



GLOBAL ENVIRONMENT FACILITY
INVESTING IN OUR PLANET

Naoko Ishii
CEO and Chairperson

April 21, 2014

Dear Council Member:

FAO as the Implementing Agency for the project entitled: *China: Securing Biodiversity Conservation and Sustainable Use in China's Dongting Lake Protected Areas*, has submitted the attached proposed project document for CEO endorsement prior to final approval of the project document in accordance with FAO procedures.

The Secretariat has reviewed the project document. It is consistent with the proposal approved by Council in March 2011 and the proposed project remains consistent with the Instrument and GEF policies and procedures. The attached explanation prepared by FAO satisfactorily details how Council's comments and those of the STAP have been addressed. I am, therefore, endorsing the project document.

We have today posted the proposed project document on the GEF website at www.TheGEF.org. If you do not have access to the Web, you may request the local field office of UNDP or the World Bank to download the document for you. Alternatively, you may request a copy of the document from the Secretariat. If you make such a request, please confirm for us your current mailing address.

Sincerely,

Naoko Ishii
Chief Executive Officer and Chairperson

Attachment: GEFSEC Project Review Document
Copy to: Country Operational Focal Point, GEF Agencies, STAP, Trustee



REQUEST FOR: CEO ENDORSEMENT
PROJECT TYPE: FULL-SIZED PROJECT
TYPE OF TRUST FUND: GEF TRUST FUND

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PART I: PROJECT INFORMATION

| | | | |
|---|--|------------------------------------|----------------|
| Project Title: Securing Biodiversity Conservation and Sustainable Use in China's Dongting Lake Protected Areas | | | |
| Country(ies): | China | GEF Project ID:¹ | 4356 |
| GEF Agency(ies): | FAO | GEF Agency Project ID: | 608809 |
| Other Executing Partner(s): | Forestry Department of Hunan Province (FDHP) | Resubmission Date: | March 20, 2014 |
| GEF Focal Area (s): | BD | Project Duration (Months) | 60 |
| Name of Parent Program (if applicable): | | Project Agency Fee (\$): | 295,000 |
| | <ul style="list-style-type: none"> ➤ For SFM/REDD+ <input type="checkbox"/> ➤ For SGP <input type="checkbox"/> ➤ For PPP <input type="checkbox"/> | | |

A. FOCAL AREA STRATEGY FRAMEWORK²

| Focal Area Objectives | Expected FA Outcomes | Expected FA Outputs | Trust Fund | Grant Amount (\$) | Co-financing (\$) |
|------------------------------|--|---|-------------------|--------------------------|--------------------------|
| BD-1 | Outcome 1.1: Improved management effectiveness of existing and new protected areas; | Output 1: Protected areas (4) and coverage (436,000 ha) of unprotected threatened species (at least 5) | GEFTF | 1,367,732 | 5,531,200 |
| BD-2 | Outcome 2.1 Increase in sustainably managed landscapes and seascapes that integrate biodiversity conservation; | Output 2. National and sub-national land-use plans (1) that incorporate biodiversity and ecosystem services valuation. Output 3. Certified production landscapes and seascapes (700 ha). | GEFTF | 1,257,509 | 1,495,900 |
| BD-2 | Outcome 2.2: Measures to conserve and sustainably use biodiversity incorporated in policy and regulatory frameworks. | Output 1. Policies and regulatory frameworks (3) for production sectors. | GEFTF | 324,759 | 572,900 |
| Total project costs | | | | 2,950,000 | 7,600,000 |

¹ Project ID number will be assigned by GEFSEC.

² Refer to the [Focal Area/LDCF/SCCF Results Framework](#) when completing Table A.

B. PROJECT FRAMEWORK

Project Objective: to secure the conservation of biodiversity of global importance in the Dongting Lake through strengthening existing management efforts and the promotion of the Wetland's long-term sustainable development. Specifically, the project objectives are to: (i) strengthen the existing institutional and policy framework; (ii) promote an integrated, ecosystem-wide planning and management approach; (iii) strengthen the existing network of wetland nature reserves (NR); (iv) demonstrate sustainable co-management models of Dongting Wetlands Ecosystems (DWE) and biodiversity friendly production practices to reduce human activity pressure on the Wetlands; and (v) increase institutional capacity and public awareness and support for wetlands conservation.

| Project Component | Grant Type | Expected Outcomes | Expected Outputs | Trust Fund | Grant Amount (\$) | Confirmed Co-financing (\$) |
|--|------------|--|--|------------|-------------------|-----------------------------|
| Component 1: Strengthening of institutional capacities for integrated monitoring and management of biodiversity in DWE | TA | Outcome 1.1: DLCC (Dongting Lake Conservation Commission) is fulfilling its function coordinating the implementation of the DWE Management Plan (DWEMP) and at least two key biodiversity threats addressed (sand mining threatening porpoises, poplar plantations, and/or un-sustainable fisheries) by the end of project. | <p>Output 1.1.1: DLCC strengthened by the end of the project with: i) a functioning secretariat in FDHP; ii) agreed operations procedures; iii) agreed five years work plan; and iii) at least one meeting per year held</p> <p>Output 1.1.2: Updated detailed biodiversity baseline and threat analysis by the end of PY1 including three technical reports on: a) DWE biodiversity and ecosystem services value and status; b) impacts on biodiversity from different sectors and response options; and c) options and priorities for land and water use plans valuating biodiversity</p> <p>Output 1.1.3: Integrated DWEMP incorporating valuation of biodiversity approved by DLCC by PY3 and under initial implementation by the end of the project</p> <p>Output 1.1.4: DWE Integrated Information Management System (IIMS) on status of biodiversity, ecosystem services, and socio-economic indicators is operating providing data and analysis for DWE management and decision-making at municipal, province and NR levels by PY2.</p> | GEFTF | 420,200 | 672,000 |
| Component 2: Strengthening of management effectiveness of DWE NRs network | INV | <p>Outcome 2.1a: Improvement in management effectiveness of NRs by the end of the project monitored through the BD management effectiveness tracking tool: (a) NR management effectiveness assessment improved for: East Dongting Lake (DL) from 61 to 70; West DL from 54 to 70; South DL from 56 to 68; and Hengling from 53 to 66; (b) threat score decreased for: East DL from 56 to 47; West DL from 63 to 51; South DL from 57 to 50; and Hengling from 61 to 40</p> <p>Outcome 2.1b: 50% increase in national and local governmental budget allocations to PA management (baseline allocation 20 million/year)</p> <p>Outcome 2.2.a: Improved biodiversity and endangered species indicators by the end of the project in DWE: (i) increase in total bird visitation by 10% in the</p> | <p>Output 2.1.1: Three local decrees on Administrative Measures for NR (AMNR), one for each of East, South and Hengling Dongting Lake (DL) NRs, proclaimed by the end of PY2 (facilitating increased local government budget allocations).</p> <p>Output 2.1.2: West Dongting Lake NR and South Dongting Lake NR are upgraded from provincial NRs to National NRs and Hengling NR to Ramsar site by the end of PY3 (facilitating increased national government budget allocations)</p> <p>Output 2.1.3: Four five-years NR management plans (NRMP) updated for 2013-2018 and at least 20 NR staff trained in NR planning and management strengthening the DWE NR network</p> <p>Output 2.1.4: Capacities for NR management strengthened through: a) training of 100 NR staff in BD monitoring and conservation measures, eco-tourism in NRs, law enforcement and co-management mechanism, and public communication and awareness raising; and b) upgrading of infrastructure, patrol and monitoring equipment in three DL NRs (West, South and</p> | GEFTF | 1,359,200 | 4,483,000 |

| | | | | | | |
|--|----|--|---|-------|---------|---------|
| | | <p>four DL NRs; (ii) finless porpoise population maintained; (iii) lesser white-fronted goose population maintained; (iv) black stork population maintained; (v) 5% increase in Pere Davis deer population; (vi) Whistling Swan population maintained; (vii) increase from 2 to 5% appearance of Silver Fish in monitoring caches (ecosystem health indicator)</p> <p>Outcome 2.2.b: Improved income indicators for households (of which 60% are represented by women as the main participant and beneficiary)³ involved in co-management demonstration models: (i) 320 farming households have increased their income with at least 30% in East DL NR from bird-friendly rice production; (ii) 400 house-holds involved in organic fish farming and 500 households involved in rights based fisheries co-management to support the restoration of fisheries resources have increased their income with at least 100% in Hengling NR experimental zone; (iii) 70 households have increased their income with at least 100% in West DL NR from eco-tourism operations and bird habitat conservation</p> | <p>Hengling).</p> <p>Output 2.2.1: Four demonstration models for NR co-management implemented: a) agriculture integrated management model restoring paddy harvested fields as winter bird feeding ground on 700 ha involving 320 households in East DL NR; b) reed and poplar management model in South DL NR; c) organic fish farming (involving 400 households) and ecosystem and rights based fisheries co-management (involving 500 households) models to support the restoration of fisheries resources and maintain the porpoises population in 1,800 ha in Hengling NR experimental zone; d) eco-tourism and bird habitat conservation model conserving 60 ha of birds habitat and 70 additional households involved in eco-tourism operations in West DL NR.</p> <p>Output 2.2.2: Conservation of 5 flagship biodiversity species (finless porpoise, lesser white-fronted goose, black stork, Pere David's Deer, Whistle Swan) in a common effort among all NRs through: a) development and implementation of conservation action plan; b) restoration of 6,000 ha of habitat; c) systematic monitoring of population or proxy indicators for population size supported by a GIS data base</p> | | | |
| Component 3: Mainstreaming of biodiversity conservation in key sectors | TA | <p>Outcome 3.1.a: BD O2 tracking tool score on biodiversity conservation integration in policies and regulations increased from 17 to 23 (out of 36 possible) for the sectors influencing on DWE</p> <p>Outcome 3.1.b: Poplar plantation reduced by 20,000 ha by the end of the project</p> | <p>Output 3.1.1: Amendment of Wetland Protection Regulation of Hunan Province (WPRHP) presented to the Provincial People's Congress by PY3 including in particular provisions for: a) integrated management of wetland biodiversity and ecosystems; and b) compensation mechanism for conservation of wetlands biodiversity and ecosystem services</p> <p>Output 3.1.2: At least two sector policies (fisheries, reed and/or poplar plantation) are aligned with WPRHP, the Integrated DWEMP and the four AMNR decrees and NRMPs at local and provincial level by the end of the project</p> <p>Output 3.1.3: Practical skills of 360 provincial and local government officers in enforcement of wetland conservation and sustainable use regulations enhanced</p> <p>Output 3.1.4: Increased capacity of 40 provincial and local government officials and private sector representatives in development and implementation of biodiversity conservation measures and practices in fishery management, pollution control from paper mills, sand mining and land-use planning for reed and poplar plantations</p> | GEFTF | 239,350 | 373,000 |

³ Due to male migration out of the area, please see section B.2

| | | | | | | | |
|---|-----|---|---|-------|---------|------------------|------------------|
| Component 4: Environmental education and awareness | INV | Outcome 4.1: Awareness among the local population on DWE biodiversity value, use and wetlands protection regulations increased to 30%. | <p>Output 4.1.1: 50,000 brochures distributed and system of 20 billboard signs set up on: a) flagship species conservation; b) rules and regulations for protection and use of wetlands biodiversity; c) success stories on organic aquaculture, eco-tourism, ecosystem and rights based management of fisheries, and bird-friendly cultivation plan; and d) NR demarcation</p> <p>Output 4.1.2: Infrastructure and display of visitors and other education centres improved including: a) construction of three visitors and education centers of West, South and Hengling DL NRs; b) improvement of displays in four centers; and c) upgrading of displays in Qingshan polder organic aquaculture success story exhibition hall (West DL NR)</p> <p>Output 4.1.3: Special campaign and events organized and conducted including: a) 20 summer holiday university volunteers camps in each of the four NRs; and b) 40-60 campaigns on special days such as annual Wetlands day, annual Bird week, bi-annual Bird watching race</p> <p>Output 4.1.4: Curricula on DWE biodiversity conservation and sustainable use included in 20 middle schools in counties and townships around the lake reaching 30,000 students.</p> | GEFTF | 430,220 | 1,179,000 | |
| Component 5 M&E and information dissemination | TA | Outcome 5.1: Project implementation based on results based management and increased receptivity and adoption of DWE approach to “mainstreaming” biodiversity conservation in sector planning both in China and elsewhere | <p>Output 5.1.1: Project monitoring system providing six-monthly reports on progress in achieving project outputs and outcomes</p> <p>Output 5.1.2: Midterm and final evaluation reports</p> <p>Output 5.1.3: Project “best-practices” and “lessons-learned” in relation to co-management models, integrated DWE management experience, mainstreaming of wetlands biodiversity conservation in sectors disseminated via publications, project website and others.</p> | GEFTF | 372,150 | 390,000 | |
| Subtotal | | | | | | 2,821,120 | 7,097,000 |
| Project management Cost (PMC) ⁴ | | | | | GEFTF | 128,880 | 503,000 |
| Total project costs | | | | | | 2,950,000 | 7,600,000 |

C. SOURCES OF CONFIRMED CO-FINANCING FOR THE PROJECT BY SOURCE AND BY NAME (\$)

Please include letters confirming co-financing for the project with this form

| Sources of Co-financing | Name of Co-financier (source) | Type of Co-financing | Co-financing Amount (\$) |
|-------------------------|---|----------------------|--------------------------|
| Province Government | FDHP, the NRMBs and other provincial and local government departments | Cash | 1,338,000 |
| Province Government | FDHP, the NRMBs and other provincial and local government departments | In-kind | 1,562,000 |
| National Government | <i>National Wetland Conservation Programme</i> through the FDHP | Cash | 1,500,000 |
| National Government | <i>Wetland Conservation Subsidy Programme</i> through the FDHP | Cash | 1,000,000 |
| National Government | <i>National Wildlife Conservation and Nature Reserve Development Programme</i> through the FDHP | Cash | 2,000,000 |

⁴ PMC should be charged proportionately to focal areas based on focal area project grant amount in Table D below

| | | | |
|---------------------------|-----|---------|------------------|
| GEF Agency | FAO | In-kind | 200,000 |
| Total Co-financing | | | 7,600,000 |

D. TRUST FUND RESOURCES REQUESTED BY AGENCY, FOCAL, AREA AND COUNTRY¹

| GEF Agency | Type of Trust Fund | Focal Area | Country Name/ Global | (in \$) | | |
|------------------------------|--------------------|------------|-------------------------|------------------|-----------------------------|-------------|
| | | | | Grant Amount (a) | Agency Fee (b) ² | Total c=a+b |
| | | | | | | |
| Total Grant Resources | | | | | | |

1 In case of a single focal area, single country, single GEF Agency project, and single trust fund project, no need to provide information for this table. PMC amount from Table B should be included proportionately to the focal area amount in this table.

2 Indicate fees related to this project

F. CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS:

| Component | Grant Amount (\$) | Co-financing (\$) | Project Total (\$) |
|---------------------------|-------------------|-------------------|--------------------|
| Local consultants | 529,000 | 1,200,000 | 1,537,000 |
| International consultants | 0 | 180,000 | 180,000 |

G. DOES THE PROJECT INCLUDE A “NON-GRANT” INSTRUMENT?

(If non-grant instruments are used, provide in Annex D an indicative calendar of expected reflows to your Agency and to the GEF/LDCF/SCCF/NPIF Trust Fund).

No

PART II: PROJECT JUSTIFICATION

A. DESCRIBE ANY CHANGES IN ALIGNMENT WITH THE PROJECT DESIGN OF THE ORIGINAL PIF⁵

A.1 National strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NCSA, NIPs, PRSPs, NPFE, Biennial Updates Reports, etc.

After the approval of the PIF, China developed a new and more strategic focused NBSAP. The alignment of the project has been adjusted to this new plan as follows:

The priorities of the Government of China (GoC) in biodiversity conservation and implementation of the United Nations Convention on Biological Diversity (UNCBD) are set out in China's Fourth National Report on Implementation of the Convention on Biological Diversity, 2008 and the China National Biodiversity Conservation Strategy and Action Plan, 2011-2030 (NBSAP). The NBSAP identifies 35 priority regions for biodiversity conservation in China where the Dongting Lake is identified as priority area in the Hilly Plain priority Region of East and Central China. The present project will in particular support the implementation of one of the four conservation priorities for this area: *Improve the conservation of rare and endangered species such as Chinese sturgeon and dolphins, and of river and marine coastal wetlands and wintering habitats of red-crowned cranes and Siberian white cranes and potential habitats of South China Tiger*. The present project will also support the implementation of in particular 5 of the 30 priority actions identified in the NBSAP which are: Action 2 *Improve the legal system of biodiversity conservation and sustainable use* (component 3 of the present project); Action 3 *Establish and enhance bodies for biodiversity conservation and management and improve the inert-agency coordination mechanism* (component 1 and 3); Action 4 *Incorporate biodiversity conservation into relevant sectoral and regional planning and programmes* (component 1, 2, and 3); Action 9 *Undertake biodiversity monitoring and pre-warning* (component 1); Action 13 *Improve conservation in priority areas of biodiversity conservation* (all components); Action 30 *Promote the establishment of biodiversity conservation partnerships* (component 2 and 4).

A.2 GEF focal area and/or fund(s) strategies, eligibility criteria and priorities.

The project will no longer directly contribute to BD-1 outcome 1.2: Increase revenue for protected area systems to meet total expenditures required for management. This is covered by the GEF (ID: 4646) financed CBPF-Main Streams of Life (MSL) – Wetland PA System Strengthening for Biodiversity Conservation Programme, currently finalizing its preparation of all related projects. The instruments and best practices developed under this programme covering 7 provincial wetlands NR systems will benefit the DWE NR network, and may be taken up by Hunan province guided by (State Forest Administration) SFA leading this programme. Further, three financing mechanism already created to strengthen NRs in China is already been taken advantage of by Hunan Province to support DWE NRs which in particular include the three important sources of co-financing to this project (*National Wetland Conservation Programme (2011 – 2015); Wetland Conservation Subsidy Programme; and National Nature Reserve Development Programme*). That said, the project in its planned activities will still indirectly support BD-1 1.2. In particular the development and proclamation of AMNR and the upgrading of West Dongting Lake NR and South Dongting Lake NR from provincial NRs to National NRs and Hengling NR to Ramsar site will facilitate increased local and national government budget allocations to the NR (component 1 outcome 2.1.b). Further, the establishment of partnerships with local governments, state farms, farmers and fishers communities and the private sector in co-management models is expected to bring additional financing to biodiversity conservation in the 4 NRs (component 2 outcome 2.2.a and 2.2.b). Likewise it is foreseen that the amended WPRHP will include a compensation scheme providing economic incentives for biodiversity conservation (component 3). Please see FAO-GEF Project Document section 1.1.5 c) for complete text on alignment with GEF BD FA strategy)

⁵ For question A.1-A,7 in Part II, if there are no changes since PIF and if not specifically requested in the review sheet at PIF stage, then no need to respond, please enter "NA" after the respective question

A.3 The GEF Agency's comparative advantage:

As in the PIF except an update of FAO's opportunities as a GEF agency to facilitate synergies with other GEF financed wetlands programmes in China as follows: FAO is presently participating as the designated GEF Executing Agency in the preparation of 5 other GEF projects in China of which three concerns wetlands biodiversity conservation and restoration (Poyang Lake in Jiangxi province, Western Jilin Saline-alkaline Wetlands, and Estuarine wetlands in Shandong and Guangdong Provinces) with which FAO will facilitate synergies.

