

SIGNATURE PAGE

Country: China \_\_\_\_\_

UNDAF Outcome(s)/Indicator(s): \_\_\_\_\_  
(Link to UNDAF outcome.. If no UNDAF, leave blank)

Expected Outcome(s)/Indicator (s): \_\_\_\_\_  
(CP outcomes linked to the SRF/MYFF goal and service line)

Expected Output(s)/Indicator(s): \_\_\_\_\_  
(CP outcomes linked to the SRF/MYFF goal and service line)

Implementing partner: \_\_\_\_\_  
(designated institution/Executing agency)

Other Partners: \_\_\_\_\_  
(formerly implementing agencies)

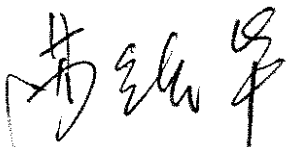
Programme Period: January 2005-December 2012 \_\_\_\_\_  
Programme Component: \_\_\_\_\_  
Project Title: Biodiversity Management in the Coastal Area of China's South Sea \_\_\_\_\_  
Project ID: \_\_\_\_\_  
Project Duration: 8 years \_\_\_\_\_  
Management Arrangement: National Execution \_\_\_\_\_

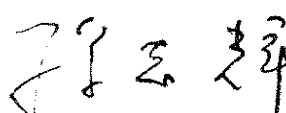
Total budget: USD 12,749,000  
Donor GEF (Full): USD 3,195,000  
GEF (PDFB): USD 320,000  
3,515,000  
Donor NOAA: USD 460,000  
Government in kind contributions: USD 8,774,000

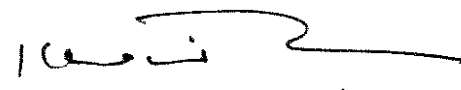
Agreed by  
(Government)

Agreed by  
(Implementing  
partner/Executing Agency)

Agreed by  
(UNDP)

  
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**中华人民共和国国家海洋局**

State Oceanic Administration (SOA)

The People's Republic of China

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Date 20/04/2005 Pages 1 Issued by [Signature]

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Cc: Mr. Li Rusong  
Mr. Ryuichiro John Hanawa

April 14, 2005

Dear Ms. Maria,

**Subject: NPD and NPM of BMCACAA project**

In full cooperation with your office, State Oceanic Administration (SOA) has achieved great progress in formulation of Project Document. And the signing ceremony of Prodoc was held in SOA on Feb. 2, 2005 successfully. Here please allow me to express my thanks for your long-term support, which greatly contributed to the success of Project.

According to the Prodoc, as an in-kind contribution to the project, SOA need to appoint two senior staff for position of National Project Director (NPD) and National Project Manager (NPM), which will play very important role in project execution, coordination and management. Here on behalf of SOA, I would like to inform you that Mr. Li Haiqing, Director General of Department of International Cooperation of SOA, will act as NPD, with Mr. Zhu Wenxi, Deputy Director of Division of International Organization acting as NPM.

Thanks for your consideration, and look forward to working with you more closely and successfully in the future.

Thanks again and best regards.

Sun Zihui [Signature]  
Deputy Administrator  
State Oceanic Administration  
P. R. China

# **UNDP Project Document**

**Government of China  
United Nations Development Programme**

## **Primary partners:**

State Oceanic Administration  
Guangxi Zhuang Autonomous Region  
Hainan Province  
Guangdong Province  
Fujian Province  
Zhejiang Province  
U.S. National Oceanic and Atmospheric Administration

## **Project Title:**

**Biodiversity Management in the Coastal Area of China's South Sea**

The objective of this project is the conservation and sustainable use of coastal and marine biological diversity in four sites along China's coastline. Upon successful completion of the project, stakeholders will be applying innovative and adaptive Marine Protected Area (MPA) and integrated coastal management practices to mitigate and prevent threats to coastal ecosystem integrity. In so doing, stakeholders will be utilizing new partnerships, conservation tools, information, and sustainable livelihoods to conserve coastal diversity in the priority sites.

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# Acronyms

AC	Advisory Committee
AMA	Adaptive Management Advisor
APR	Annual Project Report
BL	Budget Line
CBA	Conservation Biology Advisor
CBD	Convention on Biological Diversity
CICETE	China International Center for Economic and Technical Exchanges
DG	Director-General
DDG	Deputy Director-General
EE	Environmental Economist
GEF	Global Environment Facility
GEFSEC	GEF Secretariat
GIS	Geographic Information System
GoC	Government of China
HNDR	Hepu National Dugong Reserve
ICM	Integrated Coastal Management
ICZM	Integrated Coastal Zone Management
IPCC	Inter-Provincial Coordination Committee
LPSC	Local Project Steering Committee
MEPL	Marine Environmental Protection Law
M&E	Monitoring and Evaluation
MOF	Ministry of Finance
MPA	Marine Protected Area
MPAMA	MPA Management Advisor
NEA	National Executing Agency
NEX	National Execution
NGO	Non-Governmental Organization
NOAA	National Oceanic and Atmospheric Administration (USA)
NPD	National Project Director
NPM	National Project Manager
OFB	Ocean and Fisheries Bureau
PCU	Project Co-ordination Unit
PIC	Project Implementation Coordinator
PIR	Project Implementation Review
PSC	Project Steering Committee
RCO	Reporting and Contract Officer
RMB	Renminbi (unit of Chinese currency)
SBAA	Standard Basic Assistance Agreement
SNCRNR	Sanya Coral Reef National Reserve
SEPA	State Environmental Protection Administration
SIU	Site Implementation Unit
SNMR	Shankou National Mangrove Reserve
SOA	State Oceanic Administration
SRF	(UNDP) Strategic Result Framework
TOR	Terms of Reference
TPR	Tripartite Review
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific, and Cultural Organization
VCG	Village Conservation Group

# **Section I Elaboration of the Narrative**

## **Part Ia Situation Analysis**

The project will conserve and sustainably utilize coastal biological diversity in four sites on China's coast. A detailed description of the problems to be addressed is provided in the Baseline Section (paragraphs 30, 42, 50, 59, and 60) of the attached project brief. The relevant and intended outcomes in the Country Programme (Strategic Results Framework - SRF) are 1) "Environment and energy sustainability objectives integrated in macroeconomic and sector policies", and 2) "improved national capacity to negotiate and implement global environment commitments". The national institutional and legal framework is described in the Baseline Section (paragraphs 9-15) of the attached project brief. An independent review of the project design is provided in Annex C of the project brief.

## **Part Ib Strategy**

China's approach to sustainable development while "conserving biodiversity" and its national commitment to these goals are described in the Baseline Section and paragraphs 9-15 of the project brief. UNDP's programme has generated support for the sustainable development baseline and livelihood development. The specific activities undertaken through this project in support of policy development and strengthened national capacities are described in the outputs section of the project brief.

## Part II Results and Resources Framework

<p>Intended Outcome as stated in the Country Results Framework:</p> <p>Biodiversity, ecosystem services, protected areas and other commitments under the Convention on Biological Diversity integrated into national/local governance and production systems (including social, economic and policy frameworks such as MDGs, community participation, poverty reduction, sustainable land management, and key sectors such as agriculture, fisheries, forestry and energy).</p> <p>Outcome indicator as stated in the Country Programme Results and Resources Framework, including baseline and target</p> <p>Applicable MYFF Service Line</p> <p>Service Line 3.5: Conservation and sustainable use of biodiversity</p> <p><i>Partnership Strategy:</i></p> <p>UNDP builds strong stakeholder coalitions to allow participatory implementation of environment protection and management programmes on a sustainable basis. Such partnerships include UN Agencies, international funds, bilateral and multilateral organizations, China's national, regional, and local government bodies, national and international environmental NGOs, academic institutions and universities, local population and private sector. In doing so, the CO launched donor meetings on environment and continues to act as an informal secretariat for these meetings. On the programme level UNDP leads partnerships through Steering Committee meetings, stakeholder consultations, joint missions, etc.</p> <p>For the purpose of this project, the main partners are the State Oceanic Administration, the Five Governments of Hainan, Guangdong, Fujian, and Zhejiang Provinces and Guangxi Autonomous Region, and the U.S. National Oceanic and Atmospheric Administration.</p> <p><i>Project title and ID:</i></p> <p>Biodiversity Management in the Coastal Area of China's South Sea</p>
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Intended Outputs	Output targets	Indicative Activities	Inputs
OUTPUT CONSERVATION CAPACITIES STRENGTHENED AT NANJI ISLANDS	1. MPA infrastructure strengthened in measurable ways. 2. MPA staff skills demonstrably improved. 3. Biological monitoring program made operational. 4. The general public and school students in Nanji township and Pingyang County will know more about Nanji Island MPA.	1.1 Boundary markers, warning boards and enforcement infrastructure established in MPA. 1.2 Provide communications/other equipment for management and enforcement and new vehicle & boat (Gov't) (GEF) 1.3 Upgrade water and power supply systems at MPA. 2.1 Train staff in techniques of biodiversity conservation, data management and management decision-making & provide computer equipment for data management (GEF) 3.1 Establish an ecological monitoring station. 3.2 Develop standardized biodiversity monitoring/survey protocols. 4.1 Build a new education center. 4.2 Devise innovative and effective public educational and awareness raising program, including one for local schools and host at least 500 students.	
OUTPUT CONSERVATION CAPACITIES STRENGTHENED AT SANYA MPA	1. Long term survey and monitoring program operational. 2. Pilot coral reef transplantation is undertaken and results are assessed.	1.1 Develop long-term program for biological monitoring. 1.2 Conduct comprehensive baseline survey of coral reef conditions and species distributions within the reserve. 1.3 Establish and operate two biodiversity monitoring stations 1.4. Strengthen Sanya MPA enforcement by training and better equipping MPA staff. 1.5 Develop GIS-based maps of biodiversity hotspots in MPA for use by managers. 2.1 Identify healthy reef areas that could contribute to the recovery of the overall area. 2.2 Assess coral reef restoration options drawing upon best practices worldwide and Plan coral reef restoration program. 2.3 Conduct pilot coral reef restoration in pilot areas of Sanya 2.4 Monitor new coral growth in restoration sites 2.5 Train and equip MPA staff and volunteer divers to monitor coral health and recruitment.	
OUTPUT CONSERVATION CAPACITIES	1. Establish and strengthen information baseline for adaptive management.	1.1 Develop simple yet effective biodiversity survey protocols and conduct baseline surveys of habitats 1.2. Analyze baseline biological information to guide management planning,	

<p>STRENGTHENED AT SHANKOU MANGROVE RESERVE AND THE DUGONG RESERVE</p>	<p>2. Operational infrastructure and capacity of reserve strengthened</p> <p>3. Restore 50 ha of mangrove habitat and TBD ha seagrass habitat. (Co-financed)</p>	<p>using GIS and other techniques.</p> <p>1.3 Develop and implement simple, adaptive biodiversity monitoring program.</p> <p>1.4 Conduct ongoing, regular field surveys.</p> <p>2.1 Develop detailed management zones for MPA.</p> <p>2.2 Consult stakeholders and demarcate reserve boundaries/zones by end of year 1.</p> <p>2.3. Basic equipment for MPA in use by end of year 1</p> <p>2.4 Develop educational and awareness materials</p> <p>2.5 Implement training program to strengthen MPA capacity.</p> <p>3.1 Develop plan for removing stress/threats to mangrove/ seagrass habitat and implement before restoration begins.</p> <p>3.2 Seek out best practices for mangrove/seagrass restoration; among organizations with successful hands-on experience.</p> <p>3.3 Identify pilot areas for restoration where chances are especially good for a successful outcome.</p> <p>3.4 Implement pilot mangrove and seagrass restoration activities &amp; train staff in restoration methods and practice.</p>	
<p>OUTPUT 2.1 DEMONSTRATE INTEGRATED COASTAL ZONE MANAGEMENT MPA APPROACH TO TOWNSHIP PLANNING, MANAGEMENT AND DEVELOPMENT AT NANJI ISLANDS</p>	<p>1. Comprehensive township master plan for Nanji Islands under implementation.</p>	<p>1.1 Review existing development, management and zoning plans for Nanji area (GEF)</p> <p>1.2 Conduct socio-economic survey.</p> <p>1.3 Collect, review and synthesize relevant findings of marine biological studies, to current ecosystem status (GEF)</p> <p>1.4 Create and demonstrate GIS-based biodiversity overlays using data gathered under Output 1.1 for use in planning exercise</p> <p>1.5 Synthesize information and zone areas of priority use.</p> <p>1.6 Develop and secure adoption of a township-level master plan for Nanji Islands.</p>	
<p>OUTPUT 2.2 INTEGRATED POLLUTION CONTROL IS DEMONSTRATED AT SANYA MPA</p>	<p>1. Link biodiversity conservation, with pollution reduction/control.</p>	<p>1.1 Integrate data on species/habitat with pollution data to ascertain the pollution threat to Sanya biodiversity.</p> <p>1.2 Highlight and quantify the ecosystem benefits safeguarded by SNCRN and raise awareness among officials of the importance of pollution control investments</p> <p>1.3 Government invests in effective pollution control/waste water treatment measures around Sanya; monitor impacts.</p>	<ul style="list-style-type: none"> <li>•</li> </ul>
<p>OUTPUT 2.3 DEVELOP AND APPLY</p>	<p>1. Develop funding mechanisms (fees, tax incentives/disincentives, penalties/fines).</p>	<p>1.1. Determine annual recurrent costs of MPA management ICZM planning and review existing financing mechanism experience in China and associated</p>	

<p>SUSTAINABLE FINANCING MECHANISMS FOR SANYA RESERVE MANAGEMENT. (DEMONSTRATION)</p>		<p>laws/regulations.  1.2 Conduct “willingness to pay” surveys to determine proper user fees and assess various options for funding mechanisms.  1.3 Develop sustainable financing mechanisms to support Sanya MPA operations and introduce to decision makers through roundtable discussions and workshops.  1.4 Train MPA staff and relevant institutions in financial planning, emphasizing cost-recovery and other best practices.  1.5 Pilot sustainable finance mechanism for Sanya MPA management/ICZM planning.</p>	
<p>OUTPUT 2.4:  DEMONSTRATE PARTICIPATORY CO-MANAGEMENT AND SUSTAINABLE LIVELIHOOD STRATEGIES AT SHANKOU MANGROVE RESERVE</p>	<p>1. MPA’s capacity to work effectively with local communities is strengthened and vice versa.  2. Stakeholders pursuing alternative livelihoods.</p>	<ul style="list-style-type: none"> <li>● 1.1 Investigate participatory management experiences from other projects in China and apply lessons.</li> <li>● 1.2 Consult with local leaders and stakeholders and develop participatory management program.</li> <li>1.3 Enable stakeholders to establish a new NGO to serve as the main local community partner of the MPA.</li> <li>1.4 Training to MPA/NGO staff in participatory management</li> <li>1.5. Strengthen local capacity for participatory management by organizing stakeholders into VCG around the MPA.</li> <li>1.6 Develop management roles/responsibilities of VCGs and NGO and develop agreements between MPA and the groups.</li> <li>1.7 Undertake innovative public awareness/education program based upon best practice and experience from other projects in China as well as Asia. (GEF)</li> <li>2.1 Overcome knowledge barriers, establish links to viable markets for local resources, and help stakeholders access financing for new, sustainable livelihoods (GEF/Gov’t)</li> </ul>	

<p>OUTPUT Establish MPA process at Weizhou Island.</p> <p>2.5: Model designation at Weizhou Island.</p>	<p>1. Comprehensive assessment of Weizhou Island for possible MPA designation.</p> <p>2. Weizhou MPA is legally established and operationalized.</p> <p>3. Untreated solid waste and domestic sewage levels are reduced.</p>	<p>1.1 Summarize and translate key lessons/best practices for MPA establishment from international sources</p> <p>1.2 Conduct surveys on: biological, ecological and socio-economic subjects to identify priority biodiversity areas and important socio-economic parameters. (GEF)</p> <p>1.3 Regularly consult with local communities as important partners in the MPA process.</p> <p>1.4 Prepare practical report synthesizing survey data &amp; including high-quality maps and circulate for review by PSC.</p> <p>2.1 Prepare master plan for establishment of MPA in cooperation with local stakeholders.</p> <p>2.2 Acquire right of the use of the land and law is passed establishing the MPA.</p> <p>2.3 Develop infrastructure for MPA.</p> <p>2.4 Reserve is fully staffed, operational costs funded &amp; Capacity of staff is strengthened</p> <ul style="list-style-type: none"> <li>• 3. 1 Gov't establishes solid waste treatment infrastructure.</li> </ul>
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<p>OUTPUT 2.6: DEMONSTRATE INTER-PROVINCIAL CO-OPERATION ON ICM BIODIVERSITY CONSERVATION AT DONGSHAN-NAN'AO MIGRATORY CHANNEL</p>	<p>1: Inter-provincial cooperative program in place and operational.  Strengthened inter-provincial capacity for sustainable development and ICM.  2: Priority habitats identified and conserved.  3: Primary threats to priority migratory species (Chinese white dolphins, sea turtles, horseshoe crabs) measurably mitigated/reduced.  [Note – Targeted Output 4 combined with TO 1 above)</p>	<p>1.1 Provinces establish inter-provincial joint committee on ICM and biodiversity conservation. 1.2 Develop and implement two functional land and water-use planning and zoning program, in contiguous areas of each province (Provincial Gov't's). 1.3. Implement regulatory and/or technological solutions to address target fisheries, locations and seasons (Gov't) 2.1 Establish management and monitoring stations for horseshoe crabs; Prepare plan to establish an MPA for Chinese horseshoe crab (Gov't) 2.2 Prepare and implement inter-provincial strategy and action plan for marine habitat/species protection and recovery. 2.3 Identify and designate islands ecological recovery and implement a recovery strategy (Gov't) and conduct beach cleanups involving school groups (Government, GEF) 3.1 Conduct field surveys to determine species distribution, migration routes, and priority habitat; (e.g. 'priority marine turtle nesting beaches/feeding grounds in the region.) 3.2 Gather more detailed information on the nature of the main threats to biodiversity (e.g. by-catch). 3.3 Apply GIS as a tool to analyze data and assess threats to migratory species. 3.4. Formulate and implement an inter-provincial action plan for marine habitat migratory species protection and the recovery of Dongshan-Nan'ao as well as species-specific plans. 3.5. Establish and operate a migratory species and marine mammal rescue center in Dongshan (Gov't). 3.6 Inform and educate fishermen about marine conservation and migratory species conservation (GEF)</p>	
<p>OUTPUT LESSONS EXCHANGED ACROSS PROJECT SITES.</p>	<p>1: Lessons are exchanged across project sites.</p>	<p>1.1 Organize MPA and international staff exchanges with other GEF projects; 1.2 Establish cross-site thematic learning groups. 1.3 Rotate staff among the project MPAs 1.4 Round table discussions and annual presentations of lessons learned from various sites.</p>	

<p>OUTPUT 3.2: STAKEHOLDERS ASSESS LESSONS LEARNED AND SYNTHESIZE AND DISSEMINATE TO KEY STAKEHOLDERS NATIONALLY AND INTERNATIONALLY.</p>	<p>1: Project experiences and their relevance to other sites assessed and best practices/lessons summarized.</p> <p>2: Lessons learned and best practices handbook.</p> <p>3: Lessons learned and best practices are shared via round table discussions, training courses, and world-wide web postings.</p>	<p>1.1 Analyze and synthesize results of demonstrations and produce short, easily understandable, and useful summaries of lessons learned and best practices.</p> <p>1.2 Conduct one adaptation study per site linking results of demonstration outputs and an analysis of remaining threats at project sites &amp; Develop an approach/blueprint for addressing remaining threats and underlying causes at each site</p> <p>2.1. Develop and disseminate lessons learned/best practices handbook derived from the project's experience.</p> <p>3.1 Organize round-table discussions.</p> <p>3.2 Organize national workshops/meetings site stakeholders and other interested parties utilizing the handbook in topics that require more training and where there is interest.</p> <p>3.3 Establish project web site and hyperlink it with other related reference sites.</p>	
<p>OUTPUT 3.3 PROJECT EXPERIENCE ADAPTED TO EACH SITE IMPLEMENTED, WHERE APPROPRIATE AND RELEVANT TO THREAT REMOVAL.</p>	<p>1: Nanji begins adopting lessons learned/tools from other sites.</p> <p>2: Sanya begins adopting lessons learned/tools from other sites.</p> <p>3: Shankou-Weizhou begins adopting lessons learned/tools from other sites.</p> <p>4: Dongshan-Nan'ao begins adopting lessons learned/tools from other sites.</p>	<p>1.1 At Nanji Islands, this means: (i) develop sustainable financing plan. (ii) make new investments in solid waste management and sewage treatment; (iii) Participatory management and alternative livelihood development.</p> <p>2.1 At Sanya, this means: (i) Participatory management and alternative livelihood development for local residents; and (ii) Undertaking an integrated approach to resource planning.</p> <p>3.1 At Shankou-Weizhou this means:  (i) Sustainable financing plan for each MPA developed; (ii) Develop and apply marine resource-use zones for Guangxi and Beihai City (WI, DR); (iii) Develop and implement regulatory controls on industrial pollution of MPA (WI); (iv) Local government establish sewage treatment plant and improve solid waste disposal system for island (WI).</p> <p>4.1 At Dongshan-Nan'ao, this means: (i) Develop and implement migratory species action plan.</p>	

<p>PROJECT IMPLEMENTATION &amp; ADAPTIVE MANAGEMENT:</p>	<ol style="list-style-type: none"> <li>1. Regular PSC meetings and guidance</li> <li>2. Report on Inception report</li> <li>3. Annual Project Report (APR)</li> <li>4. Annual Tripartite Reviews (TPR)</li> <li>5. Annual review of project's work experiences and assessment of best practices.</li> <li>6. Second phase of project brief prepared by end of year 3.</li> </ol>	<ol style="list-style-type: none"> <li>1. Conduct regular steering committee meetings;</li> <li>2. Report on project progress per UNDP requirements;</li> <li>3. Prepare an Inception report;</li> <li>4. Prepare Annual Project Report (APR);</li> <li>5. Conduct annual Tripartite Reviews (TPR);</li> <li>6. Prepare Project Implementation Review (PIR) reports prior to terminal evaluation for Phase I;</li> <li>7. Ongoing review and analysis of project's work and experiences to develop best practices;</li> <li>8. Organize round table discussions;</li> <li>9. Prepare second phase project brief by e/o year 3;</li> <li>10. Submit project brief for second phase by beginning of year 4.</li> </ol>	
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## Part III Management Arrangements

Project implementation arrangements are designed to accommodate the fact that project sites are thousands of kilometers from Beijing. Every effort has been made to streamline and decentralize UNDP's normal service delivery procedures in the interest of cost-effective and time-efficient project management.

As the window for GEF in China, on behalf of the Chinese Government, the Ministry of Finance (MOF) will be the recipient of GEF grant. The State Oceanic Administration (SOA) is designated by the Chinese Government as the Executing Agency (i.e. UNDP's "Designated Institution"). The management of the project will be included in the whole coordination system of MOF.

The responsibilities of MOF are as follows:

1. Coordination from the country level;
2. Supervision of the implementation of the project;
3. Management of a special grant account;
4. Organization of post-evaluation from China side.

Project execution will adhere to UNDP "national execution" project implementation requirements. The administration of project funds will be the joint responsibility of the UNDP and the GoC. UNDP will oversee and verify the proper use of funds through: the "cash advance request"; quarterly work plans, quarterly financial reports; Combined Delivery Reports (and/or other reports generated from UNDP's project management software); budget revision approval; periodic visits to SOA and the Project Coordination Unit; regular communication with the National Project Director and Project staff; site visits; dialogue with project stakeholders, and annual project audits. Additionally, as an officially designated GEF "Implementing Agency," UNDP is accountable to the GEF for all aspects of project implementation. The UNDP/GEF Executive Coordinator is required to report on project delivery to the GEF Secretariat and GEF Council. Therefore, the UNDP/GEF Regional Coordinator maintains a role in monitoring project implementation and ensuring GEF funds are used in accordance with GEF eligibility rules, policies and norms.

The SOA's responsibilities as the national executing agency (or the "Designated Institution" in UNDP terminology) will include:

- 1) Planning for and monitoring of the technical aspects of the project, including regular project visits and monitoring progress benchmarks and outputs, preparation and submission of periodic progress and technical reports, and regular consultations with beneficiaries and contractors;
- 2) Chairing the Project Steering Committee and annual Tripartite Review meetings;
- 3) Developing and reviewing work plans;
- 4) Procuring goods and services on a transparent and competitive basis, e.g., review and approval of TOR/specifications for personnel/contractors/vendors and required bidding documentation, and awarding and entering into contracts of recruitment or procurement with support from UNDP China Country Office (Agreement attached as Appendix B9);
- 5) Maintaining a separate project account for the accountability of project funds;
- 6) Ensuring advanced funds are used in accordance with agreed work plans and project budget;
- 7) Preparing, authorizing and adjusting commitments and expenditures; ensuring timely disbursements, financial recording and reporting against budgets and work plans (in English);
- 8) Managing and maintaining budgets, including tracking commitments, expenditures and planned expenditures against budget and work plan (in English);



- 9) Coordinating the financing from UNDP/GEF with that from other sources;
- 10) Resource mobilization of baseline and co-finance as contemplated in the project document.
- 11) Maintaining productive, regular and professional communication with UNDP and other project stakeholders to ensure the smooth progress of project implementation.

The UNDP will be responsible for the following:

- 1) Implementation oversight: The UNDP Country Office, working with the UNDP-GEF Regional Coordinator, will provide technical and administrative support and monitor project implementation in order to ensure results-oriented project implementation and achievement of the project outputs. This will include participation in project work-planning exercises, including monitoring missions.
- 2) Supporting SOA and the PCU to fulfill their responsibilities by assessing management capacity needs and providing necessary training and capacity support measures (i.e. introduction and sensitization to UNDP work-planning, adaptive management and financial reporting requirements, formats and processes)
- 3) Financial oversight. UNDP will make available approved GEF funds. It will maintain a reasonable level of due diligence with respect to the project's expenditures of GEF funds in order to ensure the proper administration of UNDP-GEF funds and that a proper project budget and accounting of project expenditures are maintained. UNDP will monitor resource mobilization of baseline and co-finance as contemplated in project document.
- 4) UNDP may provide other assistance upon request of the SOA, through Letters of Agreement for Support Services (as per the UNDP Programming Manual). Financial transactions and reporting will be subject to annual audits undertaken by accredited auditors in compliance with national regulations and UNDP rules and procedures for national execution.
- 5) Ensuring that GEF funds are used in accordance with GEF eligibility rules, policies and norms in order to achieve the expected outcomes approved by the GEF Council. Fulfilling all other duties and obligations as a GEF Implementing Agency.

