



PROJECT IDENTIFICATION FORM (PIF)

PROJECT TYPE:

TYPE OF TRUST FUND:

PART I: PROJECT IDENTIFICATION

Project Title:	CBPF-MSL: Strengthening the management effectiveness of the wetland protected area system in Hainan for conservation of globally significant biodiversity		
Country(ies):	People's Republic of China	GEF Project ID:	4811
GEF Agency(ies):	UNDP	GEF Agency Project ID:	4597
Other Executing Partner(s):	Forestry Department of Hainan Province, Dongzhaigang Nature Reserve	Submission Date:	February 1, 2012
		Resubmission Date:	February 29, 2012
GEF Focal Area (s):		Project Duration (months):	60
Name of parent program: For SFM/REDD+ n/a	China Biodiversity Partnership Framework and Action Plan (CBPF) and Main Streams of Life - Wetland PA System Strengthening Programme	Agency Fee (\$):	237,129

A. FOCAL AREA STRATEGY FRAMEWORK:

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Indicative grant amount (\$)	Indicative co-financing (\$)
BD-1	Outcome 1.1: Improved management effectiveness of existing and new protected areas.	Output 1.1. New protected areas (2) and coverage (40,000 ha) of unprotected ecosystems.	GEFTF	1,709,271	11,287,000
	Outcome 1.2: Increased revenue for protected area systems to meet total expenditures required for management.	Output 1.3. Sustainable financing plans (1).	GEFTF	800,000	5,858,000
Sub-total				2,509,271	17,145,000
Project management cost			GEFTF	125,500	855,000
Total project cost				2,634,771	18,000,000

B. PROJECT FRAMEWORK:

Project Objective: *To strengthen the management effectiveness of the wetland protected area system in Hainan in response to existing and emerging threats to the globally significant biodiversity and essential ecosystem services*

Project Component	Grant type	Expected Outcomes	Expected Outputs	Trust Fund	Indicative Grant Amount (\$)	Indicative co-financing (\$)																					
1. Expansion of wetland PAs	TA	<ul style="list-style-type: none"> Increased coverage of Hainan's terrestrial PA system from the current 285,600 ha, with improved coverage of under-represented areas. <table border="1"> <thead> <tr> <th></th> <th>Current</th> <th>Target</th> </tr> </thead> <tbody> <tr> <td>32a¹</td> <td>7.6</td> <td>15</td> </tr> <tr> <td>33a</td> <td>9.6</td> <td>15</td> </tr> <tr> <td>41a</td> <td>8.5</td> <td>15</td> </tr> <tr> <td>43c</td> <td>0</td> <td>15</td> </tr> <tr> <td>44</td> <td>36.5</td> <td>40</td> </tr> <tr> <td>80b</td> <td>1.5</td> <td>5</td> </tr> </tbody> </table> <ul style="list-style-type: none"> Strengthened capacity of HFD for management of the 		Current	Target	32a ¹	7.6	15	33a	9.6	15	41a	8.5	15	43c	0	15	44	36.5	40	80b	1.5	5	<ul style="list-style-type: none"> PA system consolidation and expansion through: (i) development of a climate resilient PA system consolidation strategy and action plan with disaggregated section on the mangrove PA system; (ii) PA system financing for the expanded PA system with disaggregated section on the mangrove PA system; and through (iii) operationalisation of PA functions in the newly designated areas including boundary demarcation, signage, management bases. Provincial guidelines for management and zoning of coastal wetland PAs developed, providing tailored approach to address specific threats Supervisory capacity of the provincial Forestry Department for planning and monitoring wetlands PAs and Ramsar Sites as well as for providing adequate support for an ecosystem specific PA 	GEFTF	340,000	5,150,000
	Current	Target																									
32a ¹	7.6	15																									
33a	9.6	15																									
41a	8.5	15																									
43c	0	15																									
44	36.5	40																									
80b	1.5	5																									

¹ 32a Tropical semi-evergreen monsoon forest on laterite, 33a Tropical evergreen lowland forest, 41a Tropical acid shrub forest (Melastoma), 43c Tropical limestone forest, 44 Mangroves, 80b Tropical coastal savannah thorny forest. See Annex 1 for distributions.

		PA system, indicated by: (i) improvement as per the capacity scorecard (baselines to be established during the PPG); (ii) percentage of natural wetlands types in the Hainan wetland PA network increased from the baseline of 80% to 100%.	networking approach strengthened through strategic training activities and adoption and application of a set of professional competency standards for wetland PA management staff as a basis for enhanced performance.			
2. Development of Mangrove PA network	TA/INV	<ul style="list-style-type: none"> ▪ The PA coverage of the mangrove ecosystem types increased from current 3,857ha to >5,000ha. ▪ Increase in the number of wintering black-faced spoonbills from the baseline number of 76 to 100.² ▪ Strengthened site level wetland PA management in the 8 PAs in the Hainan mangrove PA network indicated by the METT assessment. (baseline to be established during the PPG). ▪ Improvement in the biodiversity health status of the Hainan wetland sites, indicated by the improvement in the biodiversity health index³ especially designed for wetland sites. Baseline will be established during PPG. • Further encroachment to be reversed. Area of mangrove cover increased. 1,000 ha of Dongzhaigang NNR and Qinglangang PNR and other place in Hainan island to be restored back from aquaculture ponds to mangrove cover. 	<ul style="list-style-type: none"> ▪ Mangrove PA network established, with enhanced law enforcement and monitoring capacity of individual PAs, coordinated management and monitoring activities and shared data and information base. ▪ Sector specific standards and safeguards applied to the mangrove PA network, reducing threats to the PAs. ▪ Improved buffer zones established at Donzhaigang NNR and at least one other NR and law enforcement and monitoring capacity strengthened based on Nature Reserve Management Plans ▪ Protection status of the wetland mangrove forest PAs strengthened as a mangrove network and at least 3 other PAs upgraded from local to provincial or national NRs ▪ Provincial professional competency standards for wetland PA management applied to the nature reserve staff in the mangrove PAs, and strategic training provided in protection, sustainable harvesting, monitoring, tourism control, extension work, control of alien invasive species, methods of habitat restoration. ▪ Restoration of abandoned shrimp ponds demonstrated to revive the mangrove forest to provide the habitats of stopover water birds in the tidal flats in Dongzhaigang NNR and Qinglangang PNR. ▪ Community Co-management (protection, monitoring and replanting) and alternative livelihood schemes (homestays, offshore sport fishing) established targeting villagers adjacent to Dongzhaigang NNR and Qinglangang PNR. ▪ Awareness of the importance of the mangrove PAs in safeguarding biodiversity and ecosystem services increased through targeted campaigns, communication and a data sharing platform. 	GEF TF	1,729,271	7,338,000
3. PA system management framework	TA	<ul style="list-style-type: none"> ▪ Strengthened capacity for mainstreaming wetland PAs and their management into Hainan's Tourism and overall development plans, indicated by: (i) Approval of tourism and fishery sector specific standards ; (ii) inclusion of due consideration to, and measures for, wetlands and catchment protection in the 13th 5-year 	<ul style="list-style-type: none"> ▪ Coordination with provincial sector agencies improved through establishment/ identification of appropriate cross-sectoral body and embedding of wetland PA objectives major cross-sectoral plans in particular tourism plans. ▪ Sector specific standards and safeguards developed to protect wetland PAs from biodiversity threatening sector practices, including setting up of regulatory standards for tourism development and operation and issuance of official guidelines for fisheries and aquaculture. ▪ Value of wetland ecosystem services proven through 	GEF TF	440,000	4,657,000

² The world population of black-faced spoonbill is estimated to be less than 2,000, and Hainan offers the fourth biggest wintering areas.