A.4 The baseline project and the problem it seeks to address:

This analysis has been further developed and substantially deepened during project preparation in order to do an adequate detailed design of project components securing that GEF funds are used incrementally. Please see FAO-GEF Project Document: section 1.1. b) for Threats on Dongting Wetlands Ecosystem services and biodiversity; section 1.1.1 a) for Baseline initiatives, projects and co-financing to the FDHP/FAO/GEF project; and section 1.1.1 b) for Remaining barriers to be addressed by the project

A.5 Incremental / Additional cost reasoning: describe the incremental (GEF Trust Fund/NPIF) or additional (LDCF/SCCF) activities requested for GEF/LDCF/SCCF/NPIF financing and the associated global environmental benefits (GEF Trust Fund) or associated adaptation benefits (LDCF/SCCF) to be delivered by the project:

The reasoning has been further developed and detailed according to the detailed project design and updating of co-financing sources as follows:

To address the above mentioned barriers (section 1.1.1 b) in the FAO-GEF Project Document) and achieve benefits for the global important DWE biodiversity the GEF resources will be invested incremental to the above mentioned baseline (section 1.1.1 a) in the FAO GEF Project Document) as follows:

Component 1: Strengthening of institutional capacities for integrated monitoring and management of biodiversity in DWE

The coming years the FDHP will provide an estimated USD 242 000 in co-financing in staff time, travel costs, office space and utilities, and meeting facilities to: (i) make operational and strengthen the DLCC; (ii) conduct sector specific biodiversity and ecosystem threat analysis filling current information and analysis gaps; (iii) develop and implement a 5-years integrated DWE management plan (DWEMP); and (iv) support the implementation of an Integrated Information Management System (IIMS) on status of biodiversity, ecosystem services, and socioeconomic indicators. The above mentioned *National Wetland Conservation Programme (2011 - 2015)* and the *Wetland Conservation Subsidy Programme* will through the FDHP invest an estimated USD 410 000 in wetlands sustainable use demonstration activities to be prioritized and implemented under the DWEMP as well as in DWE surveys and monitoring equipments.

The incremental USD 406 200 from GEF will be used for: short term technical assistance (institutional expert to guide making the DLCC operational and an information system expert to support the implementation of the IIMS); consultancy services to conduct specific threats analysis and support the preparation of the DWEMP; training in the operating of the IIMS platform; consultation workshops supporting integrated planning processes; and equipment to support the IIMS. Without these inputs the DLCC would become operational at a slower speed, the integrated planning process would not be build on access to up to date monitoring data and analysis on the status of DWE biodiversity and related threats, which would be a barrier for strategic priority setting in conservation and sustainable use at the DWE level. The baseline situation with weak coordination among sectors to address biodiversity and habitat conservation needs and lack of integrated DWE planning and management would continue.

Component 2: Strengthening of management effectiveness of DWE NRs network

The coming years the FDHP, the NRMBs and other provincial and local government departments will provide an estimated USD 513 000 in co-financing in staff time, local travel costs, office space and utilities, and meeting facilities to: (i) prepare, consult and approve Local Administrative Measures for NR (AMNR) decrees; (ii) support the upgrading of West and South Dongting Lake NRs to national NRS and Hengling Lake to a RAMSAR site; (iii) develop and implement 5-years NR Management Plans (NRMPs); (iv) strengthen NR management capacities; (v) develop,

implement and upscale NR co-management models addressing key pressures on biodiversity and habitat; and (vi) develop and implement strategies for conservation of flagship species. The above mentioned *National Wetland Conservation Programme (2011 – 2015)*, the *Wetland Conservation Subsidy Programme*, and the *National Nature Reserve Development Programme* will through the FDHP invest an estimated USD 2.8 million in monitoring equipment and infrastructure for NR office facilities, animal rescue centers, visitors and training centers, USD 0.35 million technical and logistical support for co-management models, and USD 0.76 million in restoration of habitat in the support of conservation of flagship species and investment support for the implementation of co-management models. Likewise farmers and fishermen will provide parallel investment financing for the establishment of organic aquaculture production, bird friendly rice production, and eco-tourism services for an estimated amount of USD 0.6 - 1.0 million.

The incremental USD 1 101 000 from GEF will be used for: i) short term consultancy services to support the drafting, approval and implementation of AMNRs and NRMPs which will facilitate increased local government budget allocations; ii) conducting biodiversity baseline studies of NR core zones and providing other needed documentation for their upgrading which will facilitate increased national government budget allocations; iii) developing the draft strategies for the conservation of flagship species and supporting their initial implementation; iv) conducting in-debt socio-economic feasibility studies for the co-management models; v) technical assistance from short term experts to support the final design and implementation of co-management models (water bird specialist for integrated bird-friendly agriculture planning, wetlands habitat and ecosystem expert to advice on land-use planning solutions for reed farming and poplar plantations, aquaculture and ecosystem approach to fisheries management specialists, and a specialist in wetlands ecotourism); vi) consultations and capacity building of NR staff, farmers and fishers to support the strengthening of NR management at the network level, and the implementation of co-management models; and vii) equipment for NR monitoring and surveillance. Without these inputs the NRs would continue to work in isolation without a common vision at the network level to address threats on biodiversity and habitats at the DWE level. The NRs would have improved infrastructure for visitors and the administration but they would still operate in many years to come without clear legal status at the local level and concrete management plans integrated at the network level as well as capacities to plan, coordinate and implement coordinated strategic actions for biodiversity conservation at the DWE level and attracted increased government budget allocations for the NRs. Some fragmented co-management actions with local communities would still be supported but there would be no systematic consolidation and scaling of successful models with wider impacts on livelihoods as well as the sustainability of DWE services and biodiversity.

Component 3: Mainstreaming of Conservation of biodiversity in key sectors in DWE

The coming years the FDHP, the NRMBs and other provincial and local government departments will provide an estimated USD 263 000 in co-financing in staff time, local travel costs, office space and utilities, and meeting facilities to: (i) support the process of drafting, consulting and obtaining approval of an amendment of the Wetland Protection Regulation of Hunan Province (WPRHP); (ii) promote and support an alignment of sector policies and regulations with the amended WPRHP; (iii) strengthen capacities of province and local authorities in the enforcement of wetland conservation laws and regulations; and (iv) strengthening public and private capacities in biodiversity conservation practices in priority sectors. The above mentioned *Wetland Conservation Subsidy Programme* will through the FDHP invest an estimated USD 100 000 in the improvement of wetlands management practices in priority sectors using and impacting on DWE resources.

The incremental USD 156 550 from GEF will be used for: short term consultancy services and consultation workshops to support the drafting, consultation and adoption of the amendment of the WPRHP and alignment of sector policies; study visits for agency officials and private sector representatives on wetlands biodiversity conservation practices to be applied in key sectors (sand mining, fisheries, reed farming and poplar plantation); and training course for provincial and local government officers in enforcement of wetlands regulations. These inputs will allow for starting the mainstreaming of DWE biodiversity conservation in key sectors which in the baseline scenario, despite their impact on and use of DWE resources, are not much involved in the conservation of DWE services and aware of solution options in terms of biodiversity-friendly practices. This GEF investment will also be supported by the baseline WWF-China, CTGPC and the Ministry of Water Resources partnership to reduce impacts of the TGD on DWE biodiversity in the achievement of incremental global environmental benefits for the DWE.

Component 4: Environmental education and awareness

The coming years the FDHP, the NRMBs and other provincial and local government departments will provide an estimated USD 1.1 million in co financing in staff time, local travel costs, office space and utilities, and meeting facilities to: (i) support the preparation of DWE biodiversity communication and information material and improve infrastructure; (ii) conduct special wetlands biodiversity campaigns and events; and (iii) support the development of DWE conservation and sustainable use curricula for middle school. The above mentioned *Wetland Conservation Subsidy Programme* will through the FDHP invest an estimated USD 50 000 in upgrading of visitors centers infrastructure.

The incremental USD 830 220 from GEF will be used for: short term technical assistance from a public communication specialist to support an improved organization of special awareness raising events (Dongting Lake International Bird Watching Race, Wetlands Ambassadors Action, Wetlands Days, etc.); consultancy services for the production of a telefilm on wetlands biodiversity and the development of wetlands ecosystem services and biodiversity curricula for middle school students; billboard signs with information on biodiversity and demarcation of NRs; and displays for visitor centers. These inputs will allow for reinforcing awareness raising under a joint strategy of the NRs and improving the organization of the baseline successful special events. In particular the GEF resources will allow for a more focused targeting and involvement of the local population in the special events and local awareness raising activities. Without the GEF resources the NRs would invest in improved visitors and education centers but these investments would not be accompanied with a specific reach out to the local population and younger generations living in the DWE.

A.6 Risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and measures that address these risks:

The risk analysis has been further detailed during project preparation and mitigation measures have been included in the project design as follows:

| Risk type | Risk level | Mitigation measure |
|--|------------|---|
| The demanding and complex integrated DWEMP fails to get buy-in from economic sectors who are used to the business-as-usual sectoral planning approach | Medium | Through the DLCC capacities of the sectors will be build in integrated ecosystem management and planning and all sectors will be involved in threat analysis, and defining and prioritizing solution options to be included in the DWEMP. An important milestone included in the project's Results Framework is the approval of the DWEMP by the provincial government which will support the buy-in of the provincial government institutions. During project preparation key stakeholders have shown widespread financial and political support to the project and the establishment of an integrated DWE management and planning approach. These include at the national level the Ministry of Finance and at the provincial level the Departments of Finance and Forestry as well as municipalities at the local level. |
| Unwillingness of production sectors to adopt biodiversity friendly practices in policies and development plans and the management and use of DWE resources | Medium | This risk will be mitigated through awareness raising and capacity building in adverse impacts and threats on DWE services and biodiversity and practical solution options. Local farmers and fishery communities and private sector companies will be involved in the implementation of co-management models seeking sustainable co-benefits for local socio-economic conditions and biodiversity conservation. Also public decision makers will be addressed in awareness raising and training activities to promote biodiversity valuation in sector development policies, plans and regulations. This risk has also been partly mitigated by a recent shift in national government priorities beginning in 2007 placing greater emphasis on environmental quality. |
| The amendment of the WPRHP will be blocked by some sectors with | Low | During project preparation wide support to an amendment of the WPRHP was confirmed. The amendment will be widely consulted in the DLCC to insure consensus has been achieved before it is |

| | | |
|---|--------|---|
| conflicting economic interest | | submitted for approval. |
| Some institutions important for the implementation of the IIMS may be reluctant to engaging in information sharing which could be a sensitive issue | Low | The enabling environment for all key institutions participation will be established through the DLCC and negotiation for the conditions for information sharing will be done. The system may start operating with all institutions interested from the beginning and then link in more reluctant institutions later, when the benefit of the platform has been proved. |
| Climatic change | Medium | The middle Yangtze River Basin, which encompasses the Dongting Lake region, is subject to extreme climate events (primarily precipitation and droughts), which appear to have increased in both intensity and frequency in recent years. These events are projected to continue or increase under most future climate change scenarios and will likely adversely impact the DWE and component habitats and biodiversity that it supports as well as the livelihoods of community who depend on its resources. By strengthening management and improving the environmental “health” of the Wetlands, the project will help build the ecosystem’s resilience to climate change. Providing support to local communities through sustainable/alternative livelihoods will enable them to better cope with climate change impacts. |

A.7 Coordination with other relevant GEF financed initiatives

The coordination with other GEF financed initiatives has been updated as follows:

FAO and FDHP will work in close collaboration with executing agencies of other projects to identify opportunities and facilitate mechanisms to achieve synergies with relevant GEF-supported projects and projects supported by other donors or the Chinese government. These efforts will be facilitated through: (i) informal communications between the GEF Agencies; (ii) sharing of data and dissemination materials between projects; and (iii) strengthening of the DLCC and other existing fora composed of representatives of government agencies, private sector and civil society to address issues of common concern that effect the ecological health and productivity of the DWE. To ensure that existing opportunities from coordination and collaboration between different initiatives are realized explicit coordination requirements have been included in the Project Management Office’s scope of work (see below). Inter-agency and project coordination will be facilitated by FAO’s participation in the CBPFA partner roundtable and the GEF5 UNDP/China Wetlands Programme, project staff participation in relevant public fora, cross-site visits, exchange of information, postings on the project website and mailings of relevant publications and newsletter. In particular the project should seek coordination and exchange with the following institutions and initiatives:

- The NR strengthening programme initiated in 2006 by the SFA and covering China’s 1,800 NRs. East Dongting Lake NR is selected among 51 pilot NRs demonstrating “best practices”. Through this initiative project supported success practices supported by the project such as the co-management models will be disseminated to other NRs in China
- The World Wildlife Fund (WWF) China ongoing program with Hunan Province in support of integrated river basin management (IRBM) in the middle and lower Yangtze (“Partnership for a Living Yangtze”) which could benefit from coordination of activities with the present project for the integrated management of the DWE.
- The WWF-China, CTGPC and Ministry of Water Resources partnership on monitoring of TGD’s impacts on biodiversity, protocols for sustainable hydropower management and environmental flows. Coordination and complementarities with this initiative is very important for the success of the present project because of its potential positive impact on the distorted hydrological cycle in the DWE its services and biodiversity.
- The six wetlands projects under the GEF5 UNDP/China Wetlands Programme including in particular the FAO supported project “Piloting Provincial-level Wetland PA System in Jiangxi Province” which has the Poyang Lake downstream from the DWE as particular focus for strengthening NR management, and conservation actions with local communities. FAO will facilitate the coordination and exchange between the Wetlands programme, in particular the Poyang Lake project, and the DWE project through coordination with

UNDP as the lead agency for the Wetlands programme, facilitation of exchange visit between the Poyang Lake and the DWE project, and ensuring the exchange of lessons learned and good practices between both projects.

- The FAO/GEF State Oceanic Administration of China supported project “Demonstration of Estuarine Biodiversity Conservation, Restoration and Protected Area Networking in China”. Also in this case FAO will facilitate the coordination and exchange between the two projects.

B. ADDITIONAL INFORMATION NOT ADDRESSED AT PIF STAGE:

B.1. Describe how the stakeholders will be engaged in project implementation:

The project will work closely with a wide range of stakeholders including provincial and local government agencies, universities, research institutions, civil society organizations, private businesses, local communities and residents living in or around the Dongting Lake. The FDHP will be the main partner for project execution with the four NRMBs as co-executing partners.

At the provincial level, through the DLCC, the FDHP will involve all sector departments important for the long term planning, conservation and sustainable use of DWE services and biodiversity including the Legislation Office of the provincial government, Provincial Finance Department, Development and Reform Commission, Water Resource Department, Agriculture Department, Forestry Department, Land Resources Department and Environmental Protection Department. These are all important partners for the success of component 1 and component 3, but they will also be included in component 2 co-management models as per their competencies.

At the local level the governments of Xiangyin county and the three municipalities Yueyang, Yiyang and Changde, and their subordinated departments, will be key partners in all components. They will in particular be consulted on and be involved in the develop and implement of: the DWEMP (component1); AMNRs, NRMPs, and the co-management models and flagship species and habitat conservation and restoration activities within their respective jurisdiction (component 2); amendment of the WPRHP and alignment of sector policies and regulations, capacity building activities in the enforcement of wetland conservation laws and regulations and biodiversity conservation practices in priority sectors (component 3); and awareness raising special events (component 4).

Partnerships will be developed for each co-management model in component 2 with farmers and fisherman communities and private sector companies linking to markets with added values for biodiversity friendly products. Interest among these partners has already been confirmed in the case of each co-management model. They will play a central role in planning, implementing and monitoring the outcome of the models and they will also play a key role in their further up-scaling in the last project year and beyond. They will bring parallel financing to the projects in terms of investments in sustainable and biodiversity friendly production practices. A special effort will be made to involve vulnerable groups among these communities and a gender sensitive approach will be applied. The private sector and the local communities will also be closely involved in the alignment of sector policies with the amended WRHP and identification of and capacity building in alternative biodiversity friendly extraction and production practices in component 3 and in awareness raising activities in component 4.

Universities, research institutions (including ASEM Water Resources Research and Development Center, Wetland Research Centre of Hunan Province, Hunan Academy of Forestry, and Dongting Lake Station for Wetland Ecosystem Research, The Chinese Academy of Sciences who is very involved in research and technical advice on DWE threats, local livelihoods, and solution options) and civil society organizations (in particular WWF-China who is playing a key role in promoting enhanced knowledge on DWE services and biodiversity and conservation actions as described above) will also be closely involved in project activities. They will participate in: the sector specific biodiversity and ecosystem threat analysis and setting up the IIMS (component1); feasibility studies for and technical advice on the implementation of co-management models and flagship species conservation strategies (component 2); capacity building in biodiversity friendly production practices (component 3); and technical advice on communication strategies and material

(component 4). A technical advisory group will be set up to advise the Project Management Office and the Project Steering Committee with the participation of these partners (see section 4.2 of the FAO-GEF project document).

The project will be launched by a well-publicized multi-stakeholder inception workshop. This workshop will provide an opportunity to provide all stakeholders with updated information on the project as well as a basis for further consultation during the project's implementation. Stakeholder committees (at least one for each NR) will be set up to provide a platform for stakeholder involvement in particular at the local level (see section 4.2 of the FAO-GEF project document).

B. 2. Describe the socioeconomic benefits to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the achievement of global environment benefits (GEF Trust Fund/NPIF) or adaptation benefits (LDCF/SCCF):

Short and medium term socio-economic benefits will be created mostly in component 2 through co-management models providing income generating opportunities from sustainable managed fisheries resources, aquaculture, eco-tourism and bird friendly rice cultivation. Specific socio economic outcome indicators have been included in the project Results Framework in outcome 2.2b to insure the systematic monitoring and follow up on achieving these local socio economic benefits. Co-management is in the context of this project defined as a partnership arrangement between government and the local community of resource users, and in some cases also connected with agents such as NGOs, research institutions, private sector companies, and other resource stakeholders. The aim is to share the responsibility and authority for management of resources within the DWE NRs in a sustainable manner with positive impacts on DWE and biodiversity as well as on the socioeconomic opportunities for the population dependent on the DWE resources.

To enhance the social sustainability of the co-management approach to fisheries resources the rights-based approach to fisheries will seek to reinforce local fisheries dependent communities claim for recognition in local and provincial policy and service provision and for legal protections. At the same time the model will support legitimate livelihood actions based on rights to access fisheries resources within established areas of the DWE under an ecosystem management approach. This approach will be further established during the project implementation linking responsibilities with protected rights for men as well as women.

Like in many rural areas in China the DWE is characterized by, that in particular the men migrate to the cities in search for work and income generating activities while the women stays behind as primary labor force for rural production activities such as farming and fishing. That means that production decision power has been transferred to women, indicating improvement of women's status and changes in family decision-making in relation to rural productive activities around the lake. It has also made women more aware of income generating opportunities from diversified parallel activities such as gathering and selling edible wetland plants, reeds harvesting, and other scattered economic activities (poultry and vegetables), and selling handiwork or self-made food to tourists, etc. However, it's still difficult for women to play a dominant role in organized and well articulated rural production activities, and the incremental value of diversified parallel activities are often underestimated and not supported.

As an area with rich wetland resources and long history of sustaining livelihoods for individual families as well as for communities, social relations and supports have covered almost all aspects of production activities and livelihood in the lake area. In the context of growth in rural migrant workers to the cities, the women staying at home have played an irreplaceable role in keeping social connections and conventional rural orders. They have maintained the integrity and continuity for family and for the lake area. In that sense the project in its co-management activities has an important opportunity to assist in developing communication platforms, aiming at promoting the exchange of information, ideas, skills, experience, and organization of cooperation in production activities (rice farming, aquaculture, sustainable fisheries and small tourism businesses) improving market links and diversifying income opportunities benefitting women and the general social capital in Dongting Lake.

Before the implementation of each co-management model, detailed social, gender and economic feasibility studies will be conducted to identify strategies to enhance local socio-economic benefits. Special attention will be given to the inclusion of vulnerable groups and women as well as men. Economic incentive mechanism will be included in the up-scaling strategies for each model to be prepared in project year 4 as well as medium term strategies for continues

support for the established market links vital for the sustainability and up-scaling of the models after the end of the project. Long term socio-economic benefits will result from recovered and sustained flow of DWE services.

NR management, biodiversity and ecosystem services conservation will always need support from public funding, and China has, over the last decade, shown significant political commitment and capacity to provide increased financing for these ends. This is also evident from the significant government co-financing provided for this project. However, the engagement of economic sectors and local communities in co-management actions, sustained by socio-economic co-benefits and the preparation of compensation mechanism for conservation activities, are all crucial measures included in the project design to allow for the creation of economic and financial sustainability for the conservation investments in the DWE. This will increase private sector investments in recovery of fisheries resources, conservation of habitats for endangered species with a value for ecotourism activities, and conservation of DWE flood control and water cleaning functions.