A Project Steering Committee (PSC) will be formed to provide overall guidance and support to project implementation activities. The PSC will meet annually to review the project and set major policy and implementation directions. The PSC will consist of one DG or DDG level member from each of the following organizations: SOA, NOAA, UNDP, Governments of Guangdong, Hainan, Fujian, and Zhejiang Provinces and Guangxi Autonomous Region. The PSC will monitor the project's implementation to ensure timely progress in attaining the desired results, and efficient coordination with other projects. The more specific functions of the PSC are to be found in the Terms of Reference in Appendix B2.

The National Project Director (NPD) will chair the PSC. The NPD will be designated by the Government and will be responsible for carrying out the directives of the PSC and for ensuring the proper implementation of the project on behalf of the Government. In doing so the NPD will take responsibility for management, reporting, accounting, monitoring and evaluation of the project and for proper management and auditing of the project resources. As the Designated Institution's formal project representative, the NPD is accountable for the successful delivery of expected project outputs.

A Project Coordination Unit (PCU) will be established in Beijing within the Department of International Cooperation of SOA. The PCU staff will be responsible for day-to-day implementation of the project, coordinating and managing project activities in accordance with the rules and procedures of UNDP/GEF, the National Execution (NEX) Manual, and based on the general guidance provided by the Project Steering Committee (PSC). The PCU will be comprised of a National Project Manager (NPM), a project implementation coordinator (PIC), and a reporting and contracts officer (RCO). The PCU will also have access to periodic input from contract personnel as required. The PCU will be located in Department of International Cooperation of SOA.

The NPM will be a staff member from the Department of International Cooperation of SOA. The PIC and RCO will be full time employees of the project. The PIC will report to the NPD and UNDP when requested and will help NPM to oversee day-to-day implementation of the project. The PIC and RCO will report to the NPD and UNDP and will be responsible for enabling the site-based implementation of project activities. Project staff will be hired using standard UNDP NEX hiring procedures in China, including a transparent process of open advertisement and individual project contracts for all project-funded positions. The PCU will invite UNDP to utilize its networks and experience in recruiting international positions to ensure best available expertise are hired.

An international expert on adaptive management, monitoring, and evaluation will also be part of the PCU. The position will provide ongoing results-oriented, adaptive management input to the PCU and to the project implementation process. This expert will undertake periodic visits to the PCU and to the project sites to review the progress of project implementation. The expert will monitor and evaluate the implementation of all demonstration components and will assist the NPM and the PSC in ensuring that the project implementation maintains its focus on achieving good, measurable results. This expert will also help to introduce international best practices to the project sites.

One Local Project Steering Committee (LPSC) will be formed in each site to facilitate implementation of project activities. The site implementation managers will liaise directly with each LPSC, which will be comprised of representatives from relevant agencies at provincial level and local municipalities, counties and sites, and at least one member from Stakeholder Advisory Group. The level of participation of LPSC will be finalized during Inception Phase upon the acceptance of SOA and UNDP. Specific LPSC membership will be reported to the PSC and will ensure that project implementation activities are open to other relevant agencies input. Each LPSC will approve the work plan developed for their respective site. Government officials or other co-funder representatives from the private or bilateral entities on the LPSC will be responsible for ensuring that co-funding support is provided in a timely and effective manner.

Five Site Implementation Units (SIU) will be established. These SIU will be modest in their level of staffing because the project will be implemented on a day-to-day basis by relying on staff assigned to the SIU by the respective Bureaus of Ocean and Fisheries, MPAs, and Municipalities. SOA will work with each Province, Autonomous Region, and Municipality to ensure that the SIUs are staffed with extraordinary employees. The PCU will interact regularly with each of the five site implementation managers based in each SIU.

Details of sites implementation arrangements will be worked out during Inception Phase. Experiences and lessons from other projects will be extracted by UNDP China Country Office and fed into the design of those sites level management arrangements.

In Sanya, the SIU will be led by the Director of the Oceans and Fisheries Bureau Office in Haikou City and will work closely with the MPA staff and municipality staff.

In Shankou, the SIU office will be led by the Director of Guangxi Autonomous Region Oceans Bureau, which is in charge of MPA administration. Two part-time staff from the Guangxi Autonomous Region Oceans Bureau will staff this office, which will work closely with the MPA and municipality staff.

In Fujian and Guangdong, because it is a cross province site, implementation arrangements will be slightly different. An Inter-Provincial Coordination Committee (IPCC) chaired by Directors from two province's Oceans Bureau on a rotationally basis will be established prior to the project's first Steering Committee meeting. The IPCC will be comprised of high-level

provincial authorities and one member from SOA.

Agencies will hold meetings directly through a joint-agency working group to be established and comprised of mid-level officials from each of the two Oceans and Fisheries Bureaus.

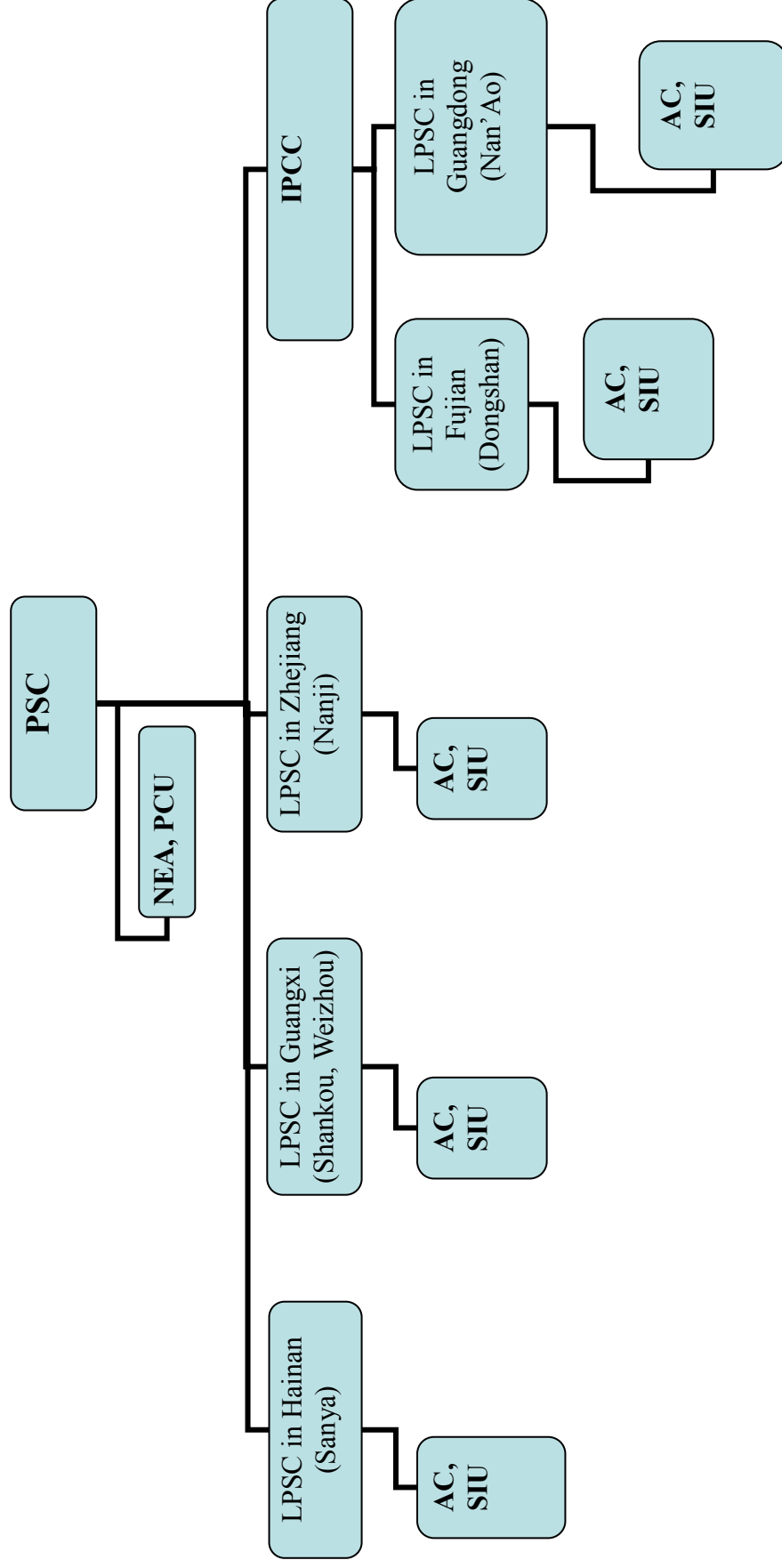
Fujian and Guangdong will establish their own SIUs and LPSCs. The Director of each respective Oceans and Fisheries Bureaus will staff each SIU.

Nanji Island. If practicable, the SIU will be established on Nanji Island. If not, it will be in the Department of Ocean and Fisheries of Zhejiang Province. The Director of the Nanji MPA and his/her support staff will staff the SIU.

In order to encourage stakeholder participation, an Advisory Committee (AC) of direct resources users will be established at each site, which will involve stakeholders from fishery association, aquaculture association and tourism sector etc. At least one member from the Advisory Committee of a site will join the LPSC at that site. By setting up site Advisory Committees, it is to make sure that project implementation activities are open to stakeholder input.

The project will rely on sub-contracts to research institutes and local municipal and provincial departments to produce a significant number of project outputs. In the case of subcontracts to local, municipal and provincial departments, the funding would support actions taken by staff (and non-staff) that are above and beyond their defined roles and responsibilities under their government positions. Therefore, in a normal tendering process for subcontracts, entities responsible for resource management (e.g., competent provincial, county or other level government departments, MPA management, research institutes, and universities etc.) should be allowed to send their bids and offers to carry out subcontracts. The executing agency chooses the most qualified and suitable bidder for a particular subcontract, after the reviews of a bid evaluation body and the Contract Committee of the executing agency, according to the provisions of the National Execution Manual. In procurement and sub-contracting, requests for waivers of competitive bidding (direct contracting) may be granted by the Contract Committee and UNDP under one or more of the conditions described in the National Execution Manual and UNDP Procurement Manual.

## Management Structure for the Project



### ***Inception Phase***

The initial cash advance will be made to undertake an Inception Phase, with the aim of staffing and establishing the PCU, building implementation capacity, preparing detailed project work plans and detailing the M&E Plan with measured baseline impact and progress indicators (see section “M&E Plan”). Terms of Reference for the Inception Phase are included in Annex 1.1.

## **Part IV Monitoring and Evaluation**

The standard M&E procedures required for all UNDP/GEF projects apply, including:

### **Tripartite Review (TPR)**

A tripartite review is a policy-level meeting of the parties directly involved in the project. It is an important and formal event in the monitoring process. It aims: to assess the progress of the project and to take decisions on recommendations to improve the design and implementation of the project in order to achieve the expected results. A tripartite review must be held once a year. In exceptional circumstances, there may be more than one TPR during a year. The following parties participate in the TPR:

The Government: Ministry of Finance (MOF) as the GEF focal point,  
The Designated Institution (SOA), and other concerned agencies;  
UNDP;  
The Project Team as observers; and  
Other main stakeholders, including other United Nations agencies and other donors, as deemed appropriate.

### **Combined Annual Project Report (APR) and Project Implementation Review (PIR)**

A combined format serves as the basis for both UNDP and GEF annual reporting requirements. The APR/PIR is used as an input to the Tripartite Review (TPR) and must be ready two weeks prior to the TPR meeting. It may be completed and submitted via UNDP-China to the UNDP/GEF Regional Coordinator at any time, so long as it covers the July-June GEF reporting period. Normally it is submitted to the Regional Coordinator at the same time it is prepared for the TPR, with revisions made taking into consideration TPR outcomes.

The PCU is responsible for preparing the APR/PIR, which also includes information about the co-financing status. The NPD will present the report at the TPR meeting. UNDP-China is responsible for submitting the report to the UNDP/GEF Regional Coordinator in order to meet GEF reporting requirements. It should be noted that the UNDP/GEF Regional Coordinator is responsible for submitting the APR/PIR for GEF purposes and therefore must be satisfied with the content.

### **Quarterly Operational Report**

Each quarter, the NPM is required to prepare a 100-word summary of the project's substantive and technical progress towards achieving its objectives. The summaries are reviewed and cleared by UNDP-China before being sent to the UNDP/GEF Regional Coordinator.

### **Budget Revisions**

Project Budgets Revisions are signed by the Designated Institution (SOA) and UNDP Resident Representative. An annual revision is mandatory and must be completed by 10 June. This is to reflect the final expenditures for the preceding year and to enable the preparation of a realistic plan for the provision of inputs for the current year. Other budget revisions may be undertaken as necessary during the course of the project. It is expected that significant revisions will be cleared with the UNDP/GEF Regional Coordinator for consistency with the GEF principle of incrementality and GEF eligibility criteria before being approved.

### **Substantive Project Revisions**

Substantive revisions are defined as set out in the UNDP Programming Manual and allow for substantive changes in the project's objectives, immediate objectives, duration, scope of intervention, or project sites. Such revisions are undertaken in accordance with the UNDP Programming Manual and should be endorsed by the Steering Committee. In addition, if the substantive project revision includes changes to the agreed use of GEF funds, it must be cleared by the Executive Coordinator UNDP/GEF before being signed.

### **Mid-term and Final Independent Evaluations**

A mid-term evaluation is scheduled to be conducted in 2006 and a final evaluation in 2010. Both evaluations will be undertaken in accordance with UNDP procedures, also taking into account specific GEF requirements. Terms of Reference will be developed by UNDP-China with input from UNDP/GEF, the PCU and SOA. An independent evaluation team will be commissioned by UNDP to conduct the evaluations.

UNDP/GEF's contribution to the evaluations will include:

- Review and provide comments on draft TOR
- Agree on timing and scope of evaluation mission
- Agree to final TOR
- Organize GEFSEC arrangements and requirements, if the evaluation has been identified for a GEFSEC Managed Project Review.
- Provide nominations for international consultants
- Review short-list candidates for both international and national consultants
- Agree with UNDP-China on final candidates
- Participate in evaluation mission if necessary
- Provide input to the evaluation mission and respond to evaluation consultant's questions
- Review and provide comments on draft evaluation report
- Support UNDP-China, the PCU and SOA in addressing recommendations and applying lessons.

Guidelines for conducting Terminal Evaluations of GEF-funded projects are included in the M&E Plan Terms of Reference.

### **(GEF) Secretariat Managed Project Review (SMPR)**

The GEF has recently commenced a program of reviewing projects to assess progress towards the delivery of expected global environment benefits. These reviews may be desk-based or field-based. They are undertaken by a team of representatives from the GEF Secretariat, GEF Agencies (UNEP, World Bank and GEF Executing Agencies such as ADB) and an observer from UNDP/GEF. SMPRs are normally designed to coincide with projects' mid-term evaluations.

### **Monitoring and Evaluation (M&E) Plan**

This project is designed to integrate M&E into the fabric of project implementation. M&E is a crucial part of the project's emphasis on knowledge management/adaptive management, as well as its emphasis on lessons learned through the many round table discussions and workshops to be held to discuss and reflect upon lessons being learned.

A Monitoring & Evaluation work plan will be detailed during the Inception Phase of the project, which will allow for a critical assessment of project performance by showing the schedule of related activities, their cost including co-financing and the expected outputs and achievements according to the established benchmarks and milestones. The work plan will be one of the main

tools for monitoring and evaluating the progress of the project and will be a critical tool for the Adaptive Management Advisor. There will also be a critical link to the Knowledge Management Strategy to be applied by the project. These links will be strengthened and formalized into the project's work plans during the Inception Phase.

Background on Monitoring, Evaluating and Reporting: Monitoring and evaluation should be interactive and mutually supportive activities. Monitoring is a continuous process of collecting and analyzing information to measure the progress of a project toward expected results. Monitoring provides managers and participants with regular feedback that can help determine whether a project is progressing as planned. Formal evaluations are periodic assessments of project performance and impact. Evaluations also document what lessons are being learned from experience. Generally, individuals involved in managing a project are charged with monitoring. By contrast, individuals independent of project operations conduct evaluations.

Reporting is the systematic and timely provision of essential information. It is an integral part of the monitoring and evaluation function. Monitoring, reporting and evaluation are management functions that could also be described as observing project progress (monitoring), documenting the observed information (reporting) and assessing on the basis of the above (evaluating).

Monitoring. This project has a comprehensive monitoring and evaluation program included in its overall design. An information baseline on the level and extent of threats to biodiversity in each site will be established during the first year of the project to provide a basis for future monitoring and evaluation. Project progress will be informally monitored on a continuous basis through a give and take of information between the PCU and the SIUs and annually through an organized review of progress towards milestones. Indicators of success are included in the project's Logical Framework and will be utilized on a continuous basis as the project monitors and evaluates its progress. These indicators will be bolstered during the first year of the project when more specific indicators of: 1) threat reduction and coastal ecosystem/biodiversity health will be developed based upon baseline surveys. Baseline surveys will: 1) determine the nature and extent of threats in each site to be reduced; 2) conduct ecological surveys within the site areas to determine specific health and size of key habitats and richness of habitat mosaic; 3) conduct attitude and awareness level surveys of key stakeholder groups, from top-level policy makers to local village level stakeholders; and 4) conduct economic surveys of local communities around site areas to quantify their use of marine resources and their current income levels.

Monitoring will be ongoing, involving data collection and assessment of the project's field implementation and will involve key project staff meeting annually to review operations and field implementation and assessing whether new priorities require a shift in project implementation. In addition to this, the project will be subject to standard UNDP/GEF monitoring requirements.

The NPM will prepare and submit quarterly narrative reports to the NPD and UNDP. The project manager will be required to produce a combined Annual Project Report (APR)/ Project Implementation Review (PIR). The report is designed to obtain the independent views of the main stakeholders of a project on its relevance, performance and the likelihood of its success. The APR/PIR then supports an annual Tripartite Review (TPR) meeting of the parties directly involved in the implementation of a project.

**Summary of Milestones:** The following is a summary of milestones to help guide monitoring and evaluation work. The workplan prepared for this project document is a summary workplan, which in effect contains milestones by the six month increment to allow for more



detailed monitoring and to enable project managers to more easily develop even more detailed annual workplans once the project begins operation.

<b>End of Year Outcome Milestones for Project Implementation</b>	<b>Years</b>							
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
Specific threat-based indicators and overall baseline established in each site	X							
Nanji – MPA infrastructure upgraded by GEF and Government funding	x							
Sanya – Coral reef pilot restoration program developed and underway in Sanya	x							
Shankou – Mangrove restoration program developed and underway in Shankou	x							
Dongshan Nan’ao – Interprovincial join committee for coastal conservation established and operational	x							
Project’s results-oriented approach describes how it is/is not making progress on meeting its indicators of success during in-house evaluation.		X						
Framework and methodology established for developing master plan at Nanji		x						
Integrated pollution control/habitat conservation program developed a Sanya & coral transplant efforts achieving promising results.		x						
Field surveys completed and interprovincial species conservation plan completed for Dongshan-Nan’ao		x						
Cross-site learning groups established and staff exchanges and round table discussions on lessons learned begin		x						
Funding proposals successfully incorporated in PRC’s 5-year plan to apply lessons learned in other sites.			X					
Comprehensive Nanji township master plan under implementation by end of year three			x					
Integrated pollution control/habitat conservation program under full implementation and coral transplant/restoration progressing according to plan.			x					
Awareness of key decision makers in Sanya measurably increased in environmental economics, ecosystem services, and funding mechanism proposal under consideration.			x					
Weizhou MPA established and under full operation			x					
Five-year plan funding for follow-on projects from PRC begins.				X				
Funding mechanism(s) for Sanya is accepted by national/local authorities and piloted in Sanya				x				
Stakeholders pursuing new, more sustainable alternative livelihoods in Shankou and Weizhou				x				
Community-based management under full operation in Weizhou and Shankou				x				
Land and water use (coastal resource use) zoning plan under use in cross-province Dongshan-Nan’ao				x				
Fishermen/women awareness measurably improved, beach habitat restored, and management stations for horseshoe crabs established.				x				

Replication of lessons learned each site continues with PRC, regional & local funding.					X	X	X	X
Milestones to be developed for years 5-8 in latter half of year 3, first half of year 4.			x	x				
Nanji adopts lessons learned/tools from other sites.					x	x	x	x
Sanya adopts lessons learned/tools from other sites.					x	x	x	x
Dongshan-Nan'ao adopts lessons learned/tools from other sites.					x	x	x	x
Shankou-Weizhou adopts lessons learned/tools from other sites.					x	x	x	x

## Part V Legal Context

This Project Document shall be the instrument referred to as such in Article I of the Standard Basic Assistance Agreement (SBAA) between the Government of the People's Republic of China and the United Nations Development Programme, signed by the parties on 29 June 1979. The host country implementing agency shall, for the purpose of the Standard Basic Assistance Agreement, refer to the government co-operating agency described in that Agreement.

UNDP acts in this Project as an Implementing Agency of the Global Environment Facility (GEF), and all rights and privileges pertaining to UNDP as per the terms of the SBAA shall be extended *mutatis mutandis* to GEF.

The UNDP Resident Representative in China is authorized to effect in writing the following types of revision to this Project Document, provided that he/she has verified the agreement thereto by UNDP/GEF Unit and is assured that the other signatories to the Project Document have no objection to the proposed changes:

- a) Revision of, or addition to, any of the annexes to the Project Document;
- b) Revisions which do not involve significant changes in the immediate objectives, outputs or activities of the project, but are caused by the rearrangement of the inputs already agreed to or by cost increases due to inflation;
- c) Mandatory annual revisions which re-phase the delivery of agreed project inputs or increased expert or other costs due to inflation or take into account agency expenditure flexibility; and
- d) Inclusion of additional annexes and attachments only as set out here in this Project Document.

## **Section II Total Budget and Workplan**

**INSERT ERP Format budget upon prodoc signature by all parties**

<b>Budget under FIM System</b>											
BL	Description	(w/m)	GEF (US\$)	2005	2006	2007	2008	2009	2010	2011	2012
<b>10</b>	<b>PERSONNEL</b>										
<b>11</b>	<b>International</b>										
11.01	Adaptive management Advisor	4	88,000	16,000	20,000	20,000	16,000	16,000			
11.02	ICZM Advisor on Best Practices	2	36,000		18,000	18,000					
11.03	Conservation biology advisor	3	54,000		18,000		36,000				
11.04	Urban/rural land-use planning	1.75	31,500		31,500						
11.05	MPA management advisor	3	54,000	18,000	18,000	18,000					
11.06	Environmental economist	3	54,000	18,000		36,000					
<b>11.99</b>	<b>Sub-total:</b>		<b>317,500</b>	<b>52,000</b>	<b>105,500</b>	<b>92,000</b>	<b>52,000</b>	<b>16,000</b>			<b>0</b>
<b>15</b>	<b>M&amp;E</b>										
15.01	Mid-term evaluation (month 33)		60,000				60,000				
15.02	Final evaluation (month 90)		40,000								40,000
15.04	Adaptive Management Monitoring by SOA, UNDP, and MOF		40,000	12,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000
<b>15.99</b>	<b>Sub-total</b>		<b>140,000</b>	<b>12,000</b>	<b>4,000</b>	<b>4,000</b>	<b>64,000</b>	<b>4,000</b>	<b>4,000</b>	<b>4,000</b>	<b>44,000</b>
<b>16</b>	<b>Travel</b>										
	Local Travel										
16.01	PCU		28,000	7,000	7,000	7,000	7,000				
16.02	Shankou		12,500	3,125	3,125	3,125	3,125				
16.03	Sanya		12,500	3,125	3,125	3,125	3,125				
16.04	Fujian-Guangdong		12,500	3,125	3,125	3,125	3,125				
16.05	Nanji		12,500	3,125	3,125	3,125	3,125				
<b>16.99</b>	<b>Sub-total</b>		<b>78,000</b>	<b>19,500</b>	<b>19,500</b>	<b>19,500</b>	<b>19,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>17</b>	<b>National Professionals</b>										
17.01	Project Implementation Coordinator	48	57,600	14,400	14,400	14,400	14,400				

17.02	Reporting and Contracts Officer	48	57,600	14,400	14,400	14,400	14,400						
	Technical support consultants		0										
17.03	<b>technical support consultant for PCU</b>	10	40,000	7,000	11,000	11,000	11,000						
17.04	<b>technical support consultant for Shankou</b>		8,600	2,000	2,200	2,200	2,200						
17.05	<b>technical support consultant for Sanya</b>		8,600	2,000	2,200	2,200	2,200						
17.06	<b>technical support consultant for Fujian-Guangdong</b>		8,600	2,000	2,200	2,200	2,200						
17.07	<b>technical support consultant for Nanji</b>		8,600	2,000	2,200	2,200	2,200						
17.99	<b>Subtotal</b>		<b>189,600</b>	<b>43,800</b>	<b>48,600</b>	<b>48,600</b>	<b>48,600</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
19	<b>Component Total</b>		<b>725,100</b>	<b>127,300</b>	<b>177,600</b>	<b>164,100</b>	<b>184,100</b>	<b>20,000</b>	<b>4,000</b>	<b>4,000</b>	<b>4,000</b>	<b>4,000</b>	<b>44,000</b>
20	<b>CONTRACTS</b>												
21	<b>Shankou</b>												
21.01	SC1: Shankou: Sustainable use and participation by local resource users and related non-governmental stakeholders		70,000	20,000	20,000	20,000	10000						
21.02	SC2: Support to MPA planning and biodiversity management at Weizhou, Shankou and Dugong Reserves		120,000	30,000	40,000	40,000	10000						
21.03	SC3: Undertake public awareness program based upon best practices and lessons learned from other parts of China/Asia		35,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	
21.04	SC4: Targeted mangrove and seagrass habitat restoration		54,000		22,000	22,000	10,000						
	<b>Sub-total</b>		<b>279,000</b>	<b>55,000</b>	<b>87,000</b>	<b>87,000</b>	<b>35,000</b>	<b>5,000</b>	<b>5,000</b>	<b>5,000</b>	<b>5,000</b>	<b>5,000</b>	<b>0</b>







