differentiated Management in Hainan Island of China (ITTO PD 14/92 Rev.2(F)). It was finished in 1998. The institute was one of the executing agencies.
- (2) Development and Extension of Criteria and Indicators for Sustainable Management of Natural Tropical Forests in China (ITTO PD 12/00 Rev.3(F)). It was finished in 2003. The institute is the executing agency.
- (3) Tropical Forest Fire Monitoring and Management System Based on Satellite Remote Sensing Data in China (ITTO PPD 22/01(F)). It was finished in 2003. The institute is the executing agency.
- (4) Tropical Forest Fire Monitoring and Management System Based on Satellite Sensing Data in China (ITTO PD 228/03 Rev.2 (F)). It was finished in July, 2009. The institute is the executing agency.
- (5) Training on Demonstration, Application and Extension of ITTO Manual on Restoring Forest Landscapes in Tropics of China (ITTO PD 423/06 Rev.2 (F)). It was finished in June, 2010. The institute is the executing agency.
- (6) Development and Demonstration on Scheme of Payment for Environmental Services (PES) Derived from Degraded and Secondary Tropical Production Forests in Hainan Province, China (RED-SPD 020/09 Rev. 1 (F)). It is implementing and finished in November, 2011.

2. The Infrastructure of the Executing Agency

The institute possesses semi-automatic receiving station equipments of NOAA-AVHRR data. The network center of "China Forestry Academic Network" is set up within the institute, with a main communication chain-route of 1000 M bandwidth for data transmission, and with related servers, data storages, data exchangers etc. It is also equipped with a lot of workstations, digitizers, plotters, micro-computers, GPS receivers etc. It is disposed with image processing and GIS software, e.g. ERDAS, PCI, ARC/INFO, Geomedia Professional & Web-GIS, IDRISI, ENVI/IDL etc.

The institute is provided with a total of 3000 square meters of laboratory and office rooms. Among them, the lab has 600 m², while computer and network training classroom 90 m² (with 25 sets of PCs connected to the Internet), and 3 meeting rooms of different sizes.

3. Budget

The budget of the Executing Agency in last three years is shown in the following table (in US\$).

Year	2008	2009	2010
Personnel	942,217	1,018,015	1,021,785
Sub-contracts	918,081,	610,615	1,401,754
Duty Travel	430,059	397,985	613,831
Capital Items	629,956	200,000	492,307
Consumable Items	1,334,596	2,396,154	2,714,646
Total	4,254,846	4,622,769	6,244,323

4. Professional Personnel

There are presently 77 staff member, among them 28 have doctor's degree, 24 master's degree and 13 bachelor's degree. We have 2 academicians of Chinese Academy of Sciences, 15 senior research scientists (professors), 27 associate professors and 30 personnel with intermediate title. The technical staff is all engaged in works pertinent to forestry research. Eight persons work for administrative management.

ANNEX 2: CURRICULA VITAE OF PERSONNEL PROVIDED BY EXECUTING AGENCY

1. Project Director

Name: **Huang Qinglin**Date and place of birth: 1967/Fujian, China

Nationality: Chinese

Field and institution of graduation: Forestry, Fujian Forestry College, Nanping, China.

Field and institution of Post-graduation: Ph. D., Forest Management, Beijing Forestry University, Beijing

Relevant work undertaken:

- (1) Participated in ITTO PD 14/92 Rev .2 (F) "A Demonstration Programme of Sustainable Utilization of tropical Forests by Means of Differentiated Management in Hainan Province, China"
- (2) Key member of ITTO PD 12/00 Rev .3 (F) "Developing and Extending of Criteria and Indicators for Sustainable Management of Natural Tropical Forests in China"
- (3) Held 4-month ITTO Fellowship Programme in Goettingen University in Germany and finished the technical document on "Key Techniques of Continuous Cover Forestry and Their Possible Applications in Tropical Forest Management in China"
- (4) Director of ITTO PD 423/06 Rev.2 (F) "Training on Demonstration, Application and Extension of ITTO Manual on Restoring Forest Landscapes in Tropics of China"
- (5) Director of ITTO RED-SPD 020/09 Rev. 1 (F) "Development and Demonstration on Scheme of Payment for Environmental Services (PES) Derived from Degraded and Secondary Tropical Production Forests in Hainan Province, China"