B.3 Explain how cost-effectiveness is reflected in the project design:

The ecosystem, NR-network and inter-sectoral approach of the project will be cost effective in the medium and long term compared to previous species-by-species and NR-by-NR approaches to biodiversity conservation in Dongting Lake with limited emphasis on creating an enabling institutional, policy and regulatory environment for cross sector coordination and involvement.

The project design builds on and integrates already existing efforts and investments and avoids duplication of funding between NRs and sectors. As such the project will not establish a parallel monitoring system for the health of the DWE operated by the FDHP and NRMBs but rather try to establish an exchange and coordination platform for already existing monitoring done by different sectors through the IIMS. Likewise, the project will not focus at establishing new scattered pilots for sustainable use and co-management and conservation of DWE resources and biodiversity, but try to consolidate and upscale existing experiences in co-management models. The project could also have taken a more narrow approach in terms of strengthening NR monitoring and surveillance to achieve improved biodiversity conservation, however, the combination with awareness raising and co-management, involving local communities and the private sector, facilitates that also private funds will be invested in biodiversity friendly production practices, which will lead to better results at a lower cost.

The increased networking and management effectiveness among the four NRs promoted by the project in solving conservation and sustainable use challenges at the DWE level is also more cost efficient in terms of hectares and habitats covered than an approach where only the East Dongting Lake NR is supported as a demonstration model (which was a more appropriate approach when conservation efforts in the Lake were more incipient). Cost sharing of training and other NR capacity building expenses is also an important element built into the project design which will not only ensure an efficient use of GEF fund but also a more efficient use of public funds for NRs in the medium and long term. The efficiency of the GEF investment is USD 6.7/ha covered by the project. In comparison the previous GEF/UNDP/SFA project invested USD 10.5/ha covered in East Dongting lake NR.

C. DESCRIBE THE BUDGETED M&E PLAN

Monitoring and evaluation of progress in achieving project results and objectives will be done based on the targets and indicators established in the Project Results Framework (Appendix 1 and described in section 2.3 and 2.4). The project Monitoring and Evaluation Plan has been budgeted at USD 126 250 (see table in section 4.5.4). Monitoring and evaluation activities will follow FAO and GEF monitoring and evaluation policies and guidelines. Supported by component 5 the project monitoring and evaluation system will also facilitate learning and mainstreaming of project outcomes and lessons learned in relation to co-management models, integrated DWE management experience, and mainstreaming of wetlands biodiversity conservation in sector policies and development plans.

Oversight and monitoring responsibilities

The M&E tasks and responsibilities, clearly defined in the Projects detailed Monitoring Plan (see below), will be achieved through: (i) day-to-day monitoring and supervision missions of project progress (PMO and NR Project

Manager); (ii) technical monitoring of biodiversity and ecosystem “status” indicators (PMO and NR Project Manager in coordination with other relevant participating provincial technical units); (iii) specific monitoring plans for co-management models and for the implementation of the flagship species conservation plans (PMO and NR Project Manager with support from local communities and other stakeholders); (iv) midterm and final evaluations (independent consultants and FAO Evaluation Office); and (v) continual oversight, monitoring and supervision missions (FAO).

At the initiation of implementation of the GEF Project, the PMO will set up a project progress monitoring system strictly coordinated with subsystems in each of the NR Administrative Bureaus. Participatory mechanisms and methodologies for systematic data collection and recording will be developed in support of outcome and output indicator monitoring and evaluation. During the inception workshop (see section 4.5.3 of the FAO-GEF project document), M&E related tasks to be addressed will include: (i) presentation and clarification (if needed) of the project’s Results framework with all project stakeholders; (ii) review of the M&E indicators and their baseline; (iii) drafting the required clauses to include in consultants’ contracts to ensure they complete their M&E reporting functions (if relevant); and (iv) clarification of the respective M&E tasks among the Project’s different stakeholders. One of the main outputs of the workshop will be a detailed monitoring plan agreed to by all stakeholders based on the monitoring and evaluation plan summary presented below.

The day-to-day monitoring of the Project implementation will be the responsibility of the PMO driven by the preparation and implementation of an AWP/B followed up through six-monthly PPRs. The preparation of the AWP/B and six-monthly PPRs will represent the product of a unified planning process between main project partners. As tools for results-based-management (RBM), the AWP/B will identify the actions proposed for the coming project year and provide the necessary details on output targets to be achieved, and the PPRs will report on the monitoring of the implementation of actions and the achievement of output targets. NR-specific inputs to the AWP/B and the PPRs will be prepared based on participatory planning and progress review with local stakeholders and coordinated through the PMO and NR Project Managers and facilitated through project planning and progress review workshops. These inputs would be consolidated by the respective NR Project Managers before forwarding them to the PMO who will consolidate into a draft AWP/B and PPRs. An annual project progress review and planning meeting should be held with the participation of the DWP/PMO and the NR Administrative bureaus to finalize the AWP/B and PPRs. Subsequently the AWP/B and PPRs are submitted to the PSC for approval (AWP/B) and Review (PPRs) and to FAO for approval. The AWP/B will be developed in a manner consistent with the project’s Results Framework to ensure adequate fulfillment and monitoring of project outputs and outcomes.

Following the approval of the Project, the project’s first year AWP/B will be adjusted (either reduced or expanded in time) to synchronize it with an annual reporting calendar. In subsequent years, the FSP work plan and budget will follow an annual preparation and reporting cycle as specified in section 4.5.3 of the FAO-GEF project document.

Indicators and information sources

To monitor project outputs and outcomes including contributions to global environmental benefits specific indicators have been established in the Results Framework (see Appendix 1 of the FAO GEF Project Document). The framework’s indicators and means of verification will be applied to monitor both project performance and impact. Following FAO’s monitoring procedures and progress reporting formats data collected will be of sufficient detail to be able to track specific outputs and outcomes and flag project risks early on. Output target indicators will be monitored on a six-monthly basis and outcome target indicators will be monitored on an annual basis if possible or as part of the midterm and final evaluations.

The project output and outcome indicators have been designed to monitor on-the-ground impacts and progress in building and consolidating capacities for DWE integrated management and biodiversity conservation and sustainable use both at NR and FDHP and DLCC institutional level as well as at the level of farming and fishing communities and the private sectors impacting and using DWE services and biodiversity.

On-the-ground impact indicators will track:

The level of adoption by farmers and fishermen of biodiversity-friendly production practices, their income increase,

and hectares covered – hectares covered and farmers involved in restoring paddy harvested fields as winter bird feeding ground and the resulting income increase; hectares of poplar plantations reduced; hectares covered and fishermen involved in organic fish farming and ecosystem and rights based fisheries co-management and resulting income increase; and hectares covered and fishermen involved in eco-tourism and bird habitat conservation and the resulting income increase. The baseline and target for these indicators are established in the Project Results Framework and will be fine-tuned and included in the plan for each co-management model. Their systematic monitoring will be done with the involvement of participating NR Administrative Bureaus and farming and fishing communities.

Increase in biodiversity including in populations of endangered species and ecosystem health – changes in total bird visitation and in the population of finless porpoise, lesser white-fronted goose, black stork, Pere Davis deer, whistling swan, and in the appearance of Silver Fish in monitoring caches (ecosystem health indicator). The baseline and target for these indicators are established in the Project Results Framework and will be monitored as part of the NR's biodiversity monitoring systems. Other indicators for ecosystem health will be selected and monitored as part of the IIMS to be established supported by component 1. (see output 1.1.4 above).

The capacity building process indicators will capture:

Legal and planning instruments developed - Integrated DWE management plan incorporating valuation of biodiversity approved by DLCC; increase in government budget allocations for NRs; Information Management System (IIMS) on status of biodiversity, ecosystem services, and socioeconomic indicators supporting DWE management and decision-making at municipal, province and NR levels; local decrees on Administrative Measures for NR; five-years NR management plans; Amendment of Wetland Protection Regulation of Hunan Province (WPRHP) presented to the Provincial People's Congress including in particular provisions for: a) integrated management of wetland biodiversity and ecosystems; and b) compensation mechanism for conservation of wetlands biodiversity and ecosystem services.

Level of mainstreaming of biodiversity conservation in policies and legal instruments – sector policies (e.i. fisheries, reed and/or poplar plantation, sand mining) aligned with WPRHP, the Integrated DWEMP and the four AMNR decrees and NRMPs.

Levels of created human capacities and awareness – number of NR staff with enhanced capacities in BD monitoring and conservation measures, eco-tourism in NRs, law enforcement and co-management mechanism, and public communication and awareness raising; number of farmers and fishermen trained and participating in: a) bird-friendly rice cultivation and marketing, b) organic aquaculture practices, certification, marketing and business management, and c) developing ecotourism tour operations applying bird-friendly practices; number of farmers, County Bureau of Fishery staff, and NR staff trained and participating in ecosystem and rights based co-management of fishery resources and biodiversity friendly fishing practices and equipment; improvement in management effectiveness of NRs monitored through the BD management effectiveness tracking tool; number of provincial and local government officers with enhanced skills in enforcement of wetland conservation and sustainable use regulations; number of provincial and local government officials and private sector representatives with increased capacities in development and implementation of biodiversity conservation measures and practices in fishery management, pollution control from paper mills, sand mining and land-use planning for reed and poplar plantations; number of middle school students with increased knowledge about DWE biodiversity conservation and sustainable use; and level of awareness among the local population on DWE biodiversity value, use and wetlands protection regulations.

The main sources of information to support the M&E program will be: (i) the NR's biodiversity monitoring systems and the IIMS; (ii) participative progress monitoring and workshops with beneficiaries; (iii) on-site monitoring of the implementation of the co-management models; (iv) project progress reports prepared by the PMO with inputs from the NR Project Managers; (v) consultants reports; (vi) participants training tests and evaluations; (vii) mid-term and final evaluations completed by independent consultants; (viii) financial reports and budget revisions; (ix) Project Implementation Reviews prepared by the FAO Lead Technical Officer supported by the Project Task Manager in the FAO Office in Beijing and the PMO; (ix) FAO supervision mission reports; and (x) post project impact and evaluation studies (national evaluation of project) organized by the Ministry of Finance and shared with all project partners.

Evaluations

An independent Mid-Term Evaluation (MTE) will be undertaken towards the end of the third project year to review progress and effectiveness of implementation in terms of achieving project objective, outcomes and outputs. Findings and recommendations of this evaluation will be instrumental for bringing improvement in the overall project design and execution strategy for the remaining period of the project's term if necessary. FAO will arrange for the MTE in consultation with project management. The evaluation will, *inter alia*:

- (i) review the effectiveness, efficiency and timeliness of project implementation;
- (ii) analyse effectiveness of partnership arrangements;
- (iii) identify issues requiring decisions and remedial actions;
- (iv) propose any mid-course corrections and/or adjustments to the implementation strategy as necessary; and
- (v) highlight technical achievements and lessons learned derived from project design, implementation and management.

An independent Final Evaluation (FE) will be carried out three months prior to the terminal review meeting of the project partners. The FE would aim to identify the project impacts and sustainability of project results and the degree of achievement of long-term results. This Evaluation would also have the purpose of indicating future actions needed to sustain project results, expand on the existing Project in subsequent phases, mainstream and up-scale its products and practices, and disseminate information to management authorities responsible for the management of other Chinese wetlands ecosystems to assure continuity of the processes initiated by the Project.

Some critical issues to be evaluated in the midterm and final evaluations will be: (i) progress in monitoring and achieving improvements in key DWE biodiversity, ecosystem services, and socioeconomic indicators through NR monitoring systems and the IIMS and the level of data and information accessibility; (ii) the functioning and effectiveness of the DLCC as an inter-institutional coordination mechanism in developing and implementing integrated planning in support for biodiversity and wetlands ecosystem and addressing key biodiversity threats; (iii) the level of capacities and involvement of NR staff in NR networking and strengthening and progress in outcomes in terms of improved management effectiveness at the network and individual NR levels; (iv) the level of involvement of farmers and fishermen in co-management models and their increased capacities and local socio-economic benefits to sustain the models at medium and long term and assess if the models should be expanded; (v) progress in building capacities on biodiversity friendly production practices in key sectors using and impacting DWE ecosystems and the mainstreaming of biodiversity conservation and sustainable use in sector policies, regulations and development plans; (vi) the level of local awareness on the value of DWE services and biodiversity and wetlands protection regulations and involvement of men as well as women in local conservation events.

The FAO Project Task Manager will prepare the first draft of the Terms of Reference for the mid-term and the final evaluations and consult with and incorporate comments from FDHP, the FAO budget holder, the FAO Lead Technical Unit and Officer, and the FAO GEF Coordination Unit. Subsequently the TORs will be sent to the FAO Office of Evaluation for finalization, in accordance with FAO evaluation procedures and taking into consideration evolving guidance from the GEF Evaluation Office. The TORs and the reports will be discussed with and commented upon by the project partners.

Monitoring and evaluation plan summary

The table below provides a summary of the main M&E reports, responsible parties and timeframe.

| Type of M&E Activity | Responsible Parties | Time-frame | Budgeted costs |
|--------------------------|--|---------------------------------------|----------------|
| Inception Workshop | FDHP/PMO, FAO Project Task Manager (PTM) supported by the FAO LTO, BH, and the GEF Coordination Unit | Within two months of project start up | USD 2 000 |
| Project Inception Report | FDHP/PMO, FAO PTM cleared by FAO LTO, LTU, BH, and the GEF Coordination Unit | Immediately after workshop | - |

| Type of M&E Activity | Responsible Parties | Time-frame | Budgeted costs |
|--|--|--|---|
| Field based impact monitoring | FDHP/PMO, participating NRMBs and other relevant line agencies. | Continually | USD 27 910 (5 % of time of the Chief Technical Advisor (CTA), training and coordination workshop for establishing and operating of the IIMS, and 3% of time of subject specialists) |
| Supervision visits and rating of progress in PPRs and PIRs | FDHP/PMO, FAO LTO/LTU and GEF Coordination Unit | Annual or as required | The visits of the FAO LTU and the GEF Coordination Unit will be paid by GEF agency fee. The visits of the PMO/FDHP will be paid from the project travel budget |
| Project Progress Reports | FDHP/PMO, with inputs from NR Project Managers and other partners | Six-monthly | USD 34 340 (10% of the time of the CTA and 7% of time of subject specialists) |
| Project Implementation Review report | FAO PTM and LTO supported by the LTU, FDHP/PMO and NR Project Managers and cleared and submitted by the GEF Coordination Unit to the GEF Secretariat | Annual | Paid by GEF agency fee |
| Co-financing Reports | FDHP/PMO and NR Project Managers | Annual | USD 2 000 (5% of the time of the Project administrative Assistance) |
| Technical reports | FDHP/PMO, PTM/LTO/LTU | As appropriate | - |
| Mid-term Evaluation | External Consultant, FAO independent evaluation unit in consultation with the project team including the GEF Coordination Unit and other partners | At mid-point of project implementation | USD 30 000 for external consultant. In addition, either FAO staff time and travel or an additional consultant will be paid through the agency fee |
| Final evaluation | External Consultant, FAO independent evaluation unit in consultation with the project team including the GEF Coordination Unit and other partners | At the end of project implementation | USD 30 000 for external consultant. In addition, either FAO staff time and travel or an additional consultant will be paid through the agency fee |
| Terminal Report | FDHP/PMO, PTM/LTO/LTU, TSCR report Unit | At least two months before the end date of the Execution Agreement | - |
| Total Budget | | | USD 126 250 |

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

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT(S) ON BEHALF OF THE GOVERNMENT(S):
(Please attach the [Operational Focal Point endorsement letter\(s\)](#) with this template. For SGP, use this [OFFP endorsement letter](#)).

| NAME | POSITION | MINISTRY | DATE (MM/dd/yyyy) |
|-----------|-----------------------------|---|-------------------|
| Jiandi Ye | GEF operational Focal Point | International Department, Ministry of Finance , D.R.C. | 09/02/2010 |

B. GEF AGENCY(IES) CERTIFICATION

| This request has been prepared in accordance with GEF/LDCF/SCCF/NPIF policies and procedures and meets the GEF/LDCF/SCCF/NPIF criteria for CEO endorsement/approval of project. | | | | | |
|--|-----------|-------------------------------|---|-----------------|---------------------------|
| Agency Coordinator, Agency Name | Signature | Date (Month, day, year) | Project Contact Person | Telephone | Email Address |
| Gustavo Merino, Director Investment Centre Division Technical Cooperation Department FAO Viale delle Terme di Caracalla (00153) Rome, Italy TCI-Director@fao.org | | March 20, 2014 | Rikke Olivera, Natural Resource Programme Officer, FAO Investment Centre Division FAO Rome, ITALY | +3906 5705 5701 | Rikke. Olivera@fao.org |
| Barbara Cooney FAO GEF Coordinator Email: Barbara.Cooney@fao.org Tel: +3906 5705 5478 | | | | | |

ANNEX A:PROJECT RESULTS FRAMEWORK (either copy and paste the framework from the Agency document, or provide reference to the page in the project document where the framework could be found)

Please see Appendix 1 of the FAO GEF Project Document page 74

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

GEFSEC comments and responses from the project team:

| GEFSEC comment at PIF to be responded at CEO endorsement | Responses |
|--|---|
| <p>19. Is the role of civil society, including indigenous people and gender issues being taken into consideration and addressed appropriately?</p> <p>General information has been provided at this stage. Further information are required at the time of CEO endorsement based on stakeholder consultations.</p> | <p>The role of civil society and local communities have been further analyzed during the project preparation and detailed in this document section B.1</p> |
| <p>20. Does the project take into account potential major risks, including the consequences of climate change and provides sufficient risk mitigation measures? (i.e., climate resilience)</p> <p>Adequate information provided at this stage. Further analysis and details are required at the time of CEO endorsement.</p> | <p>The risk analysis has been further developed during the project preparation and mitigation measures have been identified and incorporated in project design. Please see section A.6 of this document</p> |
| <p>28. Is the GEF/LDCF/SCCF funding per objective appropriate to achieve the expected outcomes and outputs according to the incremental/additional cost reasoning principle?</p> <p>Costs are generally considered appropriate. Further details on the budget are required at the time of CEO endorsement.</p> | <p>Please see budget summary section 4.3.1 and the detailed Results Budget Appendix 3 of the FAO-GEF project document</p> |
| <p>29. Comment on indicated cofinancing at PIF. At CEO endorsement, indicate if cofinancing is confirmed.</p> <p>Cofinance is identified at about 1 to 2 ratio. Considering the country, all efforts should be made to increase the cofinancing ratio by the time of CEO endorsement.</p> | <p>The confirmed co-financing has been increased to USD 7,600,000</p> |

STAP comments and responses from the project team:

| |
|--|
| <p>STAP:</p> <p>3. While supportive of this initiative, STAP would like to stress the linkage between the proposed project and the completed UNDP/GEF China Wetlands Project. In reviewing the results of this project, it would appear that significant strides were made to build capacity amongst Government agencies at local levels to take into account wetland biodiversity conservation in decision making and policy – in effect "mainstreaming" biodiversity into planning efforts. This is an important enabling condition for the proposed FAO project to directly improve the effectiveness of protected areas in Dongting, and address broader resource management challenges. STAP wishes to stress that this project should ensure that it builds on and consolidates these results from the previous GEF supported project in Dongting Lake. STAP notes that the ground work for a number of proposed results, such as "strengthening and operationalizing the provincial wetlands coordination committee" was established in the previous UNDP/GEF project noted in the proposal.</p> <p>Response:</p> |
|--|

During the project preparation all achievements of the previous UNDP/GEF/SFA (State Forest Agency) “Wetland Biodiversity Conservation and Sustainable Use in China” project (GEF ID: 623) was reviewed again to make sure the project design build on all previous achievements and lessons learned. Three years after the completion of the project, reflections on lessons learned made with FDHP, NRMBs and the local consultant team, participating in the preparation of the present project, are:

- The biodiversity monitoring programme (mainly focused at birds) provides important systematic information on the status of birds population. However, its limitation to East Dongting Lake NR and to birds monitoring does not provide adequate planning and decision support information on ecosystem health and linkages between habitat conditions and species populations.
- The establishment of closed management regimes in NR core zone has been an important improvement in conceptualizing NR management, however legal and administrative clarity with local governments and co-management agreements and models with sectors and communities operating in these zones are needed to achieve improved conservation and solve conflicts with production sectors
- A focus at East Dongting Lake NR only is not able to solve DWE conservation and sustainable use challenges. A balanced and integrated approach involving all four NRs at a network level, local government and communities as well as all sectors using and impacting the DWE are needed to burst the achievement of global environmental and local socio economic benefits

Taking these lessons learned into account the present project will build on the important conservation foundation laid by the UNDP/GEF/SFA Wetlands Project and seek systematic up-scaling of achievements gained to the other three NRs of DWE.