³ Biodiversity health is reflected in the ability of a site to maintain its biodiversity values. These will vary significantly from site to site. The biodiversity index which is being developed for this project includes two components: 1) score of habitat suitability for important biodiversity and 2) status of important biodiversity. The score does not necessarily indicate stability. Many wetland sites are very dynamic but what we are interested in is the ability of the biota to adapt to or even thrive with the changes. This will become increasingly important as climate and water flow patterns change. Each site using this index will undertake a baseline survey which also selects indicators and target species for subsequent surveys. Indicators should include key wetland birds, important aquatic fauna – fish, mollusks; selected indicator insects; endangered mammals; major components of vegetation; incidence of AIS, avian diseases etc.

	<ul style="list-style-type: none"> plan and subsidiary sectoral plans ▪ Increased availability of operational funding for national and provincial level PAs indicated by the financial sustainability scorecard, compared with the baseline of US\$ 6 million (RMB 39 million) per year ▪ Improved data sharing platform being regularly updated. (as indicated by use levels of data providers and data users) 	<ul style="list-style-type: none"> economic valuation of wetland biodiversity and ecosystem services and well accepted. ▪ Provincial PA system financing strengthened through development of mechanisms for incorporating new funding sources from eco-compensation initiatives and new financing investments from the public and private sector especially eco-tourism companies. ▪ Virtual database containing PA and biodiversity information (PA boundary, status, zones, important species, trends, threats, water level and quality, climate change risk management, ecosystem/ biodiversity resilience enhancement), restoration parameters and functional management, socioeconomic information, local involvements etc.) developed and adapted for web access and linked to the national platform. 				
Sub-total					2,509,271	17,145,000
Project management cost				GEF/TF	125,500	855,000
Total project costs					2,634,771	18,000,000

C. INDICATIVE CO-FINANCING FOR THE PROJECT BY SOURCE and BY NAME if available (\$)

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount (\$)
Local Government	Hainan Provincial Government	Grant	13,000,000
Local Government	Hainan Provincial Government	In-kind	4,300,000
GEF Agency	UNDP	Grant	700,000
Total Co-financing			18,000,000

D. GEF RESOURCES REQUESTED BY FOCAL AREA(S), AGENCY (IES) SHARE AND COUNTRY(IES): NA

GEF Agency	Type of Trust Fund	Focal Area	Country Name	Grant Amount (a)	Agency Fee (b)	Total c=a+b
UNDP	GEF TF	Biodiversity	China	2,634,771	237,129	2,871,900
Total Grant Resources				2,634,771	237,129	2,871,900

PART II: PROJECT JUSTIFICATION

1. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

A.1. THE GEF FOCAL AREA STRATEGIES:

The project is aligned with the GEF BD-1 objective: Improve Sustainability of Protected Area (PA) Systems. More specifically, the project contributes to Outcome 1.1: Improved management effectiveness of existing and new PAs and Outcome 1.2: Increased revenue for PA systems to meet total expenditures required for management. The project will contribute to the objective and outcomes by creating a strong provincial system for managing the PA system and the sub-system of mangrove PAs, improving the spatial design of the PA system and bringing an additional 40,000 ha under protection, ensuring better terrestrial ecosystem representation and filling ecosystem coverage gaps. As Hainan Province is largely an island, the whole island can be regarded as a catchment system, the project therefore focuses on terrestrial wetland PAs including catchment PAs inland and mangrove PAs along the coast. This will increase the resilience of the sub-system in the face of a fast changing climate by maintaining representative samples of different forest, grassland and wetland types, with gradients in altitudes and increased connectivity between core areas. This will allow the gradual redistribution of component species of different wetland ecosystems and ensuring adequate protection of upstream non-wetland habitats such as forests and grasslands that serve as vital catchments for the wetlands themselves. The project will improve functioning of existing and new PAs, by strengthening its management effectiveness through strengthening monitoring and law enforcement, establishment of buffer zones, development of co-management arrangement with community participation. The project is designed to reduce threats by integrating wetland PA objectives in tourism plans and establishing standards for tourism development and operation, which to some extent contributes to BD-2 objectives. However, the project objective for mainstreaming is directly linked to the PA system strengthening, in line with the programmatic framework which is aligned with BD-1. In addition, the Project directly contributes to the goals of Programme of Work on Protected Areas (PoWPA) in particular: Goal 1.2: To integrate PAs into broader land and seascapes and sectors so as to maintain ecological structure and function; Goal 2.2: To enhance and secure involvement of indigenous and local communities and relevant stakeholders; 3.1: To provide an enabling policy, institutional and socio-economic environment for PAs; Goal 3.2: To build capacity for the planning, establishment and management of PAs;

Goal 3.4: To ensure financial sustainability of PAs and national and regional systems of PAs; Goal 4.1: To develop and adopt minimum standards and best practices for national and regional PA systems; and Goal 4.2: To evaluate and improve the effectiveness of PA management.

A.2. NATIONAL STRATEGIES AND PLANS OR REPORTS AND ASSESSMENTS UNDER RELEVANT CONVENTIONS:

The proposed Project is well aligned with national and provincial policies and programmes. The 12th National Five-year Plan (2011-2015) urges environmental protection and sustainable growth, enhancing “ecological conservation and restoration.” The plan urges the reinforcement of biodiversity conservation, strengthening monitoring in Nature Reserves (NR) – the main protected area category - and improving their management and protection. The project will enable the State Forestry Administration (SFA) to achieve its target of adequately protecting 55% of the natural wetlands in China by the end of 2015, mitigating further loss of natural wetland areas and degradation of their functions. Meanwhile, the newly approved National Biodiversity Conservation Strategy and Action Plan (NBCSAP 2011-2030) identifies 35 biodiversity priority protection regions in China which include the Tropical Forests of Hainan which is partially targeted by the project. The project will address key priorities under the NBCSAP, through implementing its priority strategy of strengthening the effectiveness of the PA system in China and contributing directly to the achievement of the following action programmes under Plan Action lines 12,13 and 14 respectively, including: coordinating action to implement and improve the national nature reserve plan; enhancement of biodiversity conservation in priority areas of protection; and standardisation of nature reserves to carry out actions to improve the quality of nature reserve management. The project is also in line with the China Biodiversity Partnership and Framework for Action (CBPF), which is China’s primary investment strategy for biodiversity conservation through the GEF and other partners. This project has been designed to address urgent, priority and catalytic issues identified under the CBPF, in particular under Theme 3: Investing and Managing Effectively in Reducing Biodiversity loss in PAs. It will contribute directly and substantially to Results 4, 16, 17, 18 and 19 of the agreed CBPF Framework which are respectively: financial flows to biodiversity conservation increase over current baseline; effective governance and legal framework for the national protected area system; harmonised and effective national system for selecting, designing, managing and monitoring protected areas; NRs and PNRs are effectively managed; National NRs and PNRs have stable and sufficient finance. The project is part of the GEF/UNDP Programme *Main Streams of Life - Wetland PA System Strengthening for Biodiversity Conservation*, which is a sub-programme of the CBPF. The project is one of the six provincial level initiatives under the umbrella framework programme, and will contribute to the national level programme outcomes under the three programmatic components.