Position in the present organization: Professor of CAF

Task and Responsibilities in the project: In charge of activity 1.3 and 2.5

2. Key Staff Member

Name: **Huang Jincheng**Date and place of birth: 1962/ Guangdong, China

Nationality: Chinese

Field and institution of graduation: Tropical crops, South China Tropical Agriculture University, China.

Field and institution of Post-graduation: Ph. D., Forest Silviculture, Chinese Academy of Forestry, Beijing, China

Relevant work undertaken:

- (1) Director of sub-project No.4 of ITTO PD 14/92 Rev .2 (F) "A Demonstration Programme of Sustainable Utilization of tropical Forests by Means of Differentiated Management in Hainan Province, China"
- (2) Director of ITTO PD 10/99 "Selection and Cultivation of Fast-growing and High-yielding Strains of Timber-oriented Rubber Tree in Hainan, China"
- (3) Key member of ITTO PD 423/06 Rev.2 (F) "Training on Demonstration, Application and Extension of ITTO Manual on Restoring Forest Landscapes in Tropics of China" and ITTO RED-SPD 020/09 Rev. 1 (F) "Development and Demonstration on Scheme of Payment for Environmental Services (PES) Derived from Degraded and Secondary Tropical Production Forests in Hainan Province, China"

Position in the present organization: Senior Engineer and Vice Director of Forestry Department of Hainan Province Task and Responsibilities in the project: In charge of activity 2.1 and 2.6

Name: **Dong Dong**Date and place of birth: 1985/ Anhui, China

Nationality: Chinese

Field and institution of graduation: Horticulture, Anhui Agriculture University, Anhui Province, China

Field and institution of Post-graduation: Ph. D., Landscape Architecture, Huazhong Agriculture University, Hubei Province

Relevant work undertaken:

(1) Participated in project "Assessment on old and famous trees in Jiuhua Mountain"

(2) Participated in project "Assessment of ecosystems in Three Gorges Reservoir Area"

Position in the present organization: Postdoctoral fellow of CAF

Task and Responsibilities in the project: In charge of activity 1.1 and 1.2

Name: **Zhang Yin**Date and place of birth: 1986/ Anhui, China

Nationality: Chinese

Field and institution of graduation: Resource Management, Hefei College, Anhui Province, China

Field and institution of Post-graduation: Master, Forest Management, Southwest Forestry University, Beijing, China

Relevant work undertaken in the last three years:

(1) Participated in project "Countermeasures of rural tourism in Anhui Province"

Position in the present organization: Ph.D. candidate of Forest Management, CAF

Task and Responsibilities in the project: In charge of activity 2.2 and 2.3

Name: **Peng Wencheng**Date and place of birth: 1963/ Hunan, China

Nationality: Chinese

Field and institution of Post-graduation: Master, Forest Management, Chinese Academy of Forestry, Beijing, China.

Relevant work undertaken:

(1) Participated in ITTO RED-SPD 020/09 Rev. 1 (F) "Development and Demonstration on Scheme of Payment for Environmental Services (PES) Derived from Degraded and Secondary Tropical Production Forests in Hainan Province, China"

Position in the present organization: Senior Engineer of Hainan Forestry Institute; Ph.D. candidate of Forest Management, CAF

Task and Responsibilities in the project: Participated in activity 2.2 and 2.3

Name: **He Chulin**

Date and place of birth: 1962/ Hunan, China

Nationality: Chinese

Field and institution of graduation: Computer science, University of National Defensive Science and Technology,

Changsha, China.