STAP:

4. Overall, STAP believes that the project as currently described is well designed, and appears to address the primary pressures and drivers affecting biodiversity and effective resource management in the Dongting Lake basin. However, STAP wishes to propose a number of areas for specific consideration and development in the final project design. Currently, the PIF does not adequately outline how the threats to biodiversity in the region (which are well described) will be adequately addressed by the actions proposed. Components 2 and 3 in Table B directly address some of these threats, and Components 1 and 4 are represent important enabling conditions, however given the complex and widespread nature of the problems described across sectors these efforts may not be enough.

Response:

A detailed threats analysis has been done during the project preparation identifying main threats to be: i) pollution from point and non point sources (over use of agrochemicals, industrial and domestic wastewater, and waste oil from ships); ii) overfishing and non-sustainable fishing practices with adverse impacts on livelihoods of local communities; iii) river traffic and sand mining disturbing wild life and degrading habitats; iv) Fragmentation of habitat by monoculture reed farming and poplar plantations for timber and pulp and other conversions by agriculture; v) distortion in the hydrological cycle by hydro electric dams (please see FAO-GEF project document section 1.1 b)). Subsequently, it has been analyzed how current baseline initiatives are trying to deal with these threats (please see FAO-GEF project document section 1.1.1 a)) to identify remaining barriers that the present project should address (please see FAO-GEF project document section 1.1.1 b)). For a project supporting such a complex ecosystem as the DWE some threats will be out of the scope of the project. However, the project does try to build partnerships with baseline initiatives to influence remaining barriers for threat mitigation, which is mainly done through component 1 and 3.

STAP:

5. From the information provided, it would appear that the problems in Dongting can ultimately only be resolved with all sectors the local government fully engaged in this effort. STAP suggests, therefore, that the future Project Document should clearly define the expected responsibilities of the project proponent and government counterparts.

Response:

This is exactly the challenge the project is trying to deal with applying a long-term ecosystem management

approach for the DWE through **Component 1: Strengthening of institutional capacities for integrated monitoring and management of biodiversity in DWE**. This component includes inter-sectoral activities to: (i) make operational and strengthen the inter-institutional Dongting Lake Conservation Commission (DLCC); (ii) conduct sector specific biodiversity and ecosystem threat analysis filling current information and analysis gaps; (iii) develop and implement a 5-years integrated DWE management plan (DWEMP); and (iv) support the implementation of an Integrated Information Management System (IIMS) on status of biodiversity, ecosystem services, and socioeconomic indicators to support cross sector decision making.

The roles and responsibilities of the project proponent and project partners have been established in section 4 of the FAO-GEF project document and is also partly summarized in section B.1 of this document.

STAP:

6. Support for protected areas represents a key proposed undertaking in this project. However, in STAP's view the current project description does not yet adequately stress the improvement of PA management effectiveness, nor does it adequately describe the expected benefits (or possible impacts) of improved management of protected areas on local communities or livelihoods. In addition, addressing the challenge of sustainable financing of PAs is not adequately mentioned. STAP proposes that an approach which explicitly develops valuation (monetary or non-monetary) of ecosystem services as a possible strategy for long term sustainable management of the Lake and wetlands should be explored. While this is noted in the description, there is insufficient information to make an assessment in this regard.

Response:

In the detailed design of component 2 an analysis of current weaknesses and capacity building needs of the four NRs in DWE was conducted. Also the benefits for local communities and for cost effectiveness in NR management through co-management arrangement have been analyzed and included as an important part of component 2. The component 2 design does very much seek to bring benefits to and secure the buy-in of local communities from ecosystem services. Component 1 will further support the continuous documentation of the value of these services through the IIMS which will again support the implementation of the DWEMP and support the long term cross sector conservation and sustainable management of the DWE.

On NR financial sustainability the project will no longer directly contribute to BD-1 outcome 1.2: Increase revenue for protected area systems to meet total expenditures required for management. This is covered by the GEF (ID: 4646) financed CBPF-Main Streams of Life (MSL) – Wetland PA System Strengthening for Biodiversity Conservation Programme, currently financing its preparation of all related projects. The instruments and best practices developed under this programme covering 7 provincial wetlands NR systems will benefit the DWE NR network, and may be taken up by Hunan province guided by (State Forest Administration) SFA leading this programme. Further, three financing mechanism already created to strengthen NRs in China is already been taken advantage of by Hunan Province to support DWE NRs which in particular include the three important sources of co-financing to this project (*National Wetland Conservation Programme (2011 – 2015)*; *Wetland Conservation Subsidy Programme*; and *National Nature Reserve Development Programme*). That said, the project in its planned activities will still indirectly support BD-1 1.2 through the establishment of partnerships with local governments, state farms, farmers and fishers communities and the private sector in co-management models bringing additional financing to biodiversity conservation in the 4 NRs (component 2). Likewise it is foreseen that the amended WPRHP will include a compensation scheme providing economic incentives for biodiversity conservation (component 3). Please see FAO-GEF Project Document section 1.1.5 c) for complete text on alignment with GEF BD FA strategy)

STAP:

7. The expected increase of 150 to 250 species (all taxa?) from interventions over the life of the project seems overly ambitious and may need to be reassessed. In addition, STAP would recommend that the project proponent ensure that data collected from these assessments be accessible to other research endeavors, and therefore be deposited in accessible and stable on-line repositories.

Response:

The outcome biodiversity improvement indicators has been revised during full project design to a more achievable and measurable targets. The indicators are now: (i) increase in total bird visitation by 10% in the four Dongting NRs; (ii) finless porpoise population maintained; (iii) lesser white-fronted goose population maintained; (iv) black stork population maintained; (v) 5% increase in Pere Davis deer population; (vi) Whistling Swan population maintained; (vii) increase from 2 to 5% appearance of Silver Fish in monitoring caches (ecosystem health indicator).

Baseline: (i) Total migratory bird visitation 104,000-130,000 (2008-2012); (ii) Finless porpoise: 100-150 in DWE (2011), ca. 800 total population; (iii) Lesser white-fronted goose (*Anser erythropus*): 18,000 in DWE (mostly in East DL NR) which is 50% of total global population; (iv) Black stork (*ciconia nigra*): 23 in DWE (Dec. 2011), 24,000-44,000 global population; (v) Pere David's Deer (*Elaphurus Davidianus*): 25 in DWE (Jan 2012), 3000 global population; (vi) Whistling Swan (*Cygnus columbianus*): 800-1,000 in DWE (Nov-Dec 2011), 86,000 global population; and (vii) Silver fish (near endangered in IUCN Read List): 2% appearance rate in monitoring catches in DWE (2011)

STAP:

8. It is not clear how the proposed interventions will effectively tackle the issues of over harvesting of fish or precisely how the project will support the closure of paper mills, and address socio-economic problems which may ensure as a result. Activities by local farmers and fishermen are identified as major threats to diversity. These stakeholders are mentioned repeatedly, but there is no mention of how they will be engaged in the process.

Response:

Paper mills not complying with environmental standards have already been closed by the provincial government. However, the paper mills have for decades been an important economic pillar in the Dongting Lake area, employing over 18 000 people in Changde, Yiyang and Yueyang municipalities and finding an acceptable solution for all stakeholders is a mayor challenge bringing the effectiveness of pollution control measures at doubt despite increased efforts by the Environmental Protection Authorities since 2007. Various paper mills have been found illegally resuming production without environmental permits and clean technology in place complying with standards (see section 1.1 b) 2 of the FAO-GEF project document. The project will in component 3 support the sector with building capacities in technical solutions for pollution control from paper mills. In component 2 the project will also support alternative income opportunities from DWE services such as from tourism and fish farming.

In relation to fisheries the project will under the component 2 support the development and implementation of two co-management models for organic fish farming (involving 400 households) and ecosystem and rights based fisheries co-management (involving 500 households). These models will support the restoration of fisheries resources in 1,800 ha in Hengling NR experimental zone with very good potentials for up-scaling in the DWE.

Please see section B.1 above on how these stake holders will be involved in the project implementation.

STAP:

9. It is not clear why the risk resulting from climate change is identified as low. The argument is mostly about how effective management of the wetland area will increase its resilience against climate change. However, given that extreme events "are projected to continue or increase under most future climate change scenarios and will likely adversely impact the DWE and component habitats and biodiversity that it supports as well as the livelihoods of community who depend on its resources" it is not clear why it has been identified as " low". This issue merits further consideration.

Response:

The CC risk assessment has been revisited and is now rated as medium please see section A.6 above.

STAP:

10. Lastly, the stakeholder section has listed many government agencies, and STAP would agree that collaboration

with these agencies is important for project success. However, STAP notes that no civil society organizations or research institutes have been identified.

Response:

This has been addressed during full project design where WWF-China as well as universities were involved. Please see section B.1 above

Council member's comments and responses from the project team:

| Council member's comment at WP approval | Responses |
|---|--|
| <p>Switzerland:</p> <p>General Comments</p> <p>The proposed project complies with CBD strategies and priority programs. If successful, the proposed interventions will significantly contribute to the sustainable conservation of key wetlands and lake ecosystems of global importance.</p> <p>Main Concerns</p> <ol style="list-style-type: none"> 1) How to achieve financial sustainability of proposed interventions? Source of seed money for proposed ecological fund and how to replenish fund? 2) Is the legal framework for co-management arrangements of protected areas (including affected communities depending on the resources within the NRs) in place? 3) Ecological Compensation Fund: what is the funding source and is the fund sufficient to compensate all affected communities for lost traditional user rights and opportunities, safeguarding sustainable livelihoods of families reportedly representing some of the poorest in the country? 4) How exactly will the project mainstream biodiversity conservation into sector planning in all of China (see Project Framework 5)? 5) It is not clear how the proposed harmonized multi-stakeholder management of the NRs will be achieved in view of the numerous resource- and land-use mandates and authorities related to the target area. <p>Conclusions and Recommendations</p> <p>In spite of the recognized global ecological importance and urgent protection needs of the targeted wetlands, stabilizing and safeguarding the livelihood of the economically marginalized communities depending on the NRs for their survival should receive top priority. There are doubts on how the project deals with social justice and human life.</p> <p>The project is sound and justified and should be endorsed</p> | <ol style="list-style-type: none"> 1) Regarding financial sustainability NR management, biodiversity and ecosystem services conservation will always need support from public funding, and China has over the last decade shown significant political commitment and capacity to provide increased financing for these ends. This is also evident from the significant government co-financing provided for this project. In addition, the project seeks to create economic and financial sustainability for the conservation investments in the DWE by engaging economic sectors and local communities in co-management actions sustained by socio-economic co-benefits, and the preparation of compensation mechanism for conservation activities financed through public funds. 2) Yes, and it will be further strengthened through local administrative measures for NR decrees and specific agreements signed by all partners involved in the different co-management arrangements 3) The ecological compensation fund is yet to be designed supported by component 3 of the project. No communities will lose traditional user rights. On the contrary these rights will be secured through rights based fisheries co-management seeking to protect local fishery communities' access to fisheries resource. The fisheries co-mangement model and other co-management models to be supported by the project will in particular take into account the participation of vulnerable groups improving their livelihoods. 4) The project will mainstream biodiversity conservation into sector planning in Hunan province in relation to the use and conservation of DWE supported by component 1 and 3 (please see detailed component description in section 2 in the FAO-GEF project document) 5) Component 1 is focused at establishing the intersectoral coordination and participation in the DWE management and component 2 will support co-management with local communities, governments and the private sector. For the involvement of the various stakeholders please see section B.1 of this document. <p>The social justice in the project is secured through rights</p> |

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| <p>in principle taking these concerns into consideration.</p> <p>Further Comments</p> <p>It is suggested that the proposed threat analysis is included in the multi-stakeholder inception workshop. Following the threat analysis, potential mitigation measures and related interventions/strategies should be discussed at the same event in a participatory fashion involving all workshop participants in order to keep the planning process transparent and open, and providing all stakeholders with the opportunity to express their concerns and lobby their interests. It is advised against conducting “exclusive” workshops (technical workshops as proposed in the document). All workshops should include representatives of current user groups of the NRs in view of the importance of the targeted ecosystems related to the livelihood of the communities located within. Ownership and buy-in by all major stakeholders will be the key to the success of this highly ambitious project.</p> | <p>based co-management with particular focus on involving vulnerable groups. Social sustainability will also be supported through short and medium term socio-economic benefits created mostly in component 2 through co-management models providing income generating opportunities from sustainable managed fisheries resources, aquaculture, eco-tourism and bird friendly rice cultivation. Before the implementation of each model detailed social and economic feasibility studies will be conducted to identify strategies to enhance local socio-economic benefits. Special attention will be given to the inclusion of vulnerable groups and men as well as women. Economic incentive mechanism will be included in the up-scaling strategies for each model to be prepared in project year 4 as well as medium term strategies for continues support for the established market links vital for the sustainability and up-scaling of the models after the end of the project. Long term socio-economic benefits will result from recovered and sustained flow of DWE services.</p> <p>During project preparation a socio-economic expert conducted consultations with communities to collect their concerns on the impacts and benefits of the NRs. Initial consultations have also been held on all co-management models with local communities and governments. Recommendations from these consultations have been taken into account in the project preparation. The project implementation strategy includes participatory approaches and consensus with local communities.</p> |
| <p>France:</p> <p>The project targets the Dongting Lake, a wetland of global importance. It proposes to develop a classical approach when dealing with ecosystem management focusing on 1) policy planning and institutional arrangements, 2) protected area management with a view to ensure their sustainable financing, 3) capacity building...</p> <p>While the intentions are sound, the possibility to implement all of them can be questioned. Considering the complexity of the legal context of the area (4 protected area, several public agencies involved, etc.), the large geographical scope (more than 1 Mha), and the project appears quite ambitious.</p> <p>Those ambitions should be confronted to the ambitions of former project on the area, in particular the GEF/PNUD project and what could be actually achieved.</p> <p>Those ambitions contrast also with a thinly developed social context and thinly evaluated social stakes of the</p> | <p>Yes, the project is ambitious, however it does not start from scratch in the DWE context where the previous GEF/UNDP/SFA project has built an important baseline in particular for the East Dongting Lake NR and initial inter-institutional governance and management structures. The ambition of his project is to build on this foundation and scale up to the full DWE area.</p> <p>A socio-economic study was conducted during the project preparation including a survey and consultations with selected communities around the lake. Current income from unsustainable use of DWE was compared with potential incomes from sustainable activities proposed in the co-management models and the benefits are foreseen to be positive. However, further socioeconomic feasibility studies are still needed before the implementation of each co-management model proposed under component 2 which has been included in the project design and budget.</p> <p>The proposed co-management models will focus at involving the local population in management and sustainable use of the DWE resources, and creating new income generating opportunities (please see details on co-</p> |

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| <p>project:</p> <ul style="list-style-type: none"> - The PIF provide only scarce background data as for example the number of people living in and around the project area, the human density we are dealing with, the number of people depending directly and indirectly from the lake and its resources, etc. - The PIF doesn't look into the potential impact of the project on the lake direct and indirect users: <ul style="list-style-type: none"> a) Who is going to win (and then support the project) and who is going to lose (and then resist the project)? b) How do we compensate or deal with the losing ones? <p>The contribution to the project to the local development must be developed. The project is planning for example to close down for example 50 paper mills. It means so many workers out of job. What concrete opportunities and when will the project offer in return?</p> <p>Opinion: Favorable, under the condition that the next step of preparation look more deeply into the concrete feasibility of the project and its social context and impact (and hence acceptability).</p> | <p>management models and their benefits in the component 2 descriptions and outcome 2b in section 2 of the FAO-GEF project document). However, that might in the case of fishery also mean that fishing vessels from outside, other provinces, contributing to the over exploitation of fisheries resources will not be granted new licenses and will as such be losing. Emphasis will be on the development of the local population and communities and their benefits from the DWE resources. Regarding the paper mills, please see response to STAP comment 8 above.</p> |
| <p>Germany:</p> <p>Suggestions for improvements to be made during the drafting of the final project proposal: As the proposed FSP is expected to provide experiences and "lessons-learned" that could prove to be catalytic in launching similar approaches in other national wetlands, we would expect coordination with ongoing donor initiatives in the design of the project. In particular, we recommend cooperation with the Sino-German Project on Wetland Biodiversity Conservation in China (2010-2014).</p> | <p>Corporation with the Sino-German Project on Wetland Biodiversity Conservation in China (2010-2014) will be established to insure the transfer of lessons learned and best practices to the present project.</p> |

ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS⁶

A. PROVIDE DETAILED FUNDING AMOUNT OF THE PPG ACTIVITIES FINANCING STATUS IN THE TABLE BELOW:

| PPG GRANT APPROVED AT PIF: | | | |
|--|---------------------------------------|-----------------------------|-------------------------|
| <i>Project Preparation Activities Implemented</i> | <i>GEF/LDCF/SCCF/NPIF Amount (\$)</i> | | |
| | <i>Budgeted Amount</i> | <i>Amount Spent To date</i> | <i>Amount Committed</i> |
| 1. Stakeholder consultations | 5,800 | 9,408 | |
| 2. Policy and institutional analysis | 10,300 | 10,859 | |
| 3. Compilation of existing database | - | | |
| 4. Socio-economic analysis | - | 1,677 | |
| 5. Analysis and preparation of specific NR profiles including the assessment of NR capacity building needs | 10,100 | 7,838 | |
| 6. Identification and prioritization of threats to the DLE and development of mitigation measures | 5,200 | 3,354 | |
| 7. Assessment of capacity building needs to facilitate biodiversity mainstreaming in productive sectors | 9,800 | 10,157 | |
| 8. Development of an environmental awareness strategy | 8,800 | 1,677 | |
| 9. Final design of project components including Results Framework and budget and financial mobilization | - | 3,485 | 1,545 |
| Total | 50,000 | 48,455 | 1,545 |

⁶ If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent funds, Agencies can continue undertake the activities up to one year of project start. No later than one year from start of project implementation, Agencies should report this table to the GEF Secretariat on the completion of PPG activities and the amount spent for activities.

