



# REQUEST FOR CEO ENDORSEMENT/APPROVAL

PROJECT TYPE: Full-sized Project

THE GEF TRUST FUND

Submission Date: 12/06/2011

Resubmission: 02/08/2012

## PART I: PROJECT INFORMATION

GEFSEC PROJECT ID: 3670

GEF AGENCY PROJECT ID: 40685

COUNTRY(IES): People's Republic of China

PROJECT TITLE: Jiangsu Yancheng Wetland Protection Project

GEF AGENCY(IES): AsDB

OTHER EXECUTING PARTNER(S): Jiangsu Provincial Government

GEF FOCAL AREA(s): Biodiversity

GEF-4 STRATEGIC PROGRAM(s): BD-SP1, BD-SP2, BD-SP7

NAME OF PARENT PROGRAM/UMBRELLA PROJECT: CBPF

Expected Calendar (mm/dd/yy)	
Milestones	Dates
Work Program (for FSPs only)	3/17/2010
Agency Approval date	12/16/2011
Implementation Start	06/01/2012
Mid-term Evaluation (if planned)	03/01/2016
Project Closing Date	06/30/2017

## A. PROJECT FRAMEWORK

**Project Objective:** To conserve the coastal ecosystems of the Yancheng wetlands while reducing rural poverty and promoting environmental sustainability through the establishment of an integrated wetlands management system.

Project Components	Investment, TA, or STA	Expected Outcomes	Expected Outputs	GEF Financing		Co-Financing		Total (\$) c=a+ b
				(\$ a)	%	(\$ b)	%	
1. Wetland Restoration and Biodiversity Conservation	Investment, TA	1.1 Ecological character and functions of coastal wetlands enhanced through restoration.  1.2. Reduced pollution input into the wetlands  1.3: Enhanced stakeholder participation in biodiversity conservation and	1.1.1: 540 ha of wetland in experimental zone restored (ADB) 1.1.2: 1,630 ha of dehydrated wetland in core zone rehydrated (YRBNNR) (ADB) 1.1.3: 1,435 ha of fishpond converted to wetland (YRBNNR) (ADB) 1.1.4. 400 ha of <i>Spartina alterniflora</i> control implemented in YRBNNR (ADB) 1.1.5: 24 ha of permanent and natural water points established for Milu (ADB) 1.1.6. 50 ha of rotational closure of grazing ground implemented (DMNNR) (ADB) 1.1.7: 220 ha of fodder ground established (ADB) 1.1.8: 426.4 ha of tick control implemented in DMNNR (ADB) 1.1.9: 24km of steel biological fences erected or rehabilitated (ADB) 1.1.10: Milu deer habitat surveillance system established (ADB) 1.1.11: Science education center expanded (ADB)  1.2.1: Wastewater treatment and solid waste collection and disposal facilities constructed in 2 NNRs (ADB)  1.3.1. Operational management plans for PAs developed in consideration of the ecological water allocation requirements of the PAs. (GEF)	790,684	1.48	52,700,000	98.52	53,488,117

		<p>wetland protection through effective PA management</p> <p>1.4: Improved financial sustainability for wetland nature reserve management</p>	<p>1.3.2. A wetland Information Management System established for both the NNRs (GEF)</p> <p>1.3.3. Capacity for PA management and monitoring strengthened (GEF)</p> <p>1.3.4 Increased trans-provincial cooperation mechanisms in place for biodiversity conservation of selected target species (e.g. the migratory red-crowned cranes) (GEF)</p> <p>1.3.5 Training-of-trainers programs on sustainable natural resource management and sustainable livelihoods designed and delivered for 20 public education and collaborative management officers at 2 NNRs (GEF)</p> <p>1.4.1. Innovative financing mechanisms for nature reserve conservation and management piloted (GEF).</p> <p>1.4.2. A sustainable tourism strategy for both NNRs developed and implemented (GEF).</p> <p>1.4.3. Private sector participation and public-private partnership strategies and programs developed for both NNRs and pilot tested (GEF).</p> <p>1.4.4. 40 Staff of NNRs trained in sustainable financing for PAs (GEF).</p> <p>1.4.5. 100 staff of the two NNRs trained on sustainable tourism (GEF)</p>					
2. Sustainable Natural Resources Management and Sustainable Livelihoods	TA, Investment	<p>2.1: Buffer and experimental zones of nature reserves enhanced through sustainable forest improvement investments in Sheyang Forest Farm</p> <p>2.2: Buffer and experimental zones of nature reserves enhanced through sustainable forest improvement investments in</p>	<p>2.1.1: 185 ha of forest bird habitat rehabilitated (ADB)</p> <p>2.1.2: 285.2 ha of plant nurseries established (ADB)</p> <p>2.1.3: 83.5 ha of agroforestry demonstration area established (ADB)</p> <p>2.1.4: 51.4 km of drainage canals rehabilitated (ADB)</p> <p>2.1.5: Forest fire early warning and response system established (ADB)</p> <p>2.1.6: An integrated pest management system established (ADB)</p> <p>2.1.7: 50% or more of eco-agriculture farming skills training provided to women (ADB)</p> <p>2.2.1: 860 ha of coastal wetland protection forest improved and tended (ADB)</p> <p>2.2.2: 122.7 ha of coastal wetland rehabilitated (ADB)</p> <p>2.2.3: 174 km of drainage canals improved (ADB)</p>	658,533	3.66	17,340,000	96.34	17,998,533

		Dafeng Forest Farm	<p>2.2.4: Fire prevention and response system established (ADB)</p> <p>2.2.5: An integrated pest management system established (ADB)</p> <p>2.2.6: 50% or more of eco-fish farming skills training provided to women (ADB)</p>					
		2.3: Enhanced livelihood opportunities for communities in the buffer and experimental zones of the NNR through innovative PES schemes	<p>2.3.1: A detailed assessment and preparation of a framework for piloting livelihoods enhancing PES schemes (ADB)</p> <p>2.3.2: Buffer and experimental zone management guidelines developed and implementation linked to PES schemes (GEF).</p> <p>2.3.3: Establishment and implementation of a 'community-based' fund for supporting the relevant pilot PES schemes (GEF).</p> <p>2.3.4: Special training program on PA- and ecotourism-related income generation opportunities designed and implemented for 150 low-income, women-headed households (lowest 10% income brackets) (GEF)</p> <p>2.3.5: Community training programs on PA- and biodiversity-friendly practices and guidelines designed and initiated (GEF)</p>					
3. Ecological Monitoring and Evaluation	TA, Investment	<p>3.1: Improved monitoring of biodiversity and ecosystems.</p> <p>3.2: Ecological monitoring and evaluation capacity strengthened and institutionalized into the 2 NNRs and other relevant stakeholders(GEF)</p>	<p>3.1.1: Gap filling assessments of ecosystem services and biodiversity completed (GEF).</p> <p>3.1.2: A comprehensive ecological monitoring system established with agreed aims, institutional arrangements and required financing for implementation (GEF).</p> <p>3.2.3: Selected 'targeted monitoring programs' established and sufficiently financed (e.g. wild-release trials of Milu, and Spartina control effectiveness etc.) (ADB and GEF)</p> <p>3.2.1: Training programs delivered to key stakeholders, including NNR staff responsible for monitoring. (GEF)</p>	279,033	65.04	150,000	34.96	429,033
4.Environmental Governance and Knowledge Dissemination	TA, Investment	4.1. Strengthened institutional framework for management of NNR and wise use	<p>4.1.1: Wetland and biodiversity management recommendations mainstreamed into relevant local development plans/ policies.</p> <p>4.1.2: Strengthened capacity for</p>	318,010	67.95	150,000	32.05	384,850

		of associated wetlands	inter-agency patrolling and enforcement (GEF) 4.1.3: Performance-based management scheme established (GEF) 4.1.4: PES policies and operational guidelines developed for the 2 NNRs, integrated into provincial policy framework and linked to national level PES dialogue (GEF) 4.1.5: 100 PMO/PIU staff trained in operational management planning, linked to provincial and national planning processes (GEF) 4.1.6: PMO/PIU staff trained on project management, financial management, procurement, contract management, environmental and social safeguards, PPMS and reporting (ADB) 4.1.7: Communication, Education and Public Awareness Strategy and Action Plan developed, and implemented (GEF)					
5. Project management				203,740	3.26	6,050,000	96.74	6,339,467
<b>Total Project Costs<sup>1</sup></b>				2,250,000	3.15	76,390,000	97.14	78,640,000

1) Total co-financing includes contingencies and financial charges.

#### B. SOURCES OF CONFIRMED CO-FINANCING FOR THE PROJECT

<i>Name of Co-financier (source)</i>	<i>Classification</i>	<i>Type</i>	<i>Project</i>	<i>%<sup>1</sup></i>
ADB	Implementing agency	Loan	36,900,000	48.3%
Government	Executing agency	Grant	39,490,000	51.7%
<b>Total Co-financing</b>			76,390,000	100.0%

1) Percentage of each co-financier's contribution at CEO endorsement to total co-financing.

#### C. FINANCING PLAN SUMMARY FOR THE PROJECT (\$)

	<i>Project Preparation a</i>	<i>Project b</i>	<i>Total c = a + b</i>	<i>Agency Fee</i>	<i>For comparison: GEF and Co-financing at PIF</i>
GEF financing		2,250,000		250,000	2,500,000
Co-financing (ADB)	760,000	36,900,000	37,660,000		50,000,000
Co-financing (Government)	1,238,460	39,490,000	40,728,460		50,000,000
<b>Total</b>	<b>1,998,460</b>	<b>81,997,690</b>	<b>83,996,150</b>	<b>250,000</b>	<b>102,500,000</b>

**D. GEF RESOURCES REQUESTED BY AGENCY(IES), FOCAL AREA(S) AND COUNTRY(IES):** Not applicable.

**E. CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS:**

<i>Component</i>	<i>Estimated person weeks</i>	<i>GEF amount (\$) **</i>	<i>Co-financing (\$)</i>	<i>Project total (\$)</i>
Local consultants*	272	306,000	105,000	411,000
International consultants*	62	310,000	65,000	375,000
<b>Total</b>	<b>334</b>	<b>616,000</b>	<b>170,000</b>	<b>786,000</b>

\* Details provided in Annex C. \*\* Cost of remuneration only.

**F. PROJECT MANAGEMENT BUDGET/COST<sup>1</sup>**

<i>Cost Items</i>	<i>Total Estimated person weeks/months</i>	<i>GEF amount (\$) <sup>2</sup></i>	<i>Co-financing (\$) <sup>3</sup></i>	<i>Project total (\$)</i>
Local consultants <sup>4</sup>	108	82,400		82,400
International consultants <sup>5</sup>	6	30,000		30,000
Office facilities, equipment, vehicles and communications <sup>6</sup>		18,818		18,818
Travel <sup>7</sup>		34,000		34,000
Others <sup>8</sup>		38,522	6,050,000	6,088,522
<b>Total</b>	<b>114</b>	<b>203,740</b>	<b>6,050,000</b>	<b>6,253,740</b>

Note:

- 1) Details provided in Annex C.
- 2) Cost of remuneration only.
- 3) Loan documentation provides only lump-sum for project management.
- 4) Local consultants include the full-time Local project coordinator; Mid-term, and National Terminal Evaluation consultant, and; National PPMS Specialist.
- 5) International consultants include the Mid-term and International Terminal Evaluation consultants.
- 6) Reports, communications, and equipment.
- 7) Travel budget for International and local Project Evaluation consultants and Local GEF project coordinator
- 8) Contingencies and workshops

**G. DOES THE PROJECT INCLUDE A “NON-GRANT” INSTRUMENT?** yes ☒ no ☐

(If non-grant instruments are used, provide in Annex E an indicative calendar of expected reflows to your agency and to the GEF Trust Fund).

The project is estimated to cost \$76.39 million, including \$6.19 million for contingencies, \$1.32 million for financing charges, and \$8.14 million for taxes and duties, which will be paid by the PRC government from its own resources. There will be reflows to ADB for the loan portion of the project. The GEF funding is grant with no financial reflows—please refer to Annex E.

**H. DESCRIBE THE BUDGETED M & E PLAN:**

To monitor the progress of the Project in achieving the planned outcomes and outputs, the Jiangsu Provincial Project Management Office (JPMO), with assistance of the consultants, will establish and maintain a project performance management system (PPMS), which will be designed to permit adequate flexibility to adopt remedial action regarding project design, schedules, activities, and development impacts. In developing the PPMS, ADB and GEF procedures will be followed. Comprehensive PPMS procedures will be developed to generate data systematically on inputs and outputs of the project activities; and the ecosystem and socioeconomic indicators to measure project impacts. The PPMS will adopt the following agreed quantitative and qualitative indicators: (i) physical progress of implementation of the project components, (ii) populations of rare birds, including the population of wintering red-crowned cranes in the Yancheng Rare Birds National Nature Reserve (YRBNNR); (iii) mortality rate of the Milu (Père David's Deer, *Elaphurus davidianus*) in the Dafeng Milu National Nature Reserve (DMNNR); (iv) area of *Spartina alterniflora* (an invasive alien species) within the two national nature reserves; (v) results of the system-wide mainstreaming program (e.g. PES policy frameworks, OMP stakeholder inputs, BZ/ERZ guideline development/employ, transprovincial mechanisms for globally endangered species and wetland monitoring system established); (vi) results of the capacity development program; and (vii) social development.

The GEF-5 Biodiversity Tracking Tools were (i) utilized at project outset and provide (subjective) baseline for tracking project progress in mitigating medium-high threats within the two nature reserves. They will provide one baseline of measurable indicators against which subsequent progress can be measured at different intervals of implementation, especially at (ii) the project midterm and (iii) conclusion of the project. Following rapid biodiversity assessments to fill in gaps, development of a structured biodiversity monitoring program for both national nature reserves will provide management boards with the information for ongoing tracking of trends and changes in species/habitats, and serve a sound database for monitoring of biodiversity values in both national nature reserves (NNRs). The proposed Operational Management Plans (OMPs) for both national nature reserves build off these assessments and are also supported by an M&E plan, which will provide additional strategic guidance to ensure conservation management actions are effective in addressing key threats to biodiversity.

Supporting improved monitoring of biodiversity and coastal area ecosystems, a comprehensive ecological monitoring system will be established with agreed aims, institutional arrangements and required financing for implementation. Per STAP GEF-PES Guidelines (22-24 June 2009), the project will also develop and track indicators affording evaluation of the four main threats to PES effectiveness: (i) non-compliance; (ii) poor administrative selection; (iii) spatial demand spillovers; and (iv) adverse self-selection.

An Inception Workshop will be held at project start-up. It will involve local partners with assigned roles in the project organization structure, ADB and other stakeholders. The Inception Workshop is crucial for building ownership for the project results and to plan the first year's AWP. The Inception Workshop report will be a key reference document and will be prepared and shared with participants to formalize various agreements and plans decided during the meeting.

As the project progresses, the JPMO will refine the PPMS framework, update tracking tools (as required in mid-term and final evaluations), confirm achievable targets, and firm up monitoring and recording arrangements. Baseline and progress data will be reported at the requisite time intervals by IAs and PIUs to the JPMO, including semiannual reporting on the implementation of the environmental management plan (EMP). The JPMO will be responsible for analyzing and consolidating reported data through its management information system, and for reporting outcomes to ADB through quarterly progress reports.

In addition to regular monitoring, project performance will be reviewed annually, and jointly by ADB, the Government, Jiangsu Provincial Government (JPG), Yancheng Municipal Government (YMG), the project implementation units (PMUs) and local partners. Reviews will assess implementation performance and achievement of project outcomes and outputs, assess financial progress, identify issues and constraints affecting implementation, and work out a time-bound action plan for their resolution. ADB, the Government, and JPG will undertake a midterm review (MTR) to assess implementation status and take appropriate measures—including modification of scope and implementation arrangements, and reallocation of loan and grant proceeds, as appropriate—to achieve the project objectives.

A terminal evaluation report will also be undertaken at least one month before the end of the project to assess the achievement of project outcomes and outputs and lessons learned. In accordance with GEF procedures, project evaluations will be publicly accessible and project documentation will be made available to the GEF Evaluation Office.

A summary of the M&E activities relevant to GEF is provided below. Further information regarding the performance and impact indicators for project implementation, along with their corresponding means of verification are provided within the Project Design and Monitoring Framework (Annex A).

Type of M&E Activity	Responsible Parties	Project Budget US\$ (Excluding Project Team Staff Time)	Time frame
Inception Workshop and Report	Jiangsu Provincial Project Management Office (JPMO) ADB	\$ 30,000	Within first two months of project start up
Measurement of project results	JPMO in consultation with ADB, supported by loan and GEF implementation consultants, will oversee the identification and measurement of key results indicators related to global	\$ 50,000	Start, mid and end of project (during evaluation cycle) and annually when

	environmental benefits (GEBs) and socio-economic benefits.		required.
Project progress on output and implementation	The JPMO will adopt the following agreed progress indicators: (i) physical progress of overall project, its components and subcomponents; (ii) procurement progress; (iii) financial progress; (iv) implementation of environmental and social safeguards; (vi) progress in project management and capacity building; and (vii) provision of technical services.	\$ 90,000	Semiannually
Ecological monitoring and evaluation	The two NNRs under supervision of the JPMO will monitor both PA and wider coastal ecosystem and biodiversity impacts including: (i) the implementation of the spartina control pilot and its effectiveness; (ii) implementation and adaptability of wild-released Milu to the 3rd core zone in the DMNNR; (iii) establish and monitor indicators of PES effectiveness; and (iv) establishment of monitoring indicators and protocols for reporting on broader coastal development impacts on wetland ecosystems in the province .	\$ 50,000	Quarterly during implementation and two years after implementation
PIR	JPMO ADB	--	Annually
Periodic status/progress reports	Project Implementation Units (PIUs)	--	Quarterly
Mid-term evaluation	ADB External Consultants (i.e. evaluation team)	\$ 40,000	At the mid-point of project implementation.
Final evaluation	ADB External consultants (i.e. evaluation team)	\$ 50,000	At least three months before the end of project implementation
Project terminal report	JPMO ADB	--	At least three months before the end of the project
Audit	ADB Jiangsu provincial audit bureau	--	Annual
Visits to field sites	ADB Representatives from provincial and national responsible authorities	Paid from GEF agency fee and Government operational budget	Semiannual or more frequent
TOTAL indicative COST Excluding project team staff time and ADB staff and travel expenses		\$ 310,000	

## **PART II: PROJECT JUSTIFICATION:**

### **A. STATE THE ISSUE, HOW THE PROJECT SEEKS TO ADDRESS IT, AND THE EXPECTED GLOBAL ENVIRONMENTAL BENEFITS TO BE DELIVERED:**

#### ***National and Global Significance of the Yancheng Coastal Wetlands:***

Jiangsu has the third largest area of coastal and seashore wetlands by province in the People's Republic of China (PRC). A significant portion of this 843,500 hectares (ha) wetland area is located in Yancheng municipality. The wetlands in Yancheng cover a total area of 453,000 ha – or about 30% of the municipality's total area – and stretch for about 580 km along the coast—significant wetlands accounting for 70% of the provincial total and 14.3% of the

national total. The Yancheng coastal wetlands consist primarily of extensive inter-tidal mudflats, tidal creeks and river channels, salt marshes, reed beds and marshy grasslands that provide desirable habitats for numerous species of flora and fauna of global and national importance.

