PROJECT IDENTIFICATION FORM (PIF)

PROJECT TYPE: Full-sized Project
THE GEF TRUST FUND

Submission Date: December 11, 2009

PART I: PROJECT IDENTIFICATION

GEF PROJECT ID[1]: 4175 **PROJECT DURATION:** 60 months
GEF AGENCY PROJECT ID: 609231
COUNTRY(IES): China
PROJECT TITLE: Demonstration of Estuarine Biodiversity Conservation Restauration and Protected Area Networking in China
GEF AGENCY(IES): FAO
OTHER EXECUTING PARTNER(S): State Oceanic Administration of China; Guandong Provincial Bureau of Ocean and Fisheries; Shendong Provincial Bureau of Ocean and Fisheries
GEF FOCAL AREA (S)[2]: Biodiversity
GEF-4 STRATEGIC PROGRAM(s): BD-S P #2-Increasing Representation of Effectively Managed MPAs in PA Systems; BD-SP #4 Policy and Regulatory Framework for Mainstreaming Biodiversity.
NAME OF PARENT PROGRAM/UMBRELLA PROJECT: China Biodiversity Partnership and Framework for Action (CBPFA)

INDICATIVE CALENDAR*	
Milestones	**Expected Dates mm/dd/yyyy**
Work Program (for FSP)	3/2010
CEO Endorsement/Approval	6/2011
Agency Approval Date	8/2011
Implementation Start	10/2011
Mid-term Evaluation (if planned)	4/2014
Project Closing Date	9/2016

* See guidelines for definition of milestones.

A. PROJECT FRAMEWORK:

Project objective: The goal of the proposed project is to improve on existing efforts to conserve biodiversity in China's major estuarine ecosystems. The Project's specific objective is to develop a series of "best practices" based on experience derived from project supported field activities focusing on the creation of marine protected area networks (MPA) and wetland restoration in the Yellow and Pearl River Estuaries, two of China's most important estuarine ecosystems. This would be achieved through: (i) strengthening of individual MPAs to better achieve their conservation objectives; (ii) creation of new MPAs where gap analysis indicates that examples of critical habitats and species remain outside of conservation protection; (iii) promotion of the establishment of MPA networks among existing protected areas; (iv) restoration of degraded wetlands habitats; (v) addressing policy gaps/failures to reinforce government efforts to create and conserve estuarine ecosystems; (vi) identification and mitigation of one or more explicit threats to the respective estuarine ecosystems; (vii) building institutional capacity; (viii) promotion of increased public awareness of the significance of biodiversity resources in these deltaic systems and the role MPAs and MPA networks play in its conservation; and (ix) the development and dissemination of a series of "best practices."

Project Components	Investment, TA or STA**	Expected Outcomes	Expected Outputs	Indicative GEF Financing		Indicative Co-financing		Total ($1,000) c=a+b
				($1,000) a	%	($1,000) b	%	
1. Policy, Planning and Institutional Arrangements	TA, STA	Development and application of a more integrated approach demonstrated by the incorporation of conservation and management principles of wetland biodiversity in development planning affecting the Yellow and Pearl River Estuaries.	(i) development of policy tools for mainstreaming biodiversity in economic sectors (e.g., ecological compensation fund); (ii) development of one estuarine-based PA network plan and strategy for the respective estuaries; (iii) development of one medium to long-term restoration strategies for the Yellow and Pearl river estuaries, respectively; and (iv) creation of new (or strengthening of existing) municipal estuary coordination committees (at minimum 2) to address threats to biodiversity conservation.	363.6	50.5	355.9	49.5	719.5
2. MPA Networking and Wetland Restoration	Inv, TA	Increased conservation of biodiversity of global importance in wetland ecosystems	(i) strengthening of existing MPAs through: (a) development or updating of existing MPA management plans; (b) support for infrastructure/equipment: (c) staff training; (d) introduction of	1,418.2	22.6	4,864.1	77.4	6,282.3

[1] Project ID number will be assigned by GEFSEC.
[2] Select only those focal areas from which GEF financing is requested.