ANNEX D: CALENDAR OF EXPECTED REFLOWS (if non-grant instrument is used)

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

N/A



FAO/GLOBAL ENVIRONMENT FACILITY PROJECT DOCUMENT



| | |
|--|--|
| PROJECT TITLE: Securing Biodiversity Conservation and Sustainable Use in China's Dongting Lake Protected Areas. | |
| PROJECT SYMBOL: (GCP/CPR/043/GFF) | |
| Recipient Country/ies: China | |
| Resource Partner: Global Environmental Facility (GEF) | |
| FAO project ID: 608809 | GEF Project ID: 4356 |
| Executing Partner(s): Forestry Department of Hunan Province (FDHP) | |
| Expected OED (starting date): March 2014 | |
| Expected NTE (End date): February 2019 | |
| Contribution to FAO's Strategic Framework¹ | a. Strategic objective/Organizational Result: SO2 b. Regional Result/Priority Area: Priority C for Asia and the Pacific c. Country Programming Framework Outcome: 1.1 and 4.1 |
| GEF Focal Area/LDCF/SCCF: BD | |
| GEF/LDCF/SCCF Strategic Objectives: BD-1, BD-2 | |
| Environmental Impact Assessment Category (insert √): A B C <input checked="" type="checkbox"/> | |
| Financing Plan: GEF allocation: | USD 2 950 000 |
| <u>Co-financing:</u> | |
| FAO | USD 200 000 |
| FDHP, Nature Reserve Management Bureaus, and local governments: | USD 2 900 000 |
| <i>National Wetland Conservation Programme (2011 - 2015) through FDHP:</i> | USD 1 500 000 |
| <i>Wetland Conservation Subsidy Programme through FDHP:</i> | USD 1 000 000 |
| <i>National Nature Reserve Development Programme through FDHP:</i> | <u>USD 2 000 000</u> |
| Subtotal Co-financing: | USD 7 600 000 |
| Total Budget: | USD 10 550 000 |
| EXECUTIVE SUMMARY | |
| <p>The Dongting Wetlands Ecosystem (DWE) is China's second largest freshwater lake (2 625 km² core lake area expanding to around 20 000 km² in the flooding season) located in the northeast of Hunan Province in the mid reaches of the Yangtze River. The DWE was classified by World Wildlife Fund (WWF) as one of the 200 global key eco-zones. The Wetlands represent an important staging, wintering, and feeding site for the North-East Asian Flyway of migratory birds. An estimated 15% of</p> | |

¹ For projects operated by country offices, it is necessary to link projects in FPMIS at OR level. For all other projects, linkage at product/service level is necessary

the remaining population of the rare and endangered Yangtze Finless Porpoise (*Neophocaena phocaenoides*) reside in the Wetlands. More generally, native and global important biodiversity is substantial with large and varied population of fish, amphibians and aquatic vegetation including 48 national protected species (of which 11 are protected as class I in the Chinese classification system) and 34 species of internationally endangered waterfowls on the IUCN red list.

Because of the ecosystem services it provides, the DWE plays an important socio-economic role. Nearly 16 million people live around the lake and even more people are dependent on the flood control and water cleaning functions the DWE provides as the most important flooding and natural water cleaning area in the mid reaches of the Yangtze River. The annual value of ecosystem services provided by the DWE was in 2007 estimated to around 30 billion Chinese Yuan (USD 4 billion). The agricultural production (rice and other grains, cotton, ramie, tea, and oil, and reed and poplar plantations), benefiting from the humid climate of the wetlands account for 1/3 of the total provincial production. Fishers from as many as eight non-adjacent counties are fishing in the lake and the sector had a total value of 3 billion Chinese Yuan in 2007 (USD 0.4 billion). Major economic sectors that depend on one or more environmental “goods and services” provided by the ecosystem also include tourism, commercial transport, and sand mining. The Administration of the DWE is highly complex divided into 17 counties and 6 state-owned farms, belonging to 3 municipalities (Yueyang, Yiyang and Changde), and some 26 public sector institutions are managing the DWE resources. The DWE contains four nature reserves (NR) covering 4,325 km², an important part of the DWE area.

Despite important conservation efforts over the last decade the globally important ecosystem and the services it provides are increasingly at risk. Loss of habitat arising from sector conflicts and economic interests of local farmers and fishers has resulted in a decline in numbers of populations and in some cases entire species in the Wetlands. Waterfowl have the last 50 years diminished from 0.5 million birds to current 0.17 million birds. The population of the finless porpoises has drastically declined from an estimated 851 in Poyang and Dongting lakes in 2006 to 450 and 90, respectively in 2012, which could mean a total extinction already in 2025. The (close to) extinction of the porpoises is among other factors closely linked to the drastic decline of fish stocks in the DWE. Main threats are: i) pollution from point and non point sources (over use of agrochemicals, industrial and domestic wastewater, and waste oil from ships); ii) overfishing and non-sustainable fishing practices with adverse impacts on livelihoods of local communities; iii) river traffic and sand mining disturbing wild life and degrading habitats; iv) Fragmentation of habitat by monoculture reed farming and poplar plantations for timber and pulp and other conversions by agriculture; v) distortion in the hydrological cycle by hydro electric dams.

The present “Securing Biodiversity Conservation and Sustainable Use in China's Dongting Lake Protected Areas” project is a joint effort by the Forestry Department of Hunan Province (FDHP), the four NR Management Bureaus, other provincial and local partners and FAO and the Global Environmental Facility (GEF) to secure the conservation of biodiversity of global importance in the Dongting Lake through strengthening existing management efforts and the promotion of the Wetland’s long-term sustainable development. The **project objectives are** to: (i) strengthen the existing institutional and policy framework; (ii) promote an integrated, ecosystem-wide planning and management approach; (iii) strengthen the existing network of wetland nature reserves; (iv) identify and demonstrate sustainable co-management models of DWE biodiversity and biodiversity friendly production practices to reduce human activity pressure on the Wetlands; and (v) increase institutional capacity and public awareness and support for wetlands conservation. The project’s **development objective** is to recover fish stocks, promote sustainable fish farming and rice production supporting livelihoods and income generation for local fisheries and farming communities. To achieve these objectives the project will implement the following 4 technical components with the FDHP as the lead Executing Partner:

Component 1: Strengthening of institutional capacities for integrated monitoring and management of biodiversity in DWE. Includes activities to: (i) make operational and strengthen the inter-institutional Dongting Lake Conservation Commission (DLCC); (ii) conduct sector specific biodiversity and ecosystem threat analysis filling current information and analysis gaps; (iii) develop and implement a 5-years integrated DWE management plan (DWEMP); and (iv) support the implementation of an Integrated Information Management System (IIMS) on status of biodiversity,

ecosystem services, and socioeconomic indicators to support cross sector decision making.

Component 2: Strengthening of management effectiveness of DWE NRs network. Includes activities to: (i) prepare, consult and approve Local Administrative Measures for NR (AMNR) decrees; (ii) support the upgrading of West and South Dongting Lake NRs to national NRS and Hengling Lake to a RAMSAR site; (iii) develop and implement 5-years NR Management Plans (NRMPs); (iv) strengthen NR management capacities; (v) develop, implement and upscale NR co-management models addressing key pressures on biodiversity and habitat; and (vi) develop and implement strategies for conservation of flagship species.

Component 3: Mainstreaming of Conservation of biodiversity in key sectors in DWE. Includes activities to: (i) support the process of drafting, consulting and obtaining approval of an amendment of the Wetland Protection Regulation of Hunan Province (WPRHP); (ii) promote and support an alignment of sector policies and regulations with the amended WPRHP; (iii) strengthen capacities of province and local authorities in the enforcement of wetland conservation laws and regulations; and (iv) strengthening public and private capacities in biodiversity conservation practices in priority sectors.

Component 4: Environmental education and awareness. Includes activities to: (i) support the preparation of DWE biodiversity communication and information material and improve infrastructure; (ii) conduct special wetlands biodiversity campaigns and events; and (iii) support the development of DWE conservation and sustainable use curricula for middle school.

Expected project outcomes are:

- DLCC is fulfilling its function coordinating the implementation of the DWEMP and at least two key biodiversity threats addressed (sand mining threatening porpoises, poplar plantations, and/or un-sustainable fisheries) by the end of project
- Improvement in management effectiveness of NRs by the end of the project monitored through the GEF Biodiversity (BD) management effectiveness tracking tool
- 10% increase in national and local governmental budget allocations to PA management
- Improved biodiversity and endangered species indicators by the end of the project: (a) increase in total bird visitation by 10% in the four Dongting NRs; (b) finless porpoise population maintained; (c) lesser white-fronted goose population maintained; (d) black stork population maintained; (e) 5% increase in Pere Davis deer population; (vi) Whistling Swan population maintained; (f) increase from 2 to 5% appearance of Silver Fish in monitoring caches (ecosystem health indicator)
- Improved income indicators for households (of which 60% are represented by women as the main participant and beneficiary) involved in co-management demonstration models: (a) 320 farming households involved in bird-friendly rice production increasing their household income with at least 30% in East DL NR; (b) 400 households involved in organic fish farming and 500 households involved in rights based fisheries co-management to support the restoration of fisheries resources increasing their income with at least 100% in Hengling NR experimental zone; (c) 70 households incorporated in eco-tourism operations and bird habitat conservation increasing their income with at least 100% in West DL NR.
- GEF BD objective 2 tracking tool score on biodiversity conservation integration in sector policies and regulations increased from 17 to 23 (out of 36 possible) for the sectors influencing on DWE
- Poplar plantation reduced by 20,000 ha by the end of the project.
- Awareness among the local population on DWE biodiversity value, use and wetlands protection regulations increased to 30% over a 10% baseline.
- Project implementation based on results based management and increased receptivity and adoption of DWE approach to “mainstreaming” biodiversity conservation in sector planning both in China and elsewhere.

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GLOSSARY OF ACRONYMS

| | |
|--------|---|
| AWP/B | Annual Work Plan and Budget |
| AMNR | Administrative Measures for NR |
| BD | Biodiversity |
| BH | Budget Holder |
| CBPFA | China Biodiversity Partnership and Framework for Action |
| CTGPC | Chinese Three Gorges Project Corporation |
| CNAO | China National Audit Office |
| CNY | Chinese Yuan |
| CAS | Chinese Academy of Sciences |
| CAFS | Chinese Academy of Fishery Sciences |
| CEO | Chief Executing Officer (GEF) |
| CPS | Country Partnership Strategy |
| CV | Curriculum Vitae |
| DWP | Division of Wildlife Protection |
| DWE | Dongting Wetlands Ecosystem |
| DWEMP | Dongting Wetlands Ecosystem Management Plan |
| DLCC | Dongting Lake Conservation Commission |
| DL | Dongting Lake |
| EOP | End of Project |
| EP | Executing Partner |
| FA | Focal Area |
| FAO | Food and Agriculture Organization of the United Nations |
| FDHP | Forestry Department of Hunan Province |
| FE | Final Evaluation |
| FPMIS | Field Project Management Information System |
| FSP | Full – size Project |
| GoC | Government of China |
| GEF | Global Environment Facility |
| GEFSEC | GEF Secretariat |
| GIS | Geographic Information System |
| HPFD | Hunan Province Finance Department |
| HQ | Headquarters |
| IUCN | International Union for the Conservation of Nature |
| IA | Implementing Agency |
| IAS | International Accounting Standard |
| IPSAS | International Public Sector Accounting Standards |
| IHB | Institute of Hydrobiology |
| IIMS | Integrated Information Management System |
| IRBM | Integrated River Basin Management |
| LTO | Lead Technical Officer |
| LTU | Lead Technical Unit |
| METT | Monitoring Evaluation Tracking Tools |
| MOF | Ministry of Finance |
| MP | Management Plan |
| M&E | Monitoring and Evaluation |
| MTE | Mid-Term Evaluation |
| NGO | Nongovernmental organization |
| NR | Nature Reserve |
| NRMB | Nature Reserve Management Bureau |
| NRMP | NR Management Plan |
| NBSAP | National Biodiversity Conservation Strategy and Action Plan |
| PIF | Project Identification Form (GEF) |
| PIM | Project Implementation Manual |
| PIR | Project Implementation Review |
| PMO | Project Management Office |

| | |
|--------|---|
| PPG | Project Preparation Grant (GEF) |
| PPR | Project Progress Report |
| PRC | People's Republic of China |
| PSC | Project Steering Committee |
| PTM | Project Task Manager |
| PY | Project Year |
| PRODOC | FAO Project Document |
| SC | Stakeholder Committees |
| SO | Strategic Objectives |
| STAP | Scientific and Technical Advisory Panel |
| SFA | State Forest Administration |
| TCI | Investment Centre Division (FAO) |
| TGD | Three Gorges Dam |
| TOR | Terms of Reference |
| TWG | Technical Working Groups |
| UN | United Nations |
| UNCBD | United Nations Convention on Biological Diversity |
| UNDAF | United Nations Development Assistance Framework |
| UNDP | United Nations Development Programme |
| USD | United States Dollar |
| WFP | World Food Program |
| WPRHP | Wetlands Protection Regulation of Hunan Province |
| WWF | World Wildlife Fund |
| WB | World Bank |

SECTION 1 – RELEVANCE (strategic fit and results orientation)

1.1 GENERAL CONTEXT

a) Development and institutional context of the Dongting Lake Wetlands

The Dongting Wetlands Ecosystem (DWE) is China's second largest freshwater lake (2 625 km² core lake area expanding to around 20 000 km² in the flooding season) located in the northeast of Hunan Province, south of the Jingjiang Section in the mid reaches of the Yangtze River. The DWE receives water inflows from north, south, and west from the Xiang River, Zi River, Yuan River and Lin River. The Yangtze River flows into the DWE from north at Ouchi, Songci and Taiping, and the outflow to the Yangtze River is to the northeast at Chenglingji of Yueyang City (see map appendix 7).

The DWE was classified by World Wildlife Fund (WWF) as one of the 200 global key eco-zones. The Wetlands represent an important staging, wintering, and feeding site for the North-East Asian Flyway of migratory birds. 120 species of birds known to winter in the Wetlands are included in the China-Japan and China-Australia bilateral agreements on migratory bird conservation. The DWE is also important for other endangered species. An estimated 15% of the remaining population of the rare and endangered Yangtze Finless Porpoise (*Neophocaena phocaenoides*) reside in the Wetlands. Recently the Père David's deer (*Elaphurus davidianus*), which was extinct from the wild in China in 1900 but survived in captivity in Europe, has been reintroduced into the DWE with an estimated population of 25 in 2012. More generally, native and global important biodiversity is substantial with large and varied population of fish, amphibians and aquatic vegetation including 48 national protected species (of which 11 are protected as class I in the Chinese classification system) and 34 species of internationally endangered waterfowls on the IUCN red list.

Because of the ecosystem services it provides, the DWE plays an important socio-economic role in the immediate area and well beyond. Nearly 16 million people live around the lake, representing around 20% of the population in Hunan province, and even more people are dependent on the flood control and water cleaning functions the DWE provides as the most important flooding and natural water cleaning area in the mid reaches of the Yangtze River. An assessment conducted in 2007 estimated that the value of ecosystem services provided by the DWE amounts to around 30 billion Chinese Yuan (USD 4 billion) per year².

The agricultural production, benefiting from the humid climate and soils with high content of organic matter around or clamed from the wetlands, account for 1/3 of the total production in the province with a total value of 8.6 billion Chinese Yuan in 2007 (USD 1.1 billion)³. This includes production of rice and other grains, cotton, ramie (herbaceous perennial fiber crop), tea, and oil, and reed and poplar plantation farmers. Fishers from as many as eight non-

² This includes the value of: vegetation resources (0.6 billion Yuan/year); fish resources (0.5 billion yuan/year); water supply and storage (8.4 billion yuan/year); flood regulation (3.7 billion yuan/year); Scientific research and tourism (2.9 billion yuan/year); carbon fixation and oxygen emission (2.4 billion yuan/year); water purification and pollutants degradation (8.8 billion yuan/year); and biological habitat (2.0 billion yuan/year). Assessment financed by the GEF/UNDP/SFA (State Forest Administration) project *Wetlands biodiversity Conservation and sustainable use*

³ Disaggregated in 6.3 billion Yuan crop production, 0.3 billion Yuan forestry, 2 billion Yuan livestock production

adjacent counties are fishing in the lake and the sector had a total value of 3 billion Chinese Yuan in 2007 (USD 0.4 billion). Major economic sectors that depend on one or more environmental “goods and services” provided by the ecosystem also include tourism, commercial transport, and sand mining. A significant percentage of the economies and livelihoods of the many adjacent villages and townships are derived either directly or indirectly from the Wetlands.

The Administration of the DWE is divided into 17 counties and 6 state-owned farms, belonging to 3 municipalities, Yueyang, Yiyang and Changde Municipalities. Some 26 public sector institutions are managing the DWE resources the most important being the Forestry Department (responsible for the poplar plantations), the Fisheries Administration Bureau, the Water Resource Department, the Reed Management Authority, Land Resources Department (responsible for sand mining), the Environmental Protection Department, and four Nature Reserve Management Bureaus (NRMB).

The DWE contains four nature reserves (NR) under the overall administration of the Forestry Department of Hunan Province (FDHP) covering 4 325 km², an important part of the DWE area: East Dongting Lake national NR and RAMSAR site in Yueyang municipality; West Dongting Lake provincial NR and RAMSAR site in Changde municipality; South Dongting Lake provincial NR and RAMSAR site in Yiyang municipality; and Hengling Lake provincial NR in Xiangyin county (map appendix 7). Four separate NRMBs undertake the management of wetlands and wild life within the NRs. However, even within the core protection zone, the NRMBs do not have jurisdiction over the fishery and reed resources, which fall under the Fisheries Administration Bureau and the Reed Management Authority respectively.

b) Threats on Dongting Wetlands Ecosystem services and biodiversity

Despite the significance of the highly diverse and productive biodiversity of the Wetlands, the globally important ecosystem and the services it provides are increasingly at risk. Loss of habitat arising from sector conflicts and economic interests of local farmers and fishers has resulted in a decline in numbers of populations and in some cases entire species in the Wetlands. Waterfowl have the last 50 years diminished from 0.5 million birds to current 0.17 million birds, even though improvements have been seen the last 15 years as a result of the establishment of NRs and conservation efforts. Some formerly common waterfowl, such as the swan goose *Anser cygnoides* and coot *Fulica atra*, have shown a significant decline and it is difficult to find White-naped Crane *Grus vipio* and Hooded Crane *Grus monacha* in most parts of the lake. The population of the Yangtze finless porpoises, in high danger of extinction, has drastically declined from an estimated 851 in Poyang and Dongting lakes in 2006 to 450 and 90, respectively observed in a study carried out in October 2012, which could mean a total extinction already in 2025⁴. According to the same study the Yangtze River Dolphin *Lipotes vexillifer* has disappeared altogether. The (close to) extinction of the two river mammals is among other factors closely linked to the drastic decline of fish stocks in the DWE and apparent change of fish species composition and age structure.

⁴ Reported based on a research expedition on the Yangtze River between Yichang in Hubei Province and Shanghai in the period October-December 2012, led by China's Ministry of Agriculture and organized by the Institute of Hydrobiology (IHB) at the Chinese Academy of Sciences, WWF and the Wuhan Baiji Dolphin Conservation Fund. The expedition visually identified 380 individual Yangtze finless porpoise in the river's mainstream. Based on this observation, scientists estimate that the population in the Yangtze mainstream is about 500, down from 1,225 in 2006.

Main threats to DWE services, biodiversity and local livelihood include:

1) Pollution from point and non-point sources

Four main point and non-point pollution sources are seriously challenging the water cleaning capacity of the DWE and impacting the water quality in particular in dry seasons with low water levels: pollutants carried into the lake by the four main contributory rivers; widespread pollution from the overuse of fertilizers and pesticides; polluted waste water from industries around the lake (including in particular textile, oil, food, chemical, and paper mills); and urban sewage. There is no comprehensive water quality monitoring system in the lake with data available for other institutions than the Environmental Protection Department. In a study published by the Ministry of Environmental Protection, water quality monitored in 2010 in 8 stations distributed in the lake and its outlet showed water quality of Grade IV (Chinese Standard Water Quality with a scale from I - V). Particularly high levels of phosphorous (Grade V and worse) and nitrogen (Grade IV-V) and mild-eutrophication were found.

In 2005 statistics indicates that about 500 million cubic meters of industrial wastewater were discharged into the DWE, with over 1.3 million tons of pollutants. Around 6 000 ships passing through the lake every year were discharging hundreds of tons of waste oil. There is a systematic overuse of fertilizers and pesticides in the agriculture production in the DWE area with an annual application of pesticide and chemical of 0.08 million ton and 1.693 million ton respectively and an effective utilization ratio of chemical fertilizer of only around 40%, meaning around 60% are flowing into the DWE. Pollution from intensively cultured fish ponds also aggravated rivers and ground water pollution. Domestic sewage produced by urban residents and let into the DWE was up to 15 million tons in 2005.