32.07	Implement training program in conservation biology, ecosystem health monitoring(National)		40,000	20,000	20,000	20,000	20,000					
32.08	ICZM short term training (Int'l)		20,000	20,000	20,000							
32.09	staff training MPA management skills(National)		22,500	7,500	7,500	7,500						
32.10	Short-term: environmental economics, ecosystem benefits assessment and development of environmental financing mechanisms (Int'l)		25,000			25,000						
32.11	Underwater monitoring		17,500	5,000	7,500		5,000					
	<b>Subtotal</b>		<b>165,000</b>	<b>32,500</b>	<b>55,000</b>	<b>52,500</b>	<b>25,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Workshops</b>											
	<b>PCU</b>											
32.12	Lessons Learned roundtables		65,000	10,000	10,000	10,000	10,000	5,000	5,000	5,000	5,000	10,000
32.13	National workshops		48,000	12,000	12,000	12,000	12,000					
32.14	Steering Committee Meetings		48,400	12100	12100	12100	12100					
32.15	Staff exchanges		15,000		5,000	5,000	5,000					
	<b>Subtotal</b>		<b>176,400</b>	<b>34,100</b>	<b>39,100</b>	<b>39,100</b>	<b>39,100</b>	<b>5,000</b>	<b>5,000</b>	<b>5,000</b>	<b>5,000</b>	<b>10,000</b>
	<b>Shankou</b>											
32.16	MPA establishment roundtables		20,000	5,000	5,000	5,000	5,000					
32.17	Lessons Learned roundtables		12,000			6000	6000					
32.18	Local Steering Committee Meetings		18,000	4500	4500	4500	4500					
	<b>Subtotal</b>		<b>50,000</b>	<b>9,500</b>	<b>9,500</b>	<b>15,500</b>	<b>15,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Sanya</b>											
32.19	Lessons Learned roundtables		12,000			6000	6000					
32.20	LPSC Meetings		12,000	3000	3000	3000	3000					

	<b>Subtotal</b>		<b>24,000</b>	<b>3,000</b>	<b>3,000</b>	<b>3,000</b>	<b>9,000</b>	<b>9,000</b>	<b>9,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Fujian-Guangdong</b>													
32.21	Provincial working group meetings		15000	3750	3750	3750	3750	3750	3750					
32.22	Outreach program for local fishermen		30000	5,000	10,000	10,000	5,000	5,000						
32.23	Lessons Learned roundtables		12000			6000	6000							
32.24	Steering Committee Meetings		12000	3000	3000	3000	3000							
	<b>Subtotal</b>		<b>69,000</b>	<b>11,750</b>	<b>16,750</b>	<b>22,750</b>	<b>17,750</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Nanji</b>													
32.25	Lessons learned roundtables		12,000			6000	6000							
32.26	Steering Committee Meetings		12,000	3000	3000	3,000	3,000							
	<b>Subtotal</b>		<b>24,000</b>	<b>3,000</b>	<b>3,000</b>	<b>9,000</b>	<b>9,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	Workshops Sub-total													
<b>39</b>	<b>Component Total</b>		<b>673,400</b>	<b>93,850</b>	<b>168,850</b>	<b>215,350</b>	<b>160,350</b>	<b>10,000</b>	<b>10,000</b>	<b>10,000</b>	<b>5,000</b>	<b>10,000</b>	<b>10,000</b>	<b>0</b>
<b>40</b>	<b>EQUIPMENT</b>													
	<b>PCU</b>													
	Expendable Equipment													
45.01	Computers/Printers/Software		10,000	8,000	2,000									
45.02	Office supplies/furniture		5,000	3,000	2,000									
	Non-expendable Equipment													
45.03	Project vehicle		25,000	25,000										
	<b>Subtotal</b>		<b>40,000</b>	<b>36,000</b>	<b>4,000</b>									
	<b>Shankou</b>													
42.01	Expendable Equipment													
45.04	Computers/Printers/Software		10,000	2,000	8,000									
45.05	GIS Software		10,000	2,000	8,000									
	Non-expendable Equipment													
45.06	Vehicle		22,000	22,000										
45.07	Equipment for MPA operation		20,000		15,000	5,000								
45.08	Boat & boating equipment		15,000		10,000	5,000								

45.09	Biodiversity survey and monitoring equipment																			
45.10	MPA boundary marking equipment (buoys, signs)																			
	<b>Subtotal</b>																			
	<b>Sanya</b>																			
	Expendable Equipment																			
45.11	Computers/Printers/Software																			
45.12	GIS Software																			
	Non-expendable Equipment																			
45.13	Protected area equipment for rangers/field visits																			
45.14	Vehicle																			
45.15	Equipment for MPA operation & compliance monitoring																			
	<b>Subtotal</b>																			
	<b>Fujian-Guangdong</b>																			
	Expendable Equipment																			
45.16	Computers/printers/software for each office																			
45.17	GIS Equipment																			
	Non-expendable Equipment																			
45.18	Small boats																			
45.19	Ecosystem/biodiversity survey and monitoring																			
45.20	MPA operation equipment & infrastructure																			
	<b>Subtotal</b>																			
	<b>Nanji</b>																			
	Expendable Equipment																			
45.21	Office Computer/Printer/Software																			
45.22	Data management computer																			



**OUTLINE WORK PLAN**

Output/Output Target/Activity/(funder)	Months of Years 1-4							
	1-6	7-12	13-18	19-24	25-30	31-36	37-42	43-48
<b>OUTPUT 1.1: CONSERVATION CAPACITIES STRENGTHENED AT NANJI ISLANDS</b>								
<b>Output Target 1:</b> MPA infrastructure strengthened in measurable ways.								
1.1 Boundary markers, including buoys surrounding length of core area and warning boards (GEF)		X						
1.2 Look-out posts at approximately six important sites within the MPA (GEF) established		X						
1.3 Provide communications and other equipment for management and compliance monitoring		X						
1.4 Upgrade water and power supply systems at MPA facilities (Government)		X	X					
1.5. Provide MPA new vehicle and boat (Government)			X					
<b>Output Target 2:</b> MPA staff skills demonstrably improved.								
2.1 Train staff in techniques of biodiversity conservation, data management and management decision-making (GEF)			X					
<b>Output Target 3.</b> Biological monitoring program made operational and effective.								
3.1 Establish information baseline on nature and extent of main threats to biodiversity to be reduced.	X	X						
3.2 Establish an ecological monitoring station and laboratory (Government)				X				
3.3 Develop standardized biodiversity monitoring and survey protocols (GEF).		X						
3.4 Provide computer equipment for data management (GEF)			X					
<b>Output Target 4.</b> The general public and school students in Nanji township and Pingyang County will know measurably more about Nanji Island MPA by the end of the project.								
4.1 Build a new natural history/environmental interactive education center				X				
4.2 Devise innovative and effective public educational and awareness raising program. (GEF)				X	X			
4.3 Develop educational program for local schools and host at least 500 students per year. (GEF)	Target			X				
<b>OUTPUT 1.2: CONSERVATION CAPACITIES STRENGTHENED AT SANYA MPA</b>								
<b>Output target 1:</b> Long term survey and monitoring program operational.								
1.1 Establish information baseline on nature and extent of main threats to biodiversity to be reduced.	X	X						
1.2 Develop long-term program for biological monitoring			X					
1.3 Conduct comprehensive baseline survey of coral reef and related species in Sanya.		X	X	X				

Output/Output Target/Activity/(funder)	Months of Years 1-4									
	1-6	7-12	13-18	19-24	25-30	31-36	37-42	43-48		
1.4 Establish and operate two biodiversity monitoring stations				X	X					
1.5. Strengthen Nanji MPA enforcement by training and better equipping MPA staff.						X				
1.6 Develop GIS-based maps of biodiversity hotspots in MPA for use by managers						X				
<b>Output Target 2:</b> Pilot coral reef transplantation is undertaken and results assessed.										
2.1 Identify healthy reef areas that could contribute to the recovery of the overall area	X	X								
2.2 Assess reef restoration options drawing upon best practices worldwide and plan coral reef restoration program.	X	X								
2.3 Conduct pilot coral reef restoration in pilot areas of Sanya		X	X	X						
2.4 Train and equip MPA staff and volunteer divers to monitor coral health and recruitment.				X	X					
2.5 Monitor new coral growth in restoration sites and assess results					X	X	X	X		X
OUTPUT 1.3: CONSERVATION CAPACITIES STRENGTHENED AT SHANKOU MANGROVE RESERVE AND THE DUGONG RESERVE										
<b>Output Target 1:</b> Establish and strengthen information baseline for adaptive management.										
1.1 Establish information baseline on nature and extent of main threats to biodiversity to be reduced.	X	X								
1.2 Develop simple yet effective biodiversity survey protocols and conduct baseline habitat surveys.	X	X	X							
1.3. Analyze baseline biological information to guide management planning (GEF & Govt).			X	X						
1.4 Develop and implement simple, adaptive biodiversity monitoring program (GEF).			X	X						
1.5 Conduct ongoing, regular field surveys (Gov't)			X	X	X	X	X	X		X
<b>Output Target 2.</b> Operational infrastructure and capacity of reserve strengthened										
2.1 Develop detailed management zones for MPA management (Government & GEF)	X	X	X							
2.2 Consult stakeholders and demarcate reserve boundaries/zones.		X	X							
2.3. Basic equipment for MPA (transport, communications, computers) in use. (GEF)		X	X							
2.4 Develop educational and awareness materials (GEF)			X	X						
2.5 Implement training program to strengthen capacity of MPA reserve staff.										
<b>Output Target 3:</b> Restore 50 ha of mangrove habitat and TBD ha seagrass habitat.										
3.1 Seek out best practices for mangrove and seagrass bed restoration; contact organizations with proven successful hands-on experience. (GEF)		X								
3.2 Develop plan for removing stresses and threats to mangrove and seagrass habitat and implement it prior to any restoration activities being undertaken. (GEF)			X							

Output/Output Target/Activity/(funder)	Months of Years 1-4									
	1-6	7-12	13-18	19-24	25-30	31-36	37-42	43-48		
3.3 Identify pilot areas for restoration where chances are especially good for a successful outcome.			X							
3.4 Implement pilot mangrove and seagrass restoration activities (NOAA, Government, GEF)			X	X	X	X				X
3.5 TRAIN STAFF AND MEMBERS OF THE VCGS IN MANGROVE RESTORATION METHODS AND PRACTICE. (GEF)			X	X	X					
Output 2.1: Demonstrate Integrated Coastal Zone Management MPA approach to township planning, management and development at Nanji Islands										
<b>Output Target 1.</b> Comprehensive township master plan for Nanji Islands under implementation.										
1.1 Review existing development, management and zoning plans for Nanji area (GEF)			X							
1.2 Conduct socio-economic survey covering a wide range of parameters, (GEF)			X							
1.3 Collect, review and synthesize relevant findings of marine biological studies at Nanji Islands, to provide historic picture of ecosystem changes and current status (GEF)		X	X							
1.4 Create and demonstrate GIS-based biodiversity overlays using data gathered under IO 1.1 for use in planning exercise (GEF).			X	X						
1.5 Synthesize biological, ecological, geographical, and socio-economic information and assess areas of priority use (conservation, fishing, tourism, etc) and develop zoning model.				X						
1.6 Develop and secure adoption of a township-level master plan for Nanji Islands (Gov't, GEF).				X	X					
OUTPUT 2.2: INTEGRATED POLLUTION CONTROL IS DEMONSTRATED AT SANYA MPA										
<b>Output Target 1:</b> Link biodiversity conservation, with pollution reduction/control.										
1.1 Integrate data on species/habitat locations/condition with pollution data (ambient levels, point, non-point sources) to ascertain the nature of the pollution threat to biodiversity in SNCRNR. (GEF)				X	X					
1.2 Highlight and quantify the ecosystem benefits safeguarded by SNCRNR and raise awareness among municipal and provincial officials of these benefits and the importance of pollution control investments (GEF)					X	X				
1.3 Government invests in effective pollution control/waste water treatment measures around Sanya; monitor the resulting impacts. (Government)						X			X	
Output 2.3: Demonstrate the development and effective application of sustainable financing mechanisms for long-term Reserve management at Sanya.										
<b>Output Target 1:</b> Develop funding mechanisms (fees, tax incentives/disincentives, penalties/fines).										

Output/Output Target/Activity/(funder)	Months of Years 1-4									
	1-6	7-12	13-18	19-24	25-30	31-36	37-42	43-48		
1.1. Determine annual recurrent costs of MPA management, review existing financing mechanism experience in China (cost recovery, etc..) and associated laws/regulations (GEF)				X						
1.2 Conduct “willingness to pay” surveys to determine appropriate user fees (park entrance fees, diver fees, sport fishing fees, etc..) and assess various options for funding mechanisms. (GEF)					X					
1.3 Develop sustainable and appropriate financing mechanisms to support Sanya MPA operations and introduce to decision makers through roundtable discussions and workshops.					X	X				
1.4 Pilot sustainable finance mechanism to support MPA management and sustainable coastal development and planning.						X	X		X	
1.5 Train MPA staff and relevant institutions in financial planning and management, emphasizing best practice.									X	
OUTPUT 2.4: DEMONSTRATE PARTICIPATORY CO-MANAGEMENT AND SUSTAINABLE LIVELIHOOD STRATEGIES AT SHANKOU MANGROVE RESERVE & WEIZHOU MPA.										
<b>Output Target 1:</b> MPA's capacity to work effectively with local communities is strengthened and vice-versa.										
1.1 Investigate participatory management experiences from other projects in China and draw some lessons to apply to this project. (GEF)			X							
1.2 Consult with local stakeholders and develop a practical, meaningful participatory management program for reserve. (GEF)			X	X						
1.3 Enable stakeholders to establish a new NGO, (e.g. “the Shankou Mangrove Ecosystem Conservation Association”) to serve as the main local community partner of the MPA. (GEF)					X	X	X	X	X	X
1.4 Provide training in participatory management to MPA staff and NGO staff					X	X				
1.5. Strengthen local capacity for participatory management by organizing resource users and stakeholders into Village Conservation Groups (VCG) in areas around the MPA. (GEF)					X	X				
1.6 Develop management roles and responsibilities of VCGs and NGO and develop cooperative agreements between MPA and the groups. (GEF, MPA)						X				
1.7 Undertake innovative public awareness/education program based upon best practice and experience from other projects in China as well as Asia. (GEF)						X			X	
<b>Output Target 2:</b> Stakeholders pursuing alternative livelihoods.										
2.1 Overcome knowledge barriers by conducting marketing study and establish links to viable markets for local resources.									X	X
2.2 HELP STAKEHOLDERS ACCESS FINANCING FOR NEW, SUSTAINABLE LIVELIHOODS									X	X



Output/Output Target/Activity/(funder)	Months of Years 1-4									
	1-6	7-12	13-18	19-24	25-30	31-36	37-42	43-48		
Output 2.5: Establish Model MPA designation process at Weizhou Island.										
<b>Output Target 1:</b> Comprehensive assessment of Weizhou Island for possible MPA designation.										
1.1 Summarize and translate into Chinese global lessons/best practices for MPA establishment.	X									
1.2 Conduct surveys on: biological, ecological and socio-economic subjects to identify priority biodiversity areas and important socio-economic parameters. (GEF)		X	X							
1.3 Regularly consult with local communities as important partners in the MPA process.	X	X	X	X	X	X	X	X	X	X
1.4 Prepare practical report synthesizing survey information, prepare high-quality, illustrative maps and circulate report for review by PSC.		X	X							
<b>Output Target 2:</b> <i>Weizhou MPA is legally established and operationalized.</i>										
2.1 <i>Prepare master plan for establishment of MPA in cooperation with key stakeholders.</i>				X						
2.2 SoA acquires right of the use of the land and law is passed establishing the MPA.			X	X	X					
2.3 Reserve is fully staffed and operational costs funded (Government)						X				
2.4 Capacity of Weizhou MPA staff is strengthened through training (GEF)										
2.5 Develop infrastructure for MPA including buildings, staff quarters, lookout posts (Gov't)						X				
<b>Output Target 3:</b> <i>Solid waste and domestic sewage levels are reduced significantly.</i>										
3.1 Government establishes solid waste and sewage collection and treatment infrastructure.					X	X	X	X	X	X
Output 2.6: demonstrate Inter-provincial co-operation on ICM and biodiversity conservation at Dongshan-Nan'ao migratory channel										
<b>Output Target 1:</b> Inter-provincial cooperative program in place and operational.										
1.1 Provinces establish inter-provincial joint committee on ICM and biodiversity conservation.	X	X								
1.2 Develop and implement a large-scale functional land and water-use planning and zoning program (Gov't).										
1.3. Implement regulatory and/or technological solutions to address target fisheries, locations and seasons (Gov't)										
<b>Output Target 2:</b> Primary threats to priority migratory species (Chinese white dolphins, sea turtles, horseshoe crabs) and related habitats significantly and measurably mitigated/reduced.										
2.1 Establish information baseline on nature and extent of main threats to biodiversity to be reduced.	X	X								
2.2 Conduct field surveys to determine species distribution, migration routes and priority habitat, (e.g. priority turtle nesting beaches/feeding grounds.)	X	X	X	X	X	X	X	X	X	X

Output/Output Target/Activity/(funder)	Months of Years 1-4									
	1-6	7-12	13-18	19-24	25-30	31-36	37-42	43-48		
2.3 Gather more detailed information on the nature of the main threats to biodiversity (e.g. work with fishermen's associations to gather information on by-catch – species and quantity).	X	X	X							
2.4 Apply GIS as a tool to analyze data and assess threats to migratory species.			X							
2.5 Based on analyses of new data, stakeholders formulate an inter-provincial conservation plan for migratory species and their habitats and the protection of Dongshan-Nan'ao's ecosystem integrity.			X							
2.6 Develop & implement comprehensive conservation plans for priority migratory species.				X	X	X	X			X
2.7 Establish management and monitoring stations for horseshoe crabs & prepare a proposal for the establishment of an MPA for Chinese horseshoe crab					X	X				
2.8 Identify and designate islands ecological recovery and implement a recovery strategy (Gov't)					X					
2.9 Conduct beach cleanups involving school groups (Government, GEF)				X	X					
2.10 Establish and operate a migratory species and marine mammal rescue center in Dongshan.				X	X	X	X			X
<b>Output target 3: Strengthened inter-provincial capacity for sustainable development/ICM.</b>										
3.1 Develop and implement a land and water-use planning and zoning program (e.g., move aquaculture operations to offshore waters, ensure no sand mining or other threats on key beaches)						X	X	X		X
3.2. Implementation of regulatory and / or technological solutions to address target fisheries, locations and seasons (Gov't)								X	X	X
3.3 Enable local fishermen's associations to implement an outreach program to inform and educate fishermen about marine conservation and migratory species conservation (GEF)						X	X			
OUTPUT 3.1: LESSONS ARE EXCHANGED ACROSS PROJECT SITES.										
<b>Output Target 1: Lessons are exchanged across project sites.</b>										
1.1 Establish cross-site thematic learning groups to share lessons and discuss best practice.			X	X	X	X	X	X		X
1.2 Organize MPA and international staff exchanges with other GEF projects;			X	X	X	X	X	X		X
1.3 Rotate staff among the project MPAs			X	X	X	X	X	X		X
1.4 Round table discussions and annual presentations of lessons learned from various sites.		X		X		X				X
OUTPUT 3.2: STAKEHOLDERS ASSESS LESSONS LEARNED (SUCCESSES/FAILURES) AND SYNTHESIZE AND DISSEMINATE TO KEY STAKEHOLDERS NATIONALLY AND INTERNATIONALLY.										
<b>Output target 1: Project experiences and their relevance to other sites assessed.</b>										
1.1 Conduct one adaptation study per site linking results of demonstration outputs and an in-depth analysis of remaining threats at project sites and develop a simple program for addressing remaining threats and underlying causes at each site.								X		

Output/Output Target/Activity/(funder)	Months of Years 1-4							
	1-6	7-12	13-18	19-24	25-30	31-36	37-42	43-48
<b>Output Target 2:</b> Easily understandable, useful summaries of lessons learned and best practices.								
2.1 Analyze and synthesize results of demonstration components and produce short, practical and easily understandable summaries of lessons learned and best practices.					X			
<b>Output Target 3:</b> Lessons learned and best practices handbook.								
3.1. Develop and disseminate lessons learned/best practices handbook from project experience.						X		

### Replication of lessons learned during Years 4-8

Output/Output Target/Activity	Year 4 37-48	Year 5 49-60	Year 6 61-72	Year 7 73-84	Year 8 85-96
<b>Output Target 4:</b> Lessons learned and best practices are shared via round table discussions, training courses, and world-wide web postings.					
4.1 Organize round-table discussions beginning year 4 of lessons learned and best practices among Gov't (national and local) and private sector stakeholders.	X	X	X	X	X
4.2 Organize national workshops/meetings site stakeholders and other interested parties utilizing the handbook in topics that require more training and where there is interest.	X		X		
4.3 Establish project web site and hyperlink it with other related reference sites.	X	x	x	x	x
OUTPUT 3.4 PROJECT EXPERIENCE ADAPTED TO EACH SITE AND IMPLEMENTED, WHERE APPROPRIATE AND RELEVANT TO THREAT REMOVAL.					
<b>Output Target 1:</b> Nanji adopts lessons learned/tools from other sites.					
1.1 At Nanji Islands, this means: (i) developing sustainable financing plan. (ii) making new investments in solid waste management and sewage treatment; (iii) Participatory management and alternative livelihood development for local residents.	X	X	X	X	X
<b>Output Target 2:</b> Sanya adopts lessons learned/tools from other sites.					
2.1 At Sanya, this means: (i) Participatory management and alternative livelihood development for local residents; and (ii) Undertaking an integrated approach to land, water and resource planning.	X	X	X	X	X
<b>Output Target 3:</b> Shankou-Weizhou adopts lessons learned/tools from other sites.					

<p>3.1 At Shankou-Weizhou this means:  (i) Sustainable financing plan for each MPA developed; (ii) Developing and applying marine resource-use zoning schemes to control marine resource use (WI, DR); (iii) Developing and implementing regulatory controls on industrial pollution of MPA (WI); (iv) Local government establishing sewage treatment plant and improving solid waste disposal system for island (WI).</p>	X	X	X	X	X	X	X
<p><b>Output Target 4:</b> Dongshan-Nan'ao adopts lessons learned/tools from other sites.</p>							
<p>4.1 At Dongshan-Nan'ao, this means: (i) Develop and implement migratory species action plan.</p>	X	X	X	X	X	X	X

**SIGNATURE PAGE**

Country: China \_\_\_\_\_

UNDAF Outcome(s)/Indicator(s): \_\_\_\_\_  
*(Link to UNDAF outcome., If no UNDAF, leave blank)*

Expected Outcome(s)/Indicator (s): \_\_\_\_\_  
*(CP outcomes linked t the SRF/MYFF goal and service line)*

Expected Output(s)/Indicator(s): \_\_\_\_\_  
*(CP outcomes linked t the SRF/MYFF goal and service line)*

Implementing partner: \_\_\_\_\_  
*(designated institution/Executing agency)*

Other Partners: \_\_\_\_\_  
*(formerly implementing agencies )*

Programme Period: January 2005-December 2012 \_\_\_\_\_  
Programme Component: \_\_\_\_\_  
Project Title: Biodiversity Management in the Coastal Area of  
China's South Sea \_\_\_\_\_  
Project ID: \_\_\_\_\_  
Project Duration: 8 years \_\_\_\_\_  
Management Arrangement: National Execution \_\_\_\_\_

Total budget: USD 12,749,000  
Donor GEF (Full): USD 3,195,000  
GEF (PDFB): USD 320,000  
3,515,000  
Donor NOAA: USD 460,000  
Government in kind contributions: USD 8,774,000

Agreed by **(Government)**: \_\_\_\_\_  
Agreed by **(Implementing partner/Executing agency)**: \_\_\_\_\_  
Agreed by **(UNDP)**: \_\_\_\_\_

## Appendix B1 Response to Technical Comments

Principal Comments to be considered for CEO endorsement	Response
<p><b>Germany:</b></p> <p>This project goal is closely related not only to the aims of the Biodiversity Convention, but also to the Convention on the Conservation Migratory Species of Wild Animals (CMS).</p> <p>Although China is not (yet) party to CMS it should be examined how synergies between both conventions - and agreements under CMS as e.g. the MoU on the Conservation of Marine Turtles in South-East Asia - may be achieved on international and on project level. Experiences gained in best practices of conservation and lessons learnt in co-operation with local communities could easily be exchanged.</p> <p>Hence SOA as executing agency should highlight in the proposal not exclusively the eligibility under CBD and GEF but also under CMS and, where appropriate, with the Ramsar Convention. The joint work programmes of CMS and Ramsar respectively with CBD should be evaluated regarding common fields of implementation.</p>	<p>In China, one of the government counterparts of contact for CMS is the State Forestry Administration (SFA). The project experiences gained by SOA in best practices of conservation and lessons learned will be shared with SFA for its consideration of the issues related to the CMS. In addition, SFA is also the government focal point for the Ramsar Convention on Wetlands, to which China is a Party. Since the Ramsar Convention covers the conservation and sustainable use of mangrove, SOA will exchange mangrove related project outputs with SFA. Through the National Coordinating Group for CBD Implementation, SFA and SOA can coordinate their programmes and activities where appropriate, as both SFA and SOA are members of the National Coordinating Group. At the local level, one Local Project Steering Committee (LPSC) will be formed in each site to facilitate coordination and implementation of project activities. The LPSC will be comprised of representatives from relevant agencies at provincial level, local municipalities, counties and sites.</p>
<p>Generally, according to the comments of the STAP review the “full and active participation of local stakeholders” should be described more detailed. Crucial and controversial issues like “Traditional Knowledge” and “Access and Benefit sharing” must be taken into consideration and emphasized on in the proposal to provide a robust and mutually agreed base for negotiations and co-operation between</p>	<p>In order to encourage stakeholder participation, an Advisory Committee (AC) of direct resources users will be established at each site, which will involve stakeholders from fishery association, aquaculture association and tourism sector etc. At least one member from the Advisory Committee of a site will join the LPSC at that site. By setting up site Advisory Committees, it is to make sure that project implementation activities are open to stakeholder input. In project implementation, e.g., in conducting surveys and designing local plans, special attention will be paid to making use of traditional values and indigenous knowledge that contribute to biodiversity conservation in the local sites.</p>