As such, the entire stretch of coastal wetlands in Yancheng was made into provincial nature reserves, and re-established in 1992 as national nature reserves, i.e., the Yancheng Rare Birds National Nature Reserve (YRBNNR) and the Dafeng Milu National Nature Reserve (DMNNR). The YRBNNR is very rich in biodiversity, with reports documenting 480 species of plants, 370 species of birds, 281 species of fish, 48 species of mammals and 45 species of amphibians. Twenty-nine (29) bird species are listed in the IUCN Red List of Threatened Species, and 12 animal species are included in the country's first-ranked priority protection list. In particular, the YRBNNR is one of two wintering grounds in the PRC for the red-crowned crane (*Grus japonensis*), rated "endangered" in the IUCN Red List. About 60% of the world's total estimated red-crowned crane population (or 2,500 individuals) winter-over in the YRBNNR. The DMNNR is home to about 25% of the world's population of Milu (*Elaphurus davidianus*, also known as 'Père David's Deer'), and the IUCN Red List rates this species "extinct in the wild." In recognition of the uniqueness of these wetland ecosystems and the species biodiversity they harbor, the two national nature reserves are accredited to the 'List of Wetlands of International Importance' under the Ramsar Convention and are also designated within UNESCO's 'World Network of Biosphere Reserves.'

The Yancheng wetlands provide important ecosystem services to local communities. A significant proportion of land surrounding the NNRs is occupied by forest, agricultural and aquaculture production farms, and local livelihoods are also sustained through the capture and culture of marine and estuarine plants (e.g., reeds) and fish species. Wetland plants slow the flow of rivers; and the mudflats absorb wave energy from the Yellow Sea, thereby controlling coastal erosion and increasing climate resilience that alleviate coastal communities' risks of tsunami and storm surges. Yancheng wetlands also improve water quality by assimilating household and industrial wastes that are rapidly increasing within the municipality. Meanwhile they regulate the local climate and thus help raise agricultural, aquaculture and forest productivity. Finally the two nature reserves attract hundreds of eco-tourists each year from around the world, contributing to employment and income generation for local communities.

### ***Pressures and Threats:***

In a period 15-20 August 2011, the GEF-5 biodiversity-tracking tool was undertaken in both YRBNNR and DMNNR sites. Building upon the Protected Area Threats Matrix (Biodiversity Tracking Tool, data sheet 2), project design benefited from inclusion of a "Conservation Needs Assessment" (CNA). The CNA worked with PA management boards and local community representation to clarify threats identified as 'medium' and 'high' in the "Threats Matrix"; afforded examination of the direct and indirect causes of threats; examined and applied criteria for threat classification (by area both within and outside the PA, intensity and urgency of the threat); ranked the identified threats, and; overall, afforded consultative process with management boards, government and community representation detailing activities likely to address threats in a long-term manner<sup>1</sup>.

Overall, the tracking tool and CNA were viewed important capacity and awareness development exercises and have helped (from the start) to ensure improved consultation and ownership of the eventual GEF project<sup>2</sup>. See *Annex F*, Conservation Needs Assessment: a) YRBNNR and b) DMNNR and; *Annex G*, Biodiversity Tracking Tools: a) YRBNNR and b) DMNNR.

Overall, despite the importance of the wetlands to biodiversity conservation, local livelihoods and ecological service functions, the Yancheng coastal wetlands have been experiencing rapid degradation, leading to loss and fragmentation of wildlife habitats and loss of biodiversity. The main threats to the coastal wetland ecosystems and biodiversity include: (i) land use changes from reclamation for agricultural, aquaculture, industrial and urban expansion; (ii) land-based point source and non- point-source pollution; (iii) the spread of the invasive alien species (i.e. *Spartina alterniflora*); (iv) dehydration; (v) poorly regulated resource use and collection, including over-fishing; and (vi) poaching and poisoning of wildlife. By example, between 1975 and 2006, the area of fish ponds and construction land

<sup>1</sup> Activities beyond the scope of GEF funding were also denoted. The CNA will serve a basis for the proposed Operational Management Plans (OMPs) for both NR sites.

<sup>2</sup> In the interest of improving local inputs and ownership in the project's design, both the tracking tool and CNA were translated into Chinese.



expanded by approximately eight times, and the area of farmland by 1.6 times. First introduced from the US to control coastal erosion and accelerate coastal sedimentation for the purpose of coastal reclamation, *Spartina alterniflora*, spread from zero ha in 1979 to 16,740 ha by 2009. This has occurred at the expense of native habitats and endemic reed species which have since 1979 decreased from 56,145 ha to 11,930 ha, seep weed from 72,134 ha to 9,499 ha, and mudflat from 133,683 ha to 77,373 ha. Fish catches have also notably declined in quality and quantity, from 165,605 tons in 1995 to 112,543 tons by 2005.

As a consequence of human and natural causes, the area of habitat suitable for the red-crowned crane has declined by 53.3% from 2,354.4 km<sup>2</sup> in 1987 to 1,100.1 km<sup>2</sup> in 2007. Habitat loss and degradation has contributed to the decline of wintering populations of the red-crowned crane, from 1,175 in 2001 to an all-year low of 477 in 2010. As regards Milu deer, the poor quality of drinking water, grazing and fodder grounds, combined with parasitic plagues, resulted in health status declines in the near extinct Milu in the DMNNR. These threats to the two nature reserves are further magnified by poor protection infrastructure, weak management capacity and inadequate linkage to area development planning, public education and community participation in planning and decision-making—factors necessary to uphold the NNRs' objectives. Furthermore the neighboring Sheyang Forest Farm (SFF) and Dafeng Forest Farm (DFF), targeted under the Loan suffer from: (i) lack of forest diversity and weak resilience; (ii) decline of the drainage function of the rivers and canals; and (iii) weak forest protection infrastructures, including fire and pest prevention and control<sup>3</sup>.

### ***The Project:***

With combined co-financing from ADB, GEF and the government, the Project comprises five major components directly responding to the pressures and threats of the Yancheng coastal wetlands. Specifically, the Project targets critical habitats and ecosystems of the two NNRs, develops essential PA management capacities, informed multiple stakeholder NNR and coastal wetland stewardship, and a dynamic, mainstreamed conservation objective within surrounding and productive landscapes (i.e. NNR 'buffer' and 'experimental' zones). The interventions and activities for each component are summarized as follows.

**Component 1: Wetland Restoration and Biodiversity Conservation.** Financed by the ADB loan/TA (98.53%) government and GEF (1.47%) grants, *Component 1* targets support to the two national nature reserves of YRBNNR and DMNNR--both of which are listed under the Ramsar convention as 'Wetlands of International Importance,' and are adjacent forest farms that may also serve to buffer the NNR and protect area coastal wetlands. Specific project activities under *Component 1* covered by the Loan will: (i) restore and rehabilitate degraded wetlands in the core zones (3,944.7 ha in total) as critical habitats for many species of global and national importance (particularly the red-crowned crane and the Milu), (ii) pilot control measures for *Spartina alterniflora* as a fast spreading invasive alien species (400 ha in the YRBNNR), and (iii) develop improvements to basic infrastructure essential for patrol, drainage, pollution control, wildlife rescue and disease control, research, monitoring, public education and collaborative management (i.e., interventions covering the entire areas of the two NNRs totaling 286,867 ha).

Specific project activities under *Component 1* covered by the GEF focus on two key outcomes:

#### ***A. Stakeholders conserving biological diversity through effective PA management.***

Activities within this outcome include: (i) building upon CNA, METT and other existing and relevant NNR assessments, the Project will fill in key gaps defining PA threats and interventions via rapid biodiversity, socio-economic and hydrological assessments for the NNRs' Core, BZ and ERZs; (ii) support development and implementation of PA Operational Management Plans (OMPs), which includes PA information management and monitoring requirements. OMP planning processes and experiences at project-site level will be viewed by provincial and national MEP and fed into ongoing dialogue regarding PRC development of a comprehensive international standard of management planning; (iii) *Component 1* also provides training and inputs to strengthen PA and wetland stakeholder management and monitoring capacities; Through workshops, meetings and ongoing dialogue the role of BZ and ERZ management to core zone health is further underscored by (iv) a training of trainers programs focused on sustainable natural resource management and sustainable livelihoods.

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<sup>3</sup> The buffering potentials of the surrounding forest farms are noteworthy and their inclusion strategic. Their inputs are further coordinated through multiple stakeholder OMP inputs, BZ/ERZ guideline development, and other participatory forums of the GEF project and provide a solid platform which will effectively extend habitat and the ecosystem protection objectives of the PA within the wider production landscape.

*B. Improved financial sustainability for wetlands nature reserve management.*

Specific project activities build upon workable models identified by the ADB RETA to undertake implementation of PES mechanisms for NNR management, including: (v) piloting of identified PES mechanisms in the two NNRs; (vi) development and implementation of a sustainable tourism strategy and action plan for both NNRs; (vii) PES specialists will develop ideas and facilitate meetings to explore and incentivize private sector participation and public-private partnership strategies, develop agreements, MoUs and contracts supporting PA financing in both NNRs; and (viii) deliver specific training programs for NNR staff related to PES and sustainable tourism. Under *Component 4* (below) experiences from application of PES in NNRs will be developed into PES systems and policy frameworks at the provincial level.

**Component 2: Sustainable Natural Resources Management and Sustainable Livelihoods.**

Major interventions (supported by the ADB loan at 96.34%) at the two forest farms also include: (i) restoration and rehabilitation of forests as bird habitats (1,045 ha); (ii) wetland restoration (122.7 ha); (iii) demonstration of indigenous species cultivation (285.2 ha) and agroforestry (83.5 ha); (iv) drainage improvements; (v) the establishment of fire prevention and response system; and, (vi) an integrated pest management system (IPM, which will cover the entire areas of the two neighboring forest farms totaling 4,366.7 ha)

Initiated by the ADB financed feasibility assessment, GEF activities in *Component 2* focuses GEF support (3.66%) on: (i) development of PA- and biodiversity-friendly, pro-poor ERZ and BZ management guidelines; (ii) the establishment of *community-based* PES initiatives (and fund) addressing key issues affecting wetland and biodiversity conservation; (iii) based on the tourism strategy developed in *Component 1*, implement ecotourism related PES training community training targeting low income, women headed households (lowest 10% income bracket), and; (iv) implement community training programs on PA- and biodiversity-friendly practices and guidelines underscoring international and national best practices in agriculture, aquaculture and forestry with the 10 villages (1,200 households,) and 70 agricultural, forest and aquaculture farms in the buffer (BZ) and experimental (ERZ) zones of the YRBNNR.

**Component 3: Ecological Monitoring and Evaluation.** Financed by the GEF grant (65%) and the ADB Loan subproject (35%), *Component 3* will support the establishment and pilot implementation of a monitoring system that will complement the OMP's developed under Component 1 and the need to address wider landscape level monitoring. Key sector agencies will be engaged to through a multi-stakeholder platform to discuss and agree on the specific aims of the wider scale monitoring and evaluation plan, sector responsibilities, reporting requirements and budget allocations/ commitments.

The first output of *Component 3* entails '*improved monitoring of biodiversity and ecosystems*' and specific activities for: (i) developing a monitoring system to complement NNR management based on the OMP; (ii) NNR stakeholder participation (through a multi-sectoral monitoring working group) on the development of a wider, landscape level ecological monitoring system; (iii) selected targeted monitoring programs established and sufficiently financed (e.g. wild release of Milu, and *spartina* control effectiveness).

A second output within *Component 3* will '*strengthen ecological monitoring and evaluation capacity and its institutionalization amongst relevant BZ and ERZ landscape stakeholders*'. Specific *Component 3* activities related to this output include: (iv) training and capacity building supporting the monitoring responsibilities of key BZ and ERZ stakeholders; and (iv) developing agreements/consensus supporting institutional arrangements and required financing for pilot testing within buffers and experimental zones outside the NNRs (where appropriate, linked to PES and NNR OMP monitoring).

**Component 4: Environmental Governance and Knowledge Dissemination.** *Component 4* is funded by the ADB loan (39%) and GEF (61%) to effectively: (i) Strengthen the capacity of the NNRs to engage with the local government in order to mainstream wetland and biodiversity priorities into sector development plans; (ii) support inter-agency coordination (e.g. PA, police, military and municipal departments) in implementing joint patrols, enforcement and information sharing protocols; (iii) support operationalizing PES policies and programs into NNR financing and inform provincial and national level policy dialogue regarding PES in PAs; (iv) build capacity of PMO/PIU staff in project management, financial management, procurement and environmental and social safeguards;

(v) develop and implement a targeted communication strategy and action plan that will promote environmental governance across sectors and stakeholders; (iv) and preparation of project related information and knowledge products.

**Component 5: Project Management.** Project Management (at 4.57% GEF, 95.43% Loan) provides overall support for the implementation of the project activities specified for each component, and the Project Performance Monitoring System will help ensure that delivery of project outcomes and outputs are timely, responsive and of an expected high quality.

***Global Environmental Benefits:***

The Jiangsu Yancheng Wetland Protection Project, with combined ADB and GEF co-financing, targets important coastal wetland restoration, ecosystem and habitat integrity and improvement, species protection, invasive species control, biodiversity supportive infrastructure improvements, public education, institutional strengthening, community participation, links to national and provincial level policy dialogue and other important opportunities in wetland conservation research and monitoring. As identified through Conservation Needs Assessments and related local participatory consultative processes, the mitigation actions proposed were developed to address key medium-longer term threats and pressures faced by the NNRs, the two linking forest farms and other BZ and ERZ areas forming the Yancheng coastal wetland ecosystem.

More specifically, project interventions identified contribute to improving the survival of a number of globally important endangered species, including migratory birds such as the endangered red-crowned crane, and the Milu deer which is listed in the IUCN Redbook as “extinct in the wild”. The sustainable forest improvement interventions proposed in the two forest farms (via the loan) also helps to strengthen habitat connectivity and ecosystem wide national coast protection and the forest network of the PRC. This provides an important mainstreaming model integrating wider landscape developments and the protection of biodiversity and coastal ecosystem services. Together with the native wetland habitat restoration and ecological monitoring improvements supported by the project, this will also contribute to carbon sequestration and the building up of PRC resilience to climate change.

The measurable targets for the global environmental benefits at the output level include: (i) 4,015 ha of coastal wetland habitat restored and rehabilitated as critical habitats for the globally endangered species of red-crowned crane; (ii) 766 ha of coastal wetland habitat restored and rehabilitated as habitats for the globally extinct-in-the-wild Milu; and (iii) 400 ha of invasive species control of *Spartina alterniflora* piloted. Together with other interventions supporting systematic incorporation and improved capacities in PA and coastal wetland planning and management, improved species/habitat protection, improved research and monitoring, institutional strengthening and regulatory enhancement and upgraded basic infrastructure services, increased public awareness and sustainable financing mechanisms, the project will, by 2017, halt annual wetland degradation rates of the YRBNNR (currently 2.5%) and the DMNNR (currently 5%), maintaining globally important biodiversity, as well as local-national ecological services and preserving the integrity of these ecosystems as ‘Wetlands of International Importance.’ By 2020 and beyond, the red-crane population will be maintained above the critical level of 600; and the annual mortality rate of Milu will be reduced from 4% at present to 2%.

Notably, the project has broader implications impacting the system-level. By example, the project focuses systematic incorporation of NNR values within the larger landscape via:

- *Project activities piloting Payment for Environment Services (PES) and public-private partnerships* (e.g. ecotourism) support promising eco-compensation work and sectoral transformation. The provincial government has high hopes on ADB-GEF contributions to the development of PES policy for nature reserves (which will be one of the first in the country).
- *Trans-provincial mechanisms for globally endangered species.* The project supports globally important species management protocols and data information sharing to address target species beyond PA and provincial borders.
- *Development of PA, BZ and ERZ management guidelines.* These tools will further assist mainstreaming of PA objectives within provincial development, build recognition of the importance of ecosystem service values for the province’s coastal landscapes, and support standard operational guidelines for units within the PA and BZ, ERZ communities and provincial government departments.
- *Development and uptake of Operational Management Plans (OMP).* Along with sustainable financing, this

exercise is being considered by the PRC PA network system as an important means developing a comprehensive international standard of management planning as defined for example by the IUCN World Commission on Protected Areas. The OMP is developed and implemented mobilizing multiple NNR and wetland stakeholder inputs.

- *Wetland ecological-monitoring system.* With project support for improved assessment and monitoring of Yancheng wetlands, the two NNRs and the JCDP will have real-time, scientifically based evidence highlighting wetland dynamics, ecosystem and biological data supporting the maintenance and improvement of area ecosystem services, and further rationale supporting PA conservation values within the wider landscape.

Project activities, processes, protocols and other applicable GEB lessons developed will be shared with all coastal-wetland, protected areas and forest protected areas within the province. Provincial and National MEP and provincial development authorities have importantly committed staff and resources to the project's piloting and review, and have highlighted the project's potential importance to informing institutional and legislative revisions and wetland management practice changes.

## **B. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH NATIONAL AND/OR REGIONAL PRIORITIES/PLANS:**

### ***National Regulatory Framework:***

The PRC has a relatively comprehensive regulatory framework for biodiversity protection and nature reserve management. The *Constitution of the People's Republic of China* (1982), *Environmental Protection Law* (1989), *Law on Protection of Wild Fauna* (1989) and other laws and regulations provide for the protection of important biological species, their habitats and valued ecosystems. The *Guideline on Protection of Terrestrial Wild Fauna*, proclaimed in 1992 by the then Ministry of Forestry, calls for the adoption of biological engineering and technical engineering measures for maintaining and improving the living environment of wild fauna, wildlife rescue, biodiversity surveys and monitoring and public education. The *Regulation on Management of Nature Reserves* (1994) sets forth the rules and procedures for the establishment and management of nature reserves. It prohibits any persons from entering the core zone but there are yet provisions on ecosystem and habitat rehabilitation restoration or patrol (e.g., by nature reserve management personnel) and emergency response (e.g., fire-fighting in a forest nature reserve in case of a forest fire).