The single largest point source polluter of the DWE have until to at least 2007 been untreated water from paper mills along the tributary rivers to the DWE using reed and poplar as the raw material for the production. 100 million tons of poisoning wastewater from over 250 paper mills were discharged into the lake each year. At the end of 2006, the province government launched a master plan to control the water pollution generated by paper mills in the vicinity of Dongting Lake. Except for two mills that had water treatment facilities and met the pollution discharge standards, 234 mills were forced to stop production. However, the paper mills have for decades been an important economic pillar in the Dongting Lake area, employing over 18 000 people in Changde, Yiyang and Yueyang municipalities and finding an acceptable solution for all stakeholders is a mayor challenge bringing the effectiveness of pollution control measures at doubt despite increased efforts by the Environmental Protection Authorities since 2007. Various paper mills have been found illegally resuming production without environmental permits and clean technology in place complying with standards.

2) Non-sustainable fishing practices

Dongting Lake has for century been well known for its fishery production. The previously abundant fish species constitute the primary food sources for Finless Porpoises. However, in the past decades, the harvest of four important Carp species (Black - *Mylopharyngodon piceus*, Grass - *Ctenopharyngodon idellus*, Silver *Hypophthalmichthys molitrix*, and Bighead - *Aristichthys noblis*) have been reduced by 90% with decreasing fish size and catch per unit effort. It is estimated that there are as many as 10,000 fishing vessels in Dongting Lake (compared to 4,000 in the 1950es) with fishing efforts that far exceeds the reproduction capacity of all fish species in the Lake. There are no systematic fish catch monitoring but it is estimated that the annual fish catch have decreased by at least 300% from the 1950s and according to the Ministry of Environmental Protection the catches for Dongting lake

amounted to 23,200 tons in 2010⁵, signalling a decreasing food supply for local people as well as wildlife species.

The decrease in fish populations primarily results from the over-fishing by contractors who have entered into annual concession agreement with fishery management authorities. As fishing is contract-based, both local fishermen and fishers from other 9 provinces including Hubei, Jiangxi and Anhui are allowed to fish with varying attitudes towards sustainable fishing. While local people welcome the introduction of moratorium during migration seasons of birds and spring fish spawning season, outsiders tend to oppose to such moratorium as they tend to keep a “take it or lose it” attitude towards fish harvest. The use of destructive and illegal fishing methods (including electric fishing, fishing with very big net traps, and building dykes for the purpose of catching all the fishes, big or small in a specific area) is still practised which do not only kill fish of any age but also kill finless porpoises during the dry season. The decreasing fish stocks and harvest level have severe impacts on the life of local fishermen. Poor sanitary conditions as a result of pollution and lack of safe drinking water have also worsened the livelihoods of local fisher communities.

3) River traffic and sand mining disturbing wild life and degrading habitats

Finless Porpoises habitually migrate from the main course of Yangtze River to Dongting Lake in May each year following the flooding and migrating fish stocks, and then return to the main course of Yangtze in October. Meanwhile, the species also migrate from Dongting Lake to Yangtze at day time and return to Dongting Lake at night. The heavy commercial transport traffic on the Lake and sand mining activities are interfering with communication and migratory habits of the porpoises and is isolating the populations in Dongting Lake from the population in the main course of the Yangtze River. In 2001, sand mining was prohibited in the main course of the Yangtze River, but mining has shifted to Dongting Lake and tributaries of the Yangtze River. Sand mining vessels operating in the confluence of Dongting Lake and the main course of the Yangtze River are blocking the migratory routes of the porpoises between the lake and the river. Further, sand mining also destroy the breeding habitats of different fish species reducing the fish population in the lake which has both environmental and social implications for the livelihoods of local fishermen.

4) Fragmentation of habitat by monoculture reed farming and poplar plantations for timber and pulp and other conversions by agriculture

In the mid 1990s, paper mills were encouraged by local authorities to boost economic development. To support this industry, around 39,800 ha of poplars were planted on the sand beaches in all three municipalities around the lake providing raw material for the mills and timber. The poplar is alien to but a highly competitive species in the DWE and the plantation monoculture established, without land use planning and biodiversity conservation considerations, have seriously substituted native vegetation, fragmented habitat for DWE endangered biodiversity, and changed and reduced ecosystem services. There are even 10,000 ha of poplar plantations inside the core zone of East Dongting Lake NR which have reduced the habitat of migratory and stationary water birds.

Likewise, as raw material for the paper mills, the areas under reed farming in DWE have expanded with around 80% the over last decades. The species used for reed farming is the native *Phragmites* and the planted *Miscanthus*. The drastic expansion in the areas under reed farming has substituted other native vegetation and changed the distribution pattern of the

⁵ Bulletin on the Ecological and Environmental Monitoring Results of the Three Gorges Project, Ministry of Environmental Protection of the Peoples Republic of china, 2011

wetlands. Further, the annual harvesting, suddenly converting the reeds into bare land, is harming wildlife, including many birds, hiding in and feeding in the reeds, destroying habitats, and cutting of their food source in the winter season. In the East Dongting Lake NR core zone it is estimated that 10.66 % of the DWE have been converted into reeds farming and an additional 6.13% have been converted from rice fields to dry land vegetable farming which has drastically reduced the feeding areas and habitats for waterfowl feeding on the harvested rice fields in the winter season.

5) Distortion/changes in hydrological cycle

The storage of flood water is one of the most important socioeconomic and biodiversity sustaining functions of the DWE. The seasonal flooding is crucial for the biodiversity and the local micro climate dominated by high humidity. These functions have been distorted by the historical construction of dykes converting wetlands areas into farm land (in the period 1949 – 1998 around 5,900 km² were converted) and the construction of the Three Gorges Dam (TGD)⁶ which seems to have lowered the general flow in Yangtze River with up to as much as 50%. Since the severe flood in 1998 dykes have been torn down to accommodate more flood water in the DWE, but impacts from the hydrological changes caused by the TGD seems to include changes in the micro climate, increased and prolonged droughts and lowering of the water level in the DWE. Likewise, research has shown that changes in the hydrological and hydraulic conditions in the spawning sites of the Chinese Carps in Yangtze River (black, grass, bighead and silver carps –ecosystem health indicators for the DWE) in the spawning season (end of April to the beginning of July), have negative impacts on the reproduction of the carps. The spawning of the carps is dependent on a certain water level rising process and flow velocity which have been lowered in April and May since the start of the operation of the TGD. Monitoring data collected in Jianli County of the central Yangtze shows that the annual average amount of baby fish fry has declined from 2.524 billion between 1997-2003 (before the water impoundment of the TGD) to 42 million in 2009.⁷

The global warming causing climate changes also seems to have an impact on changes in the hydrological cycle. According to continued monitoring by the Dongting Lake Ecologic Monitoring Station and the Hunan Provincial Meteorological Bureau 80% of the catastrophic floods occurred in Dongting lake region in the following year of the El Nino year. Since the frequency of El Nino, which used to be every eight year, is expected to increase with global warming this global climate phenomenon may have more frequent impacts on the hydrological cycle.

Due to the drastic drop in flood water quantity from the upper Yangtze River and decrease in precipitation in the DWE region, the water level in Dongting Lake hit record low in 2006 within the last 30 years. The dry season used to start in November but now seems to start in September. In October 2009 the lake water body area had declined 53.66% compared to previous years. The August precipitation in the DWE catchment area of Xiangjiang River, Zijiang River, Yuanjiang River and Lishui River has declined by over 50% compared to the historical average. The lake water body area was only 382 km² in May 2011, a drop of some 60% compared to the historical data for this period. The Ministry of Environment Protection reported a 30% reduction in water inflow (measured in September) and outflow (measured in January-March) to the DWE in 2010 compared to historical data. Caused by upstream

⁶ The Three Gorges Dam is the world's largest hydroelectric plant upstream the Yangtze River from the DWE completed in 2006 and under full operation from 2012

⁷ Research done by the Yangtze River Fisheries Research Institute under the Chinese Academy of Fishery Sciences (CAFS).

activities the sedimentation in the lake is also increasing with an estimated 2.42 raise in the lakebed every year.

1.1.1 Rationale

a) Baseline initiatives, projects and co-financing to the FDHP/FAO/GEF project

The national government of China has the last years increasingly recognised the need for improved conservation and sustainable management of China's wetlands biodiversity and ecosystem services. This has led to the establishment of three important programmes that provide financing to the work of provincial and local governments and NRMBs in wetlands conservation and sustainable use:

(i) *National Wetland Conservation Programme (2011 - 2015)* supports projects in wetlands conservation, restoration, and sustainable use demonstrations, and capacity building. The programme is financed through CNY 5.585 million (USD 0.893 million) from central government and CNY 7.402 million (USD 1.184 million) from local governments;

(ii) *Wetland Conservation Subsidy Programme* supports projects in wetlands survey and monitoring including equipment procurement and maintenance, wetland restoration, and improvement of wetland management including recruitment of part-time staff. The subsidy Programme has an annual budget of CNY 200 million (USD 32 million) from the central government; and

iii) *National Nature Reserve Development Programme* supports mainly infrastructure construction in nature reserves. The Programme has an annual budget of CNY 300 million (USD 48 million) from the central government.

It is estimated that these programmes will provide a total amount of USD 4.5 million to the improvement of the conservation of the DWE during the next 5 years including an estimated USD 1.5 million from the *National Wetland Conservation Programme*, USD 1 million from the *Wetland Conservation Subsidy Programme*, and USD 2 million from the *National Nature Reserve Development Programme*. These funds will serve as co-financing to the proposed project as detailed in the incremental reasoning section c below.

To address the threats and challenges on the DWE, a number of significant achievements have been reached in recent years at the provincial level. Hunan Province proclaimed a provincial wetlands regulation in 2005 and in 2007 developed a draft framework master plan for the management of the DWE. This was followed by the creation of the Dongting Lake Conservation Commission (DLCC) on 22 June 2007. The Chairman of the DLCC is the Vice Provincial Governor and members include Deputy Director Generals of the Legislation Office of the provincial government, Provincial Finance Department, Development and Reform Commission, Water Resource Department, Agriculture Department, Forestry Department, Land Resources Department and Environmental Protection Department. However, many of these achievements have mostly stayed on paper and they now need to be strengthened and updated based on improved systematic data on DWE health and the status of its services and implemented on-the-ground supported by the renewed political will coming from the Province Governor and high levels in the province government.

Some important data and indicators for decision-making and planning and management of the DWE are now monitored by different sector institutions with fixed yearly budgets for data collection and analysis. Of particular importance is the East Dongting Lake NR biodiversity species population monitoring system and the Ministry of Environmental Protection have several monitoring points throughout the DWE under the Dongting Lake Ecologic Monitoring Station managing an important amount of periodic data on water quality and quantity. Other entities doing monitoring of specific indicators include the Hunan Provincial Meteorological Bureau doing continued monitoring of climate indicators (precipitation, accumulative temperature, sunlight, frost and non-frost period, cold spell, and frequency of strong winds) and the Luhu Wind-powered Electricity Exploitation Co. Ltd of Huashun Group monitoring wind directions and velocity. Even though fragmented, information on land-use changes and conversion of wetlands areas is available in annual reports from Dongting Lake Water Resources Administration Bureau of Hunan Province, Lake and Islet Management Commission and local governments.

Since the establishment of the 4 NRs in the DWE, between 1994 and 2001, and the declaration of three of them as RAMSAR sites, the concrete conservation work has improved supported by the FDHP, local governments, WWF and various donors including the GEF (see further details in section 1.1.4). The understanding of in particular the conservation needs of migratory birds and their habitats have improved significantly. The NR have established very basic poorly staffed monitoring and control teams mostly with capacities in birds monitoring, and they all have overall 15 years master plans. East Dongting lake NR has a visitors and training center and 4 management stations, while the other three only have very basic visitors facilities. Within the coming years an estimated USD 3 million will be invested in monitoring equipment and infrastructure for office facilities, animal rescue centers, visitors and training centers in the 4 NRs financed by the above mentioned *Wetland Conservation Subsidy Programme* and the *National Nature Reserve Development Programme*.

As a consequence of the creation of the NRs at different points in time and under different local governments, the NRs have been at different stages in terms of building management capacities and they have mostly worked in isolation from each other concentrating on consolidating own capacities. Now there is a common recognition of that they will not be able to address the various above described crosscutting challenges with an NR-by-NR approach, but need to strengthen their networking in the support of biodiversity conservation at the DWE ecosystem level. During the preparation of the present project, the NRs have initiated the next step towards exchanging experiences, identifying common problems, prioritising actions and building their capacities at a network level. A specific area of action will be strategies for the conservation of threatened flagship species not only at the DWE NR network level but also connecting with other partners and NRs the species are migrating to. For example The Chinese Academy of Sciences (CAS) Institute of aquatic biology has a monitoring programme on porpoises and ex-situ conservation has started as a parallel strategy to in situ conservation efforts.

The NRs have also started to work more closely with community, state farm and private sector partners which should be consolidated in concrete co-management arrangements⁸ the

⁸ Co-management is in the context of this project defined as a partnership arrangement between government and the local community of resource users, and sometimes also connected with agents such as NGOs and research institutions, and other resource stakeholders, to share the responsibility and authority for management of resources within the DWE NRs in a sustainable manner with positive impacts on DWE and biodiversity. There is no standardised approach, but rather a range of different arrangements, levels of

next years to decrease threats from the sectors using and impacting on DWE services. Some pilot experiences, supported by WWF and local governments, exist in organic vegetables and citrus production in Xibanshanzhou Polder in South Dongting Lake and organic fish farming in several locations the most successful being the Qingshan Polder in West Dongting Lake. These initiatives have improved the local ecological conditions including the water quality, decrease in illegal fishing, and water birds have returned. At the same time they have improved local livelihoods increasing product prices and family income (with up to 400%) and the organic fish production in DWE have reach an estimated 500 000 kg per year.

In 2010, WWF-China and the Three Gorges Project Corporation (CTGPC), Ministry of Water Resources signed a five-year Memorandum of Understanding to strengthen their cooperation on monitoring of TGD's impacts on biodiversity, protocols for sustainable hydropower management and environmental flows. In 2012, the three partners and Changjiang River Scientific Research Institute jointly published the report "China's Environmental Flows Research and Practice". Actions taken based on this research and improved understanding of required environmental flows for ecological sustainability and biodiversity conservation could have important positive impacts on the DWE biodiversity and services in the future.

Initially supported by the previous GEF project (see section 1.1.4) important progress has also been made in raising the awareness of local villages about DWE biodiversity conservation and the crucial importance of the wetlands ecological functions. Also the awareness among local government and main leaders has improved significantly with an enabling impact on improved conservation and sustainable use policies. Traditions for some very successful awareness raising and eco-tourism events have been established including the *Dongting Lake International Bird Watching Race*, which is held the first weekend in December every other year by East Dongting NR. This event started in 2002 and is now gathering more than 30 teams from Beijing, Shanghai, Guangdong, Sichuan, Hong Kong, Taiwan as well as from foreign countries. The Race is a festival and an exchange platform for bird watching fans and also attracts the attention of local communities, media, government agencies, enterprises and volunteers and is as such an important platform for awareness raising for DWE conservation. *Wetland Ambassador Action* is another awareness raising event functioning since 2001 organizing environmental protection associations and volunteers from universities in China using their summer holidays for DWE conservation advocacy actions among local communities and governments. Other important awareness raising events celebrated in DWE include world wetlands day, bird week, world environment day, the earth day and world water day. The NRs also uses other communication tools including TV, radio, newspaper and the Internet, guide books for eco-tourism in the DWE, telefilms, and environmental education activities for primary and middle school students. During the next 5 years the NRs will be investing an estimated USD 2 million in upgrading visitor centers, and running the special awareness raising events.

b) Remaining barriers to be addressed by the project

1) No functioning coordination between sectors and medium to long term planning and implementation of management strategy for the DWE. Even though the circular creating the DLCC and appointing its chairman and members was issued in 2007 by the provincial government, the circular has never been implemented and so far no meetings of the committee

sharing of responsibility and power, and ways of integration of local management mechanisms and more formalised government systems where emphasis is on generating local socio-economic benefits from a sustainable resource utilization conserving biodiversity and adapted to each concrete case.

have been held. The DLCC does not have an operations budget and procedures, a secretariat to support its work nor a work plan to govern actions to be taken. Moreover, the DLCC must be complemented by the strengthening of existing and, in their absence, the creation of new coordinating committees at the municipal level where many of the decisions that affect the Wetlands occur. The framework master plan for the management of the DWE developed in 2007 is outdated and does not built on systematic quality data and analysis of the DWE ecosystems and the trends in degradation of its services and biodiversity linked to an improved understanding of socioeconomic drivers. Separate studies exist on various aspects of the DWE and pressures but findings are not integrated in management planning. Among others, the study on the valuation of DWE ecosystem services from 2007 needs to be updated. The framework master plan from 2007 lacks detailed actions and implementation measures required to support integrated and comprehensive planning and management and implementation capacity among relevant agencies at different levels need to be strengthened. There is also a lack of mechanisms for local and sector stakeholders to participate in DWE planning and management.

2) No holistic monitoring and systematic sharing of data on the DWE biodiversity, ecosystem health and services and links to socio-economic conditions. Monitoring and information systems and data are owned by different public institutions while protocols and platform for sharing do not exist. Detailed data on water quality and quantity are kept in Dongting Lake Ecology Station, which is only accessible to the provincial government and Environment Protection Department of Hunan Province. This creates a serious weakness in knowledge based decision-making and coordinated planning and management of the DWE. Sectors like construction, water conservation, transportation, and environment have all been involved in giving lands back to the DWE from other land-uses. However, the land-use data are not exchanged to allow for a more holistic land-use planning. The lack of sharing of data also causes cost-inefficiencies where data collection and analysis is even duplicated by different sectors. In some areas there are also data gaps and lack of systematic monitoring to support an integrated planning and management. That is particularly the case for dynamics at the ecosystem level. There is no monitoring of impact of drought and floods on biodiversity and wetland ecosystem and related restoration capacities and functions. Quite a lot of sectors are involved in the studies on Dongting Lake biodiversity, but studies to date have been focused at specific limited geographical areas and aspect of the biodiversity. The East Dongting lake NR biodiversity monitoring system is only monitoring the population of specific species and does not include monitoring of the status of related habitats and no biodiversity monitoring system exist at NR network and DWE ecosystem level. There is no systematic monitoring of fishing tools used, shared data on annual catches or monitoring of the constitution of fish stocks (species, age and size) or habitats important for reproduction. Other sectors activities such as sand-mining, intensive aquaculture with alien species, poplar plantations are also not systematically monitored and their impacts on biodiversity and ecosystem services have not been systematically analyzed. Finally, systematic monitoring of socio economic drivers and conditions important for the conservation and sustainable use of DWE services and biodiversity is also lacking.

3) Incomplete legal status of NRs at local level and limited status at national level. The four NRs are established by provincial and central government approval but West Dongting Lake NR is the only one having a county decree defining its administrative status and measures at the local level. Local decrees for the other three NRs are needed in order to strengthen their management status and effectiveness including attracting increased local government budget allocations. Hengling NR does still not have status as a RAMSAR site

despite its importance for rare migratory birds and East Dongting lake NR is the only one having status as national NR giving it access to central government capacity building programmes and funding. An upgrading of West Dongting Lake NR and South Dongting Lake NR are from provincial NRs to National NRs and Hengling NR to RAMSAR site could significantly improve their management status and effectiveness including attracting increased national government budget allocation.

4) Lack of capacities in NRs to strengthen management effectiveness at network level.

The NRMBs have the primary responsibility for managing the Wetlands' four NRs but they lack the authority and adequate equipments and budgets (with the exception of East Dongting Lake NR) to secure monitoring and surveillance activities and biodiversity conservation. Relative to the magnitude and complexity of the problems faced by the Wetlands, NR staff are few and lack technical skills beyond bird monitoring. East Dongting Lake NR staff were trained mostly in bird monitoring and protection during the previous GEF project, but there has been changes in staff and capacities need to be broadened to other species and issues important for NR management at the network level including habitat and ecosystem management, ecotourism, and co-management with local communities and sectors. Also the 15-years master plans for each NR are too general and are not linking to the network ecosystem level. In addition, they are outdated and do not provide concrete priorities, activities and work planning for concrete short term actions such as much needed zoning and use regulation and co-management mechanisms.