		achieved through obtaining greater management efficiencies, more comprehensive coverage of ecosystems, and reduction of human impacts on estuarine ecosystems.	principles of co-management and (e) promoting financial sustainability measures; (ii) biodiversity conservation gap analysis; (iii) creation of new MPAs (if required) representing # of km^2; (iv) promotion of at minimum two MPA networks through establishment of: (a) MPA coordinating mechanisms, (b) shared monitoring protocols and joint law enforcement, (c) development of common spatial biodiversity information systems and (d) development of shared migratory species management plans; (v) an increase in total bird visitation in the Pearl and Yellow River estuaries over their respective baselines; (vi) an increase in total number of migratory bird species in the Pearl and Yellow River estuaries over their respective baselines; (vii) stabilization of the populations of the one or more threatened/endangered species (Categories I and II) in the Pearl and Yellow River estuaries; (viii) an increase in the populations of one or more critically endangered/endangered species (e.g., Chinese White Dolphin [*Sousa chinesis*]); and (ix) restoration of degraded habitat (# of km^2).					
3. Threat Analysis, Mitigation and Monitoring	Inv, STA, TA	Improved environmental "health" of the Yellow and Pearl River estuarine ecosystems.	(i) completion of at minimum two threat analyses; (ii) development and implementation of at minimum two mitigation action plans to address priority threats (e.g., non-sustainable fishing practices); (iii) restoration of degraded habitat (# km^2 of mangroves and *Spartina* grasslands in Pearl and Yellow River estuaries, respectively); (iv) the reduction of pollution and its resulting impacts on biodiversity (e.g., # of open oil wells in depleted reservoirs capped in Yellow River); (v) support for sustainable/ alternative livelihoods (# of fishers adopting sustainable fisheries practices); and (vi) establishment of an ecosystem "health" monitoring program in each participating estuary.	1,054.7	19.4	4,389.4	80.6	5,444.1
4.Capacity Building and Increasing Environmental Education and Awareness	Inv, TA	Increased institutional capacity and public and political support for the conservation of biodiversity in China's deltaic systems.	(i) No. of workshops; (ii) No. of decision-makers and participants from productive sectors trained; (iii) No. of cross-site learning tours; (iv) development and implementation of public awareness plans (2); (v) creation of MPA partnerships (2); (vi) equipment/materials to support plan implementation; and (vii) development of education curricula.	363.6	27.7	949.1	72.3	1,312.7
5b,c M & E and Information Dissemination	TA	Increased receptivity and adoption of "best practices" in promoting MPA networking and ecological restoration in wetland ecosystems both in China and elsewhere in East and Southeast	(i) No. of publications including "best practices"; and (ii) project website.	72.7	38.0	118.6	62.0	191.3

		Asia.						
5a. Project management				363.6	23.5	1,186.4	76.5	1,549.9
Total project costs				3,636.4	23.5	11,863.5	76.5	15,500

B. INDICATIVE CO-FINANCING FOR THE PROJECT BY SOURCE and by NAME (in parenthesis) if available, ($)

Sources of Co-financing	Type of Co-financing	Amount
Government Contribution	Grant (estimated 75%) in-kind (estimated 25%)	11,444,300
FAO	Cash and in-kind	419,200
Total co-financing		11,863,500

* The full cost of FAO's co-financing will be estimated and confirmed during project preparation.

C. INDICATIVE FINANCING PLAN SUMMARY FOR THE PROJECT ($)

	Previous Project Preparation Amount (a)	Project (b)	Total c=a+b	Agency Fee
GEF	NA	3,636,400	3,636,400	363,640
Co-financing	NA	11,863,600	11,863,500	
Total	NA	15,500,000	15,499,900	363,640

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

Not applicable.

PART II: PROJECT JUSTIFICATION

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

China has more than 1,500 rivers with significant basin drainage areas (> 1,000 km^2) that run into the sea. All have formed discrete estuarine ecosystems, three of which are defined as large (i.e., greater than 450 thousand km^2). Despite the significance of these highly productive and biologically rich systems the rapid growth of coastal commercial and industrial activities and associated maritime transport centers, particularly in the larger estuaries, have adversely affected most of China's major deltaic ecosystems. Major threats to the country's estuaries include: the reduction of freshwater inflows due to upstream diversions, pollution loading associated with local and offsite industrialization and urbanization, non-sustainable use of natural resources (e.g., fishery resources) and habitat loss due primarily to urban and industrial expansion.

In contrast to the country's terrestrial ecosystems, the conservation of estuary biodiversity is still nascent in its development and faces a number of constraints. These include: (i) policy failures and gaps contributing to the loss and degradation of estuarine ecosystems; (ii) lack of inclusion of biodiversity conservation criteria in local, regional and national socio-economic development plans; (iii) an absence of effective inter-institutional coordination mechanisms needed to manage these highly complex ecosystems at both national and local levels; (iv) low capacity to manage estuarine and marine protected areas (MPA); and (v) lack of awareness and recognition of the significance of estuarine biodiversity by decision and policy makers and the public at large.

Despite these threats and constraints the Government of China (PRC) has achieved a number of milestones in recent years in the conservation of wetland ecosystems. These include the development of a National Wetland Conservation Program (2003) and a National Wetland Strategy (2004). Moreover as China has made significant gains in the reduction of poverty and begins to reach economic standards comparable to the West there has been a notable shift beginning with the 11th National Development Plan towards addressing other priorities, including the improvement of environmental quality; a shift that is likely to be accelerated in the country's 12th Plan. For the conservation of estuarine wetland systems now is a propitious time to act on the aforementioned policies and new

priorities by supporting actions and contributing to the development of experiences that can be up-scaled and applied to other estuaries both in China and the region.