B. PROJECT OVERVIEW:

B.1. DESCRIBE THE BASELINE PROJECT AND THE PROBLEM THAT IT SEEKS TO ADDRESS:

Hainan is the smallest province (34,000 km²), comprising some two hundred islands scattered among three archipelagos off the southern coast of China. 97% of the land mass is comprised of Hainan Island. It was separated administratively only as late as 1988 from Guangdong as a new province. The province has a population of 8.4 million (2007) with rapid population growth due largely to immigration prompted by fast economic development. There are two main ethnic minorities Li (800,000) and Miao (50,000) living in the SW parts of the island. Hainan is the largest of China’s special economic zones⁴. Hainan's economy is predominantly agricultural with main crops including rice, coconuts, tropical fruits, and more than a half of the island's exports are agricultural products. There is a large off-shore fishing and aquaculture industry, producing scallops, pearls, shrimps and tilapia, supporting around 100,000 families. Tourism plays an important part in Hainan's economy, owing largely to its tropical beaches and lush forests. In 2009, the central government announced its plan to establish Hainan as an official international tourism destination, which boosted the local economy. By the first quarter of 2010, Hainan had the highest increase in GDP of any province in China, with a year-on-year increase of 25.1%.

Hainan island has mountains in the centre and SW. Its highest peak is Wuzhishan (1867m). Rainfall is high in the east (2000mm/annum) but less so along the west coast (1000mm/annum) leading to a wide range of forest and woodland types from tropical rainforest to monsoon woodlands. Most of the rivers in Hainan originate in the central area of the island and flow in different directions, making the whole island a large catchment area. There are very few natural lakes on the island. The island has 1,500 km of coast line and supports the richest mangrove forests in China and includes extensive marine areas of the South China Sea including the Nansha archipelago and many coral reefs.

Hainan’s location in the humid tropics adds greatly to the terrestrial biological richness of the province. The flora is estimated at 4,200 species including 630 endemic species and no less than 450 commercial timber species – floristically one of the richest provinces in China. Mammal and bird richness is also high with several important endangered and endemic species, including

⁴ The Chinese government provides the Special Economic Zones (SEZs) with special economic policies and flexible governmental measures. These measures include tax incentives for foreign investments in the SEZ and greater independence with regard to international trade activities. SEZs are listed separately in the national planning (including financial planning) and have province-level authority on economic administration. SEZs local congress and government have legislative authority.

the Hainan gibbon, Hainan moonrat, Hainan deer, Hainan hare, Hainan flying-squirrel, White-eared partridge and Hainan warbler. Coastal biodiversity is also exceptionally rich with 90% of the mangrove species (36 species in 20 families) occurring in China, and other important coastal and marine coral habitats. Dongzhaigang mangrove reserve with its extensive tidal flats in north-east Hainan is listed as a Ramsar site wetland of international importance. Hainan is an important wintering ground for migratory waterfowl such as endangered black-faced spoonbill and spoon-billed sandpiper. Of the 81 species of migratory water bird specified under the China-Australia Migratory Bird Agreement (CAMBA), 35 species have been recorded within the Dongzhaigang mangroves. In addition, 75 species of migratory bird specified under the China-Japan Migratory Bird Agreement (CJMBA) have been recorded. In the Dongzhaigang alone, 14 "true" mangrove species and 9 "mangrove associate" and "semi-mangrove" species are found, as well as a large number of associated marine fish and crustacean species. The island is regarded as one of China's nine biodiversity hotspots and is part of the Indo-Burma global biodiversity hotspot of Conservation International (CI).

Threats: Hainan was once almost totally forested but became heavily degraded as a result of logging, clearing land for agriculture and rubber plantations. Present natural forest cover in Hainan is estimated at around 20%. Other "forest area" includes extensive rubber, *Eucalyptus* and fruit plantations. With the forest loss, the ecosystem functions for water catchment was also degraded. Similarly, Hainan was once surrounded by a fringe of mangroves. By 1956 there remained about 10,000 ha. By 2007 this was estimated to be 3,857 ha. This rapid loss of mangrove constitutes a threat to coastline security and economic growth. Mangrove plays a valuable role in storm abatement, natural land reclamation, and protecting offshore coral reefs important for ecotourism and the seafood industries. The importance of this role will increase as climate change raises sea levels.

Biodiversity and natural habitat is being threatened by the rapid development of physical infrastructure, especially in coastal areas. Although tourism provides employment for local boat operators, tour guides as well as opportunities for local business, tourism developments which cover a significant portion of the coastal zone are posing major threats to coastal ecosystems including mangrove ecosystems. Moreover, intensification of seafood harvesting, conversion of mangroves into fish ponds, duck farming in mangrove forest and over development and intensification of touristic activities in the coastal zone are serious threats. Furthermore, all of these activities are encouraged by different government departments such as ocean and coast authorities, the agriculture department and in the Hainan International Tourism Island Master Plan approved in 2010. These place heavy threats and constraints on the viability of the NRs in particular the Dongzhaigang National Nature Reserve which is in close proximity to the provincial capital, Haikou.

A new threat to Hainan's biodiversity is the rising sea level and increasing frequency of typhoons associated with climate change. The frequency of typhoons hitting southern China coastline has doubled in the past 30 years, and Hainan has just been hit by a major one resulting in deaths and massive evacuation. These changes may seriously endanger mangrove reserves and require adjustments to the zoning of different mangrove formations and well as affect the seasonality of migrating shorebirds. With an increase in the frequency of extreme weather events, the ecosystem capacity of water retention and soil protection in catchment areas becomes increasingly important in reducing effects of extreme weather.

The provincial government is taking positive steps towards safeguarding the globally significant biodiversity. Hainan Province has established a system of terrestrial protected areas comprising 49 nature reserves (NRs) accounting for approximately 8.4 % of the total land area of the province.⁵ These NRs include 9 National NRs, 24 Provincial NRs and 16 NRs administered by county or other lower tiers of local governments (See Annex 1 for a map of NRs). Among the 49 NRs, there are 10 marine NRs and 17 coastal NRs including 7 mangrove NRs covering a terrestrial and tidal area of 12,339 ha. These NRs are mainly managed by the Hainan Forestry Department.

Table 1: Mangrove Nature Reserves in Hainan Province

	Name of Nature Reserve	Location	NR Area (ha)	Mangrove area (ha)	Annual Operational Budget	Staff No.	Management Agency
1	Dongzhaigang National NR	Wenchang County and Haikou City	3,337	1,733	RMB 2 million	40	Forestry
2	Qinglangang Provincial NR	Wenchang County	2,948	1,233.3	RNB 400,000	24 (incl. 11)	Forestry
3	Sanya Provincial NR	Sanya City	923	59.7	RMB 264,000	7	Forestry
4	Xinying Provincial NR	Danzhou City,	115	79.1	0	0	Environmental Protection
5	Xinying Provincial NR	Lingao County	3,437	ND	RMB72,000	4	Forestry
6	Huachang Bay Local NR	Chengmai Country	150	150	0	0	Forestry
7	Dongfang Provincial NR	Dongfang County	1,429	123.6	RMB 120,000	6	Forestry

⁵ There is also 10 marine PAs administered by the State Oceanic Administration, which is beyond the scope of this project.

TOTAL		12,339	3,379	RMB 2,748,000 (US\$ 422,770)	81	
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Note: NNR – National Nature Reserve, PNR – Provincial Nature Reserve

On the ground, these NRs are managed by the local forestry departments which are located within the county and municipal governments. The forestry departments are at the same time subsidiary units of the SFA at the national level, and therefore have two reporting lines – to the local and the national governments. While the national authority sets technical standards, provides technical programme support, manages the central database, and ensures effective management of the national PA system, provincial authorities are responsible for the management of the provincial PA system and site management including staffing and financing of site level operations. County and municipal governments are also responsible for site level PA management and operations, and provide staff and financing for operation of some PAs. Although there is no difference in management objectives of national/provincial/local NRs, national NRs generally receive much higher government investment and are therefore taken more seriously. National NRs can access national funding for improvement of basic capacity and facilities for NR management –i.e. personnel cost and construction of buildings and roads within PAs, however, funding does not usually cover training, monitoring and law enforcement.