5) Limited experiences with co-management models and no systematic provisions for up-scaling.

The still limited co-benefits and involvement of local communities and sectors in the management of DWE resources is an important barrier for the medium and long term sustainability of DWE services and biodiversity conservation efforts addressing the conflict between local community and biodiversity conservation needs. Despite some successful examples in the past, in particular in relation to organic fish farming increasing family incomes and decreasing illegal fishing, there has been no systematic consolidation and scaling of co-management models with wider impacts on livelihoods as well as the sustainability of DWE services and biodiversity. Agriculture, plantation and fisheries activities consequently continue to constitute threats on biodiversity and ecosystem services in the NR core zones and in the wider DWE with long term negative impacts on local livelihoods of vulnerable groups.

6) No coordinated strategies for the conservation of flagship species at network level.

Moving from a NR-by-NR approach to a NR network approach at the ecosystem level involving other sectors and NRs outside the DWE is particularly important for the conservation of endangered and critically endangered flagship species and their habitats. The lack of specific coordinated conservation strategies for these species is a critical barrier for stabilisation or increase of their populations through integrated wetlands use regulations, land-use planning and restoration of critical habitats.

7) Weak mainstreaming of biodiversity and ecosystem services conservation in sectors.

The conservation mandate of the NR administration and regulations is in near constant conflict with development priorities of other sectors. Management of the Wetlands and use of its natural resources and other "environmental "goods and services" is fragmented across a number of economic sectors (fisheries, reed farming and poplar plantations, agriculture, sand mining, hydroelectric power generation) and legal jurisdictions (e.g., municipalities and counties) including in the core zones of NRs and in many cases are in direct conflict with the Wetlands Protection Regulation of Hunan Province (WPRHP). A first barrier for the

mainstreaming of DWE biodiversity conservation in sector policies, development plans and regulations seems to be weaknesses in the WPRHP. The regulation was proclaimed in 2005 but without clear provisions for unified coordination and effective management of wetlands biodiversity and ecosystems. It also lacks incentive tools such as mechanisms for compensation for biodiversity and ecosystem services conservation.

8) Awareness raising mostly concentrated in East Dongting Lake NR and focused at visitors and stakeholders from outside. Even though the awareness about conserving DWE services and biodiversity has increased significantly the over last decade, in particular due to activities supported by WWF and East Dongting Lake NR, there is still a lot to do in terms of consolidating established awareness raising events and reach out to the younger generations in a more systematic manner. Considering the 16 million population living around the DWE and the numbers of sectors using and impacting the DWE, the need for awareness raising is not a barrier that can be overcome with one time actions. It must be constantly addressed with improved and targeted communication approaches and methods. Past and current awareness raising events have in particular had success in reaching visitors from outside and putting conservation issues on the provincial government agenda. However, more actions need to be targeted at the local population involving them in restoration and co-management initiatives.

c) Incremental reasoning for the use of GEF funds

To address the above mentioned barriers and achieve benefits for the global important DWE biodiversity the GEF resources will be invested incremental to the above mentioned baseline as follows (for detailed component description please see section 2.4):

Component 1: Strengthening of institutional capacities for integrated monitoring and management of biodiversity in DWE

The coming years the FDHP will provide an estimated USD 242 000 in co-financing in staff time, travel costs, office space and utilities, and meeting facilities to: (i) make operational and strengthen the DLCC; (ii) conduct sector specific biodiversity and ecosystem threat analysis filling current information and analysis gaps; (iii) develop and implement a 5-years integrated DWE management plan (DWEMP); and (iv) support the implementation of an Integrated Information Management System (IIMS) on status of biodiversity, ecosystem services, and socioeconomic indicators. The above mentioned *National Wetland Conservation Programme (2011 - 2015)* and the *Wetland Conservation Subsidy Programme* will through the FDHP invest an estimated USD 410 000 in wetlands sustainable use demonstration activities to be prioritized and implemented under the DWEMP as well as in DWE surveys and monitoring equipments.

The incremental USD 406 200 from GEF will be used for: short term technical assistance (institutional expert to guide making the DLCC operational and an information system expert to support the implementation of the IIMS); consultancy services to conduct specific threats analysis and support the preparation of the DWEMP; training in the operating of the IIMS platform; consultation workshops supporting integrated planning processes; and equipment to support the IIMS. Without these inputs the DLCC would become operational at a slower speed, the integrated planning process would not be build on access to up to date monitoring data and analysis on the status of DWE biodiversity and related threats, which would be a barrier for strategic priority setting in conservation and sustainable use at the DWE level. The baseline situation with weak coordination among sectors to address biodiversity and habitat conservation needs and lack of integrated DWE planning and management would continue.

Component 2: Strengthening of management effectiveness of DWE NRs network

The coming years the FDHP, the NRMBs and other provincial and local government departments will provide an estimated USD 513 000 in co-financing in staff time, local travel costs, office space and utilities, and meeting facilities to: (i) prepare, consult and approve Local Administrative Measures for NR (AMNR) decrees; (ii) support the upgrading of West and South Dongting Lake NRs to national NRS and Hengling Lake to a RAMSAR site; (iii) develop and implement 5-years NR Management Plans (NRMPs); (iv) strengthen NR management capacities; (v) develop, implement and upscale NR co-management models addressing key pressures on biodiversity and habitat; and (vi) develop and implement strategies for conservation of flagship species. The above mentioned *National Wetland Conservation Programme (2011 – 2015)*, the *Wetland Conservation Subsidy Programme*, and the *National Nature Reserve Development Programme* will through the FDHP invest an estimated USD 2.8 million in monitoring equipment and infrastructure for NR office facilities, animal rescue centers, visitors and training centers, USD 0.35 million technical and logistical support for co-management models, and USD 0.76 million in restoration of habitat in the support of conservation of flagship species and investment support for the implementation of co-management models. Likewise farmers and fishermen will provide parallel investment financing for the establishment of organic aquaculture production, bird friendly rice production, and eco-tourism services for an estimated amount of USD 0.6 - 1.0 million.

The incremental USD 1 101 000 from GEF will be used for: i) short term consultancy services to support the drafting, approval and implementation of AMNRs and NRMPs which will facilitate increased local government budget allocations; ii) conducting biodiversity baseline studies of NR core zones and providing other needed documentation for their upgrading which will facilitate increased national government budget allocations; iii) developing the draft strategies for the conservation of flagship species and supporting their initial implementation; iv) conducting in-debt socio-economic feasibility studies for the co-management models; v) technical assistance from short term experts to support the final design and implementation of co-management models (water bird specialist for integrated bird-friendly agriculture planning, wetlands habitat and ecosystem expert to advice on land-use planning solutions for reed farming and poplar plantations, aquaculture and ecosystem approach to fisheries management specialists, and a specialist in wetlands ecotourism); vi) consultations and capacity building of NR staff, farmers and fishers to support the strengthening of NR management at the network level, and the implementation of co-management models; and vii) equipment for NR monitoring and surveillance. Without these inputs the NRs would continue to work in isolation without a common vision at the network level to address threats on biodiversity and habitats at the DWE level. The NRs would have improved infrastructure for visitors and the administration but they would still operate in many years to come without clear legal status at the local level and concrete management plans integrated at the network level as well as capacities to plan, coordinate and implement coordinated strategic actions for biodiversity conservation at the DWE level and attracted increased government budget allocations for the NRs. Some fragmented co-management actions with local communities would still be supported but there would be no systematic consolidation and scaling of successful models with wider impacts on livelihoods as well as the sustainability of DWE services and biodiversity.

Component 3: Mainstreaming of Conservation of biodiversity in key sectors in DWE

The coming years the FDHP, the NRMBs and other provincial and local government departments will provide an estimated USD 263 000 in co-financing in staff time, local travel costs, office space and utilities, and meeting facilities to: (i) support the process of drafting, consulting and obtaining approval of an amendment of the Wetland Protection Regulation of Hunan Province (WPRHP); (ii) promote and support an alignment of sector policies and regulations with the amended WPRHP; (iii) strengthen capacities of province and local authorities in the enforcement of wetland conservation laws and regulations; and (iv) strengthening public and private capacities in biodiversity conservation practices in priority sectors. The above mentioned *Wetland Conservation Subsidy Programme* will through the FDHP invest an estimated USD 100 000 in the improvement of wetlands management practices in priority sectors using and impacting on DWE resources.

The incremental USD 156 550 from GEF will be used for: short term consultancy services and consultation workshops to support the drafting, consultation and adoption of the amendment of the WPRHP and alignment of sector policies; study visits for agency officials and private sector representatives on wetlands biodiversity conservation practices to be applied in key sectors (sand mining, fisheries, reed farming and poplar plantation); and training course for provincial and local government officers in enforcement of wetlands regulations. These inputs will allow for starting the mainstreaming of DWE biodiversity conservation in key sectors which in the baseline scenario, despite their impact on and use of DWE resources, are not much involved in the conservation of DWE services and aware of solution options in terms of biodiversity-friendly practices. This GEF investment will also be supported by the baseline WWF-China, CTGPC and the Ministry of Water Resources partnership to reduce impacts of the TGD on DWE biodiversity in the achievement of incremental global environmental benefits for the DWE.

Component 4: Environmental education and awareness

The coming years the FDHP, the NRMBs and other provincial and local government departments will provide an estimated USD 1.1 million in co financing in staff time, local travel costs, office space and utilities, and meeting facilities to: (i) support the preparation of DWE biodiversity communication and information material and improve infrastructure; (ii) conduct special wetlands biodiversity campaigns and events; and (iii) support the development of DWE conservation and sustainable use curricula for middle school. The above mentioned *Wetland Conservation Subsidy Programme* will through the FDHP invest an estimated USD 50 000 in upgrading of visitors centers infrastructure.

The incremental USD 830 220 from GEF will be used for: short term technical assistance from a public communication specialist to support an improved organization of special awareness raising events (Dongting Lake International Bird Watching Race, Wetlands Ambassadors Action, Wetlands Days, etc.); consultancy services for the production of a telefilm on wetlands biodiversity and the development of wetlands ecosystem services and biodiversity curricula for middle school students; billboard signs with information on biodiversity and demarcation of NRs; and displays for visitor centers. These inputs will allow for reinforcing awareness raising under a joint strategy of the NRs and improving the organization of the baseline successful special events. In particular the GEF resources will allow for a more focused targeting and involvement of the local population in the special events and local awareness raising activities. Without the GEF resources the NRs would invest in improved visitors and education centers but these investments would not be accompanied with a specific reach out to the local population and younger generations living in the DWE.

1.1.2 FAO's comparative advantages

The proposed project will benefit from FAO's extensive work on conservation and management of natural resources (primarily agriculture, forestry and fisheries resources) within the ecosystem context. Specifically in the case of China, FAO has a long record of cooperation with the Chinese government in natural resources management; programs and projects that include biodiversity conservation, forestry, fisheries conservation agriculture, integrated pest management and promoting sustainable aquaculture based on native species. The latest example contributing to this record is the provision of technical assistance to support the Sustainable Management of Freshwater Aquaculture in Pingjiang County (Hunan Province) Project; a riparian county bordering Dongting Lake. Among other issues this project, supported through FAO's Technical Cooperation Programme, is evaluating and promoting the development of improved technologies designed to reduce environmental impacts of freshwater aquaculture in the County which experience will be very useful for the co-management models on fisheries in the DWE. Another important expertise for this model will be FAO's work on the Ecosystem Approach to Fisheries and rights based management of fisheries resources.

In addition, FAO's Investment Center has supported a number of preparation and supervision missions of biodiversity conservation projects in China (primarily for GEF). Examples include: (i) the Protected Area's Management Component of the National Sustainable Forestry Development Project (2002) and (ii) Guangxi Integrated Forestry Development and Conservation Project (2006), both with the World Bank as Implementing Agency through the FAO-WB Cooperative Programme; and (iii) An IEM Approach to the Conservation of Biodiversity in Dryland Ecosystems (2008) with IFAD as GEF's Executing Agency through FAO's Investment Support Programme. Moreover, FAO is presently participating as the designated GEF Executing Agency in the preparation of 5 other GEF projects in China of which three concerns wetlands biodiversity conservation and restoration (Poyang Lake in Jiangxi province, Western Jilin Saline-alkaline Wetlands, and Estuarine wetlands in Shandong and Guangdong Provinces) with which FAO will facilitate synergies.

1.1.3 Participants and other stakeholders

The project will work closely with a wide range of stakeholders including provincial and local government agencies, universities, research institutions, civil society organizations, private businesses, local communities and residents living in or around the Dongting Lake. The FDHP will be the main partner for project execution with the four NRMBs as co-executing partners.

At the provincial level, through the DLCC, the FDHP will involve all sector departments important for the long term planning, conservation and sustainable use of DWE services and biodiversity including the Legislation Office of the provincial government, Provincial Finance Department, Development and Reform Commission, Water Resource Department, Agriculture Department, Forestry Department, Land Resources Department and Environmental Protection Department. These are all important partners for the success of component 1 and component 3, but they will also be included in component 2 co-management models as per their competencies.

At the local level the governments of Xiangyin county and the three municipalities Yueyang, Yiyang and Changde, and their subordinated departments, will be key partners in all components. They will in particular be consulted on and be involved in the develop and implement of: the DWEMP (component1); AMNRs, NRMPs, and the co-management models and flagship species and habitat conservation and restoration activities within their respective jurisdiction (component 2); amendment of the WPRHP and alignment of sector policies and regulations, capacity building activities in the enforcement of wetland conservation laws and regulations and biodiversity conservation practices in priority sectors (component 3); and awareness raising special events (component 4).

Partnerships will be developed for each co-management model in component 2 with farmers and fisherman communities and private sector companies linking to markets with added values for biodiversity friendly products. Interest among these partners have already been confirmed in the case of each co-management model. They will play a central role in planning, implementing and monitoring the outcome of the models and they will also play a key role in their further up-scaling in the last project year and beyond. They will bring parallel financing to the projects in terms of investments in sustainable and biodiversity friendly production practices. A special effort will be made to involve vulnerable groups among these communities and a gender sensitive approach will be applied. The private sector and the local communities will also be closely involved in the alignment of sector policies with the amended WRHP and identification of and capacity building in alternative biodiversity friendly extraction and production practices in component 3 and in awareness raising activities in component 4.

Universities, research institutions (including ASEM Water Resources Research and Development Center, Wetland Research Centre of Hunan Province, Hunan Academy of Forestry, and Dongting Lake Station for Wetland Ecosystem Research, The Chinese Academy of Sciences who is very involved in research and technical advice on DWE threats, local livelihoods, and solution options) and civil society organizations (in particular WWF-China who is playing a key role in promoting enhanced knowledge on DWE services and biodiversity and conservation actions as described above) will also be closely involved in project activities. They will participate in: the sector specific biodiversity and ecosystem threat analysis and setting up the IIMS (component1); feasibility studies for and technical advice on the implementation of co-management models and flagship species conservation strategies (component 2); capacity building in biodiversity friendly production practices (component 3); and technical advice on communication strategies and material (component 4). A technical advisory group will be set up to advice the Project Management Office and the Project Steering Committee with the participation of these partners (see section 4.2)

The project will be launched by a well-publicized multi-stakeholder inception workshop. This workshop will provide an opportunity to provide all stakeholders with updated information on the project as well as a basis for further consultation during the project's implementation. Stakeholder committees (at least one for each NR) will be set up to provide a platform for stakeholder involvement in particular at the local level (see section 4.2).

1.1.4 Lessons learned from past and related work, including evaluations

The UNDP/GEF/SFA (State Forest Agency) “Wetland Biodiversity Conservation and Sustainable Use in China” project (GEF ID: 623, completed in June 2009) was a 5 year national project including activities at the national level and in four internationally important

wetland sites in five provinces that included East Dongting Lake NR. USD 2 000 000 in GEF resources were invested in building capacity in biodiversity monitoring and database development and in mainstreaming biodiversity considerations across sectors to build awareness and lay the foundation for future changes in NR management approaches. At the Dongting pilot site, the terminal evaluation mission identified the following outputs at the completion of the project: (i) a wetland biodiversity monitoring program and operation had been initiated; (ii) the creation of a map-based Dongting Wetlands Information Systems; (iii) examples of the resolution of selected issues affecting the conservation of biodiversity in the wetlands through improved inter-sector coordination as demonstrated through the introduction of a closed management regime in the core zone; and (iv) training of fishermen to collect basic ecological information.

Three years after the completion of the project, reflections on lessons learned made with FDHP, NRMBs and the local consultant team, participating in the preparation of the present project, are:

- The biodiversity monitoring programme (mainly focused at birds) provides important systematic information on the status of birds population. However, its limitation to East Dongting Lake NR and to birds monitoring does not provide adequate planning and decision support information on ecosystem health and linkages between habitat conditions and species populations.
- The establishment of closed management regimes in NR core zone has been an important improvement in conceptualizing NR management, however legal and administrative clarity with local governments and co-management agreements and models with sectors and communities operating in these zones are needed to achieve improved conservation and solve conflicts with production sectors
- A focus at East Dongting Lake NR only is not able to solve DWE conservation and sustainable use challenges. A balanced and integrated approach involving all four NRs at a network level, local government and communities as well as all sectors using and impacting the DWE are needed to burst the achievement of global environmental and local socio economic benefits

Taking these lessons learned into account the present project will build on the important conservation foundation laid by the UNDP/GEF/SFA Wetlands Project and seek systematic up-scaling of achievements gained.

Other lessons learned from national or international funded wetlands initiatives and projects are that most of these projects and initiatives focus mainly on the management of the biodiversity itself with insufficient focus on policies, regulatory, institutional, and more long-term financial sustainability aspects. This has been the case of the UNDP/GEF “Wetland Biodiversity Conservation and Sustainable Use in China” project, the Dongting Lake Biodiversity Conservation Sino-Norwegian project, and WWF projects in Dongting Lake. This approach can only be successful to some extent at an early stage of building conservation and sustainable use capacities in limited areas. However, its effectiveness is not viable to achieve conservation and sustainable use objectives at the entire DWE level involving 17 counties and 6 state-owned farms belonging to 3 municipalities and some 26 sectors. Stand alone efforts made in restoration of habitats and protection of species are not sustainable if they are not followed by improved policies, regulations, institutional capacities and arrangements, and financial incentives such as conservation compensation mechanisms. The present project has in its design taken a DWE level approach and includes several actions to

strengthen inter-institutional coordination and arrangements, DWE level regulation and financial sustainability aspects

Lessons learned from previous experiences with organic fish farming seeking sustainable use models are particularly important and will be taken into account in the detailed socioeconomic feasibility study and design of co-management models to be implemented by the present project. These include that the high initial investments costs have excluded poor fishermen from joining the organic fish cooperatives and did in some cases even deprive development opportunities for those vulnerable groups. This needs to be compensated for in the initial support structure of the co-management model. Lessons learned do also include the importance of having flexible mechanism to allow not so fast movers among fishing communities to join in at a later stage. This will be an important aspect of the up-scaling strategy not only for organic fish farming but for all co-management models. Finally, lessons learned shows the importance of planning for long term but gradually decreasing support of the co-management models in order to insure their sustainability. Short term support will not convince actors with an initial wait-and-see attitude. A critical mass of initial investment is needed to achieve production efficiency and diverse market links and sales channels also need to be facilitated until sustainability is achieved.

1.1.5 Links to national development goals, strategies, plans, policy and legislation, GEF and FAO's Strategic Objectives

a) Alignment with national development goals and policies

The 12th National Five-year Plan (2011-2015) of the Government of China promotes environmental protection and sustainable growth, enhancing “ecological conservation and restoration.” The plan urges the reinforcement of biodiversity conservation, strengthening monitoring in NRs and improving their management and protection. In relation to wetlands conservation the government has launched the Implementation Plan of the National Wetland Conservation Project during the 12th Five-year Plan and the National Project Plan for Wetlands Conservation (2002-2030). The target to be reached by 2030 in this plan is 713 wetland reserves and 80 wetlands of international importance effectively conserving over 90% of the country's natural wetlands compared to 550 protecting 45% of natural wetlands in 2007. The Plan lists Dongting Lake as a priority area.