The Yellow (Huanghe) and Pearl (Zhujiang) Rivers have contributed to the formation of two of China's three largest deltas (the third is the Yangzte River delta). The Yellow River is China's second longest river and runs into the Yellow (Bohai) Sea. The estuary is one of the largest in the world and extends approximately 100 km from north to south and is 100 km wide from east to west with an estimated area of 5,450 km^2 and a coastline of 589 km. It is thought to be the most extensive, youngest and fastest growing estuarine wetland in the world increasing in area on average of 23 km^2 annually. This temperate estuarine ecosystem supports a wide range of habitats ranging from beaches, reeds, *Spartina* grass and sand and mudflats. The estuary not only represent the main spawning and feeding waters of China but is also considered to be of international importance in providing critical habitat for some 265 species of migratory birds accounting for 22.3 % of all species reported for China, many of regional and international significance. As in most estuaries, there is a rich biodiversity that includes 608 species of higher plants, 922 invertebrates and 325 vertebrates of which 25 are mammals. In total, there is one species of plant and 68 species of animals dependent on the estuarine ecosystem that are classified as category I or II in China.[3] Despite its international importance for the conservation of biodiversity the estuary has been affected by a number of on and off-site development activities that have significantly undermined its ecological structure, function and processes. On-site economic development that has adversely impacted the estuary includes oil production, salt pans, mariculture ponds and agriculture. Off-site actions include the construction of upstream water impoundments, embankments, reinforcing dikes and widening river sections to facilitate ice flows all of which have modified natural patterns of water flow and nutrient and sediment deposition. The provincial and municipal governments are well aware of these activities and their impacts and are moving to address them. Major achievements include the creation of Integrated Dongying Coordinating Council, the establishment of the Yellow River National Nature Reserve (YRNNR) and more recently the creation of five coastal special protection MPAs adjacent to the YRNNR.

In contrast to the temperate Yellow River estuary, the Pearl River estuary situated in the south central region of Guangdong Province is characterized by a sub-tropical environment typical of China's South China Sea. It is 150 km long from north to south and 100 km wide from east to west with a water surface area of 2,400 km^2 and a coastline measuring approximately 450 km in length and represents the country's second largest estuary. It is considered to be one of the most complex systems in the world in terms of number of rivers and the density of waterways that make up the estuary. As in many other estuaries of the world, the Pearl River estuary is characterized by a diverse range of habitats that contribute to its high productivity and rich biological diversity. These include: mudflats, reed, mangroves (13,067 km^2) and coastal islands. Similar to the Yellow River estuary, the Pearl River estuary represents an important stop for migratory birds between north Asia and Oceania and has been designated a Nationally Important Wetland in China's National Wetland Conservation Action Plan. The estuary is also the habitat for China's white dolphin, a highly endangered species, and is thought to support the largest known populations in China (ca. 1,000). The Pearl River estuary also supports an estimated 569 species of higher plants, 50 species of amphibians and reptiles, 194 species of birds and 20 species of mammals. In total, there are 10 species of plants and 23 species of animals dependent on the estuarine ecosystem that are classified as category I or II in China. Major threats consist of declining water quality associated with industrial and urban development, wetland conversion for urban expansion overfishing and conflicts associated with the large marine transport sector. As in the case of the Yellow River estuary, substantial efforts have already been made in conserving this important ecosystem. This includes the creation of 22 wetland nature reserves with differing conservation objectives and administration authorities that represent in aggregate 4,270 km^2 in area or some 23 % of the total wetland area. Among these are an international RAMSAR site and the 460 km^2 Pearl River Estuary Chinese White Dolphin National Nature Reserve; a joint effort between Guandong Province and Hong Kong government. The Yellow and Pearl River estuarine ecosystems represent a wide range of habitats, threats and constraints as well as provide evidence of significant achievements in the conservation of wetland biodiversity in China and have been selected as sites for the proposed project.

The goal of the proposed project is to improve on existing efforts to conserve biodiversity in China's major estuarine ecosystems. The project's specific objective is to develop a series of "best practices" based on

[3] National endangered species in China are categorized into the following classes: (i) critically endangered (I), (ii) endangered (II) and (iii) vulnerable (III).