The provincial government set out a plan to expand the terrestrial PA system to 11.79 % of the total land area by 2025, as well as increasing the mangrove areas within the PAs by at least 25% by 2017, in line with the NBCSAP and with the wetland NRs as a priority. Despite these efforts, biodiversity is still being lost even within the protected areas. There is an urgent need to strengthen the management effectiveness of the Hainan PA system, expand the PA system to secure the representative sample of ecosystems and increase the resilience of the provincial PA system.

Baseline: During the 11th Five-Year Plan period (2006-2010), since the State Council approved the National Implementation Plan on Wetland Conservation Programme, the Chinese central government has invested US\$ 216 million⁶ in carrying out wetland conservation, restoration, sustainable use demonstration and capacity building. To date, 201 wetland-related projects have been undertaken across China, including 134 projects implemented by the forestry sector, with a total local government co-funding of over US\$ 263 million. In May 2010, the Government decided to earmark US\$ 30 million as special funds to subsidise management of 20 Ramsar sites (including Dongzhaigang NNR), 16 wetland nature reserves and 7 national wetland parks in China in implementing projects in terms of wetland monitoring and ecological restoration. In addition, in the 12th Five Year Plan Period, the SFA is expected to invest US\$180 million annually in managing the 550 wetland PAs under its direct jurisdiction, and 145 national wetland parks. Since 1992, SFA has been responsible for implementation of the Ramsar Convention and has listed 37 Ramsar Sites in the country. Wetland Conservation Management Centre within the SFA, which coordinates wetland management and activities related to the Ramsar Convention, has an annual budget of US\$ 3 million. The Academy of Forest Survey and Planning, a subsidiary institute of the SFA, with an annual budget of US\$ 2 million, provides technical support for wetland surveys and monitoring.

In July 2011, the Regulation on Mangrove Protection in Hainan Province was passed by the People’s Congress of the Province. The Regulation provides for, *inter alia*: (i) protection of mangrove sites from encroachment and pollution; (ii) sustainable harvesting from mangrove areas in buffer zones and; (iii) restoration, replanting and combating invasive species. The Hainan Provincial Government and local governments currently allocate around US\$ 6 million per year for operation and running of the 49 NRs, of which approximately US\$ 442,770 are for the 7 mangrove NRs. This appropriation covers staff salaries, administration and equipment. In addition, the Provincial Government routinely provide some additional funding in infrastructure development through projects such as the NR conservation and capacity building projects, which provided US\$ 333,000 for infrastructure development in 2010 and 2011. Through the Wetland Ecological and Conservation Subsidy Project for Ramsar Site, the National Government with co-financing from the local government is investing US\$952,000 in 2011 for enhancing mangrove and wildlife protection and restoration within the Dongzhaigang National NR. The central government, with local government co-financing, has also invested US\$ 222,000 through the Nursery Construction Project, providing seedlings for mangrove afforestation. The National Forest Protection Project and Ecological Forest Conservation Projects is providing US\$ 630,000 (partially cost-shared by local governments) to support maintenance of natural forest and capacity building for forest management in Hainan. The US-based NGO RARE runs the RARE Conservation Project (US\$ 108,000) for community conservation of fish species. AUSAID is also implementing Wetlands Management Policy, Guidelines & Capacity Building Project (ACEDP) in Dongzhaigang NNR during 2007-2012 to support NR on payments for ecosystem services, policy review and capacity building.

With the support of the EU-China Biodiversity Programme implemented through the UNDP, the “Overall Land Use Plan of Hainan Province with Biodiversity Conservation (2006-2020)” was approved by the State Council in December 2009. Technical guidelines for counties to incorporate biodiversity in land-use planning and for Environmental Impact Assessment on Land Consolidation were also developed and approved by the Department of Land and Resources. However, actual application of the plans and guidelines has yet to be seen. In addition, the PA system planning and review has been undertaken by interested academics from time to time proposing new PAs. However, the exercises tended to be academic and not part of official planning of local government. There remains a need for PA system planning to be agreed with the government departments

⁶ Using the exchange rate of US\$ 1 = CNY 6.47 (June, 2011)

concerned and integrated into the overall development plans and Tourism Master Plan for the province. In this way there is a high chance of appropriate funding being approved and plans being realized.

Policy makers at national and provincial level have become increasingly interested in developing new approaches to address China's multiplying conservation challenges and resource constraints in the face of fast economic growth. In particular, local governments have been important contributors to this process, rapidly adapting centrally designed "eco-compensation" programmes to their own needs, creating "hybrids" — programmes that weave together and draw upon multiple central and provincial policies and funding sources — and creating their own distinct initiatives that often feed back into central government policy development. There are opportunities to adapt such schemes to the Dongzhaigang situation so long as strong and convincing economic argument for improved ecological services can be made.

Long-term vision and barriers to achieving it: The long-term solution that this project proposes to safeguard the wetland biodiversity in Hainan is to strengthen the PA network in the Province through enhanced management effectiveness and improved financial sustainability. Main wetlands areas in Hainan are coastal where the pressure is most severe. The PA system will cover adequate amount of coastal wetlands and the Hainan Forestry Department and subsidiary county departments will have sufficient systemic and institutional capacity to adequately manage the PAs. Economic sectors such as tourism and aquaculture will adopt a production practice that does not pose negative impacts on the biodiversity within the mangrove PAs. However, there are a number of systemic, institutional and financing barriers that impede the systematic increase in PA management effectiveness as a means of attaining the long-term conservation solution.

Barrier 1: Insufficient PA coverage and systemic and institutional capacity at provincial level

The PA system in Hainan Province only covers 8.4 % of the terrestrial areas, comprising mostly small NRs are less than 10,000 ha. In order to protect the island's terrestrial biodiversity, wetland areas and increase their resilience to climate change impact, expansion of many NRs and creation of several corridors between them are required. In addition, coastal NRs, in particular the 9 existing mangrove NRs with higher degree of naturalness, need extending. The 2011 review of Hainan's PA system in terms of gap analysis of biodiversity coverage and delivery of ecosystem services concludes that the present PA coverage was geographically biased toward its central mountainous areas with higher elevations, rugged terrain, and infertile soils. Under-protected lowlands and coastal areas tended to have higher animal species richness, and the nature reserve coverage was not enough to capture lowlands biodiversity features. Hainan Province needs to implement systematic planning approaches to define clear visions for guiding future conservation actions, and develop flexible management and funding mechanisms geared toward sustainable use of natural resources. In addition, effective PA management in Hainan is also hindered by weakness in the legal basis for PA development and management. The outdated national regulations on nature reserves do not provide much flexibility in terms of zoning and management options. The result is that the actual management on the ground comes nowhere near the strict regulations for NRs. There is a need for official standards and guidelines for coastal and catchment PAs and guidelines for managing wetlands to increase resilience. Furthermore, although the majority of the PAs is managed by the Hainan Forestry Department, the department's staff lack any specialist training, there are no accepted competence or performance standards and there is little accountability and supervision.