Field and institution of Post-graduation: Master, Tropical Forest and International Forest, Goettingen University, Germany Relevant work undertaken:

(1) Engaged in application of Remote sensing and GIS, Forest resource monitoring, Forest inventory

(2) Participated in ITTO PD 57/97 "Establishment of Satellite Remote Sensing Monitoring

- and Geographical Information System for Tropical Natural Forests in Hainan"
- (3) Participated in ITTO PD 423/06 Rev.2 (F) "Training on Demonstration, Application and Extension of ITTO Manual on Restoring Forest Landscapes in Tropics of China" and ITTO RED-SPD 020/09 Rev. 1 (F) "Development and Demonstration on Scheme of Payment for Environmental Services (PES) Derived from Degraded and Secondary Tropical Production Forests in Hainan Province, China"

Position in the present organization: Senior Engineer and vice-director of Project Administrative Office of Forestry Department of Hainan Province

Task and Responsibilities in the project: In charge of activity 2.4

ANNEX 3: TERMS OF REFERENCE OF PERSONNEL AND CONSULTANTS AND SUB-CONTRACTS FUNDED BY ITTO

National experts, national consultants and international consultant will be funded by executive agency. Only other labor totally 28PM (including 13PM for assistants and 15 PM for other labor mainly for field work and assistant work) will be funded by ITTO.

There will be 2 subcontracts in the project.

Terms of references for Subcontract A (Mapping and Investigating)

- Mapping for investigation and assessment report on 6 typical forest ecotourism resources in Hainan Province based on stakeholders participatory
 - · Investigating on 6 typical forest ecotourism resources in Hainan Province based on stakeholders participatory

Terms of references for Subcontract B (Publishing)

• Publishing investigation and assessment report on 6 typical forest ecotourism resources in Hainan Province based on stakeholders participatory

ANNEX 4: RESPONSES TO REVIEWER COMMENTS

Reviewer Comment	Amendment(s) made	Page #
Comment 1: List of Abbreviations and Acronyms must be re-arranged in alphabetical order.	List of Abbreviations and Acronyms has been re-arranged in alphabetical order.	1
Comment 2: Please include more discussion on the underlying problem for ecotourism. This proposal was submitted as a result of a suggestion to make Hainan an international tourist island. Nonetheless, there is a need to verify the statement that forest ecotourism is an important and effective supplementary pattern (probably the word effort is more appropriate) to enhance environmental services and local livelihoods in Hainan. It is also important to verify the statement that there has been no investigation or assessment to date with regard to ecotourism resources. Using the words island and province interchangeably should be avoided, to achieve consistency in referring to the project area.	More discussion on the underlying problem for ecotourism has been included. The statement that forest ecotourism is an important and effective effort to enhance environmental services and local livelihoods in Hainan has been verified. The statement of existing extensive investigation or assessment to date with regard to ecotourism resources has been verified. The words "island" was only used in the phrase "Hainan International Tourist Island" which was translated directly from official documents.	2
Comment 3: The proposal lists how it is compliant with the REDDES TP, but the relevance to the deliverables and the Monitoring Protocol is missing. Please elaborate. Just investigating and assessing the six typical forest ecotourism resources contained in the objectives is though not sufficient as it does not guarantee an improvement in local livelihoods unless the project outputs involve implementation of the ecotourism activities.	Conformity with TP deliverables and association of results with the Monitoring Protocol including Means of Verification has been elaborated.	4
Comment 4: Please provide clear information on the project site. Furthermore information on social aspects is lacking. Also, sources of the statistics quoted in the proposal must be cited.	Clear information on the project site has been provided. Information on social aspects has been added. Sources of the statistics quoted in the proposal have been cited.	6
Comment 5: Comprehensive outcomes are presented, but they appear extremely ambitious. They can hardly be achieved within the framework of this small project. Because the project activities do not involve implementation, it is difficult to say for sure that one of the outcomes from the project, for example, will enhance local livelihoods. Other positive impacts as listed on page 5 of the project proposal appear impossible to achieve. There is also no indication as to how many stakeholders will be involved. This needs explanation.	The intended situation after project completion has been reformulated. Indication as to how many stakeholders will be involved has been given. In fact, the comprehensive outcomes in previous version are the indirect intended situation after implementation of tropical forest tourism plans based on the sound methods of investigating and assessing.	6-7