experiences derived from project supported field activities focusing on the creation of protected area networks and wetland restoration in the Yellow and Pearl River Estuaries. This would be achieved through: (i) strengthening of individual MPAs to better achieve their conservation objectives; (ii) creation of new MPAs where gap analysis indicates that examples of critical habitats and species remain outside of conservation protection; (iii) promotion of the establishment of marine protected area (MPA) networks among existing protected areas; (iv) restoration of degraded wetlands habitats; (v) addressing policy gaps/failures to reinforce government efforts to create and conserve estuarine ecosystems; (vi) building institutional capacity; (vii) promotion of increased public awareness of the significance of biodiversity resources in these deltaic systems and the role of MPAs and networks play in its conservation; and (viii) the development and dissemination of a series of "best practices." The proposed project has five components: (i) Policy, Planning and Institutional Arrangements; (ii) MPA Networking and Wetland Restoration; (iii) Threat Analysis, Mitigation and Monitoring; (iv) Capacity Building and Increasing Environmental Education and Awareness; and (v) Project Management, Monitoring and Evaluation (M&E) and Information Dissemination. Key outcomes include: (i) development and application of a more integrated approach demonstrated by the incorporation of conservation and management principles of wetland biodiversity in development planning affecting the Yellow and Pearl River Estuaries; (ii) increased conservation of biodiversity of global importance achieved through enhanced management efficiencies, more comprehensive coverage of ecosystems, and reduction of human impacts on estuarine ecosystems; (iii) improved environmental "health" of the Yellow and Pearl River estuarine ecosystems; and (iv) increased institutional capacity and public and political support for the conservation of biodiversity in China's deltaic systems. There exist substantial opportunities for replication of the experiences and "lessons learned" derived from project supported activities particularly in terms of promoting inter-institutional approaches to wetlands management, restoration of wetlands, co-management, "mainstreaming" of biodiversity conservation considerations into other sectors and new institutional approaches to managing complex ecosystems (e.g., in the development of the 12th municipal and provincial development plans).

The proposed project would be a multi-provincial project (with the participation of the Guangdong [Pearl River estuary] and Shendong [Yellow River estuary] provincial governments. As a result, China's State Oceanic Administration (SOA) will be the lead government counterpart agency with over all responsibility for the project and ensuring coordination and collaboration between the two provinces and the project's five components. The SOA will further be responsible, together with FAO, for providing technical assistance, supervision and monitoring of the project components. In addition SOA will be responsible for supporting selected technical outputs to include facilitating: (i) provincial policy formulation in support of wetlands restoration and conservation; (ii) cross- and multi-provincial training and (iii) establishment and maintenance of a project website and the publication and distribution of a series of "best practices."

Activities in the two participating provinces of Guandong and Shendong would be overseen by their respective Bureaus of Ocean and Fisheries (BOF). In addition, the two Bureaus would have the main responsibility for coordinating field level activities that involve more than one municipal government (e.g, in the case of a MPA network). These multi-municipal activities would be determined during project preparation.

Most of the project activities would be supported at the local level through municipal government and specific national and provincial nature reserves (NR). Municipal government would be responsible for taking the lead in the establishment of new or strengthening of existing estuary coordination committees, establishment of MPA networks and supporting monitoring programmes under the guidance of their respective BOF where only a single municipality is involved. However, it is at the site level (i.e., specific nature reserves) where the majority of project supported activities (and budget) is expected to be allocated. This includes NR-specific activities proposed for support under components 2 and 4 and all of component 3. The NR management would be responsible for supervision of all aspects of project activities in their respective reserve under the supervision of their respective BOF.

Projected global environmental benefits (GEBs) to be achieved through the proposed project include: (i) conservation of biodiversity of global significance and (ii) partial restoration of ecosystem integrity and recovery of its underlying functions and services. Based on the proposed activities the following quantitative outcomes are proposed (to be confirmed together with targets during project preparation) to assess biodiversity conservation: (i) an increase in total bird visitation in the Pearl and Yellow River estuaries over their respective

baselines; (ii) an increase in total number of migratory bird species in the Pearl and Yellow River estuaries over their respective baselines; (iii) stabilization of the populations of the one or more threatened/endangered species (Categories I and II) in the Pearl and Yellow River estuaries, respectively; (iv) an increase in the populations of one or more critically endangered/endangered species (e.g., Chinese White Dolphin [*Sousa chinesis*]); and (v) creation of new MPAs representing (# km^2) in total.

The partial restoration of ecosystem integrity and recovery of its underlying functions (ecosystem "health") would be met through achieving the following quantitative outputs: (i) restoration of degraded habitat (# km^2 of mangroves and *Spartina* grasslands in Pearl and Yellow River estuaries, respectively); (ii) the reduction of pollution and its resulting impacts on biodiversity (e.g., # of open oil wells in depleted reservoirs capped in Yellow River); and (iii) provision of sustainable/alternative livelihoods for primary resource user in the respective Pearl and Yellow River estuaries in the next 5 years (# of fishers adopting sustainable fisheries practices).

Finally, in addition to the aforementioned GEBs, the proposed Full-size Project (FSP) is expected to provide experiences and "lessons-learned" through the development of "best practices" in the development and promotion of MPA networks and wetland restoration, respectively, that could prove to be catalytic in launching similar approaches in other deltaic systems in both China and elsewhere in Asia.

B. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH NATIONAL/REGIONAL PRIORITIES/PLANS:

The goals and objectives of the proposed project are in full conformity with PRC's national priorities and plans in support of biodiversity conservation in the country's coastal estuarine ecosystems. The Pearl and Yellow River estuaries were listed among the 16 wetland areas of international importance in China's "National Biodiversity Strategy and Action Plan (NBSAP)" which was approved in May 1994 (there has been no amendment to the NBSAP since 1994). As early as 1994, PRC in its "Action Plan for China Biodiversity Conservation" stated the goal of its second priority action was to upgrade the national protected areas and protected area (PA) network which included 7 wetland PAs among which were the Yellow and Pearl River delta areas. The Project is also in conformity with China's "National Wetland Conservation Program (2002-2030)", which was adopted in 2003 by the State Council in which both the Pearl and Yellow River Estuaries were listed as priority areas.