Barrier 2: Limited tools and capacities for wetland PA site management

Lowland and coastal NRs, including mangrove, and biodiversity are the most threatened with population and development concentrated in these areas. Although there are eight 7 mangrove wetland PAs in Hainan, their management is suboptimal and there is little coordination and joint action between them to ensure that mangrove ecosystem in Hainan as a whole will be enhanced for adequate protection. As such, there is no integrated management planning system for the mangrove PA network, nor uniform mechanisms to control external threats to mangrove ecosystems such as tourism development and operation. In addition, 7 out of 8 NRs are provincial NRs, with much smaller government budget allocation and staff numbers. Given the critically small area of remaining mangroves in Hainan, and in order to implement the mangrove protection regulation, the protection status of NRs needs to be elevated and management effectiveness at the site level as well as the mangrove NR network level, needs to improve drastically. This would include better zonation including effective buffer zones, improved law enforcement action, accelerated mangrove restoration work, and inclusion of different wetland habitat types in the PA system. Furthermore, many coastal wetland NRs have direct livelihood impact. For example, the Dongzhaigang NNR area also provides an important resource for more than 4,000 families living around the bay - in the form of fisheries, shellfish collection and fuel wood supply, as well as ecotourism related employment and business opportunities. However, daily intrusions into NRs by the local inhabitants are causing serious over-fishing, over-harvesting and resulting disturbance to ecosystems and biodiversity (especially water birds). Without the involvement of the local communities, effective NR management will be difficult. It is essential to develop co-management mechanisms and promote alternative livelihood schemes. Given the fast rise in the tourism industry on Hainan there are plenty of opportunities to be tried. Negotiations with upstream farmers are also important to regulate the levels of chemical pollutants entering into the water system. However, the NR staff lack capacity to establish and manage co-management arrangements. Similarly, community institutional arrangements do not exist for such management in most areas and their capacities for effective management and legal enforcement are also very weak.

Barrier 3: Disconnect between wetland PA sub-system management and development planning and sectoral planning Hainan's PAs face the same generic problems as NRs in other provinces in terms of extreme pressure from often poor local

communities and many other sectors and stakeholders. As the whole Hainan is a large catchment, coastal wetland PAs are affected by movement of pollutants from far outside the NR boundaries and thence way beyond the control of the management authority. This makes coastal wetland PA management ineffective without ensuring the integrity of the PA system as a whole ensuring attention is paid to migratory flyways, as well as establishing a holistic catchment approach to maintaining wetland biodiversity and ecosystem functions. Several government agencies such as agriculture, fisheries, mining, water resources operate inside PAs alongside the local county governments. These agencies tend to operate independently from the PA management authorities. This has led to promotion of many activities that have negative impacts on biodiversity and ecosystems. In the case of Dongzhaigang, many destructive activities such as intensification of seafood harvesting, conversion of mangroves into fish ponds, duck farming in mangrove forest and intensification of tourism activities are all actively encouraged by other government departments such as ocean and coast authorities, agriculture department, as well as the recently approved Hainan International Tourism Island Master Plan. These all place heavy threats on the viability of the NR. Despite the passage of the mangrove protection regulations, with overlapping jurisdictions and mandates over different elements of PAs, it is difficult for SFA or other PA authorities to exert strong control of the activities within wetland NRs and protection is dependent on developing good coordination and negotiation with different stakeholders. An underlying issue behind this disconnect and the associated chronic shortage of budget for PA management is insufficient understanding of the economic value of wetland biodiversity and ecosystem services. How the loss of these will economically affect various industries and peoples' livelihoods need to be clearly shown and accepted by the government planners and decision makers, industries and local communities. There are opportunities for developing the eco-compensation schemes in direct support of wetland PA management, however, such potential has not yet being sufficiently tapped. Availability of insufficient or outdated data and information is another problem. Even where ecological and other data exists, lack of access and sharing prevents it being used for effective planning sector developments that might adversely impact PAs and biodiversity, or planning of mitigation and adaptations strategies in the face of a changing climate. Great improvements can be made to the existing data and information system so that wetland services can be fully harnessed and not degraded during the 'green development' process.

B.2. Incremental/Additional cost reasoning: DESCRIBE THE INCREMENTAL (GEF TRUST FUND) AND THE ASSOCIATED Global environmental benefits TO BE DELIVERED BY THE PROJECT:

The project seeks to improve PA management effectiveness from the low end towards the effectively managed end of the spectrum in order to significantly reduce threats to biodiversity. **The incremental approach of the proposed project is summarised as follows:** The Government of China and the Hainan Provincial government have clearly identified wetland conservation as a priority and are making significant investments and efforts for conservation and wetland PA management. However, many investments tend to be for physical work such as infrastructure development and hard ware installation such as information centres and IT based area monitoring systems at the site level, with very little focus on wetland biodiversity conservation and species management. In parallel, the governments invest in tourism infrastructure development and promotion, to make Hainan an international tourism destination, with little consideration for biodiversity conservation. There has also been no systematic effort to remove the existing barriers to a sustainable and effective PA system to ensure that, at a minimum, wetland biodiversity within PAs can be safeguarded. In many existing PAs, pressure for the use of land and coastal natural resources, as well as threats coming from distant areas through water courses, requires urgent action in order to prevent further degradation of critical coastal wetland ecosystems and loss of critically endangered species.

Without the GEF investment in the proposed project, there will be no provincial framework and tools for systematic management of the wetland PAs. The provincial Forestry Department's PA management work will remain site based with no uniform management standards nor staff competency standards required for effective PA management. The PA management work will remain site specific and investment will remain ad-hoc and infrastructure oriented. The provincial and local PA management authorities will have limited capacity for effective management and have neither the tools nor the capacity for mitigating threats coming from outside the PAs. Hence the management effectiveness of wetland PAs will remain weak and highly vulnerable to pressure from economic sectors in particular tourism and aquaculture, as well as livelihood activities from neighboring communities. As such, the Hainan PA system will remain unable to fulfill its role in safeguarding globally significant biodiversity. Insufficient technical and functional capacity of the provincial and local forestry departments, insufficient government investment in biodiversity management activities and lack of mechanisms for viable co-management with neighbouring communities will remain critical bottlenecks.

Alternative scenario enabled by the GEF: The project complements baseline programmes and projects by addressing biodiversity conservation through strengthening the provincial PA system as a whole rather than focusing on PA sites. The GEF investment will enable expansion of the PA system in the Hainan province reducing the gap in the ecosystem coverage of the PS system. This will be directly complemented by the improved systemic and institutional capacity of the provincial and local forestry departments for the PA system planning and management, as well as increased availability of operational funding for biodiversity management within the PAs. A PA network management approach will be introduced focusing on mangrove PAs. By demonstrating the provincial systematic improvement of the mangrove PAs, the project will introduce an ecosystem based approach to PA management, with the aim of replicating this strategy in other types of PAs within the province and mangrove PAs in other provinces in the country. Furthermore, the project will demonstrate effective PA management through community

co-management. While strengthening the ability of PA authorities to manage emerging threats in the PA system itself, the project also seeks to put in place safeguard standards and measures to ensure that land and resource uses in and outside PAs, particularly in areas directly affecting the integrity of mangrove wetland biodiversity within the PAs and their broader coastal landscape, are regulated.

Global benefit: The GEF funding will secure critically important coastal wetland biodiversity in the 12,339 ha of mangrove NRs in Hainan Province, containing globally important specimen of mangrove species, habitats for a number of migratory water birds including black-faced spoonbill and spoon-billed sandpiper. The project will also increase terrestrial PA coverage in Hainan, taking the integrated approach of looking at the whole island as coastal watershed, enhancing protection of the Hainan portion of the Indo-Burma global biodiversity hotspot, and its many endemic species such as Hainan gibbon, Hainan moonrat, Hainan flying-squirrel and White-eared partridge.

The project's **objective** is: *To strengthen the management effectiveness of the wetland protected area system in Hainan in response to existing and emerging threats to the globally significant biodiversity and essential ecosystem services.* A three-pronged approach is taken to achieve the objective with the interlinked components. Component 1 addresses the spatial, regulatory and institutional deficiencies of the provincial PA system at the province level, in order for the provincial government to be able to better conserve biodiversity on the island through the PA system, and to support the individual PAs as well as the mangrove PA network which is developed under Component 2. Component 2 aims to bring about significant and fast improvement to the management of all the mangrove PAs (which also represent other types of coastal ecosystems) on the island by jointly tackling the common issues and threats to these PAs as a group and individually. In direct support of component 2 and 1 to some extent, component 3 tackles the underlying causes of the external threats to the mangrove PAs and to the PA system as a whole, through mainstreaming of wetland PAs in development and sector planning and operational framework. In turn, mainstreaming as well as strengthened capacity at the provincial level under component 1 and 3 will be applied at the site level under component 2.