The *Directive on Strengthening Wetland Protection and Management* (2004) calls for capacity building in: i) management of infrastructure, including management / patrol stations, fences, border markers and wildlife rescue centers; patrol paths and vehicles, communication equipment, fire towers, fire-fighting routes, fire trucks, and preparation / update of management plans; ii) public education infrastructures, including exhibition centers, specimens, audio/video equipment, signs, boards and pamphlets; iii) monitoring and scientific research infrastructures, including laboratory, field survey and sampling equipment and information system; iv) administrative infrastructures, including office building and auxiliary facilities. The *Guideline on Supervision and Inspection of Nature Reserves* (2006). The guideline requires the regular evaluation of NNRs and defines the scope of evaluation to include: a) institutional setup and staffing levels; b) patrol and protection facilities; c) area and suitability, boundary and land ownership of the functional zones; d) formulation and implementation of management plan and rules and procedures; e) resource baseline, protection and utilization; f) scientific research, monitoring, record-keeping and specimens; g) the management of construction projects within the nature reserve; h) tourism and other human activities; i) public education, training, exchange and cooperation; j) financing; and k) other relevant issues.

### ***National Plans and Programs:***

In 1996, the State Council approved the *National Plan for Development of Nature Reserves (1996-2010)*. The Plan sets the 2010 target of establishing 1,200 nature reserves covering 10% of the PRC national territory. By the end of 2010, there were 2,588 NRs of national, provincial, prefecture and county levels with a total area of 149.44 million ha or 14.9% of the national territory, including 319 NNRs with a total area of 92.68 million ha. By the end of 2010, more than 550 wetland nature reserves and 145 pilot national wetland parks were established across the country. As of today, 37 natural wetland sites with a total area of approximately 3.81 million ha or 10.5% of the 36.20 million ha of natural wetlands in the country. The *National Wetlands Protection Program of Action (2004-2030)* and the *National Wetland Protection Program Implementation Plan (2005-2010)* provide for the removal of major threats to the country's wetlands, including such issues as 'low awareness of the ecological value and social benefits', over-fishing, dehydration, pollution and upstream deforestation.

The *National Wetland Protection Program of Action (2004-2030)* sets forth the objective of restoring and maintaining the ecological functions of the country's wetland ecosystems, through better allocation and management of water resources, demonstration of the sustainable use of the wetland resources, and the strengthening of wetland monitoring, public awareness, training, scientific research and management systems. As a near-term implementation program for the NWPPA, the *National Wetland Protection Program Implementation Plan (NWPPIP, 2005-2010)* proposed a series of programs with a total investment of approximately CNY 9 billion, including: establishment of 222 wetland nature reserves within the period; restoration and rehabilitation of 588,000 ha of various types of wetlands (especially those in the national wetland nature reserves and including rehydration of dehydrated wetlands, conversion of fish ponds to wetlands, wildlife habitat rehabilitation and pollution control); demonstration of sustainable use and capacity building in human resources, and; infrastructure for monitoring, research, and public education. The directive specifically prescribes 'comprehensive rehabilitation and restoration of degraded coastal wetland ecosystems' by the use of 'ecological engineering measures and technologies'. The wetland restoration program contained in the NWPPIP (2005-2010) proposed the restoration of 588,000-ha degraded (in terms of area and ecosystem functions) wetlands with a priority on National Nature Reserves. In recognizing dehydration being the greatest threat to wetlands, 12 rehydration demonstrations across the country were proposed. Moreover, the NWPPIP requires all reclaimed wetlands in the nature reserves, including aquacultural ponds and farmland, to be restored. The capacity building package of actions cover better management planning and improvements to infrastructures for patrol, fire prevention, wildlife rescue, public education and research and monitoring.

In 2010, the PRC Government released the *PRC Biodiversity Protection Strategy and Action Plan (2010-2030)*, which contains 9 priority areas and 39 priority actions, including, among other things: regulatory strengthening; mainstreaming biodiversity protection into socioeconomic development planning; ecosystem and species monitoring; wetland protection / restoration and sustainable use and monitoring; coastal ecosystem and species baseline surveys; public education; capacity building for nature reserves; nature reserve-community collaborative development; habitat protection and breeding of rare and endangered species, and; early warning systems and the control of invasive species.

### ***Jiangsu Provincial Plans and Programs:***

The *Jiangsu Provincial 12<sup>th</sup> FYP (2011-2015)* has established the targets of: reducing energy intensity by 16%; reducing industrial water intensity by 25%; the reduction of the total BOD discharge and SO<sub>2</sub> emission by 8% and NH<sub>3</sub>-N discharge and NO<sub>x</sub> emission by 10%, and; increasing forest cover from 20.4% in 2010 to 22% by 2015. Resource conservation, environmental improvement, 'clean waters' and ecosystem health are also among the strategic priorities for the 12<sup>th</sup> FYP.

The environment and sustainable development chapter of the 12<sup>th</sup> FYP also calls for greater efforts in: a) ecological protection and restoration; b) reforestation; and c) eco-compensation. Ecological protection in the province will focus on the protection of key ecological function zones, including the two NNRs and the neighbouring forest farms. Ecological restoration will have an important focus on restoring the health of degraded lands, and freshwater and coastal wetland ecosystems.

Other priorities within the 12<sup>th</sup> FYP include: species surveys and protection; control of invasive species; establishment of a provincial genetic data bank, and; the rescue and protection of rare and endangered flora and fauna.

Notably, the 12<sup>th</sup> FYP also calls for the establishment of eco-compensation program for key ecological function zones, and implementation of regional pollution payment and compensation system. The eco-compensation program will be piloted in this proposed project on behalf of the two NNRs. The priorities of the *Jiangsu Coastal Development Plan (2009-2020)* has a total budget of CNY 44.3 billion by 2012, including CNY 350 million earmarked for the YRBNNR on wetland restoration and protection, establishment of a management information system, ecological monitoring and laboratory facilities and public education facilities and CNY 229 million for the DMNNR on ecosystem rehabilitation, infrastructure improvement and building of research capacity. The *Jiangsu Ecological Province Plan* proposed a total investment of CNY 200 billion between 2004 and 2010, including CNY 20 billion for ecological protection and restoration, CNY 20 billion for ecological agriculture and forestry. Both plans have been incorporated into the 12<sup>th</sup> FYP.

### ***Yancheng Municipal Plans and Programs:***

The *Yancheng 12<sup>th</sup> FYP (2011-2015)* sets forth the target of meeting the national requirements for an 'ecological city' by 2015. Following up on the Provincial priorities, pollution control targets in the municipality also include: reduction

of energy intensity (measured in energy consumption per unit of GDP) by 16%; reducing industrial water intensity by 25%; reduction in BOD discharge by 8% and NH<sub>3</sub>-N discharge by 10%, and to be accomplished through structural adjustment, cleaner production, strengthened regulatory enforcement, construction of sewage treatment plants and sanitary landfills and control of non-point-source pollution.

On the ecological front, wetland restoration and protection is a top priority of the municipality, with an emphasis on the two NNRs and NNR management boards afforded a level inputs to local EIA and area development processes. This ‘institutional strengthening’ will continue to be improved by the project. Protection of key ecological function zones (e.g. core, buffer and experimental zones) will also be strengthened. The actions proposed in the master plans of the two NNRs will be implemented. Other important priorities include ecotourism, improved biodiversity monitoring, post-EIA monitoring of area wind-farms and control of invasive species. The use of economic instruments for pollution control and ecological protection, including eco-compensation with a focus on the two NNRs, will be promoted. The environmental priorities of the *Yancheng Coastal Development Plan (2007-2020)* are incorporated into the 12<sup>th</sup> FYP.

### ***Nature Reserve Master Plans:***

The YRBNNR master plan covers 2008 through 2020. It proposes priority actions on planning and infrastructure improvements, ecological restoration, research and monitoring, public education and outreach, and beneficial uses. The estimated investments for the plan of action total CNY 26.78 million for the near-term (2008-2010) and CNY 58.55 million for the long-term (2011-2020).

The DMNNR master plan spans a period of 20 years between 2000 and 2020. The priority actions proposed in the master plan include improved drinking water supply and resting space for the Milu, improved grazing and fodder grounds, disease control, improved science education facilities, ecotourism development, improved protection facilities such as fencing and building of research and monitoring capacity.

The international approach to improving protected area management aims to develop a comprehensive operational management plan (OMP). This is an integrated and comprehensive document providing an overview of the protected area and explains the management strategies, priorities, activities and budgets required to manage a protected area sustainably. OMPs will be developed for both NNRs affording clear, structured (easy identification of management priorities), realistic, and comprehensive outline of the management objectives and operations for a protected area and a management approach to reduce threats against the protected area. They are based upon accurate ecosystem, biodiversity, livelihood and socio-economic information developed by the project both within and adjacent the PAs (BZ/ERZ), and importantly incorporate community needs/inputs in sustainable wetland resource utilization with improved management of the strictly protected.

### ***International Commitments:***

In 1992, the PRC joined the *Convention on Biological Diversity* (CBD) and the *Convention on Wetlands of International Importance* (or the Ramsar Convention). The CBD requires each ‘Contracting Party’ to, among other things, rehabilitate and restore degraded ecosystems and promote the recovery of threatened species, inter alia, through the development and implementation of plans or other management strategies and prevent the introduction of, control or eradicate those alien species. In 2009, the PRC submitted its fourth country report to the CBD secretariat. In June 1994, the PRC Government released the *Biodiversity Protection Action Plan*, and in September 2010, the *Biodiversity Strategy and Action Plan (2010-2030)*. The *Ramsar Convention* calls for protection, sustainable use, and monitoring of wetlands. In response, the PRC has as of today 37 wetlands designated as Wetlands of International Importance under the Ramsar Convention. The YRBNNR and DMNNR were designated on 11 January 2002.

Both the Rare Birds NR and Milu NR are members of the China Biosphere Reserves Network (CBRN) which was established by the Chinese National Committee for UNESCO Man and the Biosphere Programme (MAB) in 1993. As of today, there are 141 members in CBRN, of which 28, including the Rare Birds NR, are listed as UNESCO World Network of Biosphere Reserves (WNBR). The WNBR has 563 sites in 110 countries. The PRC is also part of the NE Asia Crane Site Network whereby the concerned countries have signed bilateral agreements for the protection of migratory birds (including the red-crane crane). The red-crowned crane is also covered by the *East Asia-Australasia Flyway Agreement* and the *Asia Pacific Migratory Waterbird Conservation Strategy*, among others to which the PRC is a signatory. Meanwhile, the PRC is a party to a number of bilateral agreements on the protection of migratory species. The PRC signed an agreement with Japan in 1983 and Australia in 1988 to protect migratory birds and their

habitats. In 1989, the PRC signed an MOU with the former USSR on nature conservation, and with Mongolia an agreement on nature conservation. Finally, the PRC is a member of the International Crane Foundation (ICF), a Wisconsin-based non-profit organization dedicated to the study and preservation of the 15 species of cranes.

In summary, project interventions financed by the ADB loan and the GEF co-financing target wetland restoration, ecosystem and habitat improvement, species protection, invasive species control, institutional and regulatory strengthening, infrastructure improvement, public education, community participation and capacity building in research / monitoring / planning and financing mechanisms. The project will effectively: address numerous and urgent threats and pressures identified and faced by the NNRs and the two adjacent forest farms forming the Yancheng coastal wetland ecosystem; respond directly to and build upon previous programs and national, provincial, municipal and nature reserve priorities, and; directly complement the attainment of PRC's international commitments. The forest improvement interventions in the two forest farms (under the loan) will also help strengthen the national coastal ecological protection forest network of the PRC. Viewed together with the proposed wetland improvements, they will also contribute to carbon sequestration and enhanced climate resilience in the coastal zone.

### **C. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH GEF STRATEGIES AND STRATEGIC PROGRAMS:**

**BD-SO1: Catalyzing Sustainability of Protected Area Systems:** Sustainability of protected areas will be catalyzed through restoration and rehabilitation of degraded coastal wetlands, pilot control of invasive alien species, public education and community co-management, improved research and monitoring capacities, and enhanced planning and management capabilities at the two designated protected areas, i.e., the Yancheng Rare Birds National Nature Reserve and the Dafeng Milu National Nature Reserve both of which are also wetlands of international importance under the Ramsar Convention. It is anticipated that by the end of the project, 286,847 ha of protected area will be better protected and managed to conserve biodiversity. Within BD-SO1, the project is consistent with SP-1 and SP-2:

- **SP-1: Sustainable financing of PA systems at the national level,** the PRC has recently begun experimenting with innovative financing mechanisms for pollution control and river basin management. Both the national and many provincial governments have shown a keen interest in exploring and introducing innovative financing mechanisms for biodiversity conservation within the context of nature reserves. This project will become one of the earliest pilots in the country. The experiences, including success and lessons learned, will have important implications for Jiangsu province and the PRC. In recognizing that the national-level system reform in support of biodiversity conservation will take time, the project will focus on: (i) building capacity for PA management within the two NNRs; (ii) support to the formulation of sustainable financing policies that can play a demonstration role for the country; and (iii) promoting community co-management.
- **SP2: Increasing representation of effectively managed marine protected areas in protected areas system,** as it focuses on the preservation of two of the most important coastal wetland nature reserves represented in the PRC's PA system. It is expected that by the end of the project, improved management at the two NNRs will serve as a model of best practices for effective management of coastal PAs that can be replicated elsewhere in the province, nationally and internationally.

**BD-SO2: Mainstreaming biodiversity conservation in production landscapes/ seascapes and sectors.** This objective will be achieved by promoting the incorporation of wetland protection and biodiversity conservation into such sectors as agriculture, aquaculture and forestry. For each of the priority sectors identified during the threats analysis with the tracking tools, biodiversity-friendly considerations will be mainstreamed into sector strategies and practices. Within BD-SO2, the project has a direct linkage to:

- **SP5: Strengthening the policy and regulatory framework for mainstreaming biodiversity.** Project interventions will include the formulation and introduction of payment for ecological services (PES) or eco-compensation policies and operational guidelines, and the introduction of PA- and biodiversity-friendly, pro-poor best practices in agriculture, aquaculture and forestry by developing appropriate best practices and guidelines and by designing and delivering community training programs.

**BD-SO3: Safeguarding Biodiversity:** The project will support the strategic objective of safeguarding biodiversity by exploring cost-effective strategies to control and manage invasive alien species, particularly *Spartina alterniflora*, in coastal and marine systems. First introduced from the US in 1979 to control coastal erosion and accelerate coastal sedimentation for the purpose of coastal reclamation, *Spartina alterniflora* has spread to most coastal areas in the PRC. In 2003, it was placed in the PRC's first list of the 'top 16 invasive alien species.' *Spartina alterniflora* now stretches from Liaoning Province in the Northeast to Guangdong Province in the South and occupies an area of



approximately 35,000 ha. Along the Yancheng coastal wetlands alone, *Spartina alterniflora* has spread to cover over 17,000 ha, accounting for almost half of the national total. The invasion of *Spartina alterniflora* reduces biodiversity and makes the wetlands unsuitable for the protected rare bird species. Within BD-SO3, the project will support:

- **SP-7: Prevention, control and management of invasive alien species**, by exploring cost-effective measures to control *Spartina alterniflora*. The 400-ha pilot will build on the experiences gained from the Shanghai Chongming Dongtan Birds National Nature Reserve. If the carefully controlled and monitored approach to the pilot model proves successful, it will be replicated in other parts of the Yancheng coastal wetlands. The success and lessons learned will be disseminated across the country.

#### **D. JUSTIFY THE TYPE OF FINANCING SUPPORT PROVIDED WITH THE GEF RESOURCES:**

This project is mainly financed by an ADB loan (\$36.9 million) and counterpart funding from provincial and local governments (\$39.49 million). Partly due to long history of neglect and partly due to natural and physical processes, some of the wetlands that are critical for the globally important species have degraded and are in urgent need of restoration. The protection and management infrastructure facilities in the two NNRs are in urgent need of upgrading. Understandably, the ADB loan proceeds and domestic counterpart funds are used to finance wetland restoration works and protection and management infrastructure services. Yet the institutional and financing capacity of the NNRs is still weak. Hence the GEF grant is designed to finance the "enabling" activities that will support the engineering and infrastructure investments for enhancing the loan project interventions, for sustaining the project results over the long term and for ensuring the long-term sustainability of the two NNRs. The GEF-supported enabling interventions include preparatory studies for and effectiveness monitoring of *Spartina alterniflora* control pilot and Milu relocation, sustainable financing mechanisms for wetland protection and biodiversity conservation, strengthening of the NNRs' operational management planning capability, mainstreaming of PA- and biodiversity-friendly practices into major production sectors, formulation of PES policies, collaborative management and knowledge dissemination.

#### **E. OUTLINE THE COORDINATION WITH OTHER RELATED INITIATIVES:**

The project falls under the umbrella of the CBPF. It is expected that, through this association, linkages with other related projects in China might be strengthened. The following key priorities in common with the CBPF have been identified: (i) emphasizing improved management of important biodiversity resources within protected areas or networks of protected areas; (ii) developing viable mechanisms for sustainable financing to support biodiversity conservation efforts over the long-term; and (iii) exploring cost-effective strategies and measures for prevention, control and management of invasive alien species. At project inception these linkages will be further explored and opportunities for greater and practical linkages with the CBPF identified.