Similarly, the Project is in full conformity with the National Wetland Strategy mandated by Circular # 50 of the State Council of 2004. The Strategy established the policy on wetland conservation that called for strengthening wetland management, changes in legislation, policy and funding mechanisms and a wetland conservation management system that is mainstreamed across sectors. Similarly in the country's "National Marine Economy Development Plan" approved by the State Council in 2003, the section on Marine Ecological Protection emphasized the need for conservation of special ecosystems and their biodiversity in areas such as estuaries and coastal wetlands and recommended increased support for capacity-building in existing MPAs and the importance of establishing new MPAs. Other sections emphasized the importance of the protection of nursery grounds of fishery resources such as key fishing grounds and estuaries improvement (Conservation of Marine Biology Resources) and the need for an integrated approach to the management of estuarine environment and ecosystem protection explicitly mentioning the Pearl and Yellow River estuaries (Coastal, Estuarine and Mudflat Protection).

More recently, China's "11th Five-Year Plan for National Economic and Social Development" noted the need to conserve and rehabilitate coastal ecosystems specifically citing the Yellow and Pearl River estuaries. These priorities were supported by the respective provincial 11th Five – Year Plans. More generally, the country's "Fourth State Report to the Convention on Biological Diversity" in 2008 identified among others the following priority actions: (i) the implementation of the national biodiversity survey and inventory; (ii) development of national biodiversity assessments; (iii) improvement of national nature reserve system and the development of demonstration PAs and (iv) improvement of the quality of PA management. It also included the enhancement of biodiversity conservation outside PAs and promotion of PA networking. This was followed in the same year by the State Council's approval of the "Outline of Development and Planning the National Oceanic Program" that included as one of its basic principles the implementation of an ecosystem-based approach to coastal and oceanic management and the enhancement of the conservation of marine biodiversity, key marine ecosystems and the coastal landscape. It explicitly requested an acceleration of the formulation of comprehensive administration of the coastal environment in the Pearl River estuary and adjacent waters.

The proposed project is also in direct conformity with the China – GEF Biodiversity Partnership and Framework for Action (CBPF) 2007-2017, the country's principal investment strategy for biodiversity conservation developed to facilitate dialogue with GEF and other financing agencies. Under this Framework, the Project will directly support three of the Framework's five priority themes. These are: (i) Improving Biodiversity Governance (Theme 1); (ii) Mainstreaming Biodiversity into Socio-Economic Sectors and Plans and Investment Decision-Making (Theme 2); and (iii) Investing Effectively in Reducing Biodiversity loss in Protected Areas (Theme 3). More specifically, it will support the following results identified in the CBPF: (i) financial flows to biodiversity conservation increase over current baseline (Result 4); (ii) the general public is supportive of conserving biodiversity (Result 5); (iii) biodiversity conservation and sustainable use is mainstreamed into local plans (Result 11); (iv) biodiversity conservation and poverty alleviation programs in China are mutually supportive (Result 13); (iv) national nature reserves (NNR) and provincial nature reserves (PNRs) are effectively managed (Result 17); (v) NNRs and PNRs have stable and sufficient finance (Result 18); and (vi) in NNRs and PNRs, local communities, NGOs and/or the private sector are involved in PA co-management and development (Result 20).

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

The proposed Project directly addresses the following Strategic Programs (SP) in the GEF-4 Biodiversity Strategy: (i) **BD-SP # 2** - Increasing Representation of Effectively Managed MPAs in PA Systems; and (ii) **BD-SP # 4** - Strengthening the Policy and Regulatory Framework for Mainstreaming Biodiversity. Specifically the Project will support BD-SP #2 through providing support for the strengthening of existing and creating new MPAs to conserve marine biodiversity, creation and management of estuarine marine protected area networks, increasing wetlands habitat through ecological restoration and contributing to the promotion of alternative livelihoods to reduce pressure on biodiversity resources. In conformity with BD-SP #4 the Project will promote the incorporation of principles of biodiversity conservation into broader policy and regulatory frameworks through increasing institutional capacity, increasing awareness among policy and decision makers and mainstreaming biodiversity into productive sectors through the development of policy tools to promote the integration of biodiversity considerations in economic sectors.

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

In light of the growing importance that China is placing on environmental quality there is a growing availability of financing resources to support improved environmental quality. Moreover, the Government of China will provide a substantial amount of co-financing primarily in support of restoration of wetlands, MPA infrastructure and equipment, investment in provision of alternative livelihoods and strengthening enforcement and monitoring amounting to USD 11 444 300. As a result, the requested GEF grant will be allocated mainly in support of capacity building, policy studies, preparation of plans and technical assistance to leverage some of the future resources allocated for improved environmental quality of the estuarine ecosystems that together will increase the likelihood of the Project achieving its objective.