Principal Comments to be considered for CEO endorsement	Response
<p>governmental and non-governmental stakeholders. In this context aspects of poverty alleviation should be considered as well.</p>	<p>The Convention on Biological Diversity seeks to ensure access and benefit sharing. The State Oceanic Administration and NOAA have had a substantive working relationship since 1979 through the U.S.-China Marine and Fisheries Science and Technology Protocol of the bilateral Science and Technology Agreement. The Intellectual Property Rights annex of this Agreement governs the equity, access, and distribution of intellectual property resulting from cooperation on activities pursued in the course of research and other forms of cooperation under the Agreement. The establishment of sister partner reserve sites under the Science and Technology Agreement provides a formal and legal mechanism for sites and countries to share information, access and benefit sharing, including areas of biodiversity and biotechnology.</p> <p>Output 2.4 in Shankou Mangrove Reserve is demonstration of participatory co-management and sustainable harvesting strategies with local stakeholders. Output target 3 of this output is to have market study for local resources and help with access to financing for new and alternative livelihoods, where poverty reduction is the objective.</p>

Principal Comments to be considered for CEO endorsement	Response
<p><b>GEFSEC:</b> The relationship to IW projects will be clarified.</p>	<p>This project could provide a basis for the development of an IW proposal with Viet Nam for the future development and conservation of marine and coastal resources of the Beibu Gulf (Gulf of Tonkin). National development plans for the Chinese and Viet Namese administered regions of the Beibu Gulf call for considerable economic development and growth of coastal and marine resources. These development plans should include a coordinated strategy between China and Viet Nam for the management, exploitation, and conservation of the internationally important marine and coastal resources of the Gulf.</p> <p>NOAA is currently working with Ministry of Fisheries (Viet Nam) and other governmental and nongovernmental organizations based in Viet Nam to promote sustainable development of the Ha Long Bay region and management capacity of the World Heritage Site through the application of the framework of integrated coastal management.</p> <p>In November 2003, the U.S. and Viet Nam agreed to develop a Phase II proposal to expand the geographic scope of the current Ha Long Bay capacity building project to include wider areas and applications in Quang Ninh province along the Beibu Gulf.</p>



<b>Principal Comments to be considered for CEO endorsement</b>	<b>Response</b>
<p>The Long-term financial sustainability is expected from demonstrating a long-term financial mechanism for one of the sites, and the rest expected from the government. This should be assured at time of endorsement. In addition, issues of risks need to be better address. The text in the main proposal is too limited, particularly taking into account the extensive risks highlighted in the log frame and the STAP review.</p>	<p>In this project, Sanya has been chosen to establish a sustainable financing mechanism, as a stable tourism revenue system has already been established there. During the implementation, SOA will take into account other projects' experiences, and avoid or reduce any negative impacts of tourism. Once the model is established, Chinese government will encourage the dissemination to other sites, which have the similar situation and needs.</p> <p>We hope to learn from other countries' experiences, which are good for identifying, designing, and putting into place diverse and innovative arrangements for biodiversity financing sustainability, e. g. park entrance fees and other user fees, tourist taxes, licensing fees, and concession arrangement, incentives for local charitable contributions to conservation NGOs, bioprospecting, channelling proceeds from small communities enterprises into conservation activities, conservation trust funds, and credit and investments finance for biodiversity-friendly small and medium private enterprise etc.. In addition, with the increasing importance of biodiversity conservation in national planning, the investments from governments are expected to increase.</p> <p>The risks highlighted in the log frame and STAP review have been taken into account by the Chinese central and local governments. Regarding the sustainability of financial resources, the governments have shown sound commitment to secure the financial stability by providing commitment letters. In addition, biodiversity conservation has been listed as high priority area in national and local economic development, esp. for these MPAs, which brought great revenue and benefit to local people and economic development. Evidence shows that the investment from governments and enterprises is increasing. As for the staff stability, SOA and local governments will take measures to maintain the stability of the project team, esp. the trained staff. e. g. set up requirements when choosing staff for training. Staff need have direct relationship with or is directly involved in project implementation at least for one year etc.</p>
<p>The issue of customary rights and indigenous groups,</p>	<p>Customary use of biological resources in accordance with traditional cultural practices that are compatible</p>

Principal Comments to be considered for CEO endorsement	Response
<p>as highlighted by the STAP reviewer needs to be taken into account (page 53 and 57)</p> <p>Indicators need to be better quantifiable in the log frame. Many have not been quantifiable there</p>	<p>with conservation or sustainable use requirements will be protected and encouraged through full and active participation, co-management and training.</p> <p>SOA has made some adjustments on the table already, but for some cases, it is difficult to set up quantifiable indicators, especially for those indicators for Phase Two which need to be defined towards the end of Phase One. SOA commits to pay great attention to this issue, and will try to improve the indicators on a yearly basis, and incorporate them in the annual work plans for better M &amp; E. Indicators of success are included in the project's Logical Framework and will be utilized on a continuous basis as the project monitors and evaluates its progress. These indicators will be bolstered during the first year of the project when more specific indicators of: 1) threat reduction and coastal ecosystem/biodiversity health will be developed based upon baseline surveys. Baseline surveys will: 1) determine the nature and extent of threats in each site to be reduced; 2) conduct ecological surveys within the site areas to determine specific health and size of key habitats and richness of habitat mosaic; 3) conduct attitude and awareness level surveys of key stakeholder groups, from top-level policy makers to local village level stakeholders; and 4) conduct economic surveys of local communities around site areas to quantify their use of marine resources and their current income levels.</p>

## Appendix B2 TORs

### National Project Steering Committee (PSC)

**Duration:** 8 years

**Background:**

The Project Steering Committee is an institutionalized body to provide overall guidance and support to project implementation activities. The Government of China and the United Nations Development Programme will establish the PSC upon the signing of the project document. The PSC will meet for the first time once the Project Coordination Unit has been hired and work plans prepared for the first year of operation. The PSC will meet annually thereafter.

Although the Steering Committee will have decision-making power as well as an advisory function, it may not alter project objectives or output components. The Steering Committee may alter project activities and/or implementation arrangements, including arrangements for the sub-contracts (ensuring due process is followed), but only if there is clear and consistent evidence against project output indicators (based on progress reports and adaptive management outputs) that the project activities are failing to deliver project outputs, or the sub-contracts are failing to meet their obligations under their Terms of Reference.

The National Project Manager, supported by the PCU, will act as Secretary to the Steering Committee.

The membership of the PSC will be comprised of one DG or DDG level representative from each of the following institutions:

1. SOA (Chair of the PSC and National Project Director)
2. Guangxi Autonomous Region
3. Hainan Province
4. Guangdong Province
5. Fujian Province
6. Zhejiang Province
7. U.S. National Oceanic and Atmospheric Administration (NOAA)
8. United Nations Development Programme

The representatives from the Autonomous Region and Provinces will serve as observers and technical resource persons in the PSC. The NOAA representative in the PSC will be involved in decision-making with regard to NOAA's funding support to this project; and NOAA may also play an advisory role for other project issues. The eight annual meetings will be held in each of the four sites. Normally, the PSC and TPR meetings are held at the same time and site. If required, any extra PSC meetings would be held in Beijing.

The responsibilities of the PSC as a whole and the individual members are to:

- Champion the progress of project activities within SC member's institution/government department
- Provide key policy guidance to project manager and to project implementation;
- Facilitate project work within each member's respective institution;
- Annually review and assess the progress of the Project and its components;
- Annually review and approve the work plan and updated budgets of the Project and its activities, including making the first judgment regarding the nature of any proposed adjustments and revisions, i.e., whether an adjustment or revision belongs to a substantive/significant one or a minor one;

- Provide strategic direction on the work plan;
- Support the cross-sectoral approach of the project by creating mechanisms for interaction with NGOs and other stakeholders; and,
- Continue to seek additional funding to support the outputs and activities of the Project beyond the lifespan of GEF funding.
- Approve annual work plans prepared by the PCU.
- Ensure necessary mainstreaming of project activities and outcomes into Government plans, policies and actions
- Disseminate lessons learned and encourage replication of best practices among SC member's institution/government department and relevant constituents.

### **Local Project Steering Committees**

Project work will be facilitated in local areas by local project steering committees. Each LPSC will be comprised of representatives from key government agencies at the provincial and local level: Specific LPSC membership will be approved by the PSC and will ensure that project implementation activities are open to stakeholder input. LPCUs develop the workplan in consultation with the NPM and international consultants especially the Adaptive Management Advisor, the get it endorsed by LPSC before sending it to the national SC. Government officials or other co-funder representatives from the private or bilateral entities on the LPSC will be responsible for ensuring that co-funding support is provided in a timely and effective manner.

### **Advisory Committee (AC) at each site**

An Advisory Committee (AC) of direct resources users will be established at each site, which will involve stakeholders from fishery association, aquaculture association and tourism sector etc. At least one member from the Advisory Committee of a site will join the LPSC at that site. By setting up site Advisory Committees, it is to make sure that project implementation activities are open to stakeholder input.

The AC will advise on the design of the program and supervise the project implementation through regular meetings and communications. The members, meanwhile, function in information feedback to Project Management Office during their routine activities of research, conservation and local community involvement. The project, on the other hand, will support the members' activities of investigation, supervision and public awareness campaign with some oriented activities.

### **Inter-Provincial Coordination Committee**

In Fujian and Guangdong, because it is a cross province site, an Inter-Provincial Coordination Committee (IPCC) chaired by Directors from two province's Oceans Bureau on a rotationally basis will be established prior to the project's first Steering Committee meeting. The IPCC will be comprised of high-level provincial authorities and one member from SOA.

### **UNDP-Beijing Environment Programme Team**

UNDP environment programme staff in the UNDP China Country Office will also support project implementation. The staff will work closely with the NPD and the PCU in SOA's Beijing office. UNDP will provide project coordination with other international organizations through the PSC and oversight functions at the national level.

## **Inception Phase**

### Introduction

The Inception Phase is an opportunity for the Project Team to become acquainted with the Project – its agreed strategy, expected outputs and outcomes, the stakeholders, the risks etc. It is also an opportunity to finalise any outstanding implementation details and present them to UNDP and SOA for clearance and then the Project Steering Committee for approval. The Inception Phase also brings new momentum to the project after the relatively quiet period during the project approval process.

UNDP will provide an initial cash advance for the Inception Phase upon receipt of the standard Cash Advance Request form from SOA, for the costs of the deliverables listed below. No additional work plan will be required.

### Inception Deliverables

The expected output of the Inception Phase is an Inception Report. The Report should address the following issues:

1. Finalise project institutional arrangements, including to:
  - Clarify the role of (and project links to) Provincial, County, Municipal and City Government levels. This includes reporting responsibilities for parallel co-financing
  - Finalise level of representation and individual membership of the Project Steering Committee and receive confirmation of willingness to participate. Same for the Local Steering Committees, Fujian/Guangdong Inter-Provincial Coordination Committee and Advisory Committees
  - Develop rules of procedure for the Steering Committees
  - Clarify relationship between the Steering Committee and the Tripartite Review
  - Revise existing TORs in the Project Document if necessary
2. Clarify the role and responsibility of various team members for achieving the project outcomes. (For example, the TORs in the Project Document do not state any direct responsibilities for project outputs. This particularly needs to be clarified for the Site Technical Experts, however all positions should be cross-referenced to the Logical Framework)
  - Identify links and coordination between project positions and activities
  - Link each project position to the work plan and delivery of project outcomes
  - Strengthen links to project stakeholders (particularly national, provincial and local government, as well as local communities)
  - The NPM should also make recommendations to SOA and UNDP for the appointment of project positions. Appointments should occur during the Inception Phase.
3. Provide an organizational chart of the project (donors, government, SOA, project bodies, project staff, contractors), including reporting lines. This should include:
  - Location of all staff and project teams
  - Relationship of project positions within Provincial Government structures

(including name, title and contact details of all government counterparts)

4. Develop an Adaptive Management framework for the implementation of the project, including:
  - Annual work planning process, linked to the rolling work plans. Should include the setting of yearly targets/milestones that are understood by all stakeholders
  - Ongoing work plan monitoring programs
  - Links to project outcome indicators (impact indicators), progress indicators and the Logical Framework
  - Practical, activity-level links to the Knowledge Management Strategy and Communications Strategy
  - Clarification of roles and responsibilities of all participants (Adaptive Management Advisor, PCU, SOA, UNDP, SIUs, LPSCs, Provincial Governments etc.)
5. Detail and finalise the TORs for all project sub-contracts, in-line with the information provided in the Project Document.
6. Coordinate all co-financing sources with the project work plan. This should include arrangements for coordinating and monitoring co-financing funds held with Provincial Governments.
7. With assistance from UNDP (including UNDP-China's Management Support Unit and UNDP/GEF's Regional Coordination Unit in Kuala Lumpur), review the capacity of SOA and the PCU to provide project execution services and day-to-day project management. Provide training on required UNDP reporting and project management requirements, as well as general GEF expectations.
8. Prepare a Project Operations Manual (in English and Chinese). Share with all SIUs and provide necessary training.
9. Review the project's Monitoring Plan and expand if necessary. Ensure there are measurable indicators of impact at the Output, Purpose and Goal levels of the LogFrame. Ensure baseline data are in place for all indicators. Review the progress indicators set out in the LogFrame and improve as necessary.
10. Identify significant Project Risks (possible barriers to successful project implementation and identified externalities that may reduce project effectiveness). Prepare a detailed risk management strategy for project implementation.
11. Prepare a detailed work plan for the first quarter of implementation. Prepare a project budget revision if necessary.

### **Inception Process**

The NPM is expected to meet with all stakeholders during the Inception Phase. This may be a mix of individual appointments and group meetings and/or workshops.

In the spirit of cooperation underpinning this project, all parties should be invited to participate and contribute to the Inception Phase.

The Inception Phase should include formal and informal training for the Project Team by SOA. This should cover an induction into the organization, its procedures and arrangements, as well as a sharing of project-specific knowledge from existing SOA initiatives. The NPM and Project Team should also receive training from UNDP. This will include an overview of UNDP rules and procedures from UNDP-China, introduction to the office, as well as a briefing on GEF matters from the UNDP-GEF Regional Coordinator.

The NPM leads the Inception Phase (with assistance from the Adaptive Management Advisor) and should refer to all previous project comments, including those of the STAP Roster Expert,

GEF Secretariat, UNDP-GEF, and GEF Council members. SOA and UNDP will provide copies of all relevant correspondence.

The Inception Phase is expected to take approx. 2-3 months, however flexibility exists to take account of the local situation and seasonal conditions. Monthly updates of the progress should be provided to the UNDP Resident Representative, through meetings at the UNDP office. More regular and informal contact should be maintained with responsible UNDP Program Officers.

The draft Inception Report should be shared with UNDP and SOA as soon as available and before being circulated to other stakeholders. Preparatory meetings between SOA and UNDP should be held well in advance of the Steering Committee in order to reach agreement on key issues before seeking Steering Committee approval. This will also be an opportunity to clarify UNDP's role in annual work plan reviews, measurement of progress indicators and impact indicators, TPRs and annual work planning exercises.

The agreed draft Inception Report should then be circulated for comments to all stakeholders before a revised final draft Inception Report is sent to Steering Committee members. The final draft should be sent to Steering Committee members no later than 2 weeks in advance of the first meeting.

## **National Project Director (NPD)**

The National Project Director is ultimately responsible and accountable to UNDP for the execution of the project on behalf of the State Oceanic Administration, the Designated Institution. S/he will act as the focal point and responsible party for execution of the project and will ensure that all Government inputs committed to the project are available to the project in a timely manner. S/he will also act as the approving authority for staff appointments and for advances and expenditure.

NPD is a state employee designated by the National Executing Agency and entrusted for the overall guidance and coordination of the project implementation. It is an unpaid position covered by the Government as an in-kind contribution to the project. The NPD is accountable to the National Executing Agency and UNDP for the production of the project outputs, appropriate use of the project resources provided by GEF and other donors, and coordination of the UNDP/GEF project with other programmes and projects implemented in China in the area of coastal diversity management and conservation.

### **In particular the NPD will:**

- approve project work plans, budget revisions and if necessary project revisions;
- chair the project Steering Committee;
- in consultations with UNDP assign implementing agencies for the project components and coordinate their work (through the project manager);
- be responsible for all project activities, for coordination of those activities with other involved governmental and non-governmental organisations
- ensure that Chinese legislation, rules and procedures are fully met in the course of the project implementation;
- approve terms of references, selection of project staff and reports produced by the project manager and the key experts/contractors;
- approve procurement actions;
- certify the annual and quarterly work plans for the project and request quarterly advance payments of project funds from UNDP to the Beijing bank account according to UNDP's approved procedures
- approve/certify project monitoring reports (APRs), audit reports and evaluation reports;
- facilitate liaison and cooperation with the central Government authorities in the course of the project implementation;
- report to the National Executing Agency, UNDP/GEF on the use of the project resources and achievement of the project outputs;
- liaise with UNDP and project partners as required, on a regular basis, to build an effective partnership for the successful delivery of expected project outputs
- ensure that there is a clear and unambiguous decision-making process for project implementation so that project activities are planned well in advance and necessary resources are available: this is particularly important because the project is so decentralized

The work of the NPD will be supported by the project manager and the UNDP office in Beijing. If appropriate, the NPD may partially delegate his/her responsibilities to the project manager per existing agreements.



## **Project Coordination Unit (PCU)**

A project coordination unit will be formed in the Beijing offices of the State Oceanic Administration (SOA). Government and UNDP designed the project to be implemented almost entirely at the site level in the five participating provinces. As a result, the PCU is purposefully kept small, so as not to hamper this decentralized implementation. The PCU will be the primary liaison between the Provinces and UNDP. The PCU will ensure project implementation proceeds smoothly through well-written work plans and well-oiled administrative arrangements that meet UNDP's requirements.

### Project Management Unit will be comprised of:

1. National Project Manager (SOA supported position); through Gov. designated.
2. Project implementation officer (GEF supported)
3. Reporting and Contracts Officer (GEF supported)
4. Adaptive Management & Lessons Learned Advisor (GEF supported)
5. Site Technical Advisors, Five (5). (GEF supported)

## National Project Manager (NPM)

**Duty station:** Beijing, with travel the provinces as deemed necessary, and travel to other locations consistent with these Terms of Reference.

### **Background:**

The Project is a partnership among SOA, and United Nations Development Programme, the Global Environmental Facility, with significant involvement from the U.S. National Oceanic and Atmospheric Administration. The project seeks to conserve globally significant biological diversity by implementing a cross-sectoral program of integrated activities that generate specific and meaningful results on the ground. To do this, the project will need to create and to follow successfully a path of coordinated action among provincial governments, national government agencies, at least four local communities, and NOAA. The project manager will be responsible for ensuring that this happens in an effective and lasting manner.

### **Description of Responsibilities:**

The NPM will be responsible for the overall daily coordination of all aspects of the GEF Project.

Under the guidance of the National Project Director and the UNDP, the NPM will have the following specific duties:

1. Ensure smooth implementation of the project in accordance with the project document and UNDP's procedures. In particular, establish good administrative procedures for coordination of the work of the provincial and site level project management units and ensure that the different parts of the project work well towards a common goal
2. He/she shall liaise directly with designated officials of the PSC, existing and potential project donors, and others as deemed appropriate and necessary by the PSC or by the NPM him/herself.
3. He/she shall be responsible for coordinating, overseeing the preparation of, and the delivery of all substantive, managerial and financial reports from and on behalf of the project.
4. He/she will supervise all project staff in the PCU as well as the project budget. Certify attendance sheets, and oversee the establishment and operation of the project personnel performance assessment scheme.
5. Prepare an annual work plan on the basis of the project document, under the general supervision of the PSC and in close consultation and coordination with the NPD, UNDP;
6. Work with project staff members, LPSCs, and consultants to help each one utilize a practical and simple method for helping to determine the impact of project activities – of training activities, of workshops (what do people learn?), the process of developing new laws and policies (how are people changing the way they think or the way they do their jobs?).
7. Coordinate, monitor and be responsible to the PSC for implementation of the Work Plan;
8. Ensure consistency among the various program elements and related activities provided or funded by other donor organizations;
9. Work with UNDP office to prepare Terms of Reference for consultants and contractors;
10. Foster and establish links with other related GEF programs and, where appropriate, with other relevant regional programs;
11. Provide technical input to project activities where appropriate;
12. Work with stakeholders to develop an effective biodiversity field survey program;
13. Be an ex-officio member of the PSC and be responsible for the preparation, organization, and follow-up necessary to the effective conduct of PSC business;
14. Submit quarterly reports of relevant project progress and problems to the PSC.
15. He/she will integrate the various co-funded initiatives with GEF funded activities.
16. Serve as a fundraiser and lobbyist for activities included in the project but in need of funding from other partners.

17. Organize round table discussions on project successes and failures, per the work plan
18. Encourage an atmosphere of adaptive management in the project office, where people focus on meaningful results “on the ground”, rather than simply the spending of funds or reports.
19. Oversee an effective ongoing project monitoring program and development of a process whereby the project assesses best practices as it gains experience.
20. The NPM will collaborate with UNDP to ensure that specified tasks undertaken at the project sites are outsourced to suitable consultants and/or organizations.
21. Develop and disseminate lessons learned/best practices handbook derived from the project’s experience in, for example: 1) establishment and operation of MPAs, 2) the establishment of sustainable financing mechanisms; 3) the introduction of participatory management practices where none existed before; 4) Mangrove restoration; 5) and other issues as they emerge and take priority.

**Qualifications:**

- ⇒ graduate degree in biodiversity conservation, coastal management, project management, or some directly related field (e.g. wildlife and fisheries management, natural resource management, natural resource economics, etc.);
- ⇒ extensive experience in fields related to the assignment. At least five years experience as a senior project manager.
- ⇒ Excellent inter-personal, communication and negotiating skills;
- ⇒ familiarity with the goals and procedures of international organizations strongly preferred, in particular those of the GEF and its partners (UNDP, the World Bank, major NGOs, and current and future potential additional donors);
- ⇒ well developed English speaking and writing capability an advantage;
- ⇒ previous work experience in the region on issues directly related to the project;
- ⇒ ability and willingness to travel; and,
- ⇒ demonstrable skills in office computer use - word processing, spread sheets.

**Reporting requirements:**

The NPM will submit quarterly progress reports to the National Project Director and UNDP/GEF Programme Coordinator. The NPM will be also responsible for preparation of the Annual Project Report and provide his/her input to the completion of the annual GEF Project Implementation Review.

## Technical expert for each site

**Duration:** TBD

**Duty station:** Beijing, with travel to each site as required or based at project sites.

**Background:**

The purpose of these positions is to bolster the technical oversight capacity of the Project Coordination Unit, as well as each of the Site Implementation Units (SIUs). Each Technical Expert will report to the Project Manager and will work closely with the SIUs. Several TE will be hired part-time to bolster the technical oversight capacity of the project. They will work as individuals and as a group.

***Description of Responsibilities:***

More specifically, the responsibilities of the TE are to:

- 1) As a group, to serve as an advisory body for NEA, PCU and PSC.
- 2) To work closely, as required with international experts and sub-contractors.
- 3) To review ongoing work at the site level and to advise on technical matters in order to maintain quality of work.
- 4) To review outputs products from the project's sub-contracts and from normal project implementation activities.
- 5) To ensure that project activities are finished on time and in good quality, then providing technical opinions;
- 6) To visit local sites on behalf of PCU to guarantee the project implementation direction and provide guidance;

**Qualifications:**

Those technical experts should possess an advanced degree in marine biodiversity conservation or similar field of work. He/She should have at least 10 years of documented broad experience in developing and implementing marine biodiversity conservation initiatives in various settings, in-depth understanding of the technical, legal, institutional, financial issues related to marine biodiversity conservation project implementation. He/she must possess strong communication and technical writing skills and relevant experiences in project implementation. He/She must possess excellent interpersonal skills.

## **Project Implementation Coordinator**

**Location:** Beijing, China, with travel the provinces as deemed necessary, and travel to other locations consistent with these Terms of Reference.

### **Description of Responsibilities:**

Under the supervision of the NPM, the project Coordinator will:

1. Manage the day-to-day operations of the project office;
2. Assist the NPM in ensuring that the proper UNDP procedures are utilized when communicating with UNDP so as not to lose time in unnecessary delays.
3. Learn UNDP administrative procedures, processes, and requirements and provide administrative support to project staff;
4. Assure that necessary financial, procurement, disbursement and personnel matters are effectively addressed in close cooperation with colleagues in each of the Provincial SIU offices.
5. Facilitate effective working relationships with each of the site offices.
6. Keep lines of communication open among key project stakeholders to the extent possible.
7. Work closely with part-time project accountant on a continual basis;
8. Prepare internal and external correspondence for the Project Office, maintain files and assist in the preparation of documentation for meetings;
9. Co-ordinate and assist in travel arrangements of project personnel;
10. Keep project implementation focused on producing quality results for the money spent in terms of changed human behavior and changed situations.
11. Assist in the preparation of press releases, statements and speeches on the project's activities;
12. Undertake such other duties as may be assigned by the NPM.

Work with the Reporting and Contracts Officer to monitor implementation, financial management and procurement preparations.

### **Skills and Experience Required:**

- Significant office environment work experience; Graduate university degree in a related discipline.
- Some experience would be helpful working with international organizations/agencies, governmental offices, and research organizations.
- Speaking and writing proficiency in English an advantage;
- Working fluency in office computer software.
- Excellent inter-personal skills and obvious ability to work well with others
- Reliability, initiative, thoroughness and attention to detail.
- Self-starting and ability to work independently under general guidance.
- Ability to work under pressure
- Willingness to work substantial periods of overtime upon short notice.

## Reporting and Contracts Officer

**Location:** Beijing, China, with travel the provinces as deemed necessary, and travel to other locations consistent with these Terms of Reference.

### **Description of Responsibilities:**

Under the supervision of the NPM and direct guidance of the NPD, the Reporting and Contracts Officer will support the NPM in preparing project reports and related documentation. This will include responsibilities such as:

- ⇒ Day-to-day work necessary to successfully generate all the necessary reports for the project.
- ⇒ Finalizing all relevant sub-contractual arrangements for project implementation. This will require coordinating with UNDP colleagues, the AMA, and of course the NPM.
- ⇒ Coordinating with the NPD, the PSC, relevant provincial agencies, and the academic and donor community;
- ⇒ Facilitate smooth information sharing among PSC members, UNDP, the PCU, and the AMA.
- ⇒ *Organize effective annual reviews with the help of NPM, UNDP, and AMA.*
- ⇒ Ensure that site SIUs are reporting as required and are “results oriented” and NOT “input-oriented.”
- ⇒ Apply UNDP’s and Government’s accounting requirements to project’s reporting.
- ⇒ Other duties as may be assigned by the NPD and NPM.