Direct linkages will also be sought with previous, existing and future relevant GEF projects on wetland protection and biodiversity conservation, such as:

Initiative	Possible Areas of Synergy/Reference
UNDP-GEF China Biodiversity Partnership and Framework for Action (GEF \$4.54 million; multi-partner co-financing \$15.00 million; 2007-2017)	The project is complementary to all thematic priorities of the CBPF: (i) Improving biodiversity governance; (ii) Mainstreaming consideration of biodiversity into economic sectors and plans, and investment decision making; (iii) Investing effectively in reducing biodiversity loss in protected areas; (iv) Investing effectively in reducing biodiversity loss outside of protected areas; and, (v) Cross-cutting and CBD emerging issues (e.g., invasive alien species, access, and benefit sharing).
UNDP-GEF China Biodiversity Partnership and Framework for Action (GEF \$1.74 million; Government co-financing & 1.5 million; 2010-2014)	(i) Financial flows to biodiversity conservation increase over current baseline; (ii) PAs have stable and sufficient financing; (iii) PAs are effectively managed; and, (iv) NRs, local communities, NGOs and/or the private sector are involved in PA co-management and development.
UNDP-GEF Conservation and Sustainable Use of Biodiversity in	(i) Biodiversity and ecological function conservation mainstreamed into river basin planning and monitoring



the Headwaters of the Huaihe River Basin (GEF \$2.73 million; co-financing \$10.35 million; 2009-2013)	<ul style="list-style-type: none"> <li>(ii) Biodiversity and ecological conservation mainstreamed into key productive sectors to achieve</li> <li>(iii) Biodiversity and ecosystem considerations mainstreamed into poverty alleviation strategies and programs to capture potential synergies</li> <li>(iv) Lessons learned will inform and strengthen ongoing efforts to manage IEFAs in China through national and local level learning networks dissemination and exchange of lessons.</li> </ul>
UNDP-GEF Strengthening the Effectiveness of the Protected Area System in Qinghai Province (GEF \$5.35 million; Government co-financing \$5.35 million; 2011-2016)	<ul style="list-style-type: none"> <li>(i) Increasing PA management effectiveness through strengthened institutional and staff capacities; and,</li> <li>(ii) Demonstration of effective PA management through community involvement.</li> </ul>
Demonstration of Estuarine Biodiversity Conservation Restoration and Protected Area Networking (GEF \$3.64 million; Government \$8.58 million; FAO \$0.42, including cash and in-kind; 2011-2016)	<ul style="list-style-type: none"> <li>(i) Development of policy tools for mainstreaming biodiversity into economic sectors (e.g., eco-compensation fund);</li> <li>(ii) Development and update of PA management plans;</li> <li>(iii) Introduction of co-management principles;</li> <li>(iv) Promotion of financial sustainability;</li> <li>(v) Establishment of coordinating mechanisms;</li> <li>(vi) Development of monitoring protocols and establishment of ecosystem health monitoring program;</li> <li>(vii) Strengthening of law enforcement;</li> <li>(viii) Restoration of degraded habitats (including <i>spartina</i> control); and,</li> <li>(ix) Sustainable / alternative livelihoods.</li> </ul>
FAO-GEF Securing Biodiversity Conservation and Sustainable Use in China's Dongting Lake Protected Area (GEF \$2.95 million; co-financing \$6.21 million; 2011-2016)	<ul style="list-style-type: none"> <li>(i) Improved PA management;</li> <li>(ii) Development of sustainable financing plans with possible up-scaling to national scale depending on nature and success of pilot results;</li> <li>(iii) Development of policies and regulatory frameworks promoting "mainstreaming" of biodiversity principles for five production sectors;</li> </ul>
World Bank-GEF Strengthen Integrated Planning and Implementation of Natural Resource Management and Mainstreaming of Biodiversity Values in Lake Aibi Basin (GEF \$2.98 million; Government \$7.64 million; 2011-2015)	<ul style="list-style-type: none"> <li>(i) Development/update of PA management plan;</li> <li>(ii) Biodiversity survey and monitoring programs; and,</li> <li>(iii) Public awareness building.</li> </ul>
ADB- GEF Sanjiang Plains Wetlands Protection Project (GEF \$12.14 million; ADB loan \$15.00 million; Government \$28.41 million; 2005-2010)	<ul style="list-style-type: none"> <li>(i) Improved conservation management practices with respect to wetlands and wildlife in NRs;</li> <li>(ii) Pilot wetland restoration;</li> <li>(iii) Agroforestry demonstration;</li> <li>(iv) Development of economically and environmentally sustainable ecotourism guidelines and implementation of pilots;</li> <li>(v) Development of biodiversity monitoring programs and protocols;</li> <li>(vi) Development inter-agency coordination mechanisms;</li> <li>(vii) Development of PA management plans; and,</li> <li>(viii) Conservation awareness building.</li> </ul>
UNDP-GEF China Wetland	<ul style="list-style-type: none"> <li>(i) Review and build-off the project's training needs assessment;</li> </ul>

Biodiversity Conservation and Sustainable Use (For Yancheng: GEF \$2.2 million; Government \$4.4 million; UNDP \$50 K; 1999-2009).	<ul style="list-style-type: none"> <li>(ii) The project design incorporates lessons learned, approaches and activities of this now terminated project;</li> <li>(iii) Expansion and re-alignment of PAS to include additional biodiversity hotspots and create coastal wetland eco-cline;</li> <li>(iv) Improved PA management and protection of globally threatened biodiversity in the core areas of Yancheng;</li> <li>(v) Sustainable use of inter-tidal resources by local communities in Dafeng NNR buffer zone demonstrated;</li> <li>(vi) Biodiversity-friendly land use planning in Yancheng Coastal Marshes demonstrated through preparation of biodiversity overlays;</li> <li>(vii) Alternative livelihood schemes developed for local communities in and around wetland areas; and,</li> <li>(viii) Public awareness in Yancheng Coastal Marshes of wetland values and functions enhanced.</li> </ul>
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These initiatives collectively cover the themes of habitat restoration and rehabilitation, control of invasive alien species, PA management planning, biodiversity surveys and monitoring, sustainable financing, biodiversity conservation mainstreaming into production sectors, inter-agency / cross-sectoral coordination, payment for ecological services, alternative and sustainable livelihoods, public education and community co-management that can be shared with the Jiangsu Yancheng Wetland Protection Project.

Finally, the project will coordinate with other key stakeholders, i.e., communities, government, academia, NGOs and the private sector. In addition to the release of information in existing websites of the relevant agencies (particularly the Jiangsu Environmental Protection Department and the Jiangsu Forestry Bureau), a project website will be established to disseminate information on project progress and results.

**F. DISCUSS THE VALUE-ADDED OF GEF INVOLVEMENT IN THE PROJECT DEMONSTRATED THROUGH INCREMENTAL REASONING:**

***Without- and With-Project Scenarios***

**1. Wetland Protection and Biodiversity Conservation:**

*a) Wetland Protection and Biodiversity Conservation at YRBNNR.* The YRBNNR is presently confronted by urgent and longer term threats, ranging from the conversion of wetland to farmland and fish-ponds, land-based pollution, and encroachment due to industrial and urban development. The continued decline in NRR habitat and ecosystem integrity is leading to decreases in the populations of rare birds. This is especially true for the red-crowned crane. In the past decade, the wintering red-crowned population in the NR has experienced a significant decline--from close to 1,200 in 2001, to 447 in 2010 (with a recovery to 636 in 2011). With the increasing development pressures in the buffer zone (BZ) and experimental zone (ERZ) and consequent decline of suitable, intact habitat, the red-crowned crane population has in recent years displayed a pattern of congregation toward the NR core zone which suffers from a number of pressures, including dehydration, conversion into fish-ponds, the spread of *spartina alterniflora* as an invasive species replacing native coastal plants, and habitat fragmentation. According to estimates, the 'without-project scenario' would mean that the suitability of the core zone as critical habitat for the rare birds would continue to deteriorate. The population of the red-crowned cranes would decrease to as low as 400 by 2020. The total number of other rare bird species would decrease by 3% in the core zone, and by at least 2% within the whole NR. The total bird population is projected to decrease by at least 3% for the core zone and 5% for the whole NR.

The project interventions directly address these pressures and threats in the core zone as critical habitat for rare birds, by restoring degraded wetlands, rehydrating dry wetlands, converting fish ponds back into natural ebb-flow wetland areas, controlling the spread of *spartina*, improving the basic infrastructure, raising public awareness and enhancing community participation, improving financial sustainability, and strengthening NRR management board (MB) planning, research and monitoring capacities. By implementing the above interventions a total of 4,005 ha of wetlands in the core zone (including 540 ha of wetland restoration, 1,630 ha of rehydration, 1,435 ha of fish-pond-to-wetland conversion and 400 ha of control of *Spartina alterniflora*) will be restored and rehabilitated, and NRR connectivity and integrity greatly improved. Habitat improvements are expected to in turn reverse the trend of population decline for NRR rare birds and put them on the road of gradual recovery. The red-crowned crane population is predicted to reach a more sustainable level of between 800 and 1,000 individuals in the whole NR, and between 640 and 800 in the

core zone. The total number of rare bird species is predicted to increase by 6% in the core zone and 4% in the whole NR; and the total bird population is predicted to increase by 8% in the core zone and 5% across the whole NR by 2020. Detailed predictions of changes in the bird species and bird population in the core zone, and within the whole NR under the ‘without-project’ and ‘with-project’ scenarios is summarized in the table, below:

Time/Scenario		Bird Species		Bird Population	
		Core Zone	Whole NR	Core Zone	Whole NR
Present (2010)		260	395	1,000,000	3,000,000
2020	% change without project	3%	2%	-3%	-5%
	% change with project	6%	4%	8%	5%

*b) Wetland Protection and Biodiversity Conservation at the DMNNR.* The DMNNR is faced with multiple ecological pressures and threats. As an endangered ungulate species reintroduced into its historical range, the DMNNR captive environment has afforded maximum protection, and the Milu population has continued to grow. As such, the present Milu population of 1,615 has exceeded the current NRR carrying capacity of 1,200 individuals. As a result, the existing habitat can no longer satisfy the food, drinking water and resting needs of the expanding Milu herd. In the rainy season (June-October), the monsoon climate brings plenty of precipitation which floods the first and second core zones, such that the Milu crowd onto the limited space of higher grounds. In the dry season (November-May), drought can easily occur, leading to both degradation of water sources and decreased water availability. Moreover the current habitat is dominated by the cat-tail grass (*Pennisetum alopecuroides*) which is eaten by the Milu between April and May, but becomes unsuitable from June and onwards due to lignification. The shortage of food, drinking water and resting space leads to malnutrition and endocrine disorder. The Milu also suffer from *Haemaphysalis longicornis*, which are small bloodsucking parasitic arachnids of the family *ixodidae*, causing irritation, hemorrhage and anemia, and are known to transmit diseases in the herd. Finally the NR is short of infrastructure, including fences, as well as patrol, monitoring, research and public education and collaborative management facilities, and lack of sustainable financing mechanisms and inadequate institutional capacity.

If no interventions are taken, the ecosystem health would become more unsuitable for the Milu; and the health of the Milu population would continue to decline. The project interventions directly address these pressures and threats, through the monitored relocation of the excessive population, expanding and improving the habitat for feeding, drinking and resting, controlling diseases, strengthening the protection and public education and collaborative management infrastructure and mechanisms, and building financial sustainability and mainstreamed institutional capacity. With these project interventions, the ecosystem health of Yancheng and its populations of globally important biodiversity will improve.

*c) Wetland Protection Forest Improvements at Sheyang and Dafeng Forest Farms.* The two state-owned forest farms are part of the national coastal protection forest network that extends from Liaoning province in Northeastern PRC to Guangxi province in Southwestern PRC. The farms are important as they strengthen the climate resilience of the coastal regions through provision of 4,367 ha of coastal shelterbelt. Meanwhile the two forest farms are situated in the experimental zone of the YRBNNR and serve as a buffer providing additional protection of the two NNRs. Moreover the two farms are rich in biodiversity and harbor hundreds of bird, plant and animal species, including dozens under national protection. Finally the forest-farmland intercropping and ecotourism in the two forest farms offer employment opportunities and income generation benefits for the forest farm workers and local communities. However, the two forest farms suffer from the lack of tree-species diversity, suffer from weak resilience to pests and diseases and a lack of low-input pesticide alternatives, have experienced loss of drainage function in their rivers and canals, and weak forest protection infrastructure including equipped fire patrols and fire breaks.

The introduction of payment for ecological services (PES) and eco- compensation policies and operational guidelines have been placed in the priority agenda of the provincial and national governments for the 12th five-year plan (2011-2015). This project will build on these initial accomplishments to progress to progress into the piloting of PES’ and, eventually, its institutionalization.

Without the project, the mounting ecological pressures would result in further degradation of the ecological and social functions of the two forest farms as well as increased industrial/urban encroachment potentials on the two NNRs. The project interventions directly address the major ecological pressures and threats to these agroforest ecosystems. The Sheyang Forest Farm component targets the improvement in forest biodiversity, improvement of drainage systems, integrated pest control, fire prevention and the demonstration of agroforestry. The Dafeng Forest farm component focuses on restoration of coastal wetlands, drainage improvement, demonstration of indigenous plant species and fire

prevention infrastructure. With these interventions, the two forest farms will reverse the trend of degradation of the forest ecosystem functions and services. The fire prevention infrastructure improvement will reduce the potential economic loss by 90% from forest fires for the two forest farms.

#### ***Without-GEF Project Scenarios:***

Without GEF co-financing, the project would focus on investment interventions. For the two NNRs, the loan investment interventions target: 1) the restoration and rehabilitation coastal wetlands as habitats for globally important species; 2) piloting the control of *Spartina alterniflora* as an invasive alien species; 3) construction of infrastructure facilities for patrols, pollution control, rescue, research, monitoring, public education, and collaborative management. The loan project management and capacity building subproject focuses on support to project implementation with respect to financial management, procurement, contract management, social and environmental safeguards monitoring and so on. Moreover, a small, three-month domestic consultancy is also included to provide technical assistance in the area of eco-compensation.

While the above investments would still be able to restore the ecosystem health of the core zones and improve the infrastructure facilities of the NNRs, threats and pressures from developments originating in the buffer and experimental zones and the immediate vicinities would not be removed and would continue to amount. This would severely constrain the full achievement of desired project outcomes and impacts. Moreover, the: lack of a longer-term, sustainable financing mechanism for the NNRs; the lack of capacity to formulate and implement operational management plans dealing with medium-term threats; the lack of a sound biodiversity monitoring system accounting for and tracking wider ecosystem and species dynamics (i.e. those species in addition to Milu and the red-crowned crane but equally important to the Yancheng coastal ecosystem); the lack of platforms for addressing mainstreaming, institutional strengthening and regulatory enforcement in the BZ and ERZ, and; the lack of sustainable tourism, sustainable agriculture, aquaculture and sustainable forest interventions and models in areas within/adjacent the NNRs would without the GEF project all serve to undermine the long-term operations, sustainability and protection objectives of the NNRs.

#### ***GEF Incremental Activities:***

The overall GEF project is organized around four major components. Specific GEF incremental activities in relation to the non-GEF activities are described as follows.

Component 1: Wetland Restoration and Biodiversity Conservation. This is the overriding priority for the ADB loan project (accounting for \$78.68 million or 99.30% of the total loan investment of \$79.23 million). The loan primarily targets “structural interventions” with respect to restoration and rehabilitation of degraded coastal wetlands, invasive alien species control, restoration of natural hydrology, wetland protection forest improvements and the construction of protection and management infrastructure facilities.

With the addition of GEF resources, the project will achieve two major “non-structural” results for the two NNRs, namely: a) enhanced capacity of the NNRs to engage wider-landscape stakeholders, and b) the improved financial sustainability for the NNRs. Enhanced stakeholder engagement capacity will be accomplished by the development of operational management plans (OMPs) for the NNRs, establishment of management information systems (MISs) and establishment of trans-provincial cooperation mechanisms for migratory species (e.g. the red-crowned cranes). Improved financial sustainability of the NNRs will result from the development of innovative financing mechanisms for the NNRs, including, for example, sustainable ecotourism, private sector participation and public-private sector partnerships. In particular, the sustainable ecotourism initiative will help the NNRs to reach their maximum ecotourism potential, which on the one hand generate revenues for the NNRs, and on the other hand create local employment that serves to reduce natural resource exploitation in the buffer and experimental zones. Improved financial sustainability will enable the NNRs to continue with the effort of restoring the rest of the degraded coastal wetlands, maintain and upgrade the protection and management infrastructure facilities, and strengthen their management capacities, including the recruitment of much needed staff, and hence enhance the long-term sustainability of the two NNRs.

Component 2: Sustainable Natural Resource Management and Sustainable Livelihoods. The threat analysis with the use of the GEF-5 Tracking Tools and Conservation Needs Assessment (CNA) has revealed that the present practices in the agriculture, aquaculture and forest sectors in the buffer and experimental zones of the YRBNNR are among the greatest threats to the two NNRs. For example, the expansion of cotton and use of agrochemicals in cotton and wheat farming have led to poisoning of birds, including the red-crowned crane, and these crops are also water intensive and damaging to the water quality of the NNRs. In the development and operation of aquaculture ponds, little consideration has been given to the use of these areas by rare birds and Milu. There are opportunities for improving

the ability of the forest farms adjacent to the NNRs to protect wider wetland habitat and wildlife, including the rare birds. The component therefore aims to remove these major internal and external threats by mainstreaming PA- and biodiversity-friendly practices into production and community areas in the sectors of key threats and opportunities to biodiversity conservation and wetland protection, including agriculture, aquaculture and forestry, within the NNR's buffer and experimental zones, and by introducing PES for sustainable natural resource management and support for the sustainable livelihoods of local communities. Expected outputs include a detailed assessment and preparation of a framework for piloting livelihoods-enhancing PES schemes, development of buffer and experimental zone management guidelines linked to PES schemes, establishment of a community-based fund for supporting the relevant pilot PES schemes, design and implementation of a special training program on PA- and ecotourism-related income generation opportunities for 150 low-income, women-headed households (lowest 10% income brackets), and design and implementation of community training programs on PA- and biodiversity-friendly practices and guidelines.

Component 3: Ecological Monitoring and Evaluation. The addition of GEF resources helps to fulfill important gaps by building the capacity of the NNRs in formulating and implementing biodiversity surveys and monitoring programs. The two NNRs have limited abilities at present for conducting biodiversity surveys and lack a biodiversity monitoring program capable of incorporating identified trends/changes in species/habitats into ongoing NNR management and planning. GEF resources will provide necessary supplementary rapid biodiversity assessments accounting for wider species values, develop a sound biodiversity monitoring program and protocols, and provide supplementary monitoring equipment and facilities. For adequate information to be developed and monitored, and for uptake of NNR biodiversity and habitats changes, the biodiversity monitoring program will be institutionalized into PA management, and will be utilized in activities ranging from development of daily ranger patrol regimens to the placement of tourist facilities. This will importantly serve to underscore the NNRs core protection objectives and effectively inform NNR short, medium (through OMP) and longer term planning.

Moreover, this GEF financing will be used to support institutional arrangements for a landscape level ecological monitoring system with agreed protocols. This system may be potentially useful in tracking the effectiveness of proposed PES in the project. On the NNR side, the system will also include monitoring the implementation of: the *Spartina alterniflora* control pilot in the YRBNNR and its effectiveness; the wild-release of the Milu to the third core zone in the DMNNR, and; the adaptability of the Milu to the new habitat, such that timely adjustments can be made to improve the effectiveness of the loan interventions. In this manner, the GEF financing ensures the cost-effectiveness of the ADB loan investment and the accomplishment of loan project outcomes on the systems-level.

Component 4: Environmental Governance and Knowledge Dissemination. With GEF resources, the project will be strengthened through the addition of improved environmental governance and knowledge dissemination. The threat analysis using the Tracking Tools and CNA revealed the need for more effective management of the two NNRs through improved regulatory enforcement and inter-agency coordination in NNR buffer and experimental zones, introduction of Operational Management Plans (OMPs) within broader sectoral planning, improved stakeholder coordination supporting collaborative management inputs in NNR decision-making and protection, and in utilizing project PES experiences in provincial policy formulation and within national dialogue on PES for PAs. Thus this component is designed to strengthen capacity of the NNR in regulatory enforcement with particular regard to pollution control of existing industrial and urban infrastructure facilities and the environmental impact assessment of proposed developments in the buffer and experimental zones, in support of the mainstreaming of NNR biodiversity and ecosystem conservation mandates within Jiangsu provincial and Yancheng municipal development planning processes.