E. OUTLINE THE COORDINATION WITH OTHER RELATED INITIATIVES:

Relevant on-going and recently completed GEF supported projects that will address in project design include the following:

(i) The GEF/UNDP Yellow Sea Large Marine Ecosystem (YSLME) Program established through GEF and the partner countries China and Republic of Korea is scheduled to be completed at the end of 2009 (though a possible new phase is currently under discussion). Major activities supported under this ecosystem-based sustainable management approach to the Yellow Sea LME and its respective watersheds that appear to be particularly relevant to the proposed project include: (a) the application of an ecosystem-based approach to the management of marine ecosystems and (b) the development of pilot regional institutional and capacity building initiatives;

(ii) the GEF/UNDP/IMO supported Implementation of Sustainable Development Strategy for the Seas of East Asia (PEMSEA III) that began implementation in June 2009 and will support the following activities in China that appear relevant to the proposed project: (a) integrated river basin and coastal area management programs in the Yellow Sea (which will include the Guanglihe River that drains into the Yellow River) and (b) the development of national ICM plans;

(iii) the findings of a recently completed mid-term review (MTR) of the GEF/UNDP Marine Biodiversity Management in the Coastal Area of China's South Sea (SCCBD) project will be taken into account during project preparation giving particular emphasis to: (a) strengthening institutional capacities in MPAs; (b) development and testing of tools to support conservation of marine biodiversity and (c) promoting MPA approaches in four different ecosystems (including one in Guangdong Province);

(iv) the findings of the recent project evaluation of the just completed GEF/UNEP South China Sea and Gulf of Thailand may also be relevant to the proposed project. China participated in four project activities (mangroves, sea grasses, wetlands and land-based pollution control) and these experiences will be taken into account in preparation especially as it pertains to the Pearl River; and

(v) the GEF/UNDP Wetland Biodiversity Conservation and Sustainable Use in China Project. was initially a 5 year project totaling US $ 34.6 million (M) in funding of which GEF provided US $ 11.7 M. The project carried out activities at the national level and in four internationally important wetland sites in five provinces of which the Yancheng coastal marshes wetland site is arguably the most relevant to the proposed project. Specific outcomes included: (i) the integration of wetland issues into the master coastal development plan; (ii) establishment in inter-departmental liaison groups responsible for wetland issues; and (iii) establishment and utilization of environmental education centers. Other project designs that may prove to be relevant to the proposed project include: (i) Sustainable Management and Biodiversity Conservation of the Lake Aibi Basin (Council Approved),;(ii) Integrated Ecosystem and Water Resources Management in the Baiyangdian Basin (CEO Endorsed); and (iii) Sanjiang Plain Wetlands Protection (IA Approved). These will be taken into account in project design.

Cooperation and collaboration between the aforementioned GEF supported initiatives and the proposed project will be facilitated through the China Biodiversity Partnership and Framework for Action (2007 – 2017) described previously under Block B above. As the GEF Executing Agency for the proposed project, FAO will become an active member of the partnership.

In addition to these GEF supported activities there exist a number of other on-going national (e.g., *'World Ocean Week [Xiamen]'* and the *'Marine Eco-civilization [Wenzhou] Forum'*), bilateral (e.g., U.S.-China Marine and Fisheries Science and Technology Protocol) and multi-national activities (e.g., the World Bank's 2nd Guangdong Pearl River Delta Urban Environment and GEF Shandong Environment Projects) that will be assessed during project preparation and means established to facilitate coordination with the proposed project where they are found to contribute to the achievement of the latter's stated goals and objectives.

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

There already exist a number of marine protected areas under different administrations and/or with different biodiversity conservation objectives in many of China's coastal estuaries. This has contributed to fragmentation and isolated perspectives that impede broader understanding of the status of biodiversity resources, the interaction and aggregative effect of multiple threats on specific habitats and the ecological "health" of these estuaries as ecological systems. Moreover, lack of sound planning in these complex ecosystems have contributed to undermining their ecological integrity. Building on past efforts in two of China's three largest deltas, GEF resources would be used primarily to consolidate and expand where necessary existing efforts to conserve biodiversity in these critically important ecosystems. Specifically, GEF resources would be used to promote closer integration of existing protected areas at the National, Provincial and Municipal levels and where gap analysis reveals estuarine habitats in need of conservation, the creation of new MPAs. Support would also be provided for fostering MPA networks and include but not be limited to establishment of joint coordinating committees, common data bases, regular information exchanges, joint patrols, shared research protocols and development of shared migratory species management plans. This would be complemented by support for policy studies, enhanced environmental awareness, capacity building and promoting inter-institutional cooperation. Finally the proposed project would leverage national resources in support of the restoration large wetlands in both estuaries.