Component 1: Expansion of wetland PAs

In order to remove barrier 1, the project will support the development of a climate resilient PA system consolidation strategy and action plan, with particular section looking at the mangrove PA system. According to the recent PA system review, whilst the entire PA system and management need strengthening, Hainan should especially enhance protection in the north and northeast plains and coastal regions which are under severe threats. The system consolidation strategy development will include concern for protection of representative wetlands⁷, their vital water catchments and also include consideration to adaptation to changing climate. The project will also support development of the Hainan PA system financing plan for the expanded PA system with disaggregated section on the mangrove PA system. Actual implementation of the action plan to expand the PA system and financing plan to increase investment in the PAs will be supported, including operationalisation of PA functions in the newly designated area including boundary demarcation and signage. In addition, Hainan Forestry Department's capacity for ensuring management effectiveness of the provincial PA system will be strengthened. This will be done through development and operationalisation of provincial guidelines for management and zoning of coastal wetland PAs, based on management experiences in Dongzhaigang and other coastal PAs. These guidelines will directly inform the set of national guidelines to be developed under the national level project within the CBPF-MSL Programme. Supervisory capacity of the provincial forestry department and site managers for planning and monitoring wetlands PAs and Ramsar sites will be strengthened through strategic training activities and adoption and application of a set of professional competency standards for wetland PA management staff as a basis for enhanced performance, in-service training and career structure. The provincial forestry department's capacity for providing adequate support for ecosystem specific PA networking approach will also be a focus of the training activities.

Component 2: Development of mangroves PA network

Building directly on the recent passage of the provincial mangrove protection regulations, the project will invest a significant portion of the GEF funding in development of an effective mangrove PA network. It will aim to dramatically enhance their site level management activities in particular law enforcement and monitoring, and set up mechanisms for coordination between mangrove sites including sharing data, technical exchanges, sharing of species (for replanting and re-introduction in habitat restoration). Sector specific standards and safeguard, which are developed under component 3, will be applied to the NRs within the network, reducing threats to the PAs. The PA network development approach aims to establish a model for ecosystem-type specific approach to strengthening the PA system given the common threats these PAs share. The intention is for this approach to be replicated by the province to support other types of PAs within the province, leading to the strengthening of the entire PA system in Hainan. It is further expected to contribute to strengthening mangrove PA management in other provinces in China.

Model NR management plan will be developed for Dongzhaigang NNR, which will be in line with the mangrove regulations, provincial guidelines for management and zoning of coastal wetland PAs (to be developed under component 1) and model buffer zones will be established in Dongzhaigang. Such strengthening will be complemented by restoration of abandoned

⁷ These representative wetlands can be sandy coast, muddy coast, mangrove, rice fields, salt pans, reservoirs, ponds, upland swamps, egret roosts etc. It should be also noted that climate and landform differences around the island vary, therefore an eastern estuary may be very different from a western part, and from south to north.

shrimp ponds back to wetland mangrove forest as the habitats of stopover water birds in the tide flat in Dongzhaigang NNR; development of a wetland park on reclaimed pond areas with raised wooden walkways, bird hides, information boards and a nursery garden. In addition, the Protection status of Qinglangang PNR, Dongfang PNR and another PNR will be elevated to national level nature reserve, so as to ensure larger budget allocation and intensification of conservation activities.

The project will apply the provincial professional competency standards for wetland PA management in the mangrove PAs, and strategic training will be provided in protection, sustainable harvesting, monitoring, tourism control, extension work, control of alien invasive species and methods of habitat restoration. Furthermore, the project will pilot introduction of co-management schemes whereby local villagers become more responsible in protecting and restoring some degraded wetland areas and PAs. In other areas pressures on wetland resources due to over-harvesting or over-disturbance will be reduced by introduction of alternative livelihood ventures related to eco-tourism opportunities (homestays, deep sea fishing trips etc.) offered by the great increase of tourism to the island. In addition, the project should support drafting of guidelines controlling the site-level development of business ventures that compromise the objectives of wetlands protection. As a foundation for causing this, project will support a province-wide wetland PA awareness campaign, with clear linkage between the wetland conservation issues and ecosystem services, health and local economies including handbook for decision makers, publications, media coverage, blogs, campaigns, and outdoor events. The campaign will have targeted outcomes of co-management scheme development and sustainable financing mechanisms development, making full use of economic arguments for conservation.

Component 3: PA system management framework

In response to barrier 3, this component will strengthen the PA system management framework of the province, addressing inter-sectoral coordination, integration of wetland PAs, their objectives and functions into provincial development plans and government eco-compensation schemes.⁸ The project will strengthen coordination with other agencies that are impacting wetland PA management, including agriculture, environmental protection, tourism and land consolidation. A cross-sectoral body will be established or identified to achieve this mainstreaming. Capacity of those units for spearheading inter-agency coordination will also be strengthened. Through the coordination body, the project will support embedding of coastal wetlands concerns in major cross-sectoral plans such as climate change mitigation and adaptation and achieving water security and in particular the Hainan International Tourism Island Master Plan. During the PPG, a thorough review of the provincial development and sectoral planning process will be conducted to identify bottlenecks and areas for interventions for mainstreaming wetland PAs and the PA system as a whole in the planning and budgeting process. In order to operationalise the mainstreaming, sector specific standards and safeguards will be developed to protect wetland PAs from biodiversity threatening sector practices. This could include setting up of standards for tourism development and operation and issuance of official guidelines for fisheries and aquaculture.

In support of mainstreaming and achieving sustainable financing for the PA system, the project will support compilation of the synthesis on the economic values of wetland PA sub-system (marketed and non-marketed values) following the internationally recognized methodologies and making use of existing studies as much as possible. The economic work should include roles of wetlands in climate change adaptation and disaster mitigation. Implication of the wetland loss and degradation of various economic sectors also will be clarified in the economic and financial terms. The product will be designed with the clear objective of mainstreaming wetland PAs (and the PA system as a whole) in the 13th five-year development plan, and accompanying communication products especially targeted for policy makers and for mass media, and use of these product will also be supported. Economic valuation and mainstreaming will be geared towards increasing government financing for operational budget (as opposed to development budget) which is hampering effective management of wetland PAs. This will be done by improving principles and processes for budgeting at both national (through the national project under this framework programme) and provincial levels, developing innovative funding mechanisms from the government eco-compensation schemes and private sector investments and by integrating wetlands conservation activities inside other ongoing development programmes of the government. Building on the tried and tested approaches of eco-compensation schemes, the project will support development of a scheme which directly supports NR management and local communities.

The project will further support establishment of a wetland PA data sharing NGOs and international agencies. Relevant data must be made easily and understandably available to planners and operators so that wetland services can be fully harnessed and not degraded. A virtual database containing information (PA boundary, status, zones, important species, trends, threats, water level and quality, local involvements etc.) will be developed and adapted for web access and linked to a national platform. For improved data sharing the platform needs to be regularly updated. The project will support establishment of routine monitoring and reporting procedures from demo sites to provincial centres and then feed up to the national database to the web platform. Through the coordination between different projects under the CBPF-MSL Programme, lessons learned from this project will be widely disseminated to other Chinese wetlands, and equally lessons learned elsewhere can be shared in Hainan.

⁸ Ecological Compensation Scheme, which is being developed, aims to expand and strengthen existing measures such as payment for wildlife reserves, environmental levies imposed on mines, compensation from upstream river polluters to downstream users and economic redistribution schemes that aim to close the income gap between manufacturing hubs on the east coast and rural hinterland.