The component also supports the development of a number of knowledge products on such innovative features as wetland restoration, control of invasive alien species, wild-release of Milu, mainstreaming sustainable financing mechanisms for PA management and biodiversity conservation, sustainable ecotourism, and PA- and biodiversity-friendly, pro-poor practices. These knowledge products will be valuable for exchange with other initiatives described in Section D, as well as for replication and upscaling at the national level and globally.

In summary, these two types of GEF-financed interventions (i.e. environmental governance and knowledge dissemination) are crucial to building the long-term sustainability of the two NNRs and promote this project's global biodiversity benefits.

Component 5: Project Management. This component will introduce a Project Performance Monitoring System within the Jiangsu PMO and PIUs. Dependent on its success, it stands to have positive implications to the management of other projects and sectors outside of the project.

Overall, the project blends funding from GEF, ADB and the government to achieve both global and local environmental benefits. Representing only 3% of total project financing, the net GEF contribution of \$2.5 million leverages an investment of over \$79.2 million in co-financing to ensure that a comprehensive conservation program will be put in place to protect the Yancheng wetland ecosystems. The comprehensive conservation program will entail three major parts. First, outside of the GEF loan/GEF grant project, the government will finance mitigation of the land-based pollution sources from the upstream catchment. By example, during the 11<sup>th</sup> FYP (2005-2010), the centralized treatment of urban sewage reached 80% for prefecture-level cities, 55% for county-level cities and 40% for towns. The sewage treatment targets for the 12<sup>th</sup> FYP (2011-2015) are upgraded to 85% for prefecture-level cities, 70% for county-level cities and 60% for towns. With tightened measures to control industrial, urban and non-point source pollution, the percentage of coastal function zones meeting the prescribed standards will increase from 90% in 2010 to 100% by 2015. The government is also committed to implementing measures to mitigate the potential impacts of the Jiangsu coastal development plan on coastal wetland ecosystems and biodiversity. The structural interventions under the ADB loan project aim to remove the *in-situ* threats and pressures with a focus on the core zones of the two NNRs, through restoration and rehabilitation of degraded wetlands, restoration of the area's natural hydrology, control of invasive species and improving protection and management infrastructures. GEF co-financing is used to support incremental "non-structural" activities that will, on the one hand, enable the achievement of the objectives of the overall project and, on the other hand, generate and maximize global environmental benefits.

To sum up, the government responses, ADB loan interventions and the GEF financed activities have been aligned to be complement each other and add value to both project and system-wide impacts and long-term project sustainability. The design of the overall project must be viewed as an integrated whole, with all co-financed elements considered necessary to achieving the anticipated global and local benefits.

**G. INDICATE RISKS, INCLUDING CLIMATE CHANGE RISKS, THAT MIGHT PREVENT THE PROJECT OBJECTIVE(S) FROM BEING ACHIEVED AND OUTLINE RISK MANAGEMENT MEASURES:**

Major risks to project success have been identified, and mitigation measures proposed.

First, nature reserve master plans may not be implemented as effectively as proposed. The proposed GEF grant will help strengthen the nature reserves' human resource and planning capacity to develop and implement medium-term Operational Management Plans. Where coupled with recurrent annual NNR planning and institutionalized government funding support to the nature reserves, this risk can be effectively mitigated.

The second risk is associated with continuing pressures and threat from accelerated developments adjacent to the nature reserves. Assurance has been provided by the JPG that the governments will enforce and implement the related mitigation measures that were included in the strategic environmental assessment of the Jiangsu coastal zone development plan. The development of multi-stakeholder inputs to NNR buffer and experimental zone planning, information dissemination, public education, and mainstreaming consultations supported through by GEF resources will help to ensure complementary measures adequately address/uphold NNR objectives, sustainable ownership, and buy-in from key agencies and stakeholders for the nature reserves' protection. Moreover, an environmental and biodiversity monitoring program has been incorporated into the project design. With the use of the monitoring data, adaptive management will afford timely adjustments to proposed area development plans and programs as well as provide mitigation measures.

Other risks include weak PIU procurement capacity, and local PMO coordination and management capacities necessary for smooth project implementation and mainstreaming effective partnerships and communications. These risks will be mitigated by provision of training in procurement, contract management, financial management, and disbursement by ADB officers prior to project implementation, PRC governmental and agency coordination mandates and senior-level buy-in, and, by TA consulting services during implementation.

The possible climate change risks within the project are related to sea-level rise and storm surges. As the project is situated in a sedimentary coastal area where the coastline accretion develops at a rate of 100~300 m/yr, the newly-formed coastal wetlands will continue to buffer the effects of climate change on the critical wildlife habitats which annually become more distant from the sea. No imminent threat on the protected species is anticipated.

The major risks, mitigation measures and the significance of residual risks are summarized as follows:

<b>Risk</b>	<b>Assessment without Mitigation</b>	<b>Mitigation Plan</b>	<b>Assessment with Mitigation</b>
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1. Rapid increases in economic growth dramatically increase pressures on the NNRs and coastal wetland resources.	High	The economic benefits of sound environment and NNR management will be highlighted and used to promote policy dialogue and actions supporting sustainable development.	Medium
2. NRR and ecosystem safeguards are seen as a hindrance by other development sectors.	Medium	Economic development and production sectors will be engaged and encouraged to mainstream NRR management into their programs; program resources/outputs will be shared with other sectors to promote ownership; economic benefits of sound environment management will be demonstrated in adjacent production areas.	Low
3. Nature reserve master plans and operational management plans are not implemented effectively as proposed	Medium	The project has a component to strengthen human resource capacity on implementation of NR management and the development operational management plans, which will complement earmarked and institutionalized funds in the Government's recurrent annual planning and budgets.	Low
4. Stakeholders may resist change, and are unwilling to participate in conservation and protection	Medium	A stakeholder communication and outreach strategy will be prepared and implemented. Together with information dissemination, education and consultations throughout project implementation, it will ensure ownership and buy-in by key stakeholders. Ecological compensation promoted by Government and under the project will provide additional incentives.	Low
5. Water for rehydration may be too polluted to be suitable for rare birds	Medium	Water used for rehydration will be closely monitored, and if applicable standards are violated, rehydration will be suspended. Water quality is expected from Government's accelerated effort to abate pollution in the upstream catchment.	Low
6. Construction activities may cause excessive impact on the rare birds	Low	A wildlife expert is included in the consulting services to closely monitor. Adaptive management will be adopted to adjust construction intensity and schedule.	Low
7. The newly added coastal wetland may not be able to support the relocated Milu population	Medium	The relocation is to be implemented in controlled phases. Subsequent phase will only take place if and when the preceding phase is evaluated to be successful.	Low
8. PIUs and local PMOs have inadequate capacity in procurement, contract management, financial management and disbursement	Low	Training in the related areas will be provided by ADB officers prior to project implementation and by consulting services during project implementation. JPG has a World Bank/ADB PMO with rich project experience and who will actively support the local PMO and PIUs.	Low

## **H. EXPLAIN HOW COST-EFFECTIVENESS IS REFLECTED IN THE PROJECT DESIGN:**

During project preparation, due diligence was performed through technical analysis of engineering feasibilities, financial analysis and financial management assessment, economic analysis, environmental impact assessment, resettlement planning, poverty and social impact assessment and institutional analysis. Bearing in mind that the amount of financing was pre-determined by the JPG, the purpose of the due diligence analysis was to maximize the ecological and socioeconomic benefits of the loan with the available financing and with the least environmental and social impacts.

### ***Analysis of Design Alternatives:***

For each of the project components, extensive discussions and consultations were undertaken during the project preparation to identify and assess the pros and cons on design alternatives. Collaboration between the local design institutes, the ADB/GEF consultants, line agencies and the PIUs (i.e., the NNRs and FFs) played an important role in selecting optimal alternatives. For example, the initial design of the interventions at the YRBNNR focused on the restoration of 460 ha of wetland in the experimental zone and construction of protection and management infrastructures. Several rounds of collaborative design led to the enlargement of the wetland restoration area from 460 to 540 ha; and more importantly the addition of three new components: (i) rehydration of 1,630 ha of dehydrated wetland in the core zone; (ii) conversion of 1,435-ha fish ponds in the core zone into wetlands; and (iii) 400-ha pilot on control of *Spartina alterniflora*. These design changes are best aligned to respond to the pressing threat of accelerated degradation of the core zone that has become the most critical habitat for the rare birds.

Another significant design change was reorientation of the project to maximize the use of existing topology and water courses, as compared to the original plans for the heavy use of engineering structures. Undertaking plans following natural landscape elements has significantly reduced the project cost and will simultaneously ensure least disturbance to NNR ecosystems and wildlife.

For the interventions at the DMNNR, due consideration was also accorded to the design of the drinking water supply for the Milu at the DMNNR. In addition to the maximization of the existing water channels, the water pond at the intake was designed to become a water purification wetland to reduce and filter upstream pollution.

Several alternatives for patrol roads were also examined; and the selected alternative maximized the use of several sections of the existing roadbeds and eliminated the need for two bridges, thus reducing project costs. Finally the earth works in each of the engineering component were balanced with a view to reduce engineering and transport costs and meanwhile minimize disturbance to NNR ecosystems and wildlife.

### ***Adaptive Management:***

Adaptive management has been incorporated into the *Spartina alterniflora* control pilot in the YRBNNR and the wild-release of the Milu into the third core zone in the DMNNR. The initially proposed design for the *Spartina alterniflora* control pilot was to do the two sections simultaneously (210 ha in the north of the core zone and 190 ha in the south of the core zone). In view of the experimental nature of the intervention, the selected design to carry out the pilot is now developed within a stepped approach. The first phase will carry out a smaller pilot of 50 ha. These results will be carefully evaluated and integrated into the second phase. This phased approach is expected to increase the effectiveness of the pilot and forgo the costs of rectifications in case of any unforeseen design deficiencies.

A phased approach has also been adopted for the design of the wild-release of the 418 heads of Milu from the first and second core zones to the third core zone. The selected design is to release 50 heads of Milu in the first phase. The adaptability of the first herds of wild-release will then be evaluated. If the evaluation would deem it necessary, modifications will be made to the designs of the subsequent releases.

### ***Building Maximum Synergies between Loan and GEF Financing:***

The need for loan supporting engineering works to repair the degraded habitats and upgrade the protection and management infrastructures, and the need for building the capacities of the key stakeholders are equally important. The GEF project design team worked closely with the loan PPTA consultants, local design institutes, IAs and the PIUs to ensure that the needs are fulfilled wholistically via optimal intervention combinations of the ADB loan and GEF grant.

For example, the engineering works for wetland restoration and the construction of protection and management infrastructures require considerable financing which the ADB loan is in the best position to fulfill. The smaller-sized



GEF grant financing is then more strategically placed to target “soft” interventions enhancing the long-term sustainability of project results, ensuring ecosystem- and biodiversity-based results and important safeguards within the larger loan project and magnifying the loan's contribution to global benefits. If all funds would be spent on soft interventions, very little would be left to protect and manage. If all funds would be spent on engineering works and infrastructures, the inadequate institutional and stakeholder capacities would leave the works and infrastructures ill-operated and ill-maintained to achieve the planned benefits over the long-term and would fail to remove threats and pressures outside the core zones thereby negating gains in wetland restoration and infrastructure upgrading efforts.

Cost-effectiveness of the project is thus intimately supported by the GEF grant to: (i) increase the self-financing capabilities of the NNRs through sustainable financing mechanisms and sustainable ecotourism; (ii) mainstream PA- and biodiversity-friendly practices into productive sectors in the buffer and experimental zones; (iii) improve and institutionalize biodiversity surveys and monitoring; and (iv) improve and institutionalize such environmental governance mechanisms as OMPs, stakeholder coordination and performance monitoring and disseminate project results to benefit the wider community of PA management and biodiversity conservation.

### **PART III: INSTITUTIONAL COORDINATION AND SUPPORT**

#### **A. INSTITUTIONAL ARRANGEMENT:**

ADB is the GEF agency implementing this project.

#### **B. PROJECT IMPLEMENTATION ARRANGEMENT:**

The Jiangsu Provincial Government (JPG) will serve as the executing agency and will take oversight responsibilities to ensure coordination among relevant agencies with respect to development and reform, finance, environmental protection, forestry and water resource. The Yancheng Municipal Government (YMG) will assist the JPG in coordinating and supervising implementation of the project. The implementing agencies are the Jiangsu Provincial Environmental Protection Department (JEPD) for the YRBNNR component and the GEF component, the Jiangsu Forestry Bureau for the DMNNR component, Tinghu District Government (TDG) for the Sheyang Forest Farm Component, and Dafeng City Government (DCG) for the Dafeng Forest Farm component. The Jiangsu PMO (JPMO) has been established at JEPD to be responsible for the overall planning, coordination, and supervision of the project. A municipal PMO has been established in YMG to perform tasks delegated by JPMO. PMOs have also been established at the city and district level to coordinate the project implementation on behalf of the DCG and TDG. Furthermore, project implementation units (PIUs) have been established in the project intervention sites (i.e., the YRBNNR, DMNNR, DFF and SFF) for day-to-day implementation of the respective interventions. Links to municipal and provincial level agencies involved in wetland protection and development will also be crucial to protection (e.g. inter-agency task force) and planning (e.g. Jiangsu Province Development Planning, Departments of Agriculture, Aquaculture, Forestry, etc). Important linkage is also secured for PES and OMP piloting and its implications to PA management at the national level through the Ministry of Environment and Protection.

### **PART IV: EXPLAIN THE ALIGNMENT OF PROJECT DESIGN WITH THE ORIGINAL PIF:**

The project design is principally aligned with the original PIF. The project outputs, outcomes and activities have been incorporated into the present project design.


However, there is one notable adjustment with respect to the removal of the 'Dazong lake wetland rehabilitation component' from the project due to regulatory restrictions on acquisition of basic farmland<sup>4</sup>. This has resulted in the reduction of ADB loan from \$50 million to \$36.90 million and the total project cost (with GEF) from \$100 to \$78.64 million. The inclusion of the Dazong lake component would produce considerable benefits to local communities that presently use the lake. But owing to its long distance to the coastal wetlands (approximately 100 km), the impact of its removal from the project on the coastal wetlands is anticipated to be minor, such that it does not compromise the achievement of the project objectives.

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<sup>4</sup> In the late 1990s, part of the water surface (about 115 ha) of the Dazong lake was classified as “basic farmland”. The *PRC Land Administration Law (2004)* stipulates that the acquisition of any basic farmland will require the approval of the State Council. The likelihood of obtaining State Council approval for the 115-ha basic farmland is very low. Even if it would be possible, the administrative procedure of State Council may take several years to approve which the project cannot afford.

**PART V: AGENCY(IES) CERTIFICATION**

This request has been prepared in accordance with GEF policies and procedures and meets the GEF criteria for CEO Endorsement.

Agency Coordinator, Agency name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
Nessim Ahmad Director, Environment and Safeguards, concurrently Practice Leader (Environment) Asian Development Bank		February 8, 2012	Alvin Lopez, Agriculture, Natural Resources and Environment Division, ADB	+632 683 1760	alopez@adb.org

## ANNEX A: PROJECT RESULTS FRAMEWORK

The Project Result Framework is a standard ‘Design and Monitoring Framework’ as being prepared and applied for all ADB supported TAs and Projects

### DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets/Indicators	Data Sources/ Reporting Mechanisms	Assumptions and Risks
<b>Impact</b>  Improved ecosystem health and services in the coastal wetlands in Yancheng	2012 as baseline:  <ul style="list-style-type: none"> <li>- Wintering red-crown crane population in YRBNNR maintained above the critical level of 600 by 2020 (Loan/GEF)</li> <li>- Annual mortality rate of Milu deer reduced from 4% to 2% by 2020 (Loan/GEF)</li> <li>- Innovative financing mechanisms for wetland and biodiversity conservation established and supported by the relevant policy framework by 2020.</li> </ul>	<ul style="list-style-type: none"> <li>- Yancheng annual SOE reports</li> <li>- Yancheng and project district and/or city statistical yearbooks</li> <li>- Reports of biodiversity monitoring surveys / studies by the NNRs</li> <li>- GEF tracking tools</li> </ul>	<b>Assumptions</b>  <ul style="list-style-type: none"> <li>- Government remains committed to wetland and biodiversity conservation.</li> <li>- Government adopts suitable policies to limit land-use changes</li> <li>- Point and non-point pollution is effectively controlled.</li> </ul> <b>Risk</b> <ul style="list-style-type: none"> <li>- Economic slowdown may result in greater development pressure on wetlands.</li> </ul>
<b>Outcome</b>  Coastal ecosystems of the Yancheng Wetlands conserved with reduced rural poverty and greater environmental sustainability	<ul style="list-style-type: none"> <li>- Annual degradation of YRBNNR at current rate of 2.48% in project intervention area halted by 2017</li> <li>- Annual degradation of DMNNR at current rate of 5% in project intervention area halted by 2017</li> <li>- Operational Management Plans for the NNRs adopted and effectively implemented by 2017.</li> <li>- Expansion of project activities and pilots at the provincial and national level.</li> </ul>	<ul style="list-style-type: none"> <li>- Data from Yancheng environmental protection and forestry bureaus</li> <li>- Yancheng and project district and/or city statistical yearbooks</li> <li>- Project monitoring reports</li> <li>- GEF tracking tools</li> <li>- Provincial and National MEP policy, reports and dialogue re: PES, OMP development for PAs, integrated wetland planning and monitoring.</li> </ul>	<b>Assumption</b>  <ul style="list-style-type: none"> <li>- Project governments provide sufficient funds for proper O&amp;M of project facilities.</li> </ul> <b>Risk</b> <ul style="list-style-type: none"> <li>- NR master plans and the forest farm five-year plans are not implemented effectively.</li> </ul>
<b>Outputs</b>  1. Wetland Restoration and	In YRBNNR, by 2017: <ul style="list-style-type: none"> <li>- 540 ha of wetland in experimental zone restored</li> </ul>	<ul style="list-style-type: none"> <li>- Project progress reports</li> <li>- Annual surveys for</li> </ul>	<b>Assumptions</b>  <ul style="list-style-type: none"> <li>- Project design is technically sound.</li> <li>- EA, IAs and PIUs</li> </ul>