In the absence of GEF support there is likely to be financial resources under the "baseline scenario" to continue to support the conservation of wetland biodiversity. However, how these resources are utilized remains a concern. There exist a number of examples of poorly planned and executed restoration wetlands for lack of technical

expertise and sound conceptualization of why these ecosystems should be restored. Similarly, support for existing and new marine protected areas (MPAs) is likely to continue in the next 5 years but it is highly likely that this will be used largely to strengthen existing and/or create new MPAs largely in isolation and only partly effective in meeting their objectives, particularly with respect to conservation of migratory species. Finally, China as elsewhere, remains "sector-bound" in the formulation of economic policies and plans over the years; a constraint that has proven particularly impervious to the inclusion of environmental considerations. This will remain a major challenge and one that can only be tackled through incremental approaches as part of a larger, long term process. In response, one of the main activities of the proposed project is to support pilot efforts that restore degraded wetland ecosystems to pre-existing conditions, functions and services. Demonstrating and documenting the value of such an approach subsequently disseminated through a series of "best practices" will be a key outcome of the proposed project. A second activity will be to demonstrate the added value of creation of networks of MPAs and facilitate their future creation. Finally as in other GEF-supported projects in China and elsewhere, a number of project supported activities focusing on inter-institutional planning, policy formulation and coordination will contribute to the on-going process of incorporating wetland biodiversity conservation activities into selected sectoral municipal and provincial institutional arrangements and processes

In the case of China, resources are not as much a constraint as marshalling the political commitment to support project supported interventions. This will be more of a factor of availing of the opportunity to participate in a "prestigious" project associated with GEF and an international UN agency together with being a recipient of international expertise mobilized under the project. Project identification confirmed the political commitment to support the proposed project exists at the national and provincial levels. Project preparation will focus on assessing and mobilizing the needed commitment at the municipal level in the two estuarine sites. This combination should increase the chances of achieving a significant change in approaches to the conservation of wetland biodiversity.

G. INDICATE RISKS, INCLUDING CLIMATE CHANGE RISKS, THAT MIGHT PREVENT THE PROJECT OBJECTIVE(S) FROM BEING ACHIEVED, AND IF POSSIBLE INCLUDING RISK MITIGATION MEASURES THAT WILL BE TAKEN:

Risk	Rating Risk Type	Risk Mitigation Measures
Lack of effective Project Coordination. Failure to achieve close and collaborative cooperation between the many institutional stakeholders with vested interests in the two estuaries, both in the public and private sector, will significantly reduce the chances of the project to achieve its stated goal and objectives.	Medium to High	In the preparation of the PIF consultations at the national (Ministry of Finance), provincial (Departments of Finance and Oceans and Fisheries) and local (municipal) levels indicated there was widespread political and financial support for the proposed project. Sufficient resources in project preparation will be provided to support the needed public consultation and participation to broaden the existing political support for the Project to the community at large. During implementation, one of the main priority actions to be supported under the Project would be to promote increased inter-institutional coordination through supporting the existing Integrated Dongying Coordinating Council (Yellow River Estuary) and the creation of MPA network municipal coordinating agencies (Pearl River Estuary). At the level of the MPA, the proposed project would strengthen the existing (or create new) inter-institutional coordinating committees and support the acceptance of principles of co-management with local communities.
Slow Uptake of Policy Recommendations. This risk is associated with the degree to which policy studies and recommendations in support of increased conservation of estuarine wetlands and associated biodiversity can be "mainstreamed"	Medium	This risk has been partly mitigated by a recent shift in national and provincial government priorities beginning in 2007 placing greater emphasis on environmental quality. More specifically, this risk would be addressed in project design through: (i) supporting relevant policy reforms during the process of development of the 12th provincial and municipal development plans; (ii) providing support for the creation of public fora to

into provincial and municipal policy frameworks.		address issues and threats related to the conservation of biodiversity; (iii) increasing capacity in line agencies; and (iv) promoting a number of awareness raising activities in support of relevant policy reforms directed at both key decision makers as well as the public at large and may include site visits to areas where policy related studies and related activities are being supported. As a monitoring measure the Project would integrate tracking tools (in its M&E system) with well defined triggers to ensure a timely integration of policy reforms into municipal/county policy frameworks.
Climate Change. The Pearl and Yellow River basins are subject to extreme climate events (primarily precipitation and droughts), which appear to have increased in both intensity and frequency in recent years. These events are projected to continue or increase under most future climate change scenarios and would likely adversely impact the two deltaic systems, their respective habitats and biodiversity that they support as well as the livelihoods of community who depend on their respective resources.	Low	The PRC has taken actions to cope with climate change and applied integrated watershed management principles that would help to minimize the impact of changes on estuarine ecology through the adjustment in the timing and amounts of water released from upstream impoundments. Moreover, by strengthening management and promoting the improved environmental "health" of the deltaic systems, the Project would contribute to build the ecosystem's resilience to climate change. Providing support to local communities through sustainable/alternative livelihoods would enable them to better cope with climate change impacts. Furthermore, the proposed project would forge linkages and synergies with other ongoing climate change adaptation activities in their respective delta regions and contribute to the knowledge base through its information dissemination and public awareness activities.
Currency Risk. Significant changes in foreign currency exchange rates may pose a risk to the achievement of all project outputs and outcomes.	Medium	This will be addressed through incorporating appropriate price contingencies in the project budget.