B.3. DESCRIBE THE SOCIOECONOMIC BENEFITS TO BE DELIVERED BY THE PROJECT AT THE NATIONAL AND LOCAL LEVELS, INCLUDING CONSIDERATION OF GENDER DIMENSIONS, AND HOW THESE WILL SUPPORT THE ACHIEVEMENT OF GLOBAL ENVIRONMENT BENEFITS. AS A BACKGROUND INFORMATION, READ [Mainstreaming Gender at the GEF](#):

The target PAs make an enormous contribution to the provincial economy, and ecological and social welfare of people in Hainan. Wetland PAs provide essential water resources to people and industries. In particular, the coastal wetland such as mangrove, is not only important nursery grounds for many fish, crustacean and other commercial viable species, but also provide useful natural resources and critical buffer against coastal erosion, storms and tidal swells. For example, it is estimated that the Dongzhaigang mangroves have the economic value of US\$ 59 million per year through material production, water purification, air components control, soil keeping, tourism and biodiversity maintenance. In Vietnam, it was also estimated that planting mangrove along part of the coastline cost US\$ 1.1 million, but saved US\$ 7.3 million annually in dyke maintenance. By safeguarding vital hydrological and disaster abatement services of wetlands, the project will generate large positive social and economic externalities to the Province. Wetlands also support various livelihood and economic opportunities, such as fisheries, agriculture, and tourism. They also offer opportunities for public recreation and scientific studies. By improving the design of the PA system, strengthening the PA management, and putting in place measures to manage the adverse impacts of sector activities, the project will make an important contribution to realising sustainable tourism development and economic development in Hainan. The estimated 20,000 residents around the Dongzhaigang and Qinglangang NRs will directly benefit from the sustainable use management system as well as full participation in PA co-management and benefit sharing arrangements, and alternative livelihood programmes. Local communities in other PAs including the ethnic minority groups in the inland mountain areas will indirectly benefit from the strengthened PA system as a whole in Hainan. The project aims to produce a model co-management system for the mangrove PAs, which the provincial government will apply to other PA types in Hainan. For the PA expansion and consolidation component, the project will ensure that local residents will fully participate in the process of determining the new PA boundaries as well as the rights and responsibilities of the resident communities over resources within the PAs and in the buffer zones. As women among the local communities are more often engaged with gathering natural resources and collecting water, they are the primary beneficiaries of sustainable and quality supply of these resources. This is particularly evident in Hainan where rural women face a hard unpaid workload. Therefore, a thorough gender analysis will be conducted to ensure full participation of women in project activities and to ensure that any activities do not adversely affect women or men. Tangible socioeconomic benefits with gender dimensions will be determined and appropriate indicators will be developed during the project preparation phase.

B.4. INDICATE RISKS, INCLUDING CLIMATE CHANGE RISKS THAT MIGHT PREVENT THE PROJECT OBJECTIVES FROM BEING ACHIEVED, AND IF POSSIBLE, PROPOSE MEASURES THAT ADDRESS THESE RISKS

The following potential risks and mitigation measures have been identified. These will be reviewed and updated during the project preparatory (PPG) phase.

Risk	Rating	Mitigation Measure
After 2013, China will launch a new round of government institutional reform to mainstream the people's livelihood-related issues (such as increasing incomes, regional equality, and health) into the agenda of governments. This may reduce the focus on, and budget for, wetland conservation, hindering the process of achieving wetland conservation objectives.	Low	Wetland conservation and people's livelihood are closely interlinked, in particular in terms of clean and steady water provision, as well as disaster mitigation. The project will ensure that this inter-linkage will be adequately acknowledged by policy makers at the provincial and local level as well as by the general public. The project will support necessary strategic studies and production of toolkits and materials to support better understanding of wetland PAs' contribution to economy and peoples' welfare and livelihoods.
Mainstreaming wetland PAs into sectoral policies will be hindered by lack of incentives for other sectors and poor enforcement of agreed priorities and plans that may be incompatible with larger tourism development, land conversion or other development programmes.	Low to medium	The project will support enabling institutional framework for mainstreaming, development of tools for mainstreaming such as the consolidated information data base on wetland PAs, wetland PA system review, and economic valuation studies. Sector specific standards and safeguards development will offer a practical measure for improving sector practices. The project will also support operationalisation of the newly approved Regulation on Mangrove Protection through targeted support in increasing management effectiveness of the mangrove NRs. Efforts will be made to develop viable partnership between different (and sometime competing) agencies.
Severity of climate change impacts (including sea level change, bleaching of corals and increased incidence and extended duration of extreme weather (e.g., floods and drought) may undermine conservation efforts promoted by the project through changes in mangrove distribution and changes in community resource use intensities	Medium	Given that climate change impacts are likely to increase over the long term, the project will assess these changes and propose actions and approaches to increase ecosystem resilience. These will include flexibility of wetland PA zones and boundaries. Maintaining a full range of wetland types and improving connectivity. Migration patterns and timings of wintering shorebirds may change, requiring adjustments in the PAs designed to accommodate migratory species.
Mass tourism stimulated by the International Tourism Island Development strategy will exert more threats to the mangrove forest in Hainan Province, due to disturbance, consumption of shrimp and other seafood, encroachment of forest land by tourism facility.	Medium to high	The project aims to integrate the PA system with provincial tourism development plans and activities. The project activities are expected to reduce the new pressure of mass tourism and keep the natural mangrove forest intact by establishing viable buffer zone – a wetland park on the reclaimed land through mangrove plantation and by promoting eco-tourism in experimental zone by wood path, bird watching hides, and nursery garden.

B.5. IDENTIFY KEY STAKEHOLDERS INVOLVED IN THE PROJECT INCLUDING THE PRIVATE SECTOR, CIVIL SOCIETY ORGANIZATIONS, LOCAL AND INDIGENOUS COMMUNITIES, AND THEIR RESPECTIVE ROLES, AS APPLICABLE:

Key stakeholders and roles and responsibilities in the program

Stakeholder	Roles and Responsibilities
Ministry of Finance	Operational Focal Point (OFP). Coordination and implementation of GEF projects
State Forestry Administration (including National Wetland Conservation Center)	Responsible for forest lands, most of China's nature reserves, wildlife issues, wildlife trade (CITES), wetlands protection (Ramsar Convention), drafting of departmental level regulations especially wetlands.
Hainan Provincial Government	Responsible for provincial administration, development planning and implementation, as well as planning and financing of the provincial PA system.
Haikou City government	Responsible for the city administration, development planning and implementation, as well as management of Dongzhaigang NNR
Forestry Department at provincial and local governments (including NR bureau and wildlife protection bureau)	Responsible for planning and managing the provincial PA system, and conservation of fauna and flora in the province. Also responsible for wetland management. The Provincial Forestry Department will be the main executing agency of the project.
Standing Committee of People's Congress of Hainan Province	Responsible for coordination of legislation and regulation functions in Hainan, including the provincial regulation of nature reserve management and regulation of wetland conservation.
Hainan Tourism Department	Responsible for planning and implementing tourism development plans. High levels of collaboration and mainstreaming required to ensure tourism plans do not threaten NRs.
Environment protection department of provincial and local governments	Coordination of environmental issues, pollution and CBD implementation and reporting, execution of CBPF. Processing and coordination of drafting new legislation. Must be involved in any proposed regulatory revisions.
Agriculture department of provincial and local governments	Responsible for agriculture and fisheries. Major stakeholder in terms of water use and sources of agricultural water pollution responsible for freshwater and brackish fisheries. Should mainstream biodiversity and PA protection within their plans and avoid causing pollution of wetland sites. Can help monitor wetland biodiversity on agricultural lands adjacent to NRs. Need cooperation in controlling fishing within sustainable limits.
Land department of provincial and local governments	Responsible for land use planning and land allocation. Critical partner to ensure sound coastal land use planning under development and sectoral plans.
Dongzhaigang NNR management Bureau	Planning and management of wetland PAs; project execution of other projects under the framework at provincial level.
GIZ, – Wetlands International, WWF and domestic level NGOs	Involvement in wetlands and biodiversity projects. Available for technical support, consultancies, training and monitoring. High capacity for grass roots action with local communities.
Chinese Academy of Sciences, several specialized and regional academic and research institutes	Technical expertise available on hydrological, botanical and zoological aspects.
Local communities including indigenous/ethnic minority groups	Primary resource users. Local communities around the mangrove PAs will be participants in the co-management activities as well as being beneficiaries of the livelihood support. For the PA expansion and consolidation component, local residents including indigenous/ethnic minorities in inland areas will fully participate in the process of determining the new PA boundaries as well as the rights and responsibilities of the resident communities over resources within the PAs and in the buffer zones.