Design Summary	Performance Targets/Indicators	Data Sources/ Reporting Mechanisms	Assumptions and Risks
<p>Biodiversity Conservation in YRBNNR and DMNNR</p>	<ul style="list-style-type: none"> <li>- 1,630 ha of dehydrated wetland in core zone rehydrated</li> <li>- 1,435 ha of fishpond converted to wetland</li> <li>- Spread control of 400 ha of <i>Spartina alterniflora</i> piloted</li> <li>- 38.1 km of patrol roads and stations improved</li> <li>- Wetland, PES and biodiversity research and monitoring capacity strengthened</li> <li>- Public education and community co-development capacity strengthened</li> </ul> <p>In DMNNR, by 2017:</p> <ul style="list-style-type: none"> <li>- 24 ha of permanent and natural water points established for Milu</li> <li>- 45 ha of grazing and resting ground established</li> <li>- 50 ha of rotational closure of grazing ground implemented</li> <li>- 220 ha of fodder ground established</li> <li>- 426.4 ha of tick control implemented</li> <li>- 24 km of steel biological fences erected or rehabilitated</li> <li>- Milu deer habitat surveillance system established</li> <li>- Science education center expanded</li> <li>- 30% or more of employment opportunities in project implementation provided to women</li> </ul> <p>For both NNRs, by 2017</p> <ul style="list-style-type: none"> <li>- OMP and wetland Information Management System established for both the NNRs</li> <li>- Training-of-trainers programs on sustainable natural resource management and sustainable livelihoods designed and delivered for 20 public education and collaborative management officers at 2 NNRs</li> <li>- At least 2 pilot applications of innovative financing for PA management completed.</li> </ul>	<p>PPMS</p> <ul style="list-style-type: none"> <li>- ADB mission reports</li> <li>- Training and evaluation reports</li> <li>- GEF tracking tools</li> <li>- Monitoring reports of Yancheng environmental protection, forestry, and tourism bureaus</li> <li>- Yancheng annual SOE reports</li> </ul>	<p>have capability and required counterpart funds.</p> <p><b>Risks</b></p> <ul style="list-style-type: none"> <li>- Some stakeholders may have resistance to participation in conservation and protection activities.</li> <li>- Excessive noise from construction may affect the rare birds. Water for wetland rehydration may be polluted in excess of applicable standards.</li> </ul>
<p>2. Sustainable Natural Resources Management and Sustainable Livelihoods</p>	<p>Coastal forest improvement at Sheyang Forest Farm achieved by 2017 with following targets:</p> <ul style="list-style-type: none"> <li>- 185 ha of forest bird habitat rehabilitated</li> <li>- 285.2 ha of plant nurseries established</li> <li>- 83.5 ha of agroforestry demonstration area established</li> <li>- 51.4 km of drainage canals rehabilitated</li> <li>- Forest fire early warning and response</li> </ul>	<ul style="list-style-type: none"> <li>- Project progress reports</li> <li>- Annual surveys for PPMS</li> <li>- ADB mission reports</li> <li>- Training and evaluation reports</li> </ul>	<p><b>Assumptions</b></p> <ul style="list-style-type: none"> <li>- Project design is technically sound.</li> <li>- EA, IAs and PIUs have institutional capability and required counterpart funds.</li> </ul>

Design Summary	Performance Targets/Indicators	Data Sources/ Reporting Mechanisms	Assumptions and Risks
	<p>system established</p> <ul style="list-style-type: none"> <li>- An integrated pest management system established</li> <li>- 50% or more of eco-agriculture farming skills training provided to women</li> </ul> <p>Coastal forest improvement at Dafeng Forest Farm achieved by 2017 with following targets:</p> <ul style="list-style-type: none"> <li>- 860 ha of coastal wetland protection forest improved and tended</li> <li>- 122.7 ha of coastal wetland rehabilitated</li> <li>- 174 km of drainage canals improved</li> <li>- Fire prevention and response system established</li> <li>- An integrated pest management system established</li> </ul> <p>50% or more of eco-fish farming skills training provided to women</p> <p>By 2017:</p> <ul style="list-style-type: none"> <li>- Buffer zone management guidelines developed and implementation linked to PES schemes</li> <li>- Implementation of a 'community-based' fund for supporting the relevant pilot PES schemes initiated</li> <li>- Special training program on PA- and ecotourism-related income generation opportunities designed and implemented for 150 low-income, women-headed households (lowest 10% income brackets)</li> <li>- Community training programs on PA- and biodiversity-friendly practices and guidelines designed and initiated</li> </ul>	<ul style="list-style-type: none"> <li>- GEF tracking tools</li> </ul> <p>Monitoring reports of Yancheng environmental protection, forestry, and tourism bureaus</p> <ul style="list-style-type: none"> <li>- Yancheng annual SOE reports</li> </ul>	<p><b>Risk</b></p> <ul style="list-style-type: none"> <li>- Some stakeholders may have resistance to participation in conservation and protection activities.</li> </ul>
<p><b>3. Ecological Monitoring and Evaluation</b></p>	<ul style="list-style-type: none"> <li>- Gap filling assessments of ecosystem services and biodiversity completed by 2013</li> <li>- Ecological monitoring system established with agreed aims, institutional arrangements and required financing for implementation by 2016</li> <li>- Targeted monitoring programs' established and sufficiently financed (e.g. wild-release trials of Milu, and Spartina control effectiveness etc.)</li> </ul>	<ul style="list-style-type: none"> <li>- Project progress reports</li> <li>- Annual surveys for PPMS</li> <li>- ADB mission reports</li> <li>- Training and evaluation reports</li> </ul> <p>GEF tracking tools</p> <p>Monitoring reports of Yancheng environmental protection, forestry, and tourism bureaus</p> <ul style="list-style-type: none"> <li>- Yancheng annual</li> </ul>	<p><b>Assumptions</b></p> <ul style="list-style-type: none"> <li>- Project design is technically sound.</li> <li>- EA, IAs and PIUs have institutional capability and required counterpart funds.</li> </ul> <p><b>Risk</b></p> <ul style="list-style-type: none"> <li>- Some stakeholders may have resistance to participation in conservation and protection activities.</li> </ul>

<b>Design Summary</b>	<b>Performance Targets/Indicators</b>	<b>Data Sources/ Reporting Mechanisms</b>	<b>Assumptions and Risks</b>
		SOE reports	
4. Environmental Governance and Knowledge Dissemination	<ul style="list-style-type: none"> <li>- Wetland and biodiversity management recommendations mainstreamed into relevant local development plans/ policies by 2016.</li> <li>- Coordination mechanisms with key stakeholders (including government agencies, NGOs, private sector, academia, etc.) established by 2013</li> <li>- PES policies and operational guidelines developed and introduced for the 2 NNRs by 2016</li> <li>- Communication, Education and Public Awareness Strategy and Action Plan developed, and implemented by 2013.</li> <li>- Provincial PES policy framework developed, linked to national level dialogue re: PES for PAs.</li> </ul>	<ul style="list-style-type: none"> <li>- Project progress reports</li> <li>- Annual surveys for PPMS</li> <li>- ADB mission reports</li> <li>- Training and evaluation reports</li> <li>- GEF tracking tools</li> <li>- Monitoring reports of Yancheng environmental protection, forestry, and tourism bureaus</li> <li>- Yancheng annual SOE reports</li> <li>- Provincial and National MEP policy, reports, dialogue re: PES for PAs.</li> </ul>	<p><b>Assumptions</b></p> <ul style="list-style-type: none"> <li>- Project design is technically sound.</li> <li>- EA, IAs and PIUs have institutional capability and required counterpart funds.</li> </ul> <p><b>Risk</b></p> <p>Recovery from economic downturn does not proceed as expected</p>
<b>5. Project Management and Monitoring</b>	<ul style="list-style-type: none"> <li>- Project Performance Management System established and functional.</li> <li>- PMOs established and operational by 2011, including at least 30% representation by women</li> <li>- PMOs and PIUs strengthened by 2017</li> <li>- Eco-compensation study completed and approved by 2013</li> <li>- 100 persons trained by 2013, at least 30% are women</li> <li>- 500 person-years of direct construction jobs created</li> <li>- 150 direct operational jobs created</li> <li>- 50% of off-farm opportunities created by the project taken up by women or vulnerable groups</li> </ul>	<ul style="list-style-type: none"> <li>- Project quarterly and semi-annual reports.</li> <li>- Project mid-term evaluation.</li> <li>- Project Terminal evaluation</li> </ul>	
<b>Activities and Milestones</b>	<p><b>Activities and Milestones:</b></p> <p><b>1. Wetland Restoration and Biodiversity Conservation in YRBNNR and DMNNR</b></p> <p>1.1 Wetland restoration by Q4 2013</p> <p>1.2 Public education and community co-development capacity by Q4 2013</p> <p>1.3 Wetland rehydration by Q4 2015</p> <p>1.4 Fishponds-to-wetlands conversion by Q4</p>		<p><b>Inputs(\$ million)</b></p> <p><b>ADB: 36.90</b></p> <p><b>GEF: 2.25</b></p> <p><b>Government: 39.49</b></p> <p><b>Total: 78.64</b></p>

Design Summary	Performance Targets/Indicators	Data Sources/ Reporting Mechanisms	Assumptions and Risks
	<p>2015</p> <p>1.5 Invasive alien species control pilot by Q4 2016</p> <p>1.6 Wetland protection infrastructures by Q4 2016</p> <p>1.7 Wetland and biodiversity research and monitoring capacity by Q4 2016</p> <p>2.1 Milu deer's research, monitoring, and rescue capacity by Q4 2013</p> <p>2.2 Milu deer's drinking water supply improvement by Q4 2014</p> <p>2.3 Milu deer's food supply and resting ground improvement by Q4 2016</p> <p>1.11 Public education capacity by Q4 2016</p> <p>1.12 Organize working group for development of OMP by Q4 2012</p> <p>1.13 Recruit consultants for OMP and Wetland Information system by Q3 2012</p> <p><b>2. Sustainable Natural Resources Management and Sustainable Livelihoods</b></p> <p>Coastal Forest Improvement at SFF</p> <p>2.1 Forest bird habitat restoration by Q2 2015</p> <p>2.2 Agroforestry development by Q2 2015</p> <p>2.3 Establishment of seedling nurseries by Q4 2016</p> <p>2.4 Drainage improvement by Q4 2016</p> <p>2.5 Forest fire prevention and response capacity improvement by Q4 2016</p> <p>2.6 Integrated pest management by Q2 2017</p> <p>Coastal Forest Improvement at DFF</p> <p>2.7 Coastal wetlands restoration by Q4 2015</p> <p>2.8 Forest fire prevention and response capacity improvement by Q2 2016</p> <p>2.9 Drainage improvement by Q4 2016</p> <p>2.10 Integrated pest management by Q2 2017</p> <p>2.11 Coastal wetland protection forest improvement by Q2 2017</p> <p>2.12 Consultants for Output 2 mobilized by Q4 2012</p> <p><b>3. Ecological Monitoring and Evaluation</b></p> <p>3.1. Multi-sectoral Monitoring and Conservation Working group established to guide development of ecological monitoring system by Q3 2012.</p> <p>3.2 Three training workshops for key</p>		

<b>Design Summary</b>	<b>Performance Targets/Indicators</b>	<b>Data Sources/ Reporting Mechanisms</b>	<b>Assumptions and Risks</b>
	<p>stakeholders involved in M&amp;E conducted by 2016</p> <p>4. Environmental Governance and Knowledge Dissemination</p> <p>4.1 Annual high level dialogues at the provincial level organized annually to support the mainstreaming agenda.</p> <p>4.2 PES policy framework developed at provincial level, linked to national dialogue.</p> <p><b>5. Project Management and Capacity Development</b></p> <p>5.1 Project management office in place and project consultants recruited by Q3 2012</p> <p>5.2 Review missions and progress reports</p> <p>5.3 Capacity development by Q2 2017</p> <p>5.4 Implementation of the environmental management, gender action, and resettlement plans; and the SPRSS measures during 2012–2017</p>		



**ANNEX B: RESPONSES TO PROJECT REVIEWS** (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF)

**A) STAP SCIENTIFIC AND TECHNICAL SCREENING OF THE PROJECT IDENTIFICATION FORM (PIF)**

**Date of screening:** 11 February 2010

**Screener:** David Cunningham

**Panel member validation by:** Brian Huntley

**I. PIF Information**

**Full size project / GEF Trust Fund**

**GEFSEC Project ID:** 3670

**Project Duration:** 3 years

**GEF Agency Project ID:** 40685

**Country:** People's Republic of China

**Project Title:** Jiangsu Yancheng Wetland System Protection Project

**GEF Agency:** Asian Development Bank

**Other Executing Partner:** Jiangsu Provincial Government

**GEF Focal Area:** Biodiversity

**GEF-4 Strategic Programs:** BD-SP1; BD-SP7

**Name of Partner Program/Umbrella Project:** China Biodiversity Partnership Framework Program.

**II. STAP Advisory Response** (see table below for explanation)

1. Based on this PIF screening, STAP's advisory response to the GEF Secretariat and GEF Agency: **Consent**

**III. Further Guidance from STAP**

2. STAP notes this proposal for GEF funds to support a very large wetland protection project. Component 1 involves several science-based interventions, e.g. establishment of a Payments for Environmental Services (PES) scheme or other financing mechanisms, pollution control, invasive species management, and restoring grasslands and forest ecosystems. While the PIF contains few details, the

Panel expects that the full proposal will include more baseline data and indicators against which success can be measured. STAP refers ADB to its PES advisory document<sup>1</sup> to inform the development of part of Component 1.

**ADB Response:**

Baseline data on the Jiangsu Yancheng Wetlands was collected in the project preparation phase and is presented in Part II, Section A. Indicators against which success can be measured are presented in the Project Results Framework, Part I, Section A.

**B) MATRIX OF GEF SECRETARIAT REVIEW SHEET COMMENTS (25 JUNE 08; 30 NOV 11; 21 DEC 11) AND ADB RESPONSES:**

<b>GEF Secretariat Comments</b>	<b>ADB Responses</b>
<b>3. Which GEF Strategic Objective/Program does the project fit into?</b> As discussed, GEF biodiversity strategy does not support site-based PA project (only in special circumstances), thus section C and other sections of the PIF needs to be revised appropriately. The focus on SP1 on sustainable financing should also be addressed at the system level, not at the site level to be eligible for GEF finance. If there is no interest to work at the system level (i.e., coastal/wetland PA system in Jiangsu or	The protected wetlands of Jiangsu province include: A. National Nature Reserves - Yancheng Coastal Shoal and Valuable Fowl National Nature Reserve (coastal wetland) - Dafeng Pere David's Deer National Nature Reserve (coastal wetland) - Sihong Hongzehu Wetland National Nature Reserve (inland freshwater wetland) B. State-Protected Wetlands - Yancheng Coastal Wetlands C. National Wetland Parks

<p>Yancheng), but only on the two PA sites, the proposal would not be eligible for GEF finance.</p> <p>The threats and barriers identified under the PIF and the proposed project initiative on sustainable financing (under SP1) does not seem to correspond. While reviewing the threats and barriers again, it seems like the issue for appropriate wetland ecosystem conservation in Yancheng comes from aquaculture, tourism and other production sectors. Is financing issue really the most critical issue that requires GEF support, or is it mainstreaming biodiversity in sector policy and planning etc are more critical interventions? If the former is the case, the PIF requires to justify the needs for PA financing in Jiangsu/Yancheng and what are the gaps and key barriers that require GEF intervention? If the latter is more the case, different sets of activities are required.</p>	<p>- Qinhua National Wetland Park (inland) Project activities and the lessons will be made applicable to the coastal/wetland protected areas and forest protected areas of the province.</p> <p>The project recognizes need and provides forum/activities building the critical buy-in of multiple-stakeholders necessary to minimize PA threats and pressures. The project pilots important mainstreaming of PA objectives for much-needed strategic and operational improvements to integrated wetland management in wider provincial and national development planning (e.g. via collaborative and inter-agency management protocols, multi-sectoral planning, new financing framework processes and policy, etc). Project activities are developed across key levels (e.g. PA management, local BZ and ERZ communities and businesses, local-national government) and key areas (e.g. biodiversity protection, PES, policy framework and pilot development, protection and production landscape level planning) to address system-wide concerns.</p> <p>The work is of great interest to Provincial and National Ministries of Environment Protection (MEP), PRC PA processes, integrated wetland resource management and development, ecosystem service appraisal, and social development.</p> <p>In the Chinese practice, policy creation is often led by piloting to accumulate the successes and lessons learned. In order to do piloting, a preliminary policy framework is built (i.e. background studies, preliminary policy framework, piloting, policy development and up-scaling). The ADB RETA project has successfully engaged the Provincial government in this regard and is building off a now developed preliminary provincial PES policy framework. This project builds upon this success (as well as the success and noted gaps of the former UNDP/GEF project) to expand <i>important mainstreaming and collaborative management measures</i> underscoring wetland ecosystem management and PA protection objectives. Notable mainstreaming activities impacting the system-level will include:</p> <ul style="list-style-type: none"> <li>• <i>Development and uptake of Operational Management Plans (OMP).</i> As envisaged by the MEP, the enabling environment for PA planning systems can be improved through greater expectations re: on-the-ground management, reporting and monitoring aimed at achieving conservation goals. The PRC PA network takes this as an important opportunity to develop a comprehensive international standard of management planning as defined for example by the IUCN World Commission on Protected Areas (i.e. OMP guidelines and manual developed; OMP provides responsive address of threats, with PA stakeholder consultation, re-fines conservation based targets; implements and mainstreams an adaptive conservation strategy; impact and key species monitoring, etc).</li> <li>• <i>Development of PA, BZ and ERZ management guidelines.</i> These tools will further assist systematic incorporation of PA objectives within provincial and municipal development, build recognition of the</li> </ul>
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	<p>importance of ecosystem service values of Yancheng coastal landscapes, and support standard operational guidelines for units within the PA and BZ, ERZ communities and provincial government departments.</p> <ul style="list-style-type: none"> <li>• <i>Wetland ecological-monitoring system.</i> In addition to the system-level concerns addressed above, the two PA management boards have a seat on the management board of the Jiangsu Environment Protection Department (JEPD), and have the ability to directly impact issues related to coastal wetland management planning, direct and recommend amendments to the rigor of EIAs put forward by the Jiangsu Coastal Development Plan (JCDP). With project support of this project for improved assessment and monitoring of Yancheng wetlands, the two NNRs and the JCDP will have real-time, scientifically based evidence highlighting wetland dynamics, biological data supporting the maintenance and improvement of area ecosystem services, and further rationale supporting PA conservation values within the wider landscape.</li> <li>• <i>Trans-provincial mechanisms for globally endangered species.</i> The project support globally important species management protocols and data information sharing to address target species beyond PA and provincial borders.</li> <li>• <i>Project activities piloting Payment for Environment Services (PES) and public-private partnerships</i> (e.g. ecotourism) support promising eco-compensation work and sectoral transformation. The provincial government has high hopes on ADB-GEF contributions to the development of PES policy for nature reserves (which will be one of the first in the country). The project will: <ul style="list-style-type: none"> <li>○ Set up and pilot direct payments securing valuable biodiversity and important ecosystem services.</li> <li>○ Based on PRC preliminary policy commitment and ‘best practice’ being identified via the ADB RETA, co-finance start up costs will deliver clear GEB synergies.</li> <li>○ The emerging option is yet currently fixed, but will be most relevant to GEB and supported by either privately negotiated and/or government arranged PES.</li> </ul> </li> <li>• <i>Other</i> Project activities, processes, protocols and applicable lessons developed will be shared with all coastal/wetland, protected areas and forest protected areas within the province.</li> <li>• Provincial and National MEP and provincial development authorities have importantly committed staff and resources to the project’s piloting and review, and have highlighted the project’s potential importance to informing institutional and legislative revisions and practice changes.</li> </ul>
<p><b>6. Will the project deliver tangible global environmental benefits?</b> 7 May 2008 The project is revised to have a focus on the sub-system level, on wetland PAs in Yancheng. Please further clarify the direct and indirect</p>	<p>The question of system-level coverage is somewhat addressed in the preceding comment.</p> <p>The project sites are included as priority ecosystems in</p>

<p>impact the project may have towards wetland conservation in Yancheng, in terms of coverage and other indicators. Information is yet to be provided on whether these wetland sites in Yancheng are prioritized in relevant national strategy and plans. Further information is required.</p> <p>24 June 2008 The comments from 7 May have not been adequately reflected and responded under the relevant sections, on page 6 and 7 of the PIF (no additional information recognized). Further information and description on the GEB at both system and site levels are required. Project's linkage between national strategy and plan, such as NBSAP are also required under section B</p>	<p><i>China's National Biodiversity Strategy Action Plan. Annex I</i> lists China's ecosystems that have biodiversity significance and that require priority conservation attention. Yancheng nature reserve is one of 5 top sites within priority Category A-I as a site of 'international significance of the highest order of priority.' Moreover, the Yancheng nature reserve was prioritized under the PRC system for 'Estuary and Wetland Ecosystems.'</p> <p>The Yancheng Coastal Wetlands are further covered in the <i>Priority Programs for China's Agenda 21: Priority 5 – Conservation and Sustainable Utilization of Natural Resources</i> and specifically within 'Item 5-3: Conservation and Sustainable Utilization of Wetland Resources.'</p> <p>In address, the project provides 'a prioritized plan of action for the conservation and sustainable utilization of wetland resources in China... through investigations on these resources and the establishment of demonstration projects.'</p> <p>Demonstration sites for 'wetland conservation and utilization shall be selected from typical wetlands,' and the Yancheng NNR of Jiangsu province is one of several selected. 'In-situ conservation and effective management' shall be carried out in project demonstration sites. Experiments will be carried out in demonstration areas for 'maintaining biological balance water conservation, flooding storage, conservation of flora and pollution controls'. Notably, effective measures and means for the establishment and management of wetlands nature reserves 'will be formulated at these demonstration sites on the basis of biodiversity conservation, environment protection and sustainable utilization'.</p>
<p><b>8. Is the project design sound, its framework consistent sufficiently clear (in particular for the outputs)?</b> The first comment above, on the need for system level interventions, i.e. not only for the two PA sites but addressing the wider barriers and threats at the coastal and wetland PA system in the region, is still unclear in the revised PIF and further clarification is requested.</p> <p>Moreover, the project focuses on site level on-site civil works and do not adequately address the systematic problem on the use of wetlands and water use at the policy and institutional levels.</p> <p>The PM finds that, maybe due to various revisions made, the project design is rather confusing. The project framework could be reviewed again and correspond to the threats and barriers, and particularly revise the project components to reflect both systemic and site-based demonstration actions.</p> <p>Potential approach could be to restructure and strengthen the current component 3 and 4 to</p>	<p>Per the above.</p> <p>The objective of the civil works is the restoration of the hydrological processes and ecological functions of the wetlands. The civil works constitute huge investment for the government which is a concrete indicator of the government's resolve to restore the wetlands' processes and functions. This is an implementation of policy stated in China's Agenda 21, China Biodiversity Strategy and Action Plan, the 11th Five-Year Plans and perhaps the recently completed UNDP/GEF project. The purpose of the proposed GEF grant for this project is to ensure that the civil works will be done in consideration of the globally important biodiversity and ecosystem services of the wetlands and sustaining the management of the wetlands thereafter.</p> <p>As mentioned in Section E of the PIF, the project built on the UNDP/GEF project 'Wetland Biodiversity Conservation</p>

<p>comprehensively address the policy, institutional and capacity needs of the coastal and wetland PA system in Jiangsu/Yancheng, and the component 1 and 2 to address the demonstrative actions in the two PA sites. If sustainable financing is indeed a major barrier and the GEF finance is focused on this initiative, it could be a separate component with further baseline information and concrete expected outcome and outputs.</p> <p>Component 4, which addresses part of the system level initiatives could also be further reviewed and strengthened and includes adequate policy development and its enforcement/implementation.</p> <p>Further information has been provided on the linkage with the UNDP/GEF ongoing project, Further details on the collaboration and lessons learned are expected at the time of CEO endorsement. For the PIF, please attach the matrix provided earlier on the comparison of the two projects to the PIF. Moreover, please clarify the UNDP/GEF investment amount at the Jiangsu/Yancheng wetland area (the total amount of the project is not very helpful) in comparing the scale and up scaling.</p> <p>Section E does not seem to correspond to the latest PIF template. Please delete.</p> <p>The current Section F has been revised quite significantly. The GEF incremental finance will only focus on these two activities and the project total amount remains the same? All other activities listed in the earlier version will be covered by cofinance, including management plan etc.? Please clarify and revise as appropriate.</p>	<p>and Sustainable Use in China,' its successes and gaps. The UNDP/GEF was focused to initiate mainstreaming (BD-SO2). The UNDP/GEF project planned various capacity building and institutional strengthening activities within the county and municipal governments and state-owned farms, where many of this project's ideas have taken root. The suggestion by the GEF Program Manager is well-taken, and these activities are built upon within Project components. The updated PA management plans will be incorporated in county, municipal and provincial management plans. This would present an easier task for this project as the provincial government is the local executing agency. It should be emphasized that the components address concerns on institutional and capacity needs and coordination, and to a certain extent the policy aspects of PA systems in Jiangsu province and their potential as pilots for national modeling.</p> <p>A matrix comparing proposed ADB/GEF and the UNDP/GEF projects was added to the PIF. The amount for the UNDP/GEF project pertains only to the Yancheng wetlands component based from the UNDP Project Document available on the GEF projects database. Building upon recommendations of the UNDP/GEF terminal evaluation, the following key issues are further addressed by this project:</p> <ul style="list-style-type: none"> <li>• Additional attention is given to local institutions and local government counterparts in this project, allowing them to cope with the various issues of wetland conservation and nature reserve planning management and improving institutional stability.</li> <li>• Continued attention is also given to vertical and horizontal cooperation, in view of the various sectors involved in wetlands.</li> <li>• Additional attention is given to policy and legislative frameworks, and toward the management of PAs according to guidelines of the IUCN classification system.</li> <li>• Capacity building remains a high priority, and practical, hands-on experience and sound knowledge of the local ecosystem and its components will be greatly strengthened.</li> </ul> <p>Section E is now deleted in the revised PIF.</p> <p>Yes, the GEF incremental finance will be the same even with two components supported. The scope of Component 1 – Wetland Restoration and Biodiversity Management encompasses two Strategic Programs and three major activities. The PPG phase will provide details on the scope of GEF grant to the project.</p>
<p><b>9. Is the project consistent with the recipient country's national priorities and policies?</b></p> <p>It is only noted that the two sites are priority of the Jiangsu and Yancheng's provincial and city governments. Further information is required in relation to the priority setting done at the national</p>	<p>Please refer to the response to comment 6 above. The area is prioritized in China's Agenda 21 and in China's Biodiversity Strategy and Action Plan. It is a recognized component of the China Biodiversity Partnership</p>

<p>level, and linkage to the related national strategy.</p> <p>The above comments still require response and be reflected under section B of the PIF.</p>	<p>Framework (CBPF).</p>
<p><b>11. Is the proposed project likely to be cost-effective</b></p> <p>Additional information has been provided on the pilot initiative to control IAS. Further approach needs to be clarified by the time of CEO endorsement.</p> <p>On cost-effectiveness, please also refer to the earlier comment on limited GEF activities (section on project design) under the revised PIF, and provide further clarification.</p>	<p>This is noted and will be addressed at CEO endorsement stage.</p> <p>Please refer to response on item 8 above about the scope of GEF support for the project. The invasion of <i>Spartina alterniflora</i> in the area has greatly reduced biodiversity and made the wetlands unsuitable for its protected rare bird species. While the scope will be further ascertained during project preparation, a logical and stepped wise approach will be taken. The pilot will initially build on the experiences gained from the Shanghai Chongming Dongtan Birds National Nature Reserve, where a similar model was successfully undertaken. If the carefully controlled and monitored approach to the pilot model proves successful, it may be replicated in other parts of the Yancheng coastal wetlands. The success and lessons learned will be disseminated across the country.</p>
<p><b>15. Is the value-added of GEF involvement in the project clearly demonstrated through incremental reasoning?</b> Please refer to the comments made above under the project design and strategic fit and revise and update the section accordingly. The current information is still based on site- level intervention, and also on linkage with sustainable eco- tourism development.</p> <p>It is also unclear how the activities related to eco-tourism are now going to be covered by the revised PIF. Please clarify under the project design section.</p>	<p>The concern on system-level approach has now been addressed above.</p> <p>Eco-tourism may be one of the options for introducing PES schemes. Depending on the regulatory framework and jurisdictions of national and provincial agencies in the core and buffer zone, the PPG consultants will assess the possible scope and scale that eco-tourism can play. However, it should be noted that the PES schemes will be more elaborate than just eco-tourism.</p>
<p><b>19. Is the indicative co-financing adequate for the project?</b></p> <p>Please review whether all co-finance is relevant for the project goal and biodiversity conservation in light of recent comments made by GEF Council on other project.</p> <p><b>21 DEC 2011 UA:</b> No, project management cost is currently 12.8% of GEF grant amount, which is considerably higher than the recommended threshold. Please adjust accordingly.</p>	<p>Yes, all co-finance (ADB and government) is relevant as the civil works are essential to the restoration of wetland functions. Biodiversity conservation outputs and outcomes depend on the restoration of wetland functions.</p> <p><b>26 JAN 2012 AL:</b> Project management cost has been reduced. See revised budgets.</p>
<p><b>20. Is the GEF funding level of other cost items (consultants, travel, etc.) appropriate?</b></p>	

<p><b>21 DEC 2011 UA:</b></p> <p>No. There are several issues to be addressed with regards to consultants' rate:</p> <ol style="list-style-type: none"> <li>1. Overall GEF financing of consultants is high (27 % of total GEF project amount).</li> <li>2. Co-financing provided for consultants is low, especially given the high total project co-financing.</li> <li>3. Weekly rates for international consultants are very high (USD 50).</li> </ol>	<p><b>26 JAN 2012 AL:</b></p> <ol style="list-style-type: none"> <li>1. The ADB investment project is focused on providing financing for civil works and goods that will support the restoration of hydrological processes and ecological functions in the wetland system, as well as the establishment of visitor centers with education and ecological monitoring capacity. The baseline investment project does not however have significant resources available to support softer components including consultants, which are considered essential for the protection and management of the target wetland systems. This includes funding that will support development and implementation of operational management planning in the Pas, development of management guidelines buffer zones and ecological restoration zones and their linkage with planning and management system outside of the PAs, wetland ecological monitoring, PES systems etc. These activities are considered to be greatly needed and very complimentary to the baseline project.</li> <li>2. As indicated above, the high project co-financing (from ADB) is due to the nature of ADB's investment project budget allocations. The amount allocated for consultants is 0.5 Million USD and this has already been agreed with the Provincial Government.</li> <li>3. ADB has in place its own policies, procedures and budget cost norms for the selection of consultants, which are guided inter alia by the need for high-quality services, economy and efficiency; competition and transparency. Consulting costs are based upon guidance from ADB's Central Operations Services Office (COSO) who conducts annual reviews of remuneration of experts, market surveys and consultations with other donors such as the World Bank which provides data for setting benchmark rates for budgeting purposes. These rates vary according to sector, expertise required, country and type of recruitment process. The consultant costs in the ADB project budget are therefore deemed a good reflection of market conditions. Further information on ADB's position and procedures for the recruitment of consultants has also been sent to the GEF CEO for discussion and ADB would appreciate further advice from GEF Secretariat management on this issue. The weekly rates for international consultants (USD5000) are standard international consultancy rates that ADB uses for 'budgeting' purposes only. These rates are consistent only slightly above previous ADB GEF projects that have been CEO Endorsed. The reason for the increase is associated with inflationary price factors.</li> </ol>
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## ANNEX C: CONSULTANTS TO BE HIRED FOR THE PROJECT USING GEF RESOURCES

<b>For Project Management</b>			
PMO (Loan)	The Jiangsu PMO (JPMO) is co-financed by the ADB loan and established at Jiangsu Environment Protection Department (JEPD). It is responsible for the overall planning, coordination, and supervision of the project (i.e. Loan + GEF). <sup>5</sup>		
Consulting Services (Loan)	<p>The ADB Loan provides co-financing supporting capacity development and project management in the order of 42 months of national and international consulting service, including:</p> <ul style="list-style-type: none"> <li>• <i>International Consultants:</i> Team Leader—Ecosystem Protection and PPMS Specialist (5 months); Environment Safeguard Specialist (3 months) = total, 8 months.</li> <li>• <i>National Consultants:</i> Deputy Team Leader—Wetland Ecologist (10 months); Financial Management Specialist (8 months); Procurement Specialist (6 months); Environment Safeguard Specialist (5 months); Social Safeguards Specialist (2 months); and Eco-Compensation Specialist (3 months)= total, 34 months.<sup>6</sup></li> </ul>		
<i>Position titles</i>	<i>\$/Person week*</i>	<i>Estimated person weeks**</i>	<i>Tasks to be performed</i>
<b>Local</b>			
National Institutional and Project Coordination Specialist <sup>7</sup>	700	200	Major tasks of the National Institutional and project coordination specialist include: (i) coordination with the JPMO, Loan Team Leader/Ecosystem Protection Specialist and GEF TL (PA Planning Specialist) for the implementation of GEF activities according to the GEF project work plan and budget; (ii) facilitating interagency cooperation and facilitating inclusion of project priorities into development plans; (iii) ensure reporting and consistency with GEF formats and timelines; assist inception meeting, mid-term and final evaluations and overall evaluation of GEF performance targets; recommend where relevant remedial actions ensuring quality control, and; (iv) provide translation, oversight and coordination to the GEF consultant team for the successful delivery of consulting services.
National Mid-term Evaluation Consultant	1,125	4	The consultant will assist the international mid-term evaluation consultant to provide ADB, GEF, project partners and the PMO with a comprehensive draft report for review and comments. GEF Biodiversity Tracking Tools will be undertaken at the time of the mid-term. The report shall be developed in accord with GEF M&E policy.
National Terminal Evaluation Consultant	1,125	4	The consultant will assist the international final evaluation consultant to provide ADB, GEF, project partners and the PMO with a comprehensive draft report for review and comments. GEF Biodiversity Tracking Tools will be undertaken at the time of the Terminal Evaluation Report. The report shall be developed in accord with GEF M&E policy.
National Project Performance Management System (PPMS) Specialist	1,125	8	To assist monitoring project (Loan + GEF) progress and achieve planned outcome and outputs, a national PPMS specialist will be hired. The consultant will work to assist the loan TL to (i) establish comprehensive procedures for and (ii) design of a system to permit

<sup>5</sup> A summary of the roles and responsibilities of the key project organizations is outlined within the Loan's *Project Administration Manual (PAM)*.

<sup>6</sup> Terms of Reference for the above experts are detailed within the Loan's PAM.

<sup>7</sup> It is anticipated that this expert will spend 92 weeks on project management issues and the remaining 108 weeks providing technical input to Component 4 (Environmental Governance and Knowledge Dissemination).



			<p>ongoing tracking and adoption of remedial action regarding project design, schedules, activities and impacts. Data will be systematically updated and generated based on project outcome, inputs, investment outputs, as well as agreed-upon project performance indicators, PA environment and social monitoring indicators, etc. The input of the national PPMS specialist will thus (iii) ensure measuring of project impact, output, and compliance with ADB safeguard requirements and GEF targets.</p> <p>The national PPMS specialist will also be responsible for working with the TL in review and editing the progress reports prepared by the PMO. Major tasks of the national PPMS Specialist will be to: (i) refine the PPMS framework; (ii) establish the project baseline; (iii) confirm achievable DMF targets; finalize monitoring and recording arrangements, and; (iv) establish data collection and reporting procedures.</p> <p>Compliance status will be reported by the PPMS lead to the PMO, who will closely monitor project and activity status and take necessary remedy actions for noncompliance. Compliance status will be reported on a quarterly basis by the PMO and reviewed during project review missions.</p>
Justification for Travel, if any: Travel from point of hire to and between project sites.			
International			
International Mid-term Evaluation Consultant	5,000	3	The consultant will lead the mid-term evaluation to provide ADB, GEF, project partners and the PMO with a comprehensive draft report for review and comments. GEF Biodiversity Tracking Tools will be undertaken at the time of the mid-term. The report shall be developed in accord with ADB and GEF M&E policy.
International Terminal Evaluation Consultant	5,000	3	The consultant will lead the terminal evaluation to provide ADB, GEF, project partners and the PMO with a comprehensive draft report for review and comments. GEF Biodiversity Tracking Tools will be undertaken at the time of the Terminal Evaluation Report. The report shall be developed in accord with ADB PCR and GEF M&E policy.
Justification for Travel, if any: Travel from point of hire, to and between project sites.			
<b>For Technical Assistance</b>			
Local			
National PA Operational Management Planning Specialist	1,125	28	The elaboration of an OMP is a key activity establishing fully functional NR management boards (MBs) capable of focusing activities in the most cost-effective ways to achieve forest and biodiversity conservation goals. As YRBNNR and DMNNR MBs have limited experience in this type of strategic planning, the national PA OMP consultant (working closely with International counterpart, below) will deliver training on a) the principles of PA operational planning and b) assist development of an initial 5-year OMP for the two individual NRs. Support the GEF TL (International PA Specialist) in the preparation of buffer/experimental zone management guidelines and its subsequent discussions.
National Sustainable Ecotourism Specialist	1,125	12	As team member, work closely with the International Sustainable Ecotourism Specialist (above) to (i) provide critical analysis of tourism and ecotourism in the two NRs; (ii) develop draft report via workshop/training; (iii) refine stakeholder inputs into draft Ecotourism Master Plans.

National Protected Area Financing Specialist	1,125	16	The national PA financing specialist will work with the international counterpart to review the cost effectiveness of the two NRs as further means justifying contributions of the NR to local development; provide provisional recommendations regarding priority actions and reforms that need to be made in order to: a) improve the adequacy and reliability of financing for the two focal Nature Reserves and b) increase NR institutional capacities for cost-effective management and financial sustainability <sup>8</sup> . Key tasks include: (i) Review of legal and policy groundwork affording long-term gains in the sustainability of the PA system; (ii) Review the draft OMPs prepared for the 2 NRs, and work with project staff/ PA managers to identify required recurrent and investment financing necessary to implement the plans over the 5 year period; (iii) Following review of existing mechanisms available for financing the NRs, identify additional means of ensuring adequate financing for implementation of the OMP's and opportunities for improving the adequacy/reliability of funds. (iv) In collaboration with project staff and NR MBs , prepare a draft OMP financing plan for a) YRBNNR and b) DMNNR.
Information Management/GIS Specialist	1,125	16	The National GIS Specialist will prepare graphic simulations of wetland protection and development scenarios using GIS-based simulation software (such as ArcGIS 3D Analyst); design, develop, harmonize and maintain a project GIS database; analyze and interpret digital data sets, maps, aerial photography and other source documents; perform GIS data conversion, transformation and spatial analysis; develop customized information tools for use with existing software as required, and; prepare maps and map series using professional cartographic techniques.
National PES Specialist	1,125	32	Work closely with the international counterpart to (i) develop recommendations and efficiency measures refining PES pilot modalities for government endorsement; (ii) construct baseline to determine “additionalities”; (iii) effectively integrate findings within the PES pilot model; (iv) further links to local government investment priorities and policy opportunities, and; (v) overall provide monitoring ensuring eco-compensation effectiveness.
National Wetland Biodiversity Monitoring Specialist	1,125	32	Main tasks of the National Wetland and Biodiversity Monitoring Specialist include working closely with the international counterpart in: (i) Identification of survey/monitoring gaps accounting for the full range of key NR conservation values (species/habitats); (ii) Develop methodologies for collecting specific data for the selected indicators; guide employ of national consultant rapid biodiversity assessments (fish, mammals, plants, amphibians/reptiles, other) and provide a comprehensive report on survey results including recommendations for priority issues identified to guide management activities; (iii) Develop a wetland biodiversity monitoring plan for the NNR and surrounding BZ/ERZ areas for the next five years providing information to the MB on trends/changes in biodiversity to assist the MB in responding to these trends/changes, and; (iv) Ensure that the MB and NNR stakeholders understand fully monitoring plan recommendations, and the resources required for implementation of the monitoring plan.
National Mammal	1,125	4	Dependent on identified gaps undertaken by Biodiversity Monitoring

<sup>8</sup> This work will be coordinated to consider the inputs of Payment for Ecosystem Services.

Specialist for Rapid Biodiversity Assessment (RBA)			<p>Specialists, consultant will undertake a rapid biodiversity assessment of mammals of the two NRs based on defined objects and indicators (e.g. Milu, living and breeding areas, etc.); Work closely with park staff throughout the survey process so that technical and field survey skills may be developed by accompanying NR technical (and ranger) staff. This work will precede and inform OMP development.</p> <p>Main tasks include: (i) Review of current mammalian species/habitat knowledge; supplement with NR staff and village interviews to collect information on mammals (including small mammals); (ii) conduct transect surveys, where key areas for mammal biodiversity are identified; (iii) prepare a short rapid assessment report indicating the confirmed or likely presence of key species (degree of certainty) if possible with geographical information as to where in the protected area the key species persist and where they do not. The report should also contain a brief threats assessment on key species and their habitats and recommendations for management of key and non-keystone species in the wetland ecosystem.</p>
National Avifauna Specialist for RBA.	1,125	4	<p>Dependent on identified gaps undertaken by Biodiversity Monitoring Specialist, consultant will undertake a rapid biodiversity assessment of avifauna of the two NRs based on defined objects and indicators (e.g. red-crowned crane observed individuals, living and breeding areas; other migratory and non-migratory species, etc.); Work closely with park staff throughout the survey process so that technical and field survey skills may be developed by accompanying NR technical (and ranger) staff.</p> <p>Main tasks include: (i) Review current bird species/habitat knowledge; supplement with NR staff and village interviews to collect information on birds; (ii) conduct appropriate surveys, where key areas for avian biodiversity are identified; (iii) prepare a short rapid assessment report indicating the confirmed or likely presence of key species (degree of certainty) if possible with geographical information as to where in the protected area, with what seasonality key avifauna species persist and where they do not. The report should also contain a brief threats assessment on key species and their habitats and recommendations for management of both key and non-keystone species. Inputs to precede and inform OMP development.</p>
National Fish Specialist for RBA	1,125	4	<p>Fish. To be determined, as dependent on identified gaps. Responsibilities within the Rapid Biodiversity Assessment, as above. Inputs to precede and inform OMP development.</p>
National Amphibians/Reptiles Specialist for RBA	1,125	4	<p>To be determined, as dependent on identified gaps. As above, Herpeto-fauna. Inputs to precede and inform OMP development.</p>
National Aquatic Invertebrates Specialist for RBA	1,125	4	<p>To be determined, as dependent on identified gaps. As above, Aquatic Invertebrates. Inputs to precede and inform OMP development.</p>
National Vegetation Specialist for RBA	1,125	4	<p>To be determined, as dependent on identified gaps. As above, Vegetation. Inputs to precede and inform OMP development.</p>
National Wetland Hydrologist	1,125	4	<p>To be determined, as dependent on identified gaps. As above, Wetland Hydrology. Inputs to precede and inform OMP development.</p>
National Sustainable Livelihoods and	1,125	20	<p>This national consultancy will compliment and inform the inputs of OMP development; Eco-tourism; PES; Agriculture, aquaculture and</p>

Community Co-Management Specialist			<p>sustainable forestry.</p> <p>The key tasks assigned this post include: (i) Natural Resource Use Survey/stakeholder analysis. The natural resource use survey will collect data and information relevant to local use and dependence on PA wetland resources by local households and communities and particularly disadvantaged groups such as women, the poor. Key people, groups, or institutions and <i>their levels of interest in, control of and dependence on NR lands</i> (core, BZ, ERZ) and natural resources will have be identified/ assessed in a stakeholder analysis<sup>9</sup>; (ii) Natural resource mapping. Levels of current use per resource will be identified/documented in a natural resource use audit (or inventory mapping), noting PA resources and areas utilized, the end use of that resource (e.g. local consumption, outside market), means of extraction, location within/adjacent the PA, its availability (per seasonal calendar), as well as potential for that resources/species replication as pilot model or placement within in-situ or ex-situ pilot/nursery development<sup>10</sup>; (iii) Collaborative-management agreement. Support the development of PA specific institutional structures (e.g. Commune/Village Coastal Wetland Management Boards) supporting collaborative management work (including clearly defined roles, responsibilities, forums for participation, means of communication, M &amp; E and reporting procedures); develop community-based natural resource use agreements based on geographically defined resource use plans, sustainable harvesting quotas and associated local legislation and punitive measures; responsibilities in protection; with identified budgets for implementing/monitoring these agreements<sup>11</sup>.</p>
National Sustainable Agriculture and Forestry Specialist	1,125	20	<p>The agro-forestry specialist will (i) in a participatory way identify, describe, and assess the major types of farming and forestry systems in the project area; (ii) for each forestry and farming system, identify agricultural and forestry practices that undermine NR objectives and sustainable agricultural and forest production; (iii) collect and evaluate information on current status and trends in applying of fertilizers, pesticides, other farm inputs, as well as practices that threaten NR and sustainable production; (iv) identify and assess short–medium–and long-term environmental impacts at farmer's, provincial, and interprovincial levels, arising from current agricultural and forestry practices; (v) identify and assess all factors that influence the sustainability of agricultural and forest production in the project area (e.g. farm inputs, land ownership, availability of infrastructure, institutional setting, etc); (vi) identify and assess potentially beneficial agricultural and forest practices or other measures that may enhance sustainable agricultural/forest production</p>

<sup>9</sup> The aim here is to engage key NR resource dependent individuals/groups that can play an active and supportive role during all steps of a collaborative management approach; actively solicit their contributions to improved management scenarios, and; advance constructive negotiations and participatory planning with these User Groups and NNR MBs for improved resource and BZ/ERZ management.

<sup>10</sup> The sustainable management of NR resources requires different approaches for different species and circumstances. Communities need to clearly understand the potential benefits of such arrangements, but the consultant must also ensure that agreements developed *uphold and strengthen NR protection priorities defined in the conservation needs assessment*. This work to precede and inform OMP development.

<sup>11</sup> Methodologies for carrying out this work are available to the consultant.

			and increase opportunities for sustainable production; (vii) propose interventions promoting adoption of sustainable farming practices in the project area; (ix) assess the potential contribution of the proposed interventions to NR conservation objectives. This work should inform OMP development.
National Sustainable Aquaculture and Fisheries Specialist	1,125	20	The Sustainable Aquaculture and Fisheries specialist will (i) identify, describe, and assess the major types of aquaculture and in-land fishery systems in the project area; (ii) for each system, identify current undermining NR objectives and sustainable aquaculture/fisheries production; (iii) identify and assess short–medium–and long-term environmental impacts at various levels, arising from current practices; (iv) identify and assess beneficial aquaculture/fisheries practices increasing opportunities for sustainable production; (vii) propose interventions promoting adoption of sustainable practices in the project area; (ix) assess the potential contribution of the proposed interventions to NR conservation objectives.
National Institutional Strengthening and Training Specialist	1,125	32	The Institutional Strengthening and Training Specialist will (i) conduct training needs assessment to a) analyze and b) facilitate the training of NR, JPMO, JEPD, YPMO and local government counterpart staff <sup>12</sup> ; (ii) participate in the development and review of appropriate programs and action plans related to mainstreaming of NR protection objectives; (iii) advise government on the effectiveness of programs and projects related to NR protection, local development; (iv) Assist monitoring institutional aspects of project initiatives and advise on sources of funding, support and investment opportunities furthering related projects; (v) review and make recommendations on program results and formulate future policy directions related to the sustainable management of NR BZ and ERZ coastal areas and resources.
National Communication and Public Awareness Specialist	1,125	16	The Communication and Outreach Specialist will (i) conduct stakeholder mapping to identify the key stakeholders for project implementation; (ii) conduct communication and outreach needs assessment; (iii) prepare a stakeholder communication and outreach strategy; and (iv) assist with the implementation of the strategy.
Justification for Travel, if any: Travel from point of hire, to and between project sites.			
International			
International PA Operational Management Planning Specialist (GEF TL)	5,000	20	The main tasks of the International PA OMP consultant team will include: (i) ensuring GEF linkage with loan component, reporting to JPMO; (ii) background research placing the proposed OMP within the current PRC Protected Area Planning Framework; provision of training to MB staff, local authorities and communities in the 2 NR sites to collaborate and participate more effectively in management of the NRs; (iii) training of an OMP working group (OMPWG), including local stakeholders; (iv) further clarification of issues and actions to deal with threats over the medium-term <sup>13</sup> ; identification of

<sup>12</sup> And in support of collaborative management component.

<sup>13</sup> The Conservation Needs Assessment (CNA, undertaken in August 2011) forms a basis for the OMPs development.

			gaps in resources, capacity, equipment, skills; define urgent capacity building actions improving capacity of the MB staff, local authorities and communities to implement their NR management responsibilities; (v) develop draft OMPs for the two NRs <sup>14</sup> ; (vi) prepare buffer/ experimental zone management guidelines based on input from other relevant consultants.
International Sustainable Tourism Specialist	5,000	8	The main tasks of this assignment include: (i) critical analysis of tourism and ecotourism in the two Yancheng NRs (e.g. policy and financial support, activities, services and infrastructure, current NR/community benefit sharing, etc.); examination of current environment and socio-economic impacts of tourism within the two NR sites <sup>15</sup> ; (ii) Present draft report to a multi-stakeholder workshop/training (involving the two NRs, their MBs, adjacent communities, private tour operators, etc.) in order to further refine strategies and outline recommendations (e.g. key job areas, needed training, business plan); (iii) based on workshop inputs, draft integrated Ecotourism Master Plans prioritizing (2) NR's conservation. The plan facilitated by the consultant will clearly identify practical follow-up activities for sustainable eco-tourism for both YRBNNR and DMNNR, and ensure recommendations fit local PA policy and local government strategies for sustainable buffer zone and experimental zone development. <sup>16</sup>
International Protected Area Financing Specialist	5,000	6	Overall, the consultant will review the cost effectiveness of the two NRs as further means justifying contributions of the NR to local development; provide provisional recommendations regarding priority actions and reforms that need to be made in order to: a) improve the adequacy and reliability of financing for the two focal Nature Reserves and b) increase NR institutional capacities for cost-effective management and financial sustainability <sup>17</sup> . Key tasks include: (i) Review of legal and policy groundwork affording long-term gains in the sustainability of the PA system; (ii) Review the draft OMPs prepared for the 2 NRs, and work with project staff/ PA managers to identify required recurrent and investment financing necessary to implement the plans over the 5 year period; (iii) Following review of existing mechanisms available for financing the NRs, identify additional means of ensuring adequate financing for implementation of the OMP's and opportunities for improving the adequacy/reliability of funds. (iv) In collaboration with project staff and NR MBs , prepare a draft OMP financing plan for a) YRBNNR and b) DMNNR.
International Payment for Ecosystem Services (PES) and Livelihoods Specialist	5,000	20	Based upon the RETA co-financing program and working closely with national counterpart, the PES Consultant's major tasks will be to: (i) review the RETA feasibility; assess those recommendations; recommend efficiency measures and refine modalities for government endorsement; (ii) construct baseline to assist monitoring

<sup>14</sup> A manual providing a step-by-step approach to complete the OMP is available to assist the consultant team's facilitation.

<sup>15</sup> Overall, the Sustainable Ecotourism consultant will identify potentials for sustainable tourism, target beneficiaries and benefit/revenue sharing schemes, challenges to be addressed, and recommend potential institutional arrangements for effective NR sustainable tourism.

<sup>16</sup> The work should be considered and build off inputs of the Co-management/Sustainable Livelihoods consultancy.

<sup>17</sup> This work will be coordinated to consider the inputs of Payment for Ecosystem Services.

			and determine future “additionalities”; (iii) effectively integrate the findings and assessments of the RETA program, along with the PES consultant’s own recommendations, into a PES pilot model; (iv) provide oversight to PES pilot model, and develop links to local government investment priorities and policy opportunities.
International Wetland and Biodiversity Monitoring Specialist	5,000	8	Main tasks of the International Wetland and Biodiversity Specialist include: (i) Identification of survey/monitoring gaps accounting for the full range of key NR conservation values (species/habitats); (ii) Develop methodologies for collecting specific data for the selected indicators; guide employ of national consultant rapid biodiversity assessments (fish, mammals, plants, amphibians/reptiles, other) and provide a comprehensive report on survey results including recommendations for priority issues identified to guide management activities; (iii) Develop a wetland biodiversity monitoring plan for the NNR and surrounding BZ/ERZ areas for the next five years providing information to the MB on trends/changes in biodiversity to assist the MB in responding to these trends/changes, and; (iv) Ensure that the MB and NNR stakeholders understand fully monitoring plan recommendations, and the resources required for implementation of the monitoring plan.
Justification for Travel, if any: Travel from point of hire, to and between project sites.			

\* Provide dollar rate per person week. \*\* Total person weeks needed to carry out the tasks.

#### ANNEX D: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS

No applicable, as no PPG has been used.

#### ANNEX E: CALENDAR OF EXPECTED REFLOWS

(Provide a calendar of expected reflows to the GEF Trust Fund or to your Agency [and/or revolving fund that will be set up])

The PRC government has requested a loan of \$36.9 million (or 48.3% of the total cost) from ADB’s ordinary capital resources to help finance the project. The loan will have a 25-year term, including a grace period of 5 years; an annual interest rate determined in accordance with ADB’s London interbank offered rate (LIBOR)-based lending facility; a commitment charge of 0.15% per year; and such other terms and conditions as set forth in the loan and project agreements. The government has provided ADB with (i) the reasons for its decision to borrow under ADB’s LIBOR-based lending facility based on these terms and conditions, and (ii) an undertaking that these choices were its own independent decision and not made in reliance on any communication or advice from ADB.

The financing plan is in the Table, below. Government counterpart financing amounts to \$39.49 million, or 51.7% of the total project cost, to cover civil works; design, monitoring, and management expenses; taxes and duties; interest during implementation; and contingencies.

<b>Source</b>	<b>Amount (\$ million)</b>	<b>Share of Total (%)</b>
Asian Development Bank	36.90	48.3
Government <sup>a</sup>	39.49	51.7
<b>Total</b>	<b>76.39</b>	<b>100.0</b>

<sup>a</sup> Government financing includes taxes and duties, contingencies, and interest during implementation.  
Source: Asian Development Bank estimates.

The borrower will be the Government of the PRC. The government will make the loan proceeds available to the JPG, which will grant part of the loan proceeds to the two nature reserves. JPG will on-lend the remaining loan proceeds to the Yancheng municipal government (YMG) which will grant these loan proceeds to SFF for coastal forest improvement output and to the Dafeng city government (DCG) which will grant these loan proceeds to DFF for coastal forest improvement output. Each on-lending will be undertaken on the terms and conditions specified in the loan and project agreements.

Under the project, *GEF funding will be used as grant and there will be no financial reflows from GEF funding* either to ADB or the GEF.

#### **ANNEX F: CONSERVATION NEEDS ASSESSMENT**

A Conservation Needs Assessment (CNA) was undertaken in YRBNNR and DMNNR, 15-20 August 2011. The CNA clarified threats identified as ‘medium’ and ‘high’ in the “Threats Matrix”; afforded brief examination of their indirect causes; examined criteria for their classification (by area both within and outside the PA, intensity and urgency of the threat); ranked identified threats, and; overall, afforded consultative process detailing activities likely to address threats in a long-term manner. Activities beyond the scope of GEF funding were also denoted.

The involvement of local community representation in the preparation of the CNA in both is one of the standard international good practices that management boards should be aiming towards. The CNA will serve a basis for the proposed Operational Management Plans (OMPs) for both NR sites.

See accompanying attachments to this endorsement document:

- A) Conservation Needs Assessment YRBNNR
- B) Conservation Needs Assessment DMNNR

#### **ANNEX G: GEF-5 BIODIVERSITY TRACKING TOOLS**

The results of the GEF-5 Biodiversity tracking tool and CNA exercise were vetted with the JPMO (22 August) and its results and the validity of these consultative processes were reconfirmed by this important project partner.

In the interest of improving local inputs and ownership in the project’s design, the GEF-5 biodiversity tracking tool (and CNA) were translated into the local language (i.e. Chinese). Overall, the tracking tool and CNA were viewed important capacity and awareness development exercises and have helped, from the start, to ensure improved consultation and ownership of the eventual GEF program.

See accompanying attachments to this endorsement document:

- A) Biodiversity Tracking Tools, YRBNNR
- B) Biodiversity Tracking Tools, DMNNR