Comment 6: The proposal claims that all relevant stakeholders will be involved, however, no indication is given about early discussions with potential stakeholders and how the idea for this proposal was presented to those stakeholders. The statements made in this section need to be qualified, for instance that donors and the international community are expected to obtain new knowledge on how to develop ecotourism. As far as ecotourism activity is concerned, it is not a new field to local or international donors, knowledge and information on ecotourism activities is available worldwide.	Indication has been given about early discussions with potential stakeholders. The statements made in this section have been qualified.	8-9
Comment 7: Narrow down the elaboration of the problem analysis to the core problem of insufficient capacity to investigate and assess the tropical forest ecotourism resources. The problem tree needs to be reviewed to reemphasize what exactly is the key problem for Hainan Province. Lack of forest ecotourism to enhance environmental services and local livelihoods for forest-dependent communities is viewed as not being a key problem. Obviously, there must be some form of activities going on in Hainan Province, with the background on the social, cultural, economic, and environmental aspects of the project area given on page 5 of the proposal. Perhaps the key problem is that forest ecotourism has not been fully explored. The list of causes highlighted could easily be associated with the key problem, except for the box citing lack of techniques for investigating and assessing forest ecotourism. As stressed in 2.1 and again here, techniques for assessment are readily available. What is important for the project proponent is to adapt universal techniques to suit local conditions.	The elaboration of the problem analysis to the core problem has been narrowed down. The problem tree has been reviewed to reemphasize what exactly is the key problem for Hainan Province.	10-12
Comment 8: The Development Objective should be narrowed down to the problem of Ecotourism. Consequently the impact indicators must also be more specified.	The Development Objective has been narrowed down to the problem of forest ecotourism. Consequently the impact indicators have been more specified too.	13
Comment 9: The specific objective and outcome indicators are acceptable but will be difficult to achieve as the project is focused solely on investigation and assessment of ecotourism resources and not on implementation. For sustainability, some indication needs to be provided as to the commitment of all parties involved in the project to implement the results. The impact indicators must be more measurable.	The specific objective and outcome indicators have been reformulated according to the reviewer comment.	13

Comment 10: The two outputs are acceptable. It is also suggested that the project proponent indicate the need to set up a demonstration model to ensure that the outcome indicators are achievable. Of the six forest ecotourism resources investigated and assessed, select one and make it a demonstration model, in which the local community/indigenous community will be engaged. Such a model would support the outcome indicators. Of course, this may be suggested as the second phase of the project.	Yes, the reviewer comment may be suggested as the second phase of the project.	14
Comment 11: Inputs for carrying out activities were not discussed.	Inputs for carrying out activities have been discussed and added.	14
Comment 12: Although it is stated that the approach and method applied are participatory in nature, there is no indication as to how many stakeholders from each group will be involved. Some indication of number of stakeholders should be given in the proposal.	Indication as to how many stakeholders from each group has been involved. Some indication of number of stakeholders has been given in the proposal.	14-15
Comment 13: Well prepared and detailed, in accordance with ITTO guidelines. However, Duty travel appears very high with US\$ 40.000 - this should be reduced to the necessary. Furthermore the budget should include an amount of US\$ 5,000 for ITTO Monitoring and Review Costs.	Duty travel has been reduced from US\$ 40,000 to US\$ 37,000. And US\$ 5,000 for ITTO Monitoring and Review Costs has been included.	17-21
Comment 14: There are many staff from the Chinese Academy of Forestry involved in the project. If possible, scale down in numbers of staff. This may not only ensure smoother implementation, but also save costs.	The numbers of staff (especially from the Chinese Academy of Forestry) involved in the project has been scaled down.	27-28
Comment 15: The detailed tasks and responsibility of the all key experts must be provided.	The detailed tasks and responsibility of the all key experts has been provided in 4.2 Project management and ANEX 2.	22, 26-28
	The additions in revised project proposal are shown in bold and underlined, while the deletion in strikethrough in the text.	