B.6. OUTLINE THE COORDINATION WITH OTHER RELATED INITIATIVES:

The CBPF will provide a national platform to ensure strong coordination between approved and planned GEF biodiversity projects as well as other relevant initiatives of the Government and development agencies. Under the CBPF, the MSL Programme has been established, comprising a national level coordination project and six provincial projects executed by the provincial bureau of the SFA of which this project is the Hainan component. A programme level steering committee will be established chaired by the SFA, to ensure complementarity, synergetic outcome and lessons and experience sharing. This project will be executed by and coordinated at provincial level by the Hainan Forestry Bureau, however it directly benefits from and feeds into the national level project and contribute to the programmatic level outcomes. The project will also build on the experiences and lessons learned by wetland components of previous GEF projects in China. In particular, the GEF/UNDP Biodiversity Management in the Coastal Area of the China South Sea project, which will be ending early 2012, will be able to provide relevant experiences and lessons with regards to sustainable livelihood strategies in Sanya and neighbouring Guangzi province. Some of the approaches to management, sustainable financing and lessons learned under this project will be useful to adapt to Hainan mangroves protection.

C. DESCRIBE THE GEF AGENCY'S COMPARATIVE ADVANTAGE TO IMPLEMENT THIS PROJECT:

C.1. INDICATE THE CO-FINANCING AMOUNT THE GEF AGENCY IS BRINGING TO THE PROJECT:

UNDP is providing a grant of US\$ 700,000 to this project, through investment to support improved governance at national and provincial levels and community based initiatives to promote green development, in realising the Government vision to build a "Xiaokang" society.

⁹ The vision of *Xiaokang* refers to a society where people are moderately well off and in which economic prosperity is sufficient to move most of the population in mainland China into comfortable means, but in which economic advancement is not the sole focus of society. Explicitly incorporated into the concept of a *Xiaokang* society is the idea that economic growth needs to be balanced with the sometimes conflicting goals of social equality and environmental protection.

C.2. HOW DOES THE PROJECT FIT INTO THE GEF AGENCY'S PROGRAM (REFLECTED IN DOCUMENTS SUCH AS UNDAF, CAS, ETC.) AND STAFF CAPACITY IN THE COUNTRY TO FOLLOW UP PROJECT IMPLEMENTATION:

Protected Areas are one of UNDP's signature programmes and the agency has a large portfolio of PA projects globally and across Asia including China. In particular, UNDP is equipped with a wealth of accumulated knowledge and experience from projects around the world in promoting PA system objectives in development and sectoral planning. UNDP has been supporting natural resource management, biodiversity and ecosystem management in China for over three decades, and has a large biodiversity portfolio in the country. UNDP implemented/is implementing a number of GEF supported projects that are complementary to this project, and is also the implementing agency for the €51 million EU-funded ECBP programme. In addition, since 2007, UNDP has been the co-executing agency of the GEF supported CBPF, together with Ministry of Finance and Ministry of Environmental Protection. The United Nations Development Assistance Framework (UNDAF) for 2011 to 2015 provides the framework for the UN-China partnership over the coming five years, coinciding with the period of China's 12th Five Year Plan. One of the three priority areas, or UNDAF Outcomes, is Outcome 1: Government and other stakeholders ensure environmental sustainability, address climate change, and promote a green, low carbon economy. The components of this programme are a strategic way of achieving this outcome, in particular through directly contributing to Output 1.1. Policies and regulations are strengthened to create a green economy; Output 1.2. Policy and implementation mechanisms to manage natural resources are strengthened, with special attention to poor and vulnerable groups; and Output 1.3. China's vulnerability to climate change is better understood and adaptation responses are integrated into Government policy. Corresponding to the UNDAF, the UNDP Country Programme (2011 to 2015) seeks to reduce the vulnerability of biodiversity to climate change impact and safeguard local communities potentially affected by negative impacts of climate change by building ecosystem resilience, which is the fundamental building block of ecosystem's provisioning, regulating and support services essential for China's social and economic development. The proposed programme will contribute directly to its Outcome 4: Low carbon and other environmentally sustainable strategies and technologies are adapted widely to meet China's commitments and compliance with Multilateral Environmental Agreements; and Outcome 5: The vulnerability of poor communities and ecosystems to climate change is reduced.

The country office has a large biodiversity portfolio, with one Programme Manager and one Programme Associate specifically assigned to biodiversity related projects and broader support from the policy, administrative and financial sections. The UNDP Regional Technical Adviser based in Bangkok will provide technical support to the CO for implementation, monitoring and evaluation of the project.

PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S):

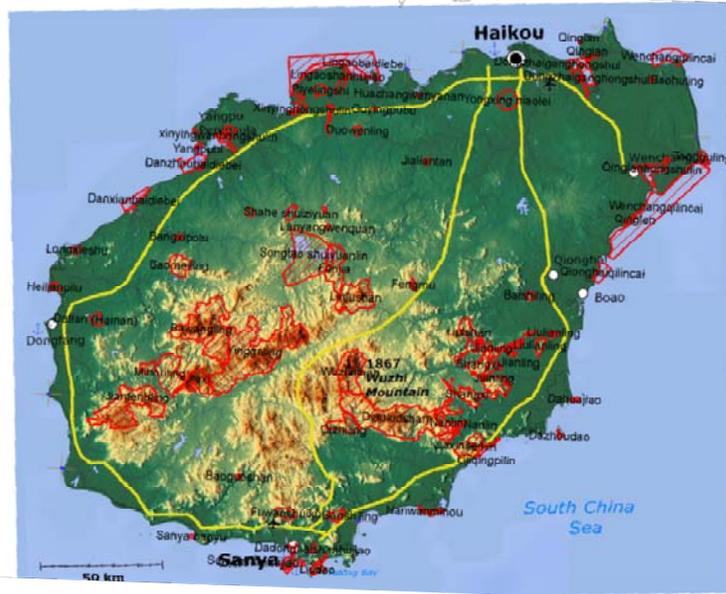
NAME	POSITION	MINISTRY	DATE (MM/DD/YYYY)
Jiandi Ye GEF Operational Focal Point	Director: International Financial institution Division III, International Department	Ministry of Finance	01/21/2012

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF policies and procedures and meets the GEF criteria for project identification and preparation.

Agency Coordinator, Agency name	Signature	Date	Project Contact Person	Telephone	Email Address
Yannick Glemarec, UNDP/GEF Executive Coordinator		February 29, 2012	Midori Paxton, Regional Technical Adviser – EBD, UNDP	+66- 818787510	midori.paxton@ undp.org

Annex. Protected Area System in Hainan Province



Map of currently planned NRs over vegetation map of Hainan