### **Skills and Experience Required:**

- University education preferred (equivalent experience considered).
- Several years' experience of work with international organizations/agencies, governmental offices, research or training organizations.
- Proficiency in English (speaking and writing).
- Demonstrable office computer skills (word processing, spreadsheet preparation, etc).
- Experience with larger budgets and demonstrable, working knowledge of international accounting standards;
- Excellent inter-personal skills
- Reliability, initiative, thoroughness and attention to detail.
- Ability to work under general guidance or independently.
- Ability to work under pressure.
- Willingness to work substantial periods of overtime at short notice.

## **Short-Term National Consultants**

National Consultants will be recruited from qualified candidates at the national and regional levels. National Consultants will play an important role in project implementation providing technical support/input in at important times and places along the project's implementation pathway. National consultants will be either hired as individuals or as part of a team under one of the project's sub-contracts.

Types of national consultant input the project may need includes the following areas of required expertise:

- Biodiversity Assessments & Field Surveys
- Biodiversity Monitoring; Participatory monitoring
- Environmental and Ecosystem Monitoring
- Training in Participatory Protected Area Management; Community involvement
- Legislation and Legal Capacity Building
- Financing Mechanisms

The more detailed Terms of References for each required consultancy will be prepared by the NPM in the earliest stages of project implementation.

## **Alternative Livelihoods Development Expert**

**Duration:** To Be Determined

**Location:** Input needed in Shankou.

This position was established to facilitate the implementation of project activities pertaining to the development of alternative livelihoods under the Project's Output 2.4 and related activities.

### **Description of Responsibilities:**

1. Work with communities to identify local skills and business interests
2. Work with the communities to carry out market assessments in 3-4 selected business areas. This should include assessing the potential scale of business opportunities and the proportion of the local population that can benefit compared with the resource users.
3. Select 2-3 business areas worthy of exploration and development based on the skills and market assessments.
4. Assess infrastructure needs for these areas.
5. Assess capacity building needs of the communities (business management, finance, technical skills etc)
6. Train communities in business planning and bring in trainers for other key skills requirements.
7. Assess and plan for provision of micro-financing to support small business development.
8. Identify and assess other barriers and risks to the local communities for developing new businesses and plan how the project can assist in addressing them.
9. Identify how to assist potentially marginalized community members who are major resource users and hence should be targets of business development support.
10. Support marketing efforts for the small businesses developed during the project life.
11. Provide technical assistance to small businesses start-ups within the project area in the selected areas of Alternative Livelihood.
12. Assess the utility in setting up a small business support unit which can continue providing support to the local communities on a fee basis upon termination of the project. If such an option is determined to be useful then plan for its development.
13. Disseminate the lessons learned from those developing new small businesses to others the project wishes to support.

### **Skills and Experience Required:**

- Proven experience in small business development for rural communities
- Proven experience in market assessments and marketing
- Proven experience in one of the main areas expected to be developed by the project, for example, tourism, handicrafts etc.
- Strong business, financial, and marketing skills, with a related university degree
- Proven experience in training local communities in business related skills
- The ability to work within a conservation project alongside scientists.
- Graduate university education (equivalent experience considered).
- Proven experience in successfully working with local communities in rural areas;
- Extensive knowledge of local socio-economic conditions and aspirations of local people;
- Direct experience in the development of economic opportunities at the community level
- Ability and willingness to travel; and,
- Reliability, initiative, thoroughness and attention to detail.
- English language ability advantageous (speaking and writing).
- Ability to work independently with general oversight and guidance.
- Ability to work under pressure.
- Willingness to work substantial periods of overtime at short notice.



**Reporting requirement:**

Reporting is not as important as achieving results on the ground. This position, should it be utilized, will develop practical recommendations that will be actually implemented. The written description of these recommendations and all relevant material will be a sufficient report from the consultancy. The AL expert will report to the NPM on the regular basis concerning implementation of the Output Target 3 under Output 2.4 of the project.

## **INTERNATIONAL CONSULTANTS**

### **Adaptive Management Advisor (AMA)**

The position is a key part of UNDP's and GEF's approach to strengthening and renewing their emphasis on quality implementation of UNDP-GEF projects. The purpose of this position is to enable the project to maintain strategic direction during implementation, by ensuring that the project is an active member of a learning network of GEF projects, to sharpen the project's focus on quality outputs, and to emphasize a learning and adaptive approach to project management and implementation.

#### **Description of work responsibilities:**

1. Facilitate learning and adaptive approach to project management and implementation by asking questions of key project personnel, including: "What are we learning and how are we incorporating it into our project implementation process?" "Are we meeting our indicators of success?"
2. Lead annual project management and evaluation exercise.
3. Upon request of the NPM, revise, update, and/or prepare detailed Terms of Reference for positions as they come up for hire during project implementation;
4. Liaise with the UNDP, PCU and monitoring of the project implementation including participation in the field missions.
5. Serve as a conduit for ongoing UNDP/GEF best practice input to project implementation, monitoring and evaluation.
6. Establish linkages among various UNDP/GEF projects implemented in China, as well as contacts with other environmental and development projects in China and other parts of the world.
7. Develop and disseminate lessons learned/best practices handbook derived from the project's
8. Assist NPM with the management of the collaborative group of co-funders that is key to the project's success.

#### **Qualification Requirements:**

- ⇒ Detailed knowledge of project design and implementation arrangements and experience with key stakeholders;
- ⇒ At least five years of experience with UNDP and GEF project development and implementation;
- ⇒ Proven experience in successfully working with adaptive management/monitoring & best practice assessment;
- ⇒ Well developed leadership, inter-personal, communication and negotiating skills, as well as a proven ability to work effectively in groups;
- ⇒ Previous work experience in China and Asia;
- ⇒ Post-graduate university education.
- ⇒ Reliability, initiative, thoroughness and attention to detail.

### **ICZM Advisor on Best Practices**

**Duration: 3.5 months**

**Location:** Nanji Islands, with travel in the project region as deemed necessary, and travel to other locations consistent with these Terms of Reference.

In China, there is a growing necessity to balance the need for immediate use and consumption of coastal resources and the need to ensure the long-term supply of those resources, including biological diversity. In many parts of coastal China, such a balance has not yet been achieved, with large parts of the coastal zone polluted, fisheries degraded, wetlands drained and coral reefs diminished. Integrated Coastal Zone Management (ICZM) is an approach to coastal resource management that is designed to try to achieve this balance. ICZM is a process of governance that consists of the legal and institutional practices necessary to ensure that development and management plans for coastal areas are integrated with environmental objectives.

This position was established to facilitate the implementation of project activities pertaining to the demonstration of Integrated Coastal Zone Management and with it, model natural resource and land-use planning in the Fujiang-Guangdong area of Dongshan-Nan-ao and the Nanji Islands and to a lesser degree in Sanya. This will entail undertaking all activities listed under Project Outputs 2.1 and 2.6 in the work plan. The position will involve a significant amount of work with local municipality and provincial officials. In many activities, this consultant will work with the conservation biology consultant. It is crucial that their work in China on this project overlap. The position will involve a significant amount of work with technical consultant counterparts, local municipalities and provincial officials, as well as the MPA Advisor.

The primary outputs from this consultancy are the following:

- ⇒ Framework in place with counterparts in Nanji for the development of a comprehensive township master plan for Nanji Islands for implementation by government.
- ⇒ An ICZM programmatic framework for Fujian-Guangdong and specific program for local interest groups to complete this framework within a year of this expert's input.
- ⇒ The level of understanding and capacity to implement ICZM among stakeholders in Nanji and Fujian-Guangdong are measurably strengthened. This will include an understanding of the key ICZM principles:
  - Precautionary approach
  - Polluter pays
  - Proper resource accounting
  - Transboundary perspective and responsibility
  - Intergenerational equity
- ⇒ A framework for a comprehensive township master plan for Nanji Islands.

The ICZM Advisor, in collaboration with the land-use planning expert, will

- 1) Work with colleagues in the Fujian-Guangdong area to a) set objectives for the development and management of the trans-provincial coastal zone involving as broad a spectrum of interest groups as possible; b) develop a simple methodology for the local governments to apply in developing and implementing a large-scale functional land and water-use planning and zoning program in the Fujian-Guangdong area that applies the key principles and integrated environment into development planning. .
- 2) Prepare inter-provincial strategy/action plan for marine habitat/species protection and recovery.
- 3) Review existing development, management and zoning plans for Nanji area and recommend how they can be modified to reflect ICZM principles and approaches.
- 4) Conduct training workshop in ICZM for stakeholders from Nanji and Fujian-Guangdong

Provinces, including on specific methods and practices for effectively developing and implementing a functional land and water-use planning and zoning program.

- 5) Work with stakeholders in Nanji and Fujian-Guangdong area and to establish the methodology and conceptual framework to be applied by stakeholders in developing a township master plan in Nanji and an ICZM plan in Fujian-Guangdong areas.
- 6) Review work done by local colleagues on ICZM and Township Master Planning.
- 7) Demonstrate GIS-based biodiversity overlays using data gathered under Output 1.1 for use in planning exercise.
- 8) Synthesize biological, ecological, geographical, and socio-economic information and assess areas of priority use (conservation, fishing, tourism, etc) and develop zoning model in Dongshan Nan'ao area.
- 9) Develop and secure adoption of a township-level master plan for Nanji Islands.
- 10) Assess and determine gaps in existing development, management and zoning approaches, program, plans for Nanji area.
- 11) Synthesize available biological, ecological, geographical, and socio-economic information and assess areas of priority use (conservation, fishing, tourism, etc) and develop zoning model.
- 12) Work with research institutes creating biodiversity overlays to demonstrate the use of GIS-based biodiversity overlays using data gathered under Output 1.1 in planning exercise.
- 13) Train stakeholders in Nanji Township and Pingyang County to develop and secure adoption of a township-level master plan for Nanji Islands. This should include laying out a planning framework for the master plan and a work plan for achieving this.
- 14) Advise Sanya colleagues on how to develop land-use planning practices to prevent and /or minimize pollution of valuable MPA waters. This will require the expert to review maps of the area with Sanya-based colleagues and recommend some basic policy and planning tools for application there.

#### **Requirements:**

- ⇒ Advanced degree in coastal conservation or sustainable development or land-use planning-related discipline, including economics.
- ⇒ Proven expertise and experience in developing and/or administering effective ICZM training programs/materials.
- ⇒ Chinese language skills are an advantage.
- ⇒ Proven experience and skill with ICZM methods and practice and with helping others successfully establish an ICZM programmatic approach.

#### **Conservation Biology Advisor**

Duration: 3 months

Conservation science has undergone some dramatic improvements during the past decade in the application of biological, ecological, and sociological knowledge to the challenge of solving problems associated with the conservation of biological diversity.

This position's purpose is to facilitate the application of conservation biology best practices and methods for biodiversity conservation in each of the project sites. This will entail undertaking most of the activities listed under Project Outputs 1.1, 1.2, 1.3, 2.5 & 2.6. The position will involve a significant amount of work with research institute counterparts, local municipalities and provincial officials, as well as the MPA Advisor and the ICZM Advisor.

More specifically, the Conservation Biology Advisor will:

Develop training materials on conservation biology, basic survey methods, and data management/use and conduct the training, in cooperation with the site technical advisor, the MPA advisor, and other colleagues in China.

- 1) In close collaboration with sub-contracted research institute, conduct consultations on what diversity management means in practical terms. Do this initially for Shankou and Sanya MPAs and secure consensus on the main points among key stakeholders, including survey, monitoring and data requirements for science-based management. The counterpart research institute will then replicate this same approach in Nanji and Dongshan Nan'ao.
- 2) Identify and describe key MPA actors in need of training.
- 3) Develop simple, practical training materials for these key actors.
- 4) Conduct training for up to 20 individuals in each MPA/site area and ensure that sub-contracted counterpart is prepared to replicate it in other two site areas.
- 5) Work with Shankou/Weizhou & Sanya MPAs to develop and implement a practical and sustainable long-term biodiversity monitoring program.
- 6) Advise technical advisor for Shankou on how to conduct effective biodiversity surveys as part of the Weizhou MPA proposal.
- 7) Advise technical advisor and other stakeholders on developing effective conservation program for migratory species in the Dongshan-Nan'ao area. This will include activities under Targeted Output 2 of Output 2.6 related to developing and implementing conservation plans for migratory species.

#### **Requirements:**

- ⇒ Advanced degree in conservation biology or related ecological/biological discipline
- ⇒ Proven expertise and experience in developing effective training programs/materials.
- ⇒ Chinese language skills an advantage.
- ⇒ Proven experience and skill with biodiversity survey and monitoring methods and practice.
- ⇒ Experience in helping colleagues to adapt these practices to fit local circumstances.

#### **MPA Management Advisor**

Duration: 3 months

This position was created to assist project staff and stakeholders in adopting MPA management “best practices,” including the establishing community partnerships for MPA management. The position allows the project to introduce the latest in community based natural resource management and government-community partnering in resource management and monitoring. Experience in this area is still quite limited in China, while there is a wealth of experience from other parts of the world on this topic. The position will contribute to Activities under Outputs 1.1, 1.2, 1.3, 2.4 & 2.5 of the work plan.

Work in close collaboration with project manager, UNDP officer, the Biodiversity advisor, relevant technical institute personnel, and local MPA staff, and local project coordination unit people.

- 1 Prior to coming to China, summarize global lessons/best practices for MPA establishment and work with PCU staff to have translated into Chinese.
- 2 Direct and review the comprehensive assessment of Weizhou Island for possible MPA designation.
- 3 Work with Nanji, Sanya and Shankou to develop simple, practical management plans. Advise on the most effective way to produce a useful result and give one workshop in each area on how to do this, complete with materials for reference.
- 4 Work with local colleagues and the Conservation Biology expert to establish survey protocols/information requirements for: biological, ecological and socio-economic subjects to identify priority biodiversity areas and important socio-economic parameters.
- 5 Develop training materials MPA management and design and conduct training.
- 6 Design and conduct training for MPA manager and staff at Nanji, Sanya, and Shankou in participatory & community-based management and conservation biology.
7. Develop community-based enforcement regimes in consultation with local stakeholders and provide necessary training to local stakeholders and MPA managers.
8. Devise practical guidelines for public participation in diversity-management for use by coastal management agencies and secure their approval.
9. Provide input on how the stakeholders should establish Village Conservation Groups or an NGO – whichever is most appropriate.
10. Work with MPA managers and authorities in Nanji, Sanya and Shankou in devising practical, workable approaches in each context for applying cooperative MPA management with local communities.
11. Consult local communities regularly important partners in the MPA process.

**Qualification Requirements:**

- ⇒ Advanced degree in protected area issues-related discipline and at least 8 years professional experience.
- ⇒ Proven expertise in practical MPA management and the application of MPA management best practices.
- ⇒ Proven ability to excel in situations characterized by multi-cultural challenges (i.e. ambiguity) and to forge successful results.
- ⇒ Proven experience and skill in applying community-based MPA management approaches.

- ⇒ Experience with protected areas in China a significant advantage as is the ability to speak Chinese.
- ⇒ Experience in helping colleagues adapt to these practices to fit local circumstances.

## Environmental Economist

Duration: 3 months

The conservation of biological diversity is more about changing human behavior than managing wildlife or the environment. Coastal management is people management. Economics provides some key insights into human behavior including resource use and this is no less the case when it comes to environmental challenges. This position was created to provide crucial expert input with respect to environmental economics and the usefulness of environmental economic thought to support the development of effective and well-funded conservation action.

### **Description of Responsibilities:**

**Prior to coming to China, the expert should review responsibilities and request relevant information from PCU in advance of your work in China. This position is responsible for conducting all of the activities and achieving the results described under Output 2.3.**

1. Broaden the understanding of key Sanya, Shankou decision makers regarding environmental economics and the hidden values of ecosystem services and the economic trade-offs involved in making coastal resource use decisions. If feasible, do this for stakeholders from the other two sites
2. In so doing, add economic rationale to the need for applying an ICZM approach in project.
3. Propose funding mechanisms (fees, tax incentives/disincentives, penalties/fines) in order to:
  - a) internalize the cost of ecological damage from pollution, and inappropriate coastal development and boating practices; and b) provide source of funding for the MPA.

In order to do this, the expert will:

**Determine annual recurrent costs of MPA management; Review existing financing mechanism experience in China (cost recovery, etc..) and associated laws/regulations; and Assess values and services provided by coral reefs/coastal ecosystems,**

1. Highlight and quantify the ecosystem benefits safeguarded by SNCRNR and raise awareness among municipal and provincial officials of these benefits and the importance of pollution control investments.
2. Assess how to use regulatory incentives to promote conservation.
3. Advise MPA managers on how to conduct willingness to pay surveys in the four site areas in order to determine economic values of certain biological and environmental resources, AND Conduct “willingness to pay” surveys to determine appropriate user fees (park entrance fees, diver fees, sport fishing fees) and assess various options for funding mechanisms.
4. Develop sustainable and appropriate financing mechanisms to support Sanya MPA operations and introduce to decision makers through roundtable discussions and workshops.
5. Pilot sustainable finance mechanism to support MPA management and sustainable coastal development and planning.

6. Train MPA staff and relevant institutions in financial planning and management, emphasizing best practice.
  
8. Generate recommendations for strengthening the coastal fishery and for strengthening local peoples' stake in sustainable fishery management

**Qualification Requirements:**

- ⇒ A PhD degree in economics with a focus or interest on environmental or resource use.
- ⇒ Proven mastery of environmental economics and the ability to explain the principles in simple, easily understood terms.
- ⇒ Particular attention to detail.
- ⇒ Ability to work and communicate well with a diverse group of stakeholders;
- ⇒ Ability to design practical funding mechanisms that become viable, effective institutions;
- ⇒ Detailed knowledge of the international donor/funding arena;



## **Terms of Reference & Monitoring and Evaluation Plan**

Two evaluations: One (1) mid-term and One (1) final project evaluation

Two external evaluations are scheduled in the project's eight year lifespan, one in month 33, and one in month 90. These independent evaluations of project performance will match project progress against predetermined success/threat reduction indicators. Each evaluation of the project will document lessons learned, identify challenges, and provide recommendations to improve performance.

### **Evaluation #1:**

The first evaluation will be conducted in month 33, near the completion of year three. This evaluation will assess progress in achieving threat reduction, identify any difficulties in project implementation and their causes, and recommend corrective courses of action. Effective action to rectify any identified issues hindering implementation will be a requirement prior to determining whether implementation should proceed. This evaluation will be led by UNDP/GEF, in cooperation with UNDP-China and SOA. UNDP/GEF's participation will not be funded from the project's budget. UNDP China's participation will be partly funded from the "Adaptive Management Monitoring" budget line.

A crucial milestone to be reviewed during this evaluation will be whether the project's stakeholders have succeeded in including specific activities and funding requests in the next Five Year Plan of the Peoples' Republic of China. Such funding is critical to supporting the replication of activities scheduled to begin in years 4-5 of the project. Without the inclusion of these funds in the Five Year Plan, the project will not be allowed to continue beyond year 3.

Project performance will be measured in each of the three evaluations based on the quantitative and qualitative indicators to be finalized during the first year of project implementation. Many of these indicators will relate to the reduction of the key threats to biodiversity in each of the four coastal sites.

Other indicators to be considered are defined in the Logical Framework and the Results Framework of the Project Document. The logical framework for this project sets out a range of impact/implementation indicators that will be used to gauge impact. Success and failure will be determined in part by monitoring relative changes in baseline conditions established during year one of the project. Baseline conditions will be defined with respect to the nature and extent of threats, as well as habitat size and condition, and population size of indicator species to ensure that viable populations of these species are present in perpetuity. Where possible, indicator species that are sensitive to habitat change and indicative of increased pressure will be identified and monitored. If populations of rare or endangered species are shown to be in decline, measures will be taken to identify the reason for the decline, and alternative management strategies will be developed to ensure the long-term health of populations and incorporated into site management.

### **Evaluation #2:**

The focus of this evaluation will be on the effectiveness of the overall project in attaining its objectives, and on describing and quantifying the overall impact of the project and of GEF's incremental investment in the project. This constitutes the final evaluation and will be undertaken by a team of independent evaluation experts commissioned by UNDP.

Each of the three evaluations should also assess:

- (a) Relevance of the project original problem analysis (approach, objectives, modalities of implementation, etc.) with regard to the prevailing context;

- (b) Effectiveness of the approach used to produce these results;
- (c) Efficiency of project management, including the delivery of inputs in terms of quality, quantity and timeliness; and the monitoring system;
- (d) Transfer of capacity to the provincial institutions;
- (e) Views of the direct beneficiaries on the preliminary outcomes and on the consultative process taking place for the project.

Particular attention should be paid to assessing the following issues in the context of national execution: 1) capacity built within the assisted institution and its staff, and; capacity built within the end-users including specific groups.

**Sustainability** of the results needs to be reviewed in light of the following considerations:

- (a) Commitment of the host government to the project targets, and
- (b) Involvement of the local organizations (participatory process)
- (c) Management and organizational factors
- (d) Co-funding actually leveraged for replication of best practices in other sites.
- (e) Human resources development

Evaluation Expert/Team should inspect the following documents, among others: the Project Document; project files; technical reports; mission reports; monitoring visit reports; Annual Project Reports; TPR reports; PIRs; and other relevant documents; lessons learned round table discussion records and minutes; maps and databases developed under the project and being used in the sites.

Basing on the analysis of the above documentation as well as on interviews with the project personnel, direct and indirect project beneficiaries and project stakeholders. The Evaluator should provide a fair assessment of the project implementation and present his findings and recommendations in the report.

## **Appendix B3 Global Environment Facility Guidelines for Implementing Agencies to Conduct Terminal Evaluations**

### **Background**

Terminal evaluations of projects by Implementing and Executing Agencies under expanded opportunities (IAs/EAs) represent one of the modalities under the GEF M&E evaluation program. All regular and medium sized projects supported by the GEF are required to undergo a terminal evaluation upon completion of implementation.

The present document describes the minimum requirements for terminal evaluations of a GEF supported project, which are considered complementary to those required by a IAs/EAs. The guidelines comprise first the principles to conduct terminal evaluations and subsequently the scope of these evaluations. A terminal evaluation reviews the implementation experience and achievement of results of the project in question against the project objectives endorsed by GEF, including changes agreed during implementation.

### **GEF Principles for conducting terminal evaluations**

- The IAs/EAs responsible for the project will arrange for the terminal evaluation;
- A team of independent consultants will conduct the evaluation. These consultants should not have participated substantively during project preparation and/or implementation and should have no conflict of interest with any proposed follow-up phases. It would also be advisable for the team to be comprised of professionals with a wide range of skills – strong analytical and evaluation experience, expertise in technical aspects of the project, global environmental issues, and experience with economic and social development issues.
- The duration and scope of the evaluation depends on the complexity of each project and should be reflected in the TORs.
- The evaluation should be completed within 6 months of closing of all project activities.
- Major project stakeholders at the national and local levels should be involved.
- If the project did not establish a baseline (initial conditions), the evaluator should seek to determine it through the use of special methodologies so that achievements, results and impacts can be properly established.
- It would be advisable to take advantage of the project M&E components and the log frame of the project design (the M&E components should also be evaluated).
- Evaluators should have an updated knowledge of GEF policies and strategies. A brief presentation of specific GEF terminology is provided in Attachment 1.

### **Scope**

The scope of the terminal evaluation will depend upon type of project, size, focal area, and country context. However, the following issues should be covered:

- An analysis of the attainment of global environmental objectives<sup>2</sup>, outcomes/impacts<sup>3</sup>, project objectives<sup>4</sup>, and delivery and completion of project outputs/activities<sup>5</sup> (based on

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• <sup>2</sup> This should be the highest level in the project's logical framework, which is often labeled the "goal" to which the project contributes. Different implementing agencies are using different terms for this level. The World Bank often refers to this level as the "global objective". UNEP uses "overall project objective" to describe this level, while UNDP has used "development objective".

• <sup>3</sup> Proposed changes to and effects on the environment and society to be caused by the project.

• <sup>4</sup> "Project objective" are the second highest level of objectives in the logical framework. This are referred to by the World Bank as development objectives, by UNDP as project objectives and by UNEP as "objectives".

- indicators).
- Evaluation of project achievements according to GEF Project Review Criteria<sup>6</sup>:
  1. Implementation approach
  2. Country ownership/Driveness
  3. Stakeholder participation/ Public Involvement
  4. Sustainability
  5. Replication approach
  6. Financial planning
  7. Cost-effectiveness
  8. Monitoring and evaluation

Each terminal evaluation will include **ratings** on the following criteria: (a) Outcomes/Achievement of objectives (the extent to which the project's environmental and development objectives were achieved); (b) Implementation Approach; (c) Stakeholder Participation/Public Involvement; (d) Sustainability; and (e) Monitoring & Evaluation. The ratings will be: Highly Satisfactory, Satisfactory, Marginally Satisfactory, Unsatisfactory, and N/A. This system will allow consistency across all IAs/EAs.

Terminal evaluations should present and analyze main findings and key lessons, including examples of best practices for future projects in the country, region and GEF (technical, political, managerial, etc.). Evaluations should also have an annex explaining any differences or disagreements between the findings of the evaluation team, the IA/EA or the GEF recipient organization.

A terminal evaluation is not an appraisal of a follow-up phase.<sup>7</sup>

### **Communications with GEF M&E**

Each IA/EA should confirm by May 15, the terminal evaluation schedule presented with the PIR. This information will include the approximate timing of the completion report. The final evaluation reports will be sent to the GEF M&E unit no later than 4 weeks after the final version is completed.

### **Role of GEF M&E**

The GEF M&E unit will review the final document of all terminal evaluations to identify issues and lessons to complement the annual Project Performance Review (PPR) and to improve the scope and content of future terminal evaluations. The results of the review will be incorporated in the annual PPR to complement findings of other M&E exercises. For a few selected evaluations, which have great learning potential, the GEF unit will participate after agreement with the IA/EA.

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• <sup>5</sup> This refers to outputs, activities or components as described in the Project Document that will contribute to the attainment of the objectives.

• <sup>6</sup> Most of this discussion is based on the GEF Council paper: GEF Project Cycle (GEF/C.16/Inf.7)

• <sup>7</sup> Under special circumstances some projects may require a follow-up phase, even if this was not envisaged initially. In these cases, IA/EA would have to provide substantial justification for the additional GEF funding. Project proposals requesting support for follow-up phases should be accompanied by an independent terminal evaluation of the earlier phase when the project concept is reviewed for pipeline entry. If the current phase of the project is still under implementation, an interim evaluation should be proposed following the GEF Guidelines for Terminal Evaluations. This interim evaluation should be carried out by persons independent from those responsible for the design and implementation of the new phase. The TORs of the interim evaluation should be reviewed and approved by GEF M&E. Furthermore, in these cases, the project concept will be admitted into the GEF pipeline (and any associated PDF-B reviewed and approved if necessary), with the following binding conditions: (i) a terminal evaluation of the project should be submitted along with the project proposal for work program entry; and (ii) the proposal will reflect the experience and lessons of the earlier phase. If either of the above conditions are not met, the project will not be recommended for entry into the work program.

Completing a terminal evaluation does not preclude the project from being selected for one of the GEF M&E initiated thematic reviews and evaluations.

### **Attachment: Explanation on Terminology**

**Implementation Approach** includes an analysis of the project's logical framework, adaptation to changing conditions (adaptive management), partnerships in implementation arrangements, changes in project design, and overall project management.

Some elements of an effective implementation approach may include:

- The logical framework used during implementation as a management and M&E tool
- Effective partnerships arrangements established for implementation of the project with relevant stakeholders involved in the country/region
- Lessons from other relevant projects (e.g., same focal area) incorporated into project implementation
- Feedback from M&E activities used for adaptive management.

**Country Ownership/Driveness** is the relevance of the project to national development and environmental agendas, recipient country commitment, and regional and international agreements where applicable.

Some elements of effective country ownership/driveness may include:

- Project Concept has its origin within the national sectoral and development plans
- Outcomes (or potential outcomes) from the project have been incorporated into the national sectoral and development plans
- Relevant country representatives (e.g., governmental official, civil society, etc.) are actively involved in project identification, planning and/or implementation
- The recipient government has maintained financial commitment to the project
- The government has approved policies and/or modified regulatory frameworks in line with the project's objectives

For projects whose main focus and actors are in the private-sector rather than public-sector (e.g., IFC projects), elements of effective country ownership/driveness that demonstrate the interest and commitment of the local private sector to the project may include:

The number of companies that participated in the project by: receiving technical assistance, applying for financing, attending dissemination events, adopting environmental standards promoted by the project, etc.

Amount contributed by participating companies to achieve the environmental benefits promoted by the project, including: equity invested, guarantees provided, co-funding of project activities, in-kind contributions, etc.

Project's collaboration with industry associations

**Stakeholder Participation/Public Involvement** consist of three related, and often overlapping processes: information dissemination, consultation, and "stakeholder" participation. Stakeholders are the individuals, groups, institutions, or other bodies that have an interest or stake in the outcome of the GEF-financed project. The term also applies to those potentially adversely affected by a project.

Examples of effective public involvement include:

#### **Information dissemination**

- Implementation of appropriate outreach/public awareness campaigns

### **Consultation and stakeholder participation**

- Consulting and making use of the skills, experiences and knowledge of NGOs, community and local groups, the private and public sectors, and academic institutions in the design, implementation, and evaluation of project activities

### **Stakeholder participation**

- Project institutional networks well placed within the overall national or community organizational structures, for example, by building on the local decision making structures, incorporating local knowledge, and devolving project management responsibilities to the local organizations or communities as the project approaches closure
- Building partnerships among different project stakeholders
- Fulfillment of commitments to local stakeholders and stakeholders considered to be adequately involved.

**Sustainability** measures the extent to which benefits continue, within or outside the project domain, from a particular project or program after GEF assistance/external assistance has come to an end. Relevant factors to improve the sustainability of project outcomes include:

- Development and implementation of a sustainability strategy
- Establishment of the financial and economic instruments and mechanisms to ensure the ongoing flow of benefits once the GEF assistance ends (from the public and private sectors, income generating activities, and market transformations to promote the project's objectives).
- Development of suitable organizational arrangements by public and/or private sector
- Development of policy and regulatory frameworks that further the project objectives
- Incorporation of environmental and ecological factors affecting future flow of benefits.
- Development of appropriate institutional capacity (systems, structures, staff, expertise, etc.)
- Identification and involvement of champions (i.e. individuals in government and civil society who can promote sustainability of project outcomes)
- Achieving social sustainability, for example, by mainstreaming project activities into the economy or community production activities
- Achieving stakeholders consensus regarding courses of action on project activities.

**Replication approach**, in the context of GEF projects, is defined as lessons and experiences coming out of the project that are replicated or scaled up in the design and implementation of other projects. Replication can have two aspects, replication proper (lessons and experiences are replicated in different geographic area) or scaling up (lessons and experiences are replicated within the same geographic area but funded by other sources). Examples of replication approaches include:

- Knowledge transfer (i.e., dissemination of lessons through project result documents, training workshops, information exchange, a national and regional forum, etc).
- Expansion of demonstration projects.
- Capacity building and training of individuals, and institutions to expand the project's achievements in the country or other regions.
- Use of project-trained individuals, institutions or companies to replicate the project's outcomes in other regions.

**Financial Planning** includes actual project cost by activity, financial management (including disbursement issues), and co-financing (see Attachment 2 for further discussion on co-financing). If a financial audit has been conducted the major findings should be presented in the TE.

Effective financial plans include:

- Identification of potential sources of co-financing as well as leveraged and associated financing<sup>8</sup>.
- Strong financial controls, including reporting, and planning that allow the project management to make informed decisions regarding the budget at any time, allows for a proper and timely flow of funds, and for the payment of satisfactory project deliverables
- Due diligence due diligence in the management of funds and financial audits.

**Cost-effectiveness** assesses the achievement of the environmental and developmental objectives as well as the project's outputs in relation to the inputs, costs, and implementing time. It also examines the project's compliance with the application of the incremental cost concept. Cost-effective factors include:

- Compliance with the incremental cost criteria (e.g. GEF funds are used to finance a component of a project that would not have taken place without GEF funding.) and securing co-funding and associated funding.
- The project completed the planned activities and met or exceeded the expected outcomes in terms of achievement of Global Environmental and Development Objectives according to schedule, and as cost-effective as initially planned.
- The project used either a benchmark approach or a comparison approach (did not exceed the costs levels of similar projects in similar contexts). A benchmark approach in climate change and ozone projects measures cost-effectiveness using internationally accepted threshold such as 10\$/ton of carbon equivalent reduced, and thresholds for the phase out of specific ozone depleting substances measured in terms of dollars spent per kg (\$/kg) of each type of ODS reduced.

**Monitoring & Evaluation.** Monitoring is the periodic oversight of a process, or the implementation of an activity, which seeks to establish the extent to which inputs, work schedules, other required actions and outputs are proceeding according to plan, so that timely action can be taken to correct the deficiencies detected. Evaluation is a process by which program inputs, activities and results are analyzed and judged explicitly against benchmarks or baseline conditions using performance indicators. This will allow project managers and planners to make decisions based on the evidence of information on the project implementation stage, performance indicators, level of funding still available, etc, building on the project's logical framework.

Monitoring and Evaluation includes activities to measure the project's achievements such as identification of performance indicators, measurement procedures, and determination of baseline conditions. Projects are required to implement plans for monitoring and evaluation with adequate funding and appropriate staff and include activities such as description of data sources and methods for data collection, collection of baseline data, and stakeholder participation. Given the long-term nature of many GEF projects, projects are also encouraged to include long-term monitoring plans that are sustainable after project completion.

Any issues related to the quality of backstopping and quality assurance and control of project deliverables listed in the project document should be addressed in this section.

### **Leveraged Resources**

Leveraged resources are additional resources—beyond those committed to the project itself at the time of approval—that are mobilized later as a direct result of the project. Leveraged resources can be financial or in-kind and they may be from other donors, NGO's, foundations, governments, communities or the private sector. Please briefly describe the resources the project has leveraged

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• <sup>8</sup> Please refer to Council documents on co-financing for definitions, such as GEF/C.20/6. Annex 2 presents a table to be used for reporting co-financing.

since inception and indicate how these resources are contributing to the project's ultimate objective.



## **Appendix B4 Description of project sub-contracts organized by site (as reflected in budget)**

This section presents the key substantive elements of the 16 sub-contracts to be awarded by the project. The substantial number of sub-contracts, and the large percentage of the budget that they represent, mean that sub-contract management will form a crucial component of project management.

### *Finalization of TORs*

The draft terms of reference presented below are designed to assist the project team in preparing final, detailed terms of reference for the sub-contracts. They present information on duration and timing, background, oversight and co-ordination, objectives, activities and deliverables of each sub-contract. It will be the responsibility of PCU team members, with support where necessary from national and international consultants, and agreement from project partners, to finalize these TORs. In addition to the information presented below, the final version of each sub-contract will include:

- 1) the general conditions under which the work will be conducted;
- 2) work plan detailing the tasks to be undertaken by the subcontractor and the time at which the main outputs will be delivered to the project;
- 3) the process for transfer of payment(s);
- 4) the process for refund of unspent balance, and;
- 5) any substantive revisions to the present draft TORs that may become necessary due to changes in baseline or other circumstances.

Some of the TORs cannot be finalized until other sub-contracts have been completed. This is notably the case for implementation of action plans at Fujian-Guangdong and at Nanji Islands.

In other cases, sub-contract timing and ultimate success may also depend on the results of previous sub-contracts. Thus, several sub-contracts will depend on the successful conclusion of biodiversity assessments, surveys and/or GIS work. These factors and inter-relationships among sub-contracts will need to be taken carefully into account by project managers.

### *Technical proposals and issuing of contracts*

Following the finalization of these TORs, and depending on the size of the sub-contract in question, appropriate contracting procedures will be followed in selecting among potential sub-contractors. Technical proposals will need to be prepared by each potential sub-contractor. It is within these technical proposals that the most detailed and up-to-date substantive descriptions of work will be found, as potential sub-contractors describe how they propose to implement the required sub-contract tasks, including inputs, work plan, etc. **It will be extremely important for project partners to have substantive input into the technical proposal process and to ensure that the final technical proposals are clear, comprehensive and have a strong likelihood of meeting the objectives set out in the TORs. This will require active assessment and commenting on all technical proposals.** Wherever and to the degree possible, the relevant international consultants should also be involved in this assessment process (see below, Oversight and Co-ordination).

Several of the TORs note that the potential sub-contractors will need to present an updated assessment of baseline circumstances with respect to their sub-contract. For example, in the case

of the sub-contract for strengthening GIS at Sanya, the potential sub-contractors will need to include a description and assessment of current status of expertise with regards to use of GIS at that site. In this way, the project can ensure that work being done under each of the sub-contracts is truly building on existing baselines and creating value added.<sup>9</sup>

#### *Oversight and co-ordination*

Each sub-contract TOR contains a section on oversight and co-ordination. A key theme that is brought out in these sections is the relationship between international consultants and the sub-contracts. As highlighted in the following table, each sub-contractor will receive the attention and support of one or more international consultants. Both sub-contractors and international consultants will be focusing on completing essentially the same tasks and delivering the same outputs and using their comparative advantages to do so. Thus, for example, the international consultant in environmental economics will provide substantive support and co-operation to the national sub-contractor in this area. This cooperative relationship is described in both the sub-contract TORs as well as in the TORs for the international consultants.

Nevertheless, sub-contractors should have a realistic idea of the extent of support that they can expect from international consultants. This will be necessarily limited by the relatively short duration and infrequency of the international consultant contributions. In addition, national sub-contractors should recognize that the final outputs of each sub-contract ultimately remain their responsibility.

#### *Reporting*

All reports by national sub-contractors will be prepared in Chinese. Draft and final versions of the reports will then be translated, with the support of the PCU and professional translation services, into English for review by project managers and, as appropriate, relevant technical experts (see oversight section under each TOR).

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• <sup>9</sup> This is necessary for at least two reasons: 1) the baseline situation at the time of sub-contract issuance may be different from its status at the time of its assessment during project formulation, and; 2) in some cases, the baseline within the technical area and site in question may not have been thoroughly analyzed during the PDF-B.

**Summary of Sub-contract and Consultant Inputs, by Demonstration Output**

<b>Sub-contract(s)</b>	<b>Supporting international consultant(s)</b>	<b>Output(s) contributing towards</b>
SC-1 – Shankou: Sustainable use and participation	Conservation Biology Advisor Adaptive Management Advisor	2.4 Participatory co-management and sustainable harvesting at Shankou
SC-2 – Shankou/Weizhou/Dugong: MPA planning and biodiversity management	NOAA; Adaptive Management Advisor (AMA)	1.3 Conservation capacities strengthened at Shankou Mangrove/Dugong Reserves. 2.5 MPA establishment at Weizhou
SC-3 – Shankou/Weizhou: Public awareness	MPAMA; AMA; NOAA	1.3; 2.5
SC-4 – Shankou/Dugong: Mangrove and seagrass habitat restoration	AMA; NOAA	1.3
SC-5 – Sanya: Biodiversity surveys, etc.	AMA; NOAA	1.2 Conservation capacities are strengthened at Sanya
SC-6 – Sanya: Coral transplantation	CBA; AMA; NOAA	1.2
SC-7 – Sanya: Pollution	AMA	2.2 Control of land-based and marine sources of pollution at Sanya
SC-8 – Sanya: Economic instruments and sustainable financing	AMA	2.3 Sustainable financing at Sanya
SC-9 – Sanya: Public awareness	MPAMA; AMA	1.2
SC-10 – Dongshan-Nan'ao: Biodiversity surveys, etc.	AMA	2.6 Inter-provincial co-operation at Fujian-Guangdong
SC-11 – Dongshan-Nan'ao: Action Plan formulation	CBA; AMA	2.6
SC-12 – Dongshan-Nan'ao: Action Plan implementation	CBA; AMA	2.6
SC-13 – Nanji: Infrastructure	AMA	<ul style="list-style-type: none"> <li>1.1: Conservation Capacities Strengthened at Nanji</li> </ul>
SC-14 – Nanji: Biodiversity surveys, etc.	NOAA	2.1 Integrated MPA/township planning
SC-15 – Nanji: Develop master plan	NOAA	2.1
SC-16 – Nanji: Implement master plans	ICZM; AMA; NOAA	2.1
SC-17 – Nanji – Public Awareness	ICZM, CBA	

## Sub-contracts TORs

### Shankou-Weizhou Site:

#### SC-1 Shankou: Sustainable use and participation by local resource users and related non-governmental stakeholders<sup>10, 11</sup>

*Budget Line 21.01:* US\$70,000

*LFA ref:* 2.4.1, 2.4.4, and 2.4.5

*Work plan output/activity ref:* 2.4/1.3, 2.4/1.5,

*Expected duration:* 24 months

*Expected period:* Months 7-30

#### *BACKGROUND*

Three townships surround the Shankou reserve: Shankou, Shatian and Baisha. Together, these townships include more than 40 villages and a population of about 80,000. Villagers have used land in what is now the buffer zone of the reserve for traditional farming for many years. Villagers have traditionally entered the mangrove areas themselves for harvesting of various mangrove products.

Threats to the Shankou reserve related to local inhabitants include:

- the harvesting of marine organisms and other mangrove products, which is damaging tree seedlings, harming existing trees' root structures and disturbing migratory birds;
- shrimp farming in the vicinity of the reserve, and;
- hunting of birds in mangrove areas, which may be affecting three globally threatened species as well as other migratory species.

#### *OVERSIGHT AND CO-ORDINATION*

Administrative responsibility for preparation and implementation of this sub-contract will rest with the PCU, in consultation with the respective SIUs.

Support from NOAA will be essential to achieving project objectives at Shankou and Weizhou Island. It will therefore be important to liaise closely with NOAA officials at all stages of sub-contract design and implementation. Thus, NOAA's co-operation and comment should be requested at the following points: (i) commenting on these TOR; (ii) commenting on the sub-contract proposal; (iii) during sub-contract implementation, including site visits.

The sub-contractor will work in close co-operation with the MPA Management Advisor. This international expert will play the following role with respect to the work of the sub-contractor:<sup>12</sup>

- undertake one or more field visits to the site;
- advise the sub-contractor on best international practices related to methodologies being employed in the sub-contract work;
- provide technical comments on draft and final reports being prepared by the sub-contractor;
- make active and substantive contributions to outputs being produced by the sub-contractor.

Depending on the timing of contracting arrangements and missions by international consultants,

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<sup>10</sup> Additional details may be found in the project brief, particularly in paragraphs 83-86, Annex B (Logical Framework Matrix) and Annex I (Stakeholder Participation Plan).

<sup>11</sup> Work conducted under this sub-contract will specifically take into account the lessons learned on this same issue by the UNDP-GEF/Gov't of China Wetlands Project.

<sup>12</sup> See also TOR for this expert.

the Adaptive Management Advisor and the Conservation Biology Advisor may also provide comments and support, including field visits, at various points in the process.

All activities will be conducted in close coordination with MPA staff.

#### *OBJECTIVE*

The sub-contract has the following objectives:

- 1.1. Paint a clear picture of socio-economic conditions in the areas immediately surrounding the Shankou reserve, particularly the relationship of local communities with the reserve and its natural resources;
- 1.2. Enable local stakeholders to organize Village Conservation Groups (VCGs) and to establish a new NGO for Shankou.
- 1.3. Support the activities of VCGs and the new NGO aimed at enhancing participation by local people in MPA affairs.
- 1.4. Enable people to optimize their long-term benefits from sustainable use of MPA resources by helping them figure out what they can do and how they can finance their plans.

#### *SUB-CONTRACT ACTIVITIES*

- 1) Collect and synthesize official data concerning socio-economic conditions within the townships of Shankou, Shatian and Baisha. Parameters should include, but not necessarily be limited to, the following:
  - Demographic factors, including propensity to out-migration, gender balance
  - Income and employment
  - Other aspects of 'human development.'<sup>13</sup>
- 2) Working closely with local village leaders, identify villages / communities and specific individuals therein whose livelihoods have been linked most closely with the Shankou reserve.
- 3) Undertake a Rapid Rural Assessment (RRA) to develop a quantitative understanding of linkages identified under 1.2 above, including, *inter alia*, incomes derived from resource extraction within the reserve and magnitude of threats to sustainability of resources
- 4) Provide technical support to facilitate the organization of Village Conservation Groups and the new NGO.
- 5) Conduct market study and establish links to viable markets for local resources.
- 6) Assess the potential sustainable benefits to local community members from consumptive and non-consumptive use of MPA resources. These may include resource extraction, shrimp farming, participation in ecotourism, etc.
- 7) Assist local communities and stakeholders in pursuing sustainable alternative livelihoods with support from SIU.
- 8) Assess environmental and economic feasibility of various potential sustainable extraction and marketing arrangements.
- 9) Support efforts by VCGs and the new NGO to encourage local people to optimize their long-term benefits from sustainable use of MPA resources.
- 10) Assess whether local people have suffered net losses due to reduction of harvesting rates or other restrictions imposed through the project. If so, recommend alternative, non-resource-based income generating activities.
- 11) Assess reduction in threat levels measured against baseline assessment (see 1.3 above)
- 12) Conduct before and after surveys of knowledge and/or awareness among target groups of stakeholders.

#### *DELIVERABLES*

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• <sup>13</sup> See UNDP HDR reports for possible parameters.

- ⇒ Village Conservation Groups and an NGO established and operating (activities 1.4 and 1.8 above).
- ⇒ Local villagers successfully pursuing alternative livelihoods in project area and report on how this was done. (activities 1.9 – 1.10).
- ⇒ Report on the socio-economic conditions of key communities surrounding Shankou reserve, characterizing the relationship between these communities and the reserve, including threat levels. Report is to be based on both official data and results of Rapid Rural Appraisal (activities 1.1 – 1.3 above).
- ⇒ Report on the economic feasibility and environmental impact of alternative arrangements for consumptive and non-consumptive use of MPA resources (activities 1.5-1.7 above).
- ⇒ Summary of changed level of awareness/knowledge/skill among key stakeholders as to these issues.

## **SC-2 Support to MPA planning and biodiversity management at Weizhou, Shankou and Dugong Reserves**

*Budget Line 21.02: US\$120,000*

*LFA ref: Outputs 1.3 & 2.5*

*Work plan ref: Targeted Outputs 1.2, 2.1*

*Expected duration: 24 months*

*Expected period: Months 6-29*

### *BACKGROUND*

The authorities in Guangxi Autonomous Region have already taken a number of steps towards establishing an MPA at Weizhou Island. These include biodiversity surveys, mapping, etc. Portions of these reports were made available to the PDF-B development team; most were not yet available. These processes have continued in the period since the full project proposal was finalized and approved. It is unclear exactly what the status of these activities will be at the time when this sub-contract will be issued (Target Month: 6), or whether the MPA will already have been created. Guangxi Provincial Government had been expected to approve the MPA proposal sometime in 2003. This uncertainty has particular implications for sub-contract activity area 2.3

Prior to launching this sub-contract, the PCU and/or project managers should therefore obtain and review background reports, maps, etc. related to the establishment of Weizhou MPA, wherever possible in English and Chinese, as well as obtaining information on the status of the MPA establishment process. This information will allow finalization of the present sub-contract TOR.

### *OVERSIGHT AND CO-ORDINATION*

Administrative responsibility for preparation and implementation of this sub-contract will rest with the PCU, in consultation with the respective SIU.

Support from NOAA will be essential to achieving project objectives at Shankou and Weizhou Island. It will therefore be important to liaise closely with NOAA officials at all stages of sub-contract design and implementation. Thus, NOAA's co-operation and comment should be requested at the following points: (i) commenting on these TOR; (ii) commenting on the sub-contract proposal; (iii) during sub-contract implementation, including site visits.

The sub-contractor will work in close co-operation with the Conservation Biology Advisor (at Weizhou Island) and the MPA Management Advisor (at Shankou and the Dugong Reserve). The international experts will play the following role with respect to the work of the

sub-contractor:<sup>14</sup>

- undertake one or more field visits to the site;
- advise the sub-contractor on best international practices related to methodologies being employed in the sub-contract work;
- provide technical comments on draft and final reports being prepared by the sub-contractor;
- make active and substantive contributions to outputs being produced by the sub-contractor.

Depending on the timing of contracting arrangements and missions by international consultants, the Adaptive Management Advisor may also provide comments and support, including field visits, at various points in the process.

All activities will be conducted in close coordination with MPA staff.

#### *OBJECTIVE*

The objective of this sub-contract is to conserve biodiversity through improved MPA planning and management at Weizhou, Shankou and Dugong MPAs.

#### *ACTIVITIES*<sup>15</sup>

- 1) Establish and strengthen information baseline for adaptive management.
  - ⇒ Working with MPA staff, build upon existing studies to develop simple, yet effective biodiversity survey protocols.
  - ⇒ Design and conduct biodiversity field surveys to fill key information gaps. (proposed survey design should be included in sub-contract proposal)
  - ⇒ Develop and implement a program for biodiversity monitoring at Weizhou, Shankou and Dugong MPAs that covers the main elements of biodiversity and ecosystem health, but does so in a practical, affordable and sustainable way. Provide training to MPA staff in its implementation.
- 2) Improve data management and GIS capacities in all three sites as follows:
  - ⇒ Construct GIS datasets for all the three sites (Shankou, Weizhou and Dugong);
  - ⇒ Synthesize existing and newly collected data and store it in manageable database
  - ⇒ Strengthen GIS capacity within MPA and Provincial offices
  - ⇒ Digitize base maps if needed for Shankou-Weizhou area
  - ⇒ Link GIS files to biodiversity database also being constructed under this sub-contract.
  - ⇒ Analyze and manipulate data using GIS per discussions with MPA, SIU, PCU.
- 3) Prepare master / management plan for establishment / operations of Weizhou Island MPA<sup>16</sup> in cooperation with local community and key stakeholder group representatives, including:
  - ⇒ recommended institutional arrangements,
  - ⇒ community-based management approach/system,
  - ⇒ practical, simple, and enforceable priority use zones for conservation, fishing,
  - ⇒ patrolling and enforcement arrangements,
  - ⇒ specification of additional equipment needs<sup>17</sup>
  - ⇒ monitoring & research plan,
  - ⇒ public awareness and participation program,
  - ⇒ strengthened policies and regulations,
  - ⇒ signage and interpretation
  - ⇒ staff training programme.

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• <sup>14</sup> See also TOR for this expert.

• <sup>15</sup> As noted above, the final breakdown and weighting of activities will depend on progress already made at Weizhou Island by the time of sub-contract signature.

• <sup>16</sup> See comments under background.

• <sup>17</sup> Equipment will be provided separately.

- 4) Conduct before and after surveys of knowledge and/or awareness among target groups of stakeholders.

*DELIVERABLES*

- ⇒ Information baseline established. Information to be delivered in agreed upon, standardized format for use by the respective MPA. This to include GIS data sets/files.
- ⇒ Baseline biodiversity monitoring programme in operation with report summarizing results of field surveys, and design of medium-term monitoring programme.
- ⇒ Strengthened GIS program, including database, maps, data analysis and report on training conducted
- ⇒ Master/management plan for Weizhou Island adopted by relevant authorities.
- ⇒ Summary of changed level of awareness/knowledge/skill among key stakeholders as to these issues.

**SC-3 Undertake public awareness program based upon best practices and lessons learned from other parts of China/Asia**

*Budget Line 21.03: US\$35,000*

*LFA ref: 1.3.2, 2.5.13*

*Work plan output/activity ref: 2.4/1.7*

*Expected duration: 12 months*

*Expected period: Months 6-17*

*BACKGROUND*

Public awareness concerning the MPAs is limited. This is particularly true in the case of Weizhou Island, the newest MPA

*OBJECTIVE*

This sub-contract is designed to raise awareness concerning the role of the three project MPAs in marine and coastal biodiversity conservation within the overall project area, including Beihai.

*OVERSIGHT AND CO-ORDINATION*

Administrative responsibility for preparation and implementation of this sub-contract will rest with the PCU, in consultation with the respective SIU.

Support from NOAA will be essential to achieving project objectives at Shankou and Weizhou Island. It will therefore be important to liaise closely with NOAA officials at all stages of sub-contract design and implementation. Thus, NOAA's co-operation and comment should be requested at the following points: (i) commenting on these TOR; (ii) commenting on the sub-contract proposal; (iii) during sub-contract implementation, including site visits.

The sub-contractor will work in close co-operation with the MPA Management Advisor. This international expert will play the following role with respect to the work of the sub-contractor:<sup>18</sup>

- undertake one or more field visits to the site;
- advise the sub-contractor on best international practices related to methodologies being employed in the sub-contract work;
- provide technical comments on draft and final reports being prepared by the

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• <sup>18</sup> See also TOR for this expert.



- sub-contractor;
- make active and substantive contributions to outputs being produced by the sub-contractor.

Depending on the timing of contracting arrangements and missions by international consultants, the Adaptive Management Advisor and/or the MPA Management Advisor may also provide comments and support, including field visits, at various points in the process.

All activities will be conducted in close coordination with MPA staff.

#### *ACTIVITIES*

- 1) Development of awareness materials, including an educational exhibit, posters and brochures on related species and marine / coastal ecosystem integrity.
- 2) Identify educational center institutions, including museums, where such an exhibit might find a permanent home;
- 3) Develop a marine biological diversity curriculum for use by middle and high school teachers and students.
- 4) Provide training to teachers in the use of the materials.
- 5) Conduct before and after surveys of knowledge and/or awareness among target groups of stakeholders.

#### *DELIVERABLES*

- ⇒ Awareness materials, including an educational exhibit, posters and brochures
- ⇒ Summary of changed level of awareness/knowledge/skill among key stakeholders as to these issues.
- ⇒ Report on sub-contract implementation, including awareness raising activities sponsored.

### **SC-4 Targeted mangrove and seagrass habitat restoration**

*Budget Line 21.04: US\$54,000*

*LFA ref: 1.3.6*

*Work plan output/activity ref: 1.3/3.1-3.5*

*Expected duration: at least 30 months*

*Expected period: beginning latter half of year 1, beginning of year two of project.*

#### *BACKGROUND*

Mangrove and seagrass habitats at Shankou and Dugong MPAs respectively, have become been reduced in area and/or degraded in recent years.

#### *OBJECTIVE*

To demonstrate effective techniques for restoring critical mangrove and seagrass habitats

#### *OVERSIGHT AND CO-ORDINATION*

Administrative responsibility for preparation and implementation of this sub-contract will rest with the PCU, in consultation with the respective SIU.

Support from NOAA will be essential to achieving project objectives at Shankou and Weizhou Island. It will therefore be important to liaise closely with NOAA officials at all stages of sub-contract design and implementation. Thus, NOAA's co-operation and comment should be requested at the following points: (i) commenting on these TOR; (ii) commenting on the sub-contract proposal; (iii) during sub-contract implementation, including site visits.

The sub-contractor will work in close co-operation with the MPA Management Advisor. This

international expert will play the following role with respect to the work of the sub-contractor:<sup>19</sup>

- undertake one or more field visits to the site;
- advise the sub-contractor on best international practices related to methodologies being employed in the sub-contract work;
- provide technical comments on draft and final reports being prepared by the sub-contractor;
- make active and substantive contributions to outputs being produced by the sub-contractor.

Depending on the timing of contracting arrangements and missions by international consultants, the Adaptive Management Advisor and/or the MPA Management Advisor may also provide comments and support, including field visits, at various points in the process.

All activities will be conducted in close coordination with MPA staff.

#### *ACTIVITIES*

- 1) Seek out best practices for mangrove and seagrass bed restoration; contact organizations with proven successful hands-on experience.
- 2) Develop plan for removing stresses and threats to mangrove and seagrass habitat and implement it prior to the launching of restoration activities.
- 3) Working closely with staff of Shankou and dugong reserves and NOAA experts, develop a mangrove restoration plan, including identifying promising locations, techniques, etc.<sup>20</sup>
- 4) Implement plan while providing hands-on training in mangrove restoration to MPA staff.
- 5) Monitor mangrove rehabilitation, evaluate results of restoration, and develop lessons learned.
- 6) Conduct before and after surveys of knowledge among target groups of stakeholders.

#### *DELIVERABLES*

- ⇒ Technical report on restoration and training work undertaken and summary of changed level of awareness/knowledge/skill among key stakeholders as to these issues.
- ⇒ 50 hectares of mangrove habitat restored and TBD # hectares of seagrass beds restored, with independent confirmation of restored condition.

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• <sup>19</sup> See also TOR for this expert.

• <sup>20</sup> This should have as a starting point a preliminary plan included in sub-contract bid, with defined parameters within which changes can be made.

## SC-5 Sanya - Biodiversity surveys, data management and monitoring, and related training

*Budget Line 22.01: US\$110,000*

*LFA ref: 1.2.1, 1.2.3, 1.2.4, 1.2.6*

*Work plan output/activity ref: T.O.1 (1.1-1.5)*

*Expected duration: 24 months*

*Expected period: Beginning in month 3.*

### *BACKGROUND*

SNCRNR is threatened by a number of factors, ranging from increased levels of diving and pollution to illegal fishing and uncoordinated coastal zone development.<sup>21</sup> However, baseline methods of data gathering and management are inadequate to support key decisions on issues like appropriate levels of diving, prioritization of pollution investments, etc.

It should be noted that a good deal of baseline work has already been done at Sanya in the area of GIS. The successful proposal will need to assess this work, along with baseline work done in other areas, and take it into account when proposing details of work to be done under the sub-contract. This will ensure maximum value added from the present sub-contract.

### *OBJECTIVE*

To generate, in the short-term, data and analysis needed for policy decisions (including subsequent activities of this project) while building capacities and establishing a long-term system for biodiversity surveys and data management

### *OVERSIGHT AND CO-ORDINATION*

Administrative responsibility for preparation and implementation of this sub-contract will rest with the PCU, in consultation with the respective SIU.

Support from NOAA will be essential to achieving project objectives at Sanya. It will therefore be important to liaise closely with NOAA officials at all stages of sub-contract design and implementation. Thus, NOAA's co-operation and comment should be requested at the following points: (i) commenting on these TOR; (ii) commenting on the sub-contract proposal; (iii) during sub-contract implementation, including site visits.

The sub-contractor will work in close co-operation with the Conservation Biology Advisor, who will play the following role with respect to the work of the sub-contractor:<sup>22</sup>

- undertake one or more field visits to the site;
- advise the sub-contractor on best international practices related to methodologies being employed in the sub-contract work;
- provide technical comments on draft and final reports being prepared by the sub-contractor;
- make active and substantive contributions to outputs being produced by the sub-contractor.

Depending on the timing of contracting arrangements and missions by international consultants, the Adaptive Management Advisor may also provide comments and support, including field visits, at various points in the process.

<sup>21</sup> See project brief, Annex H-II, Threats, causes and activities matrix II – Sanya.

<sup>22</sup> See also TOR for this expert.

All activities will be conducted in close coordination with MPA staff.

#### *ACTIVITIES*

Activities under the sub-contract have been grouped within three categories

i. Baseline biodiversity surveys

- Comprehensive baseline survey of coral reef conditions and species distributions within the reserve, with emphasis on defining biodiversity hotspots
- Training and capacity building for reserve staff and volunteer diver monitors.
- Conduct before and after surveys of knowledge and/or awareness among target groups of stakeholders.

ii. Data management & GIS

- Synthesize collected data and store it in manageable database
- Digitize base maps if needed for Sanya area
- Link GIS framework to biodiversity database in order to create GIS-based overlays of biodiversity hotspots
- Provide training and capacity building in biodiversity and GIS for MPA and Provincial officials
- Conduct before and after surveys of knowledge and/or awareness among target groups of stakeholders.

iii. Development of a long-term programme for biological monitoring

- Design a programme for establishment of practical and effective monitoring of ecosystem health, biodiversity, and threat parameters. Programme should include specific technical details concerning establishment of two biodiversity monitoring stations, including equipment and infrastructure needs and financing requirements.<sup>23</sup>
- Work with local administration to establish above-defined infrastructure;
- Work with PCU and SIU to procure monitoring equipment
- Train MPA and Sanya City staff in monitoring techniques to ensure sustainability once sub-contract concludes
- Strengthen ties with underwater monitoring groups like Reef Check.
- Conduct before and after surveys of knowledge and/or awareness among target groups of stakeholders.

#### *DELIVERABLES*

- ⇒ Established information baseline for Sanya, including database installed at the MPA office. This will be the product of a comprehensive baseline survey of coral reef and related species and distributions in Sanya, with emphasis on definition of biodiversity hotspots
- ⇒ Database and GIS deliverables *to be determined* based on update of latest baseline status of work in these areas<sup>24</sup>
- ⇒ Monitoring program operational and local staff trained to implement and operate this monitoring program.
- ⇒ Summary of changed level of awareness/knowledge/skill among key stakeholders as to these issues.

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• <sup>23</sup> Keeping in mind scale of available sources of finance from GEF, NOAA and Government.

• <sup>24</sup> PCU should work with local authorities to prepare this baseline update. Potential sub-contractors may wish to gather additional information when preparing proposals.

## SC-6 Sanya - Plan and monitor coral transplantation

*Budget Line 22.02: US\$35,000*

*LFA ref: 1.2.6*

*Work plan output/activity ref: Output 1.2, Targeted Output 2.*

*Expected duration: at least 24 months*

*Expected period: Beginning in month 3*

### BACKGROUND

Transplantation of hard corals is a means of accelerating the regeneration of damaged coral reefs, and/or as a tool to mitigate damage from construction projects. This technique has been researched and practiced for more than a decade.<sup>25</sup> The U.S.A.'s National Oceanic and Atmospheric Administration (NOAA), in particular, has had substantial experience with transplantation projects, including projects in Hawaii, Florida and the Caribbean. Experience and results have been somewhat mixed, but have included some notable successes. For example, preliminary results from a six-year follow-up of one of three main transplantation projects in Hawaii has shown long-term increases (over 43%) in overall live coral cover, maintenance of reproductive potential and the successful transfer of complex habitat which is now being actively used by juvenile reef fish.<sup>26</sup> Other methods, such as larval seeding, have so far proven less successful in Hawaii, but promising in Australia and the Caribbean.<sup>27</sup>

Despite the above and other successes, the techniques are not without controversy. Environmental risks include damage to the reefs in 'source' areas from which corals are being removed, as well as the possible accidental introduction of disease or pathogens to 'target' areas. A key factor in reducing risks is careful planning and monitoring. Success may depend on getting a number of things right, namely, the species, the source and target locations, and the overall scale of the operation.<sup>28</sup>

The Chinese government has expressed strong interest to initiate pilot coral reef transplantation activities in its southern coastal area. The project will bring in expertise from NOAA to assist in all transplantation activities to ensure best practice is used throughout. Together the main partners will undertake pilot implementation of coral reef transplantation in order to determine its potential effectiveness in China's South Sea coastal area as a technique for restoring degraded reef areas, thereby enhancing the biodiversity of these areas.

Throughout the above process, all necessary safeguards will be employed to help ensure that the activities undertaken are protective of the global and national biodiversity values of the marine areas in question, including both source and target locations.

The overall breakdown of responsibilities among the project partners is as follows:

- *Chinese Government*: Site selection, management and physical transplantation of corals; risk assessment, planning, training and/or study tours and monitoring and establishment of feedback loops to change or halt processes
- *NOAA*: provision of technical assistance for transplantation, monitoring and assessment.

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<sup>25</sup> See, e.g., Harriott, V.J. and D.A. Fisk. 1988. Coral transplantation as a reef management option; see also Guzman, H.M. 1991. "Restoration of coral reefs in Pacific Costa Rica." *Conservation Biology*. Vol. 5, No. 2, pp. 189-195. More recently, the International Conference on Scientific Aspects of Coral Reef Assessment, Monitoring and Restoration has considered the issue. See [www.nova.edu/ocean/ncri/confinfo\\_1.html](http://www.nova.edu/ocean/ncri/confinfo_1.html)

<sup>26</sup> Steve Kolinski, NOAA, personal communication, 26 August 2002..

<sup>27</sup> Ibid.

<sup>28</sup> Zhou Qiulin, Senior Researcher, Third Institute of Oceanography, Xiamen. Personal communication, 24 August 2002.

#### *OBJECTIVE*

The sub-contractor will work with SNCRNR and with NOAA experts to ensure that risks associated with a pilot coral transplantation effort at Sanya are understood and minimized. This will be done in order to provide the greatest chances of success.

#### **Oversight and co-ordination**

Administrative responsibility for preparation and implementation of this sub-contract will rest with the PCU, in consultation with the respective SIU.

Support from NOAA will be essential to achieving project objectives at Sanya. It will therefore be important to liaise closely with NOAA officials at all stages of sub-contract design and implementation. Thus, NOAA's co-operation and comment should be requested at the following points: (i) commenting on these TOR; (ii) commenting on the sub-contract proposal; (iii) during sub-contract implementation, including site visits.

The sub-contractor will work in close co-operation with the Conservation Biology Advisor, who will play the following role with respect to the work of the sub-contractor:<sup>29</sup>

- undertake one or more field visits to the site;
- advise the sub-contractor on best international practices related to methodologies being employed in the sub-contract work;
- provide technical comments on draft and final reports being prepared by the sub-contractor;
- make active and substantive contributions to outputs being produced by the sub-contractor.

Depending on the timing of contracting arrangements and missions by international consultants, the Adaptive Management Advisor may also provide comments and support, including field visits, at various points in the process.

All activities will be conducted in close coordination with MPA staff.

#### *ACTIVITIES*

The sub-contractor will work with SNCRNR and NOAA experts do the following:

- 1) Identify/select the most suitable kinds of coral and most appropriate transplant areas;
- 2) Assess reef restoration options drawing upon best practices worldwide and plan coral reef restoration program. Assess risk to transplant effort;
- 3) Plan and co-ordinate/organize transplant operations;
- 4) Conduct baseline and ongoing monitoring to identify, measure, assess and provide timely reporting on impacts (both positive and negative) to donor and recipient reef ecosystems;
- 5) Provide technical input to ensure the highest possible survival rates of transplanted corals.
- 6) Conduct before and after surveys of knowledge and/or awareness among target groups of stakeholders.

#### *DELIVERABLES*

- ⇒ [To be determined] # hectares of coral reef restoration/transplantation successfully underway.
- ⇒ Quarterly progress reports
- ⇒ Final report on sub-contract implementation
- ⇒ Summary of changed level of awareness/knowledge/skill among key stakeholders as to these issues.

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• <sup>29</sup> See also TOR for this expert.

## **SC-7 Define point and non-point sources of pollution threatening MPA and develop action plan to reduce the level of pollution significantly**

*Budget Line 22.03: US\$75,000*

*LFA ref: 2.2*

*Work plan output/activity ref: Output 2.2; Targeted Output 1.*

*Expected duration: 24 months*

*Expected period: Beginning in month 19*

### *BACKGROUND*

Land-based sources of pollution, particularly domestic wastewater, appear to have caused significant damage to certain areas of Sanya's reef in past years. Sanya's recently constructed sewage treatment facility will have important benefits in this regard. However, it remains unclear at this point whether additional steps will be needed, such as possibly increasing the degree of treatment. In addition, two significant gaps remain in the network. First, Ximaozhou Island, where new hotel construction is planned, does not yet have any sewage treatment facilities. Second, Luhuitou Peninsula remains unconnected to the mainland's sewage network. Additional minor threats, such as wastewater flows from aquaculture, sedimentation from erosion along the Sanya River, and marine sources from ships, also persist.

This sub-contract will link closely with work being undertaken through SC-5, Activity Area i (see above), as well as SC-8. In particular, the baseline biodiversity survey and GIS-based biodiversity hotspot maps being developed under the former sub-contract will be a necessary input into work being done under the present sub-contract. Timing and organization of all three sub-contracts should take this factor into account.

### *OBJECTIVE*

The sub-contract will support efforts to remove remaining threats to globally significant biodiversity coming from land- and marine-based sources of pollution, while creating an analytical framework and approach upon which management of relevant new pollution sources associated with future growth and development may be based. Consideration will be given to sources and pollutants associated with the most significant identified threat – wastewater – along with other relatively minor threats – erosion, aquaculture and ship-borne pollutants.

### *OVERSIGHT AND CO-ORDINATION*

Administrative responsibility for preparation and implementation of this sub-contract will rest with the PCU, in consultation with the respective SIU.

Depending on the timing of contracting arrangements and missions by international consultants, the Adaptive Management Advisor may also provide comments and support, including field visits, at various points in the process.

All activities will be conducted in close coordination with MPA staff.

### *ACTIVITIES*

- 1) Review existing data sets concerning ambient pollution concentrations in waters of SNCRNR;
- 2) Develop and implement a short-term ambient water quality survey to enhance and/or verify data concerning particular priority areas;
- 3) Conduct a rapid assessment and quantification of key point and non-point sources, with emphasis on measuring those contaminants likely to cause damage to reefs and biodiversity;
- 4) Use a GIS-based approach to ensure that pollution concentrations / source data and baseline biological monitoring data (see SC-5) are integrated in order to complete a detailed picture

of current pollution threats to biodiversity.<sup>30</sup> This effort will require inter-sectoral coordination and exchange of information among relevant agencies.

- 5) Based on GIS-based integration of pollution and biodiversity data, design and prepare a priority pollution reduction programme, with cost estimates.
- 6) Present draft results of survey and analyses to an inter-sectoral technical workshop, and incorporate comments into revised plan
- 7) Present final plan to a high-level, inter-sectoral stakeholders' workshop for final approval
- 8) Conduct before and after surveys of knowledge and/or awareness among target groups of stakeholders.

#### *DELIVERABLES*

- ⇒ Program in place and under implementation to reduce pollution levels and their corresponding impact on coral reefs, including a report on priority pollution reduction programme, including cost estimates
- ⇒ Report on findings of rapid assessment of pollution sources and ambient pollution data (based on existing data sets and new survey);
- ⇒ GIS overlays integrating biodiversity and pollution data.
- ⇒ Summary of changed level of awareness/knowledge among key stakeholders.

### **SC-8 Sanya: Economic instruments and sustainable financing**

*Budget Line 22.04: US\$40,000*

*LFA ref: Output 2.3*

*Work plan output/activity ref: Output 2.3, Targeted Output 1.*

*Expected duration: 24 months*

*Expected period: Beginning in month 18.*

#### *BACKGROUND*

SNCRNR is a major attraction for a city that depends heavily on tourism revenues. Although it is a protected area, it experiences quite high levels of use by tourists. Partly as a result, it has substantial protection needs that have associated costs. Effective application of the polluter-pays and user-pays principles, both of which are accepted as part of China's environmental policy stance, is thus a key prerequisite for conservation at Sanya.

The policy framework at Sanya is already developing along lines suggesting that the above principles are indeed being taken into account. These include the ongoing agreement under which private sector operators provide various types of support (compliance monitoring, equipment, etc.) for MPA management under the terms of their licensing agreement. The requirement for water use fees to cover the costs of sewage treatment is another example. The sub-contract will build on these positive steps to demonstrate arrangements for sustainable financing for SNCRNR's effective conservation.

It will do so by carefully examining current arrangements for MPA financing and related pollution control and proposing systems whereby user fees and penalties can be used to ensure long-term financing for sustainable development and conservation at the site. User fees such as MPA entrance fees, diving, snorkeling and boating charges will be investigated and piloted. Mechanisms or instruments will be proposed which will aim at "internalizing" ecological damages such as those arising from anchors on coral, illegal sewage or waste discharges from boats, etc. Such instruments will provide an economic incentive to reduce pollution levels. Work will also be carried out to ensure retention of revenues for local conservation purposes and will build the capacity of local institutions to manage and utilize the funds.

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• <sup>30</sup> This work will build on pollution source identification conducted during the PDF-B phase.



Furthermore, the project will build the financial planning capacity of MPA managers and relevant government institutions. This approach will promote the concept of cost recovery, the need to provide available budget (through national allocation and locally generated revenue) for effective management and thus help justify the need to internalize ecological damage from local resource users. The above tools to generate revenues will then be used within this planning framework.

Awareness will be raised among senior decision-makers at municipal and provincial levels concerning the economic value of SNCRNR and the importance of effective pollution control for its conservation. This will include an economic study to demonstrate the value of SNCRNR and the cost of the identified negative impacts.

#### *OBJECTIVE*

The overall objective of the sub-contract, to be accomplished jointly with the international expert in environmental economics (EE) and other members of the project team, will be to ensure the successful accomplishment of Output 2.3 of the project brief, i.e., **to demonstrate sustainable financing and the effective use of economic instruments at Sanya.**

#### *OVERSIGHT AND CO-ORDINATION*

Administrative responsibility for preparation and implementation of this sub-contract will rest with the PCU, in consultation with the respective SIU.

The sub-contractor will work in close co-operation with the Environmental Economist (international consultant). The latter will do the following with respect to the work of the sub-contractor:<sup>31</sup>

- undertake one or more field visits to the site;
- advise the sub-contractor on best international practices related to methodologies being employed in the sub-contract work;
- provide technical comments on draft and final reports being prepared by the sub-contractor;
- make active and substantive contributions to outputs being produced by the sub-contractor.

Depending on the timing of contracting arrangements and missions by international consultants, the Adaptive Management Advisor and/or the MPA Management Advisor may also provide comments and support, including field visits, at various points in the process.

Support from NOAA will be essential to achieving project objectives at Sanya. It will therefore be important to liaise closely with NOAA officials at all stages of sub-contract design and implementation. Thus, NOAA's co-operation and comment should be requested at the following points: (i) commenting on these TOR; (ii) commenting on the sub-contract proposal; (iii) during sub-contract implementation, including site visits.

All activities will be conducted in close coordination with MPA staff.

#### *ACTIVITIES*

- 1) Assess values and services provided by coral reefs/coastal ecosystems, as well as damages caused by current activities including pollution.
- 2) Determine annual recurrent costs of SNCRNR management
- 3) Review existing financing mechanisms and associated laws and regulations and sustainable financing needs at SNCRNR.
- 4) Conduct "willingness to pay" surveys to determine appropriate user fees (park entrance

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• <sup>31</sup> See also TOR for these experts.

- fees, diver fees, sport fishing fees) and assess various options for funding mechanisms.
- 5) Propose alternative economic instruments, e.g., user fees and charges, tax incentives/disincentives penalties, etc. in order to: a) internalize the cost of ecological damage from pollution, and inappropriate coastal development and boating practices; and b) provide a source of funding for the MPA.
  - 6) Develop a proposal for targeted financing (environmental fund, etc.), using collected revenues to finance MPA operations.
  - 7) Introduce the above results and proposals to decision makers – first at Sanya and later at other sites – through roundtable discussions and workshops. These should focus on raising awareness concerning: (i) the hidden values of ecosystem services, (ii) the economic trade-offs involved in making coastal resource use decisions, (iii) the need for sustainable and appropriate financing mechanisms to support MPA operations, and (iii) the environmental economic benefits of pollution control investments.<sup>32</sup>
  - 8) Pilot implementation of action plan for sustainable financing at SNCRNR.
  - 9) Conduct before and after surveys of knowledge and/or awareness among target groups of stakeholders.

#### *DELIVERABLES*

- ⇒ A single Environmental Economics report, which will be built upon and developed during the course of the assignment, will include the following sections:
- Assessment of the values and services provided by coral reefs/coastal ecosystems, and damages caused by current activities including pollution.
  - Estimates of the annual recurrent costs of SNCRNR management
  - Brief review of existing financing mechanisms and associated laws and regulations and sustainable financing needs at SNCRNR.
  - Results of “willingness to pay” surveys to determine appropriate user fees (park entrance fees, diver fees, sport fishing fees) and assess various options for funding mechanisms.
  - Proposals for alternative economic instruments, e.g., user fees and charges, tax incentives/ disincentives penalties, etc. in order to: a) internalize the cost of ecological damage from pollution, and inappropriate coastal development and boating practices; and b) provide a source of funding for the MPA.
  - Recommendations for ongoing efforts and a proposal for targeted financing (environmental fund, etc.), using collected revenues to finance MPA operations.
- ⇒ A separate progress report will describe:
- The results of roundtable discussions and workshops.
  - Pilot implementation of action plan for sustainable financing at SNCRNR.
  - Summary of changed level of awareness/knowledge/skill among key stakeholders.

#### **SC-9 - Undertake public awareness program based upon best practices and lessons learned from other parts of China/Asia**

*Budget Line 22.05: US\$35,000*

*LFA ref: 1.2*

*Work plan output/activity ref:*

*Expected duration: 36 months*

*Expected period: beginning in month 7.*

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• <sup>32</sup> In this last item, the work being done will need to closely link up with work being done under output 2.2.

### *BACKGROUND*

Public awareness concerning conservation issues at Sanya is limited. Important target groups for raising awareness include divers.

### *OBJECTIVE*

This sub-contract is designed to raise awareness concerning the importance of SNCRNR in conserving Hainan's marine and coastal biodiversity conservation

### *OVERSIGHT AND CO-ORDINATION*

Administrative responsibility for preparation and implementation of this sub-contract will rest with the PCU, in consultation with the respective SIU.

Support from NOAA will be essential to achieving project objectives at Sanya. It will therefore be important to liaise closely with NOAA officials at all stages of sub-contract design and implementation. Thus, NOAA's co-operation and comment should be requested at the following points: (i) commenting on these TOR; (ii) commenting on the sub-contract proposal; (iii) during sub-contract implementation, including site visits.

The sub-contractor will work in close co-operation with the MPA Management Advisor. This international expert will play the following role with respect to the work of the sub-contractor:<sup>33</sup>

- Undertake one or more field visits to the site;
- Advise the sub-contractor on best international practices related to methodologies being employed in the sub-contract work;
- Provide technical comments on draft and final reports being prepared by the sub-contractor;
- Make active and substantive contributions to outputs being produced by the sub-contractor.

Depending on the timing of contracting arrangements and missions by international consultants, the Adaptive Management Advisor and/or the MPA Management Advisor may also provide comments and support, including field visits, at various points in the process.

All activities will be conducted in close coordination with MPA staff.

### *ACTIVITIES*

9.1. Development of awareness materials.<sup>34</sup>

9.2. Conduct before and after surveys of knowledge and/or awareness among target groups of stakeholders.

### *DELIVERABLES*

9.1 Awareness materials, including an educational exhibit, posters and brochures

9.2 Report on sub-contract implementation, including awareness raising activities sponsored.

9.3 Summary of changed level of awareness/knowledge/skill among key stakeholders.

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• <sup>33</sup> See also TOR for this expert.

• <sup>34</sup> The potential sub-contractors should propose the type of awareness materials to be produced, and the strategy for dissemination. One possibility that has been mentioned is the preparation of an underwater video for use in the new education centre.

**SC-10: Dongshan-Nan'ao - Conduct biodiversity surveys establishing levels of primary threats, establish information baseline and conduct detailed GIS-based threats analysis using data from biodiversity and threat surveys**

*Budget Line 23.01: US\$75,000*

*LFA ref: 2.6*

*Work plan output/activity ref: Output 2.6, Targeted Output 2.*

*Expected duration: 36 months*

*Expected period: Beginning in month 7.*

**BACKGROUND**

Besides its important fisheries, this section of China's southern coast is known as a key transit center for important migratory species moving through China's coastal waters. Key migratory species found in the site area include five globally threatened species of marine turtles, three species of horseshoe crabs and the Chinese white dolphin (*Sousa chinensis*). Other migratory species recorded within the area include the finless porpoise (*Neophocaena phocaenoides*), bottlenose dolphin (*Tursiops truncatus*), false killer whale (*Pseudorca crassidens*), grey whale (*Eschrichtius robustus*) and Risso's dolphin (*Grampus griseus*). While migratory species by definition depend on various locations and habitat types throughout their life cycles, and thus are found at a number of locations along China's South Sea coast, their numbers and concentrations are considered highly significant within these biologically rich coastal waters.

Various sandy beaches in the site area provide breeding and nesting grounds for sea turtles and, in particular, for horseshoe crabs. However, perhaps the most important habitats for migratory species in the site area are the coastal estuaries and bays, many of which are important to the Chinese white dolphin.

A number of threats have been identified as confronting the globally significant migratory species found within the site area.<sup>35</sup> These include the following:

- *Overfishing* within the site area is depleting the fishery resources on which many migratory species depend, as well as leading to problems of by-catch.
- *Aquaculture* within the area has taken place mainly in shallow coastal waters and in an overly concentrated manner. This has had several impacts, including localized pollution problems, as well as problems for migratory species that find their near shore migration routes blocked by densely concentrated aquaculture pens and nets.
- *Sand mining* at beaches within the site area is leading to loss of important spawning habitat for marine turtles and horseshoe crabs.

**OBJECTIVE**

The primary objective of the sub-contract is to make available detailed, GIS-based data on globally significant biodiversity within the site area. This will be achieved through a combination of gathering and synthesis of existing data sources, together with targeted surveying to fill remaining information gaps.

**OVERSIGHT AND CO-ORDINATION**

Administrative responsibility for preparation and implementation of this sub-contract will rest

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• <sup>35</sup> For a more complete description of threats facing the site area, see Annex H of the project brief.

with the PCU, in consultation with the respective SIU.

The sub-contractor will work in close co-operation with the international ICZM Advisor. The Conservation Biology Advisor will provide additional support. These international experts will play the following role with respect to the work of the sub-contractor:<sup>36</sup>

- Undertake one or more field visits to the site;
- Advise the sub-contractor on best international practices related to methodologies being employed in the sub-contract work;
- Provide technical comments on draft and final reports being prepared by the sub-contractor;
- Make active and substantive contributions to outputs being produced by the sub-contractor.

Depending on the timing of contracting arrangements and missions by international consultants, the Adaptive Management Advisor and/or the MPA Management Advisor may also provide comments and support, including field visits, at various points in the process.

All activities will be conducted in close coordination with MPA staff.

#### ***ACTIVITIES***

- 1) Develop and implement a program for biodiversity monitoring in the project site area. Program should include the following elements:
  - Working with project partners, and building on existing studies, design and conduct biodiversity field surveys to fill key information gaps (preliminary survey design should be included in sub-contract proposal). The survey should collect information on distribution, migratory routes and biological features of migratory species, e.g., survey to assess 'Top 5 marine turtle destinations' within broader F-G landscape. It should also include fieldwork conducted through fishermen's associations to gather detailed information on by-catch
  - Design medium term (5-10 year) biodiversity monitoring programme and provide training to local counterparts in its implementation.
  - Conduct before and after surveys of knowledge and/or awareness among target groups of stakeholders.
- 2) Implement a GIS-based approach to assessing risks to migratory species within migratory corridor, as follows:
  - Synthesize existing and newly collected data and store it in manageable database
  - Strengthen GIS capacity within local and Provincial offices
  - Digitize base maps if needed for site area
  - Link GIS framework to biodiversity database
  - Analyze data using GIS.
  - Conduct before and after surveys of knowledge and/or awareness among target groups of stakeholders.

#### **Deliverables**

- Report on data gathering and biodiversity surveys
- Report on agreed biodiversity monitoring programme.<sup>37</sup>
- Report on data management and GIS overlays
- Summary of changed level of awareness/knowledge/skill among key stakeholders.

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• <sup>36</sup> See also TORs for these experts.

• <sup>37</sup> This programme should subsequently be integrated within the Inter-provincial Action Plan (see SC-11 and SC-12).

## **SC-11: Formulate and gain approval of detailed inter-provincial action plan for conservation of globally significant biodiversity**

*Budget Line 23.02. : US\$40,000*

*LFA ref: 2.6*

*Work plan output/activity ref: Output 2.6; Targeted Outputs 1&2.*

*Expected duration: 36 months*

*Expected period: Beginning in month 7*

### *BACKGROUND*

This sub-contract will both follow on and depend upon the successful completion of SC-10, which will provide necessary baseline information for development of this action plan.

### *OBJECTIVE*

Formulation and inter-provincial approval of an Action plan for marine biodiversity conservation and sustainable use within the project site area.

### *OVERSIGHT AND CO-ORDINATION*

Administrative responsibility for preparation and implementation of this sub-contract will rest with the PCU, in consultation with the respective SIU.

The sub-contractor will work in close co-operation with the international ICZM Advisor. The Conservation Biology Advisor will provide additional support. These international experts will play the following role with respect to the work of the sub-contractor:<sup>38</sup>

- undertake one or more field visits to the site;
- advise the sub-contractor on best international practices related to methodologies being employed in the sub-contract work;
- provide technical comments on draft and final reports being prepared by the sub-contractor;
- make active and substantive contributions to the action plan being produced by the sub-contractor.

Depending on the timing of contracting arrangements and missions by international consultants, the Adaptive Management Advisor and/or the MPA Management Advisor will also provide comments and support, possibly including field visits, at various points in the process.

All activities will be conducted in close coordination with the SIUs and other local counterparts.

### *ACTIVITIES*

- 1) Based on newly gathered data and analysis, and with full stakeholder participation, formulate an inter-provincial action plan for marine habitat protection and recovery of project site area, to be funded by Government, GEF and potentially other donors. Plan is likely to include the following components
  - Awareness raising, including a fishermen's outreach programme (in co-operation with local fishermen's associations) for informing and educating fishermen about marine conservation and migratory species conservation
  - Conservation action plans for priority migratory species
  - Establishment of a migratory species rescue center
  - Monitoring and evaluation of China white dolphin, sea turtle populations

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• <sup>38</sup> See also TOR for these experts.

- Designation of identified islands as ecosystem recovery areas and implementation of recovery strategy
  - Improved enforcement of fishing regulations
  - Establishment of management and monitoring stations for horseshoe crabs
  - Complete the development of large-scale functional zonation scheme and implement scheme (e.g., movement of cage culture operations to offshore waters, ensure no sand mining or other harmful activities on key beaches, etc.)
  - Beach cleanup program involving school groups
  - Implementation of regulatory and / or technological solutions to address target fisheries, locations and seasons
  - Revised fishery regulations, e.g., reduced density of nets/modify type of nets (set nets, etc..) to reduce impact on biodiversity/migration
  - Planning for siting of aquaculture to avoid physically blocking migration channels, and/or excessively polluting near-shore waters
  - Improved public awareness; public participation plan
  - Habitat rehabilitation plan
- 2) Ensure the full co-operation of Government and other stakeholders during the formulation process and ensure that the plan is fully accepted and agreed by them.
  - 3) Conduct before and after surveys of knowledge and/or awareness among target groups of stakeholders.

#### *DELIVERABLES*

- 4) Approved and funded inter-provincial action plan<sup>39</sup>
- 5) Summary of changed level of awareness/knowledge/skill among key stakeholders.

### **SC-12: Pilot implementation of inter-provincial biodiversity action plan**

*Budget Line 21. : US\$128,000*

*LFA ref: 2.6*

*Work plan output/activity ref: Output 2.6*

*Expected duration: 48 months*

*Expected period: Beginning in month 37*

#### *BACKGROUND*

This sub-contract will both follow on and depend upon the successful completion of SC-11, which will formulate the action plan to be implemented herein.

#### *OBJECTIVE*

Successful implementation of GEF-funded components of the Fujian-Guangdong Inter-provincial Marine Biodiversity Action Plan.

#### *OVERSIGHT AND CO-ORDINATION*

Administrative responsibility for preparation and implementation of this sub-contract will rest with the PCU, in consultation with the respective SIU.

The sub-contractor will work in close co-operation with the international ICZM Advisor. The Conservation Biology Advisor will provide additional support. These international experts will play the following role with respect to the work of the sub-contractor:<sup>40</sup>

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- <sup>39</sup> Note that funding of the Action Plan has already been agreed in principal.
  - <sup>40</sup> See also TOR for these experts.

- Undertake field visits to the site;
- Advise the sub-contractor on best international practices related to methodologies being employed in the sub-contract work;
- Provide technical comments on draft and final reports being prepared by the sub-contractor;
- Make active and substantive contributions to the action plan being produced by the sub-contractor.

Depending on the timing of contracting arrangements and missions by international consultants, the Adaptive Management Advisor and/or the MPA Management Advisor will also provide comments and support, including field visits, at various points in the process.

All activities will be conducted in close coordination with the SIUs and other local counterparts.

#### *ACTIVITIES*

- 1) Strengthen existing MPA regulations and habitat conservation
- 2) Implement conservation action plan for migratory species.
- 3) Conduct before and after surveys of knowledge and/or awareness among target groups of stakeholders.

Complete description of activities to be developed based on outcome of SC-11.<sup>41</sup>

#### *DELIVERABLES*

- Deliverables to be determined based on outcome of SC-11
- Summary of changed level of awareness/knowledge/skill among key stakeholders.

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• <sup>41</sup> See list of likely action plan components under SC-11 TOR.



**SC-13: Plan and construct MPA management & enforcement infrastructure**

*Budget Line 24.01: US\$50,000*

*LFA ref: Output 1.1*

*Work plan output/activity ref: Output 1.1, Targeted Output 1*

*Expected duration: 18 months*

*Expected period: Beginning in month 3.*

*OBJECTIVE*

To provide support for priority, urgent management actions prior to development of MPA Action Plan.

*OVERSIGHT AND CO-ORDINATION*

Administrative responsibility for preparation and implementation of this sub-contract will rest with the PCU, in consultation with the respective SIU.

The sub-contractor will work in close co-operation with the international ICZM Advisor. This international expert will play the following role with respect to the work of the sub-contractor:<sup>42</sup>

- undertake one or more field visits to the site;
- advise the sub-contractor on best international practices related to methodologies being employed in the sub-contract work;
- provide technical comments on draft and final reports being prepared by the sub-contractor;
- make active and substantive contributions to outputs being produced by the sub-contractor.

Depending on the timing of contracting arrangements and missions by international consultants, the Adaptive Management Advisor and/or the MPA Management Advisor may also provide comments and support, including field visits, at various points in the process.

Support from NOAA will be essential to achieving project objectives at Nanji. It will therefore be important to liaise closely with NOAA officials at all stages of sub-contract design and implementation. Thus, NOAA's co-operation and comment should be requested at the following points: (i) commenting on these TOR; (ii) commenting on the sub-contract proposal; (iii) during sub-contract implementation, including site visits.

All activities will be conducted in close coordination with MPA staff.

*ACTIVITIES*

- 1) Install boundary markers, including buoys surrounding length of core area and warning boards
- 2) Establish look-out posts in different locations within the core area.

*DELIVERABLES*

⇒ Installed infrastructure listed under activities.

⇒ Note: Determine more detailed activities in consultation with MPA prior to issuance of sub-contract.

⇒ Summary of changed level of awareness/knowledge/skill among key stakeholders.

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• <sup>42</sup> See also TOR for this expert.

**SC-14: Nanji: Conduct biodiversity surveys, compile biodiversity data and create biodiversity data overlays for GIS**

*Budget Line 24.02: US\$56,500*

*LFA ref: 1.1*

*Work plan output/activity ref: Output 1.1., Targeted Output: 3*

*Expected duration: 18 months*

*Expected period: Beginning in month 7.*

*OBJECTIVE*

The primary objective of the sub-contract is to make available detailed, GIS-based data on globally significant biodiversity within the site area. This will be achieved through a combination of gathering and synthesis of existing data sources, together with targeted surveying to fill remaining information gaps.

*OVERSIGHT AND CO-ORDINATION*

Administrative responsibility for preparation and implementation of this sub-contract will rest with the PCU, in consultation with the respective SIU.

The sub-contractor will work in close co-operation with the international ICZM Advisor. This international expert will play the following role with respect to the work of the sub-contractor:<sup>43</sup>

- undertake one or more field visits to the site;
- advise the sub-contractor on best international practices related to methodologies being employed in the sub-contract work;
- provide technical comments on draft and final reports being prepared by the sub-contractor;
- make active and substantive contributions to outputs being produced by the sub-contractor.

Depending on the timing of contracting arrangements and missions by international consultants, the Adaptive Management Advisor and/or the MPA Management Advisor may also provide comments and support, including field visits, at various points in the process.

Support from NOAA will be essential to achieving project objectives at Nanji. It will therefore be important to liaise closely with NOAA officials at all stages of sub-contract design and implementation. Thus, NOAA's co-operation and comment should be requested at the following points: (i) commenting on these TOR; (ii) commenting on the sub-contract proposal; (iii) during sub-contract implementation, including site visits.

All activities will be conducted in close coordination with MPA staff.

**Activities**

1. Establish and strengthen information baseline for adaptive management.
  - ⇒ Working with MPA staff, build upon existing studies to develop simple, yet effective biodiversity survey protocols.
  - ⇒ Design and conduct biodiversity field surveys to fill key information gaps. (proposed survey design should be included in sub-contract proposal)
  - ⇒ Develop and implement a program for biodiversity monitoring in the MPA that is practical, affordable and sustainable. Provide training to MPA staff in its implementation.
2. Develop and implement a program for biodiversity monitoring in the project site area. Program should include the following elements:

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• <sup>43</sup> See also TOR for this expert.

- ⇒ Working with project partners, and building on existing studies, design and conduct biodiversity field surveys to fill key information gaps (preliminary survey design should be included in sub-contract proposal).
- ⇒ Design medium term (5-10 year) biodiversity monitoring programme and provide training to local counterparts in its implementation.
- 3. Implement a GIS-based approach to assessing risks to biodiversity within the MPA, as follows:
  - ⇒ Synthesize existing and newly collected data and store it in manageable database
  - ⇒ Strengthen GIS capacity within local and Provincial offices
  - ⇒ Digitize base maps if needed for site area
  - ⇒ Link GIS framework to biodiversity database
  - ⇒ Analyze data using GIS.

#### *DELIVERABLES*

- ⇒ Information baseline established. Information to be delivered in agreed upon, standardized format for use by the respective MPA. This to include GIS data sets/files.
- ⇒ Baseline biodiversity monitoring programme in operation with report summarizing results of field surveys, and design of medium-term monitoring programme.
- ⇒ Strengthened GIS program, including database, maps, data analysis and report on training conducted. Established information baseline on biodiversity of Nanji.
- ⇒ Report on data gathering and biodiversity surveys, agreed biodiversity monitoring programme,<sup>44</sup> and data management and GIS overlays
- ⇒ Summary of changed level of awareness/knowledge/skill among key stakeholders.

### **SC-15: Develop township urban/rural development master plan for Nanji Islands and Nanji MPA management plan.**

*Budget Line 24.03: US\$35,000*

*LFA ref: 2.1*

*Work plan output/activity ref: Output 2.1; Targeted Output 1*

*Expected duration: 36 months.*

*Expected period: Beginning in month 7.*

This sub-contract will both follow on and depend upon the successful completion of SC-14, which will provide necessary baseline information for development of this action plan.

#### *OBJECTIVE*

Formulation and Provincial-level approval of a township urban/rural development master plan for Nanji Islands and Nanji MPA management plan.

#### *OVERSIGHT AND CO-ORDINATION*

Administrative responsibility for preparation and implementation of this sub-contract will rest with the PCU, in consultation with the respective SIU.

The sub-contractor will work in close co-operation with the international ICZM Advisor. This international expert will play the following role with respect to the work of the sub-contractor:<sup>45</sup>

- Undertake field visits to the site;

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• <sup>44</sup> This programme should subsequently be integrated within the Inter-provincial Action Plan (see SC-11 and SC-12 below).

• <sup>45</sup> See also TOR for this expert.

- Advise sub-contractor on best international practices related to the sub-contract work;
- Provide technical comments on draft and final reports being prepared by the sub-contractor;
- Make substantive contributions to all outputs being produced by the sub-contractor.

Depending on the timing of contracting arrangements and missions by international consultants, the Adaptive Management Advisor and/or the MPA Management Advisor may also provide comments and support, including field visits, at various points in the process.

All activities will be conducted in close coordination with the SIU and other local counterparts.

#### *ACTIVITIES*

- 1) Collect and review existing development, management and zonation plans
- 2) Undertake detailed socio-economic study of local residents and economy. Factors to be considered should include, *inter alia*, the following:
  - Number of fishermen and the volume and species composition of the fish catch;
  - Visitation levels and diver numbers; income levels and employment rates;
  - Identification of point sources for land-based pollution (*e.g.* sewage, industry, ships).
- 3) Develop comprehensive township-level master plan and integrated management plan

#### *DELIVERABLES*

- ⇒ Comprehensive township level master plan and integrated MPA management plan.
- ⇒ Summary of changed level of awareness/knowledge/skill among key stakeholders as to these issues.

## **SC-16 Implement GEF-financed activities of township-level master plan and Nanji MPA management plan**

*Budget Line 21: US\$126,000*

*LFA ref: Output 2*

*Work plan output/activity ref: Output 2.1, Targeted Output 1.*

*Expected duration: 36 months*

*Expected period: Begin in month 25*

### *BACKGROUND*

This sub-contract will both follow on and depend upon the successful completion of SC-15, which will formulate the action plan to be implemented herein.

### *OBJECTIVE*

Successful implementation of GEF-funded components of a township urban/rural development master plan for Nanji Islands and Nanji MPA management plan.

### *OVERSIGHT AND CO-ORDINATION*

Administrative responsibility for preparation and implementation of this sub-contract will rest with the PCU, in consultation with the respective SIU.

The sub-contractor will work in close co-operation with the international ICZM and the MPA Management Advisors. The Conservation Biology Advisor will provide additional support. These international experts will play the following role with respect to the work of the sub-contractor:<sup>46</sup>

- undertake field visits to the site;
- advise the sub-contractor on best international practices related to the sub-contract work;
- provide technical comments on the sub-contractor's draft and final reports;
- make substantive contributions to the action plan being produced by the sub-contractor.

Depending on the timing of contracting arrangements and missions by international consultants, the Adaptive Management Advisor and/or the MPA Management Advisor will also provide comments and support, including field visits, at various points in the process.

All activities will be conducted in close coordination with the SIU and other local counterparts.

### *ACTIVITIES*

⇒ Conduct training in participatory, community based management for MPA managers/stakeholders

Complete list/description of activities to be determined based on outcome of SC-15.<sup>47</sup>

### *DELIVERABLES*

- Deliverables to be determined based on outcome of SC-15
- Summary of changed level of awareness/knowledge/skill among key stakeholders.

## **SC-17 –Develop effective education and curriculum materials on Nanji's biodiversity and marine ecosystem for local schools.**

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• <sup>46</sup> See also TOR for these experts.

• <sup>47</sup> See list of likely action plan components under SC-15 TOR.

**Budget Line 24.05: US\$30,000**

*LFA ref:* Output 1

*Work plan output/activity ref:* Output 1.1, Targeted Output 4.

*Expected duration:* 24 months

*Expected period:* Beginning in month 12.

*BACKGROUND*

Public awareness concerning conservation issues at Nanji is limited. Important target groups for raising awareness include the younger demographic.

*OBJECTIVE*

This sub-contract is designed to raise awareness concerning the importance of the Nanji area in conserving China's marine and coastal biodiversity.

*OVERSIGHT AND CO-ORDINATION*

Administrative responsibility for preparation and implementation of this sub-contract will rest with the PCU, in consultation with the respective SIU.

The sub-contractor will work in close co-operation with the MPA Management Advisor. This international expert will play the following role with respect to the work of the sub-contractor:<sup>48</sup>

- Undertake one or more field visits to the site;
- Advise the sub-contractor on best international practices related to the sub-contract work;
- Provide technical comments on subcontractor's draft and final reports;
- Make substantive contributions to outputs being produced by the sub-contractor.

Depending on the timing of contracting arrangements and missions by international consultants, the Adaptive Management Advisor and/or the MPA Management Advisor may also provide comments and support, including field visits, at various points in the process.

*ACTIVITIES*

- ⇒ Develop biodiversity and marine environment curriculum for students in middle school. This should include lesson plans and a teacher's manual.
- ⇒ Develop awareness materials to reach the general population.<sup>49</sup>

*DELIVERABLES*

- ⇒ Curriculum materials; Awareness materials
- ⇒ Report on sub-contract implementation, including awareness raising activities sponsored.
- ⇒ Summary of changed level of awareness/knowledge/skill among key stakeholders.

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• <sup>48</sup> See also TOR for this expert.

• <sup>49</sup> The potential sub-contractors should propose the type of awareness materials to be produced, and the strategy for dissemination.

## **Appendix B5 Study Tour/Training Guidelines:**

### **Study tour Guidelines:**

1. Check national study tour options first, regional second, and international third.
2. Study tours must be directly relevant to helping stakeholders solve the primary problem each particular demonstration is trying to solve in their particular site.
3. Participants should include people who will actually apply lessons on the ground in the site areas. Participants should not only be high-level officials.

## **Appendix B6 Knowledge Management Approach to be Taken by the Project.**

The project will apply an adaptive learning approach to implementation of project activities and the production of project outputs. In order to adaptively learn, project participants must be able to take time to reflect on their work and that of their counterparts in other sites, and in other projects in China and indeed around the world. In order to adaptively manage project implementation, participants must be enabled to capture their learning in the form of written best practices and worst practices – in the form of lessons learned. Project stakeholders must manage knowledge

The following are key elements to this knowledge management approach:

One key element to this is devising a communications strategy for the project. Before we set off and managing knowledge, we need to know what kind of knowledge, learning, and information we want to focus on. Answering this question can be facilitated by answering the question: “What message does the project want to get across?” The answer to this question goes to awareness raising, website design and maintenance;

A second element to knowledge management is annual work planning and monitoring. Stakeholders at each site will develop annual work plans with assistance from the technical advisors, the PCU, the Adaptive Management Advisor, and the UNDP-CO.

A third element to knowledge management is capturing lessons learned. The project will do this through cross-site people exchanges to promote learning; annual “round-table” discussions of lessons learned; formal analysis of lessons learned and reporting of the results. This will include emphasizing on the absorption of international best practice through study tours and useful follow-up and promoting effective communication among project participants. And finally publishing and disseminating a lessons learned handbook.

A fourth element of this approach is to schedule regular pauses in project implementation for reflection. This “reflective practice” will be driven by an adaptive management advisor, who will be involved with the project for the life of the project asking questions and keeping knowledge management front and center with project managers and site-level stakeholders. This will be done in many different ways, among them being; forcing cross-project learning by asking questions regarding learning of stakeholders at the site level, facilitating the flow of information from other projects to this project and cross-project learning.



**Appendix B7 Co-Financing Commitment Letters from SOA and  
5 Provinces (see separate PDF file)**

**Appendix B8 NOAA's Co-Financing Commitment Letter (see separate PDF file)**

## Appendix 9: Response to Comments Received

Response to comments in the GEF Secretariat Review of the Brief (GEF Secretariat Concept Agreement Review).

### **Summary Comment 1: The Project needs to reflect better project risks (including financial sustainability, coral reef transplantation and customary use of resources).**

*The issue of coral transplantation and reef rehabilitation has been examined more closely in light of comments received from the STAP review and the GEFSEC. An explanatory note is attached as Annex K with specific revisions also made in Output 1.2 (paragraph 68). These sections provide details regarding the project's expected support for planning, capacity building and monitoring measures to guide and support the Chinese government in their transplantation endeavors. The goal of GEF support is now clearly defined as reducing the acknowledged risks and maximizing the potential global environmental benefits from these operations.*

The project has also been strengthened by increasing the emphasis on financial sustainability, and the Prodoc will include assurances from UNDP that this issue will be achieved as well as possible. Specifically, *Output 2.3*, which pilots financial sustainability of MPAs, now has additional activities to help achieve its goal. In addition, more emphasis will be given to ensuring that provincial and local governments allocate sufficient future budgets in their sectoral planning to minimize negative impacts on biodiversity and adopt the practices demonstrated by the project. The implementation arrangements to be detailed in the Prodoc will also be developed to increase the chance of sustainability.

Customary use of resources was paid significant attention during the extensive consultations carried out during project design. Formal and informal rules regarding resource use by different groups will be particularly considered and addressed during the piloting of community based natural resource management at Shankou Mangrove Reserve. *Output 2.4* has been amended to better reflect this (see paragraphs 83-86). Successful participatory approaches and conservation measures developed around customary uses during this pilot will then be promoted during the replication stage to all sites. Paragraphs 117 to 125 have also been revised to more clearly show how stakeholder participation during project design helped formulate community-based conservation components and how the participation will continue during project implementation so that communities are involved in all major decisions on developing conservation and natural resource management measures. *Annex I* also elaborates upon measures to maximize community involvement and demonstrates how the project will promote the integration of conservation measures with local customary use of natural resources.

**Summary Comment 2: Complex inter-institutional structure to implement the project.**

This has been recognized and will be duly considered in the development and elaboration of the implementation arrangements for the Prodoc.

**Summary Comment 3: Indicators are needed for impact, not only of process.**

The logframe, *Annex B*, has been revised to include clear and measurable impact indicators.

**Summary Comment 4: Better share of project costs for those components fully covered by GEF and clarification of what is cash and in-kind contributions.**

Project management: The project development team has not yet had an opportunity to review this issue with the Chinese Government in order to come up with financial estimates of expected in-kind and cash support for project management as well as cost sharing ratios. Such estimates and ratios will be included in the project document and presented prior to project endorsement.

Dissemination of results (Output 3.3): Same response as for (a) above, i.e., in-kind support will be estimated and presented subsequently.

Cross-site learning (Output 3.1): Due to an error in the previous version of the incremental cost matrix, US\$125,000 that had been committed by the provinces for information and experience exchange (see Annex F2, Co-financing confirmation letters), was distributed among other outputs. This error has now been corrected, with individual output budgets changed, but project totals remaining the same.

**Summary Comment 5: Better description needed of UNDP program in country.**

This description has been completely rewritten and may be found in paragraphs 111-113.

**Summary Comment 6: Better description needed of the fits of this project within the GEF and non-GEF regional projects.**

Paragraphs 107-110 in the Brief have been amended to clarify the project's relationship with GEF and non-GEF regional projects and how it will proactively coordinate with them during implementation to build on their results. Specifically, relationship and mechanisms for co-ordination with PEMSEA and UNEP IW South China Seas project have been elaborated. The Brief also notes that a strategy outlining the exact level and nature of coordination will be elaborated during planning in the project inception phase.