The present project is also in conformity with the China Biodiversity Partnership and Framework for Action (CBPF) 2007-2017, China's principal investment strategy for biodiversity conservation developed to facilitate dialogue with GEF and other financing agencies. Under this Framework, the Project will directly support three of the five priority themes identified under the Framework. These are: (i) Improving Biodiversity Governance (Theme 1); (ii) Mainstreaming Biodiversity into Socio-Economic Sectors and Plans and Investment Decision-Making (Theme 2); and (iii) Investing Effectively in Reducing Biodiversity loss in Protected Areas (Theme 3). More specifically, it will support the following results identified in the CBPF: (i) financial flows to biodiversity conservation increase over current baseline (Result 4); (ii) the general public is supportive of conserving biodiversity (5); (iii) biodiversity conservation and sustainable use is mainstreamed into local plans (12); (iv) national NRs and provincial NRs are effectively managed (18); and (v) national NRs and provincial NRs, local communities, NGOs and/or the private sector are involved in NR co-management and development (20).

Building on past efforts, The Hunan Provincial Government has committed a substantial amount of resources in the 12th provincial development five year programme to support the Dongting Wetlands. The Provincial Government has introduced regulations for the protection of the Finless Porpoises in 2012 for the first time linking performance of local officials with the protection of species and is very supportive of an amendment of the WPRHP. In addition, the Provincial Development and Reform Commission is elaborating a Master Plan for Development of Dongting Lake Ecological Economic Circle which will be incorporated in the national development programme, with Dongting wetland conservation as a key focus.

b) Alignment with the National Biodiversity Strategy and Action Plan of China

The priorities of the Government of China (GoC) in biodiversity conservation and implementation of the United Nations Convention on Biological Diversity (UNCBD) are set out in China's Fourth National Report on Implementation of the Convention on Biological Diversity, 2008 and the China National Biodiversity Conservation Strategy and Action Plan, 2011-2030 (NBSAP). The NBSAP identifies 35 priority regions for biodiversity conservation in China where the Dongting Lake is identified as priority area in the Hilly Plain priority Region of East and Central China. The present project will in particular support the implementation of one of the four conservation priorities for this area: *Improve the conservation of rare and endangered species such as Chinese sturgeon and dolphins, and of river and marine coastal wetlands and wintering habitats of red-crowned cranes and Siberian white cranes and potential habitats of South China Tiger*. The present project will also support the implementation of in particular 5 of the 30 priority actions identified in the NBSAP which are: Action 2 *Improve the legal system of biodiversity conservation and sustainable use* (component 3 of the present project); Action 3 *Establish and enhance bodies for biodiversity conservation and management and improve the inert-agency coordination mechanism* (component 1 and 3); Action 4 *Incorporate biodiversity conservation into relevant sectoral and regional planning and programmes* (component 1, 2, and 3); Action 9 *Undertake biodiversity monitoring and pre-warning* (component 1); Action 13 *Improve conservation in priority areas of biodiversity conservation* (all components); Action 30 *Promote the establishment of biodiversity conservation partnerships* (component 2 and 4).

c) Alignment with GEF Biodiversity Focal Area Strategy

The present project will contribute to objective 1 of the GEF-5 Biodiversity Results Framework. In particular, the project will contribute to the achievement of Outcome 1.1 through strengthening the existing institutional and policy framework to support the integrated management of the Dongting Wetlands Ecosystem (DWE) and increasing management capacity in the four Dongting NRs and promoting integrated planning and management of the DWE (all components). The project will also indirectly support Outcome 1.2. In particular the development and proclamation of AMNR and the upgrading of West Dongting Lake NR and South Dongting Lake NR from provincial NRs to National NRs and Hengling NR to Ramsar site will facilitate increased local and national government budget allocations to the NR (component 1 outcome 2.1.b). Further, the establishment of partnerships with local governments, state farms, farmers and fishers communities and the private sector in co management models bringing additional financing to biodiversity conservation in the 4 NRs (component 2, outcome 2.2.a. and 2.2.b). Likewise it is foreseen that the amended WPRHP will include a compensation scheme providing economic incentives for biodiversity conservation (component 3). The project will also contribute to the objective 2 of the GEF-5 Biodiversity Results Framework. In particular, the project will support Outcomes 2.1 and 2.2

through strengthening the provincial DLCC and NR wetlands coordination committees (component1) and the promotion of increased capacity in and awareness of the importance of conservation of the Wetlands in other sectors (Component 3 and 4). This will be complemented by the creation of legal instruments for the four NRs (component 2) and amendment of the WPRHP and alignment of sector policies with this amendment (component 3). Finally biodiversity conservation will be mainstreamed into eco-tourism, fisheries and plantation and farmland planning and management in co-management models to be scaled up in the last project year (component2).

d) Alignment with FAO Strategic Framework and Objectives

FAO has worked with other UN agencies in China in developing the United Nations Development Assistance Framework (UNDAF) for 2011-2015 under which one of the outcomes to be achieved, supported by this and other projects, is to strengthen the policy and implementation mechanisms to manage natural resources. FAO, together with other UN agencies in China, will implement programmes to strengthen government capacity to effectively manage land and water resources, enhance government capacity to conserve biodiversity and ecosystems, empower communities to increasingly benefit from the development of eco-based livelihood resources and strengthen government capacity to develop and implement policies that ensure compliance with environmental health and safety requirements.

In December 2012 The Government of China and FAO signed the Country Programme Framework (2012-2015). The present project will contribute to priority area 1 *Improving food security and nutrition*, outcome 1.1: *diversified agricultural production system covering animal husbandry, crop production, horticulture, and capture fisheries and aquaculture* of this strategy by supporting restoration of fish stocks in Dongting lake, introduction of an ecosystem approach to fisheries management, and the up-scaling of organic aquaculture with native species all contributing to increased income of local fisher communities. Likewise the project will contribute to priority area 4 *Promoting sustainable agro-ecological development and agricultural heritage conservation and utilization*, outcome 4.1: *enhanced sustainable agro-ecological development programmes, technologies and practices* by supporting biodiversity friendly cultivation practices in the DWE area.

FAO's Strategic Framework as reflected in the Organisation's 2014 – 2017 Medium-term Plan is shaped by a vision of a world free from hunger and malnutrition where food and agriculture contributes to improving the living standards of all, especially the poorest, in an economically, socially and environmentally sustainable manner. The Framework recognizes five Strategic Objectives (SO) that represent the main areas of work of FAO. The present project will through its multi-sectoral ecosystem approach to biodiversity friendly sustainable production activities be supporting the Strategic Objective 2 (SO 2), *Increase and improve provision of goods and services from agriculture, forestry and fisheries in a sustainable manner*. FAO will contribute to SO 2 through supporting the following four Organizational Outcomes all of which will be supported by the present project:

- Producers and natural resource managers adopt practices that increase and improve the provision of goods and services in agriculture, forestry and fisheries in a sustainable manner;
- Stakeholders in member countries strengthen governance – the laws, policies and

institutions that are needed to support producers in the transition to sustainable agricultural systems;

- Stakeholders adopt and implement international governance mechanisms needed to improve and increase provision of goods and services in agriculture, forestry and fisheries in a sustainable manner; and
- Stakeholders make evidence-based decisions in the planning and management of agriculture and natural resources to support the transition to sustainable agriculture through monitoring, statistics, assessment and analyses.

Of particular relevance for the contribution of the present project is SO 2's emphasis on a holistic approach across sectors including the promotion of more sustainable practices, more viable governance arrangements and evidence based decision making and its emphasis on the integration of the three pillars of sustainability (environmental, economic and social).

SECTION 2 – PROJECT FRAMEWORK AND EXPECTED RESULTS

2.1 PROJECT STRATEGY

The strategy of the project is to support a shift from a NR-by-NR biodiversity conservation approach, involving primarily the conservation sector (FDHP and NR bureaus), to a NR network and DWE biodiversity conservation and sustainable use approach involving all sectors impacting DWE biodiversity and ecosystem services. To take the conservation of DWE and its unique global important biodiversity to the next level it is important that conservation efforts is not only implemented by each NR but mainstreamed into key sectors using and threatening the sustainability of the DWE and its biodiversity. For this end, the project will support the development of key normative, planning and decision-support instruments for cross sector joint DWE planning and management. The project will also focus at bringing key sectors to the table (fisheries, sand mining, poplar and reed cultivation, paper mills, and hydroelectric plants, etc.) strengthening collaboration on medium and long term biodiversity conservation and sustainable use efforts under the leadership of the FDHP.

The NRs will be supported in working at a network level joining forces in strengthening capacities and management effectiveness and concrete actions for the improved conservation of flagship threatened species. The NRs will also seek collaboration with local communities and the private sector in exploring new models for co-management solving concrete biodiversity threat issues in a cost efficient manner with mutual benefits for threatened species and habitats and the local population. Likewise the project will support reaching out to the more general public raising awareness on the value of DWE biodiversity and services, current threats, and conservation and sustainable use measures. There will be a particular focus on educating younger generations through collaboration with middle school educational programmes in the DWE area and involvement of university students in summer volunteers conservation camps.

2.2 PROJECT OBJECTIVES

The goal of the proposed project is to secure the conservation of biodiversity of global importance in the Dongting Lake through strengthening existing management efforts and the promotion of the Wetland's long-term sustainable development. Specifically, the project objectives are to: (i) strengthen the existing institutional and policy framework; (ii) promote an integrated, ecosystem-wide planning and management approach; (iii) strengthen the existing network of wetland nature reserves; (iv) identify and demonstrate sustainable co-management models of DWE biodiversity and biodiversity friendly production practices to reduce human activity pressure on the Wetlands; and (v) increase institutional capacity and public awareness and support for wetlands conservation.

2.3 EXPECTED PROJECT OUTCOMES

Outcome 1.1: DLCC is fulfilling its function coordinating the implementation of the DWEMP and at least two key biodiversity threats addressed (sand mining threatening porpoises, poplar plantations, and/or un-sustainable fisheries) by the end of project.

Outcome 2.1a: Improvement in management effectiveness of NRs by the end of the project monitored through the Biodiversity (BD) management effectiveness tracking tool: (a) NR

management effectiveness assessment improved for: East Dongting Lake (DL) from 61 to 70; West DL from 54 to 70; South DL from 56 to 68; and Hengling from 53 to 66; (b) threat score decreased for: East DL from 56 to 47; West DL from 63 to 51; South DL from 57 to 50; and Hengling from 61 to 40

Outcome 2.1b: 50% increase in national and local governmental budget allocations to PA management

Outcome 2.2a: Improved biodiversity and endangered species indicators by the end of the project: (i) increase in total bird visitation by 10% in the four Dongting NRs; (ii) finless porpoise population maintained; (iii) lesser white-fronted goose population maintained; (iv) black stork population maintained; (v) 5% increase in Pere Davis deer population; (vi) Whistling Swan population maintained; (vii) increase from 2 to 5% appearance of Silver Fish in monitoring caches (ecosystem health indicator).

Baseline: (i) Total migratory bird visitation 104,000-130,000 (2008-2012); (ii) Finless porpoise: 100-150 in DWE (2011), ca. 800 total population; (iii) Lesser white-fronted goose (*Anser erythropus*): 18,000 in DWE (mostly in East DL NR) which is 50% of total global population; (iv) Black stork (*Ciconia nigra*): 23 in DWE (Dec. 2011), 24,000-44,000 global population; (v) Pere David's Deer (*Elaphurus Davidianus*): 25 in DWE (Jan 2012), 3000 global population; (vi) Whistling Swan (*Cygnus columbianus*): 800-1,000 in DWE (Nov-Dec 2011), 86,000 global population; and (vii) Silver fish (near endangered in IUCN Red List): 2% appearance rate in monitoring catches in DWE (2011)

Outcome 2.2.b: Improved income indicators for households (of which 60% are represented by women as the main participant and beneficiary)⁹ involved in co-management demonstration models (i) 320 farming households involved in bird-friendly rice production increasing their household income with at least 30% in East DL NR; (ii) 400 households involved in organic fish farming and 500 households involved in rights based fisheries¹⁰ co-management to support the restoration of fisheries resources increasing their income with at least 100% in Hengling NR experimental zone; (iii) 70 households incorporated in eco-tourism operations and bird habitat conservation increasing their income with at least 100% in West DL NR.

Outcome 3.1.a: GEF BD objective 2 tracking tool score on biodiversity conservation integration in sector policies and regulations increased from 17 to 23 (out of 36 possible score) for the sectors influencing on DWE

Outcome 3.1.b: Poplar plantation reduced by 20,000 ha by the end of the project.

Baseline: 400,000 ha

Outcome 4.1: Awareness among the local population on DWE biodiversity value, use and wetlands protection regulations increased to 30% over a 10% baseline.

⁹ Due to male migration out of the area, please see section 5.1

¹⁰ The rights-based approach to fisheries in the context of this project refers to reinforcing of local fisheries dependent communities claim for recognition in local and provincial policy and service provision and for legal protections and support for legitimate livelihood actions based on rights to access fisheries resources within established areas of the DWE under an ecosystem management approach. This approach linked to the rights will be further established during the project implementation linking responsibilities with protected rights.

Outcome 5.1: Project implementation based on results based management and increased receptivity and adoption of DWE approach to “mainstreaming” biodiversity conservation in sector planning both in China and elsewhere.

2.4 PROJECT COMPONENTS AND OUTPUTS

Project overview

To achieve the project objectives and expected outcomes the project has been structured in 5 components and various subcomponents as presented in table 1 and described in more details below.

Table 1: Components and subcomponents of the *Securing Biodiversity Conservation and Sustainable Use in China's Dongting Lake Protected Areas* project

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| <p>Component 1: Strengthening of institutional capacities for integrated monitoring and management of biodiversity in DWE</p> <p>1.1 Strengthening of the Dongting Lake Conservation Commission (DLCC)</p> <p>1.2 Biodiversity and ecosystem threat analysis</p> <p>1.3 Integrated DWE management and planning</p> <p>1.4 Integrated Information Management System (IIMS) on status of biodiversity, ecosystem services, and socioeconomic indicators</p> <p>Component 2: Strengthening of management effectiveness of DWE NRs network</p> <p>2.1 Local Administrative Measures for NR (AMNR) decrees</p> <p>2.2 Upgrading of NRs</p> <p>2.3 NR Management Plans (NRMPs)</p> <p>2.4 Strengthening of NR management capacities</p> <p>2.5 NR co-management models</p> <p>2.6 Conservation of flagship species</p> <p>Component 3: Mainstreaming of Conservation of biodiversity in key sectors in DWE</p> <p>3.1 Amendment of Wetland Protection Regulation of Hunan Province (WPRHP)</p> <p>3.2 Alignment of sector policies and regulations</p> <p>3.3 Strengthening capacities in enforcement of wetland conservation laws and regulations</p> <p>3.4 Strengthening capacities in biodiversity conservation practices in priority sectors</p> <p>Component 4: Environmental education and awareness</p> <p>4.1 DWE biodiversity communication and information material and infrastructure</p> <p>4.2 Special wetlands biodiversity campaigns and events</p> <p>4.3 DWE conservation and sustainable use curricula for middle school</p> <p>Component 5: Project M&E and information dissemination</p> <p>5.1 Project progress monitoring system</p> <p>5.2 Midterm and final evaluations</p> <p>5.2 Dissemination of project results</p> |
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Component 1: Strengthening of institutional capacities for integrated monitoring and management of biodiversity in DWE

The objective of component 1 is to strengthen the existing institutional framework for the inter-sectoral management of the DWE and implement an integrated planning process

addressing key threats on biodiversity. The planning process will be supported by a biodiversity and ecosystem status monitoring system allowing for continues adaptation of management and conservation strategies and policy decisions. This will be achieved through the following subcomponents:

1.1 Strengthening of the Dongting Lake Conservation Commission (DLCC)

The project will provide technical and process support to the FDHP, as the facilitator of inter-institutional processes, for the establishment of a permanent Secretariat of the DLCC and making the committee operational. In the first project year (PY1) FDHP will allocate office space and equipment to the Secretariat as well as second two part time staff to the Secretariat as a permanent arrangement. Through two DLCC workshops operations procedures and a five year work plan of the committee will be agreed including activities related to the development and implementation of the DWE management plan (DWEMP). Annual meetings and monitoring of the progress in the implementation of the work plan will be institutionalized to support the DWE inter-sectoral planning and management processes.

Output 1.1.1: DLCC (Dongting Lake Conservation Commission) strengthened by the end of the project with: i) a functioning secretariat in FDHP (two half-time staffs, office equipment and operations budget); ii) agreed operations procedures; iii) agreed five years work plan; and iii) at least one meeting per year held

1.2 Biodiversity and ecosystem threat analysis

In PY1 technical support will be provided for: i) an updating of the valuation (including socio-economic values) and status of DWE biodiversity and ecosystem services; ii) a diagnostic of impacts on biodiversity from different sectors and identification of response options; and iii) an evaluation of options and priorities for land and water use plans valuating biodiversity. These technical studies will be subject to consultations with local stakeholders, provincial sector agencies and technical focal groups. They will serve as the priority setting basis for the development of the DWEMP (see subcomponent 1.3 below) including the prioritization of actions to mitigate threats on global important DWE biodiversity and ecosystem services.

Output 1.1.2: Updated detailed biodiversity baseline and threat analysis by the end of PY1 including four technical reports on: a) DWE biodiversity and ecosystem services value and status; b) impacts on biodiversity from different sectors and response options; and c) options and priorities for land and water use plans valuating biodiversity

1.3 Integrated DWE management and planning

In PY1 and PY2 the project will provide technical assistance for the participatory development of the DWEMP. Under the lead of the DLCC the mission and specific objectives of the MP will be formulated through public consultations. Financial and economic feasibility analysis of prioritized alternative response measures and actions to mitigate threats on DWE biodiversity and ecosystem services will be undertaken in close consultation with local stakeholders from the involved sectors, provincial sector agencies, technical focal groups, and provincial decision makers. The plan will include an implementation monitoring system with SMART indicators to monitor the progress in achieving MP objectives, outcomes and outputs. A draft DWEMP will be shared with stakeholders via publication on government website and comments will be responded and incorporated in the final DWEMP to be approved by the DLCC by the end of PY3. The implementation of the plan and corresponding progress monitoring will be linked to the work programme of the DLCC and be initiated in PY4.

Output 1.1.3: Integrated DWE management plan (MP) incorporating valuation of biodiversity approved by DLCC by PY3 and under initial implementation by the end of the project.

1.4 Integrated Information Management System (IIMS) on status of biodiversity, ecosystem services, and socioeconomic indicators

To facilitate the provision of quality data and analysis for DWE management and decision making at municipal, province and NR levels, the project will provide technical support, training and equipment to design and make operational an IIMS platform integrating information from different sector institutions on status of biodiversity, ecosystem services and socioeconomic indicators as well as hydrological data linked to the regulation of the water level in DWE by the Three Gorges Dam. A focal point will be designated from each of the sector institutions, which will be participating in and providing data for the platform, including provincial departments of Environmental Protection, Water Resources, Fisheries, Forestry and NRs, and research institutions such as the Chinese Academy of Sciences Hunan Province. The group of focal points will discuss and determine data entries and technical staff from each institution will be trained in operating the IIMS. The baseline level data will be recorded in the IIMS in the beginning of PY2 and public access to information will be enabled under agreed level of information disclosure. From PY3 the IIMS will be updated with ongoing monitoring programs in coordination among the focal points. The project will also support the publication of the first two bi-annual status reports on DWE services and biodiversity; one in PY3 and one in PY5.

Output 1.1.4: DWE Integrated Information Management System (IIMS) on status of biodiversity, ecosystem services, and socioeconomic indicators is operating providing data and analysis for DWE management and decision-making at municipal, province and NR levels by PY2.

Component 2: Strengthening of management effectiveness of DWE NRs network

The objective of component 2 is to strengthen the management effectiveness of