H. DESCRIBE, IF POSSIBLE, THE EXPECTED COST-EFFECTIVENESS OF THE PROJECT:

Cost-effectiveness in the proposed project will be derived primarily through building on and "upscaling" of previous achievements and "lessons-learned" supported by both the Guandong and Shandong provincial and municipal governments in the management and conservation of estuarine wetlands. This includes availing of the existence of enabling institutional arrangements (e.g., Integrated Dongying Coordinating Council), legislation (wetland protection regulations of both provinces), MPAs and past experience in wetlands restoration. The proposed project would "piggy-back" on these initiatives and would provide the critical inputs needed to achieve projected outputs and outcomes in a much reduced period of time than otherwise would be required in the absence of required institutional framework. Cost-effectiveness would also be supported through the rationalization of scarce institutional resources available to support biodiversity conservation in two of the country's major estuarine ecosystems. This would be achieved primarily through: (i) promoting the development of MPA networks and partnerships; (ii) development of medium to long-term wetland restoration strategies and priority definition; and (iii) providing support for coordinated and collaborative institutional approaches to wetlands management. Finally, the Project is expected to leverage a large investment program from the 12th Provincial Five Year Development Plan in support of the estuarine wetlands conservation and management that otherwise would go to other sectors and regions in the Province. A cost-effectiveness analysis of project activities and execution mechanisms will be conducted during project preparation.

I. JUSTIFY THE COMPARATIVE ADVANTAGE OF GEF AGENCY:

FAO is a globally recognized leading international organization in the area of natural resources management and sustainable development. The proposed project would benefit from FAO's extensive work on conservation and management of natural resources (primarily forestry and fisheries resources) within the ecosystem context. FAO

expertize has been built on a number of past and on-going iniatives directly relevant to project objectives. Specifically in the case of China, FAO has a long record of cooperation with the Chinese government in natural resources management; programs and projects that include agricultural biodiversity, conservation agriculture, integrated pest management and promoting sustainable aquaculture. In addition to these activities, FAO's Investment Center has supported a number of preparation and supervision missions of biodiversity conservation projects in China (primarily for GEF). Examples include: (i) the Protected Area's Management Component of the National Sustainable Forestry Development Project (2002) and (ii) Guangxi Integrated Forestry Development and Conservation Project (2006), both with the World Bank as Implementing Agency through the FAO-WB Cooperative; and (iii) An IEM Approach to the Conservation of Biodiversity in Dryland Ecosystems (2008) with IFAD as GEF's Executing Agency through FAO's Investment Support Programme. Furthermore, given the Organization's administrative and financial support for project concepts through the provision of national TCP grants, there is a unique opportunity to replicate the proposed project approach to other FAO supported iniatives both in China and elsewhere.

Most importantly, China's Ministry of Finance (MOF) approached FAO in September 2009 requesting the Organization's support in preparing this project. It was explicitly stated in that meeting that it was MOF's intention to build bridges with other GEF Agencies in support of future projects, a policy which is consistent with GEF's own policy of providing greater choice of agencies to recipient countries and promoting increased country ownership. This MOF request was viewed, at least in part, as an indication of China's satisfaction with FAO's provision of support to other GEF preparation activities (e.g., Securing Biodiversity Conservation and Sustainable Use in China's Dongting Lake Protected Area). Finally, it should be noted that the GEF CEO has voiced on several occasions the desire for the Executing Agencies generally and FAO specifically to increase and diversify their participation in GEF supported projects and programmes.

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

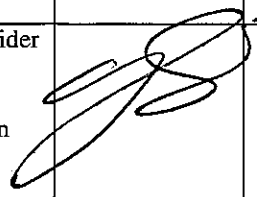
A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S):

(Please attach the country endorsement letter(s) or regional endorsement letter(s) with this template).

NAME	POSITION	MINISTRY	DATE *(Month, day, year)*
Fangyu Liu	GEF Operational Focal Point	Ministry of Finance	September 30, 2009

B. GEF AGENCY(IES) CERTIFICATION

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

Agency Coordinator, Agency name	Signature	Date *(Month, day, year)*	Project Contact Person	Telephone	Email Address
Charles Riemenschneider Director, Investment Centre Division Technical Cooperation Department FAO Viale delle Terme di Caracalla 00153, Rome, ITALY		December 11, 2009	Random DuBois Senior Environment Adviser FAO Investment Centre Division FAO Rome, ITALY	+3906 5705 5409	Random.Dubois@fao.org
Barbara Cooney FAO GEF Coordinator Email: Barbara.Cooney@fao.org Tel: +3906 5705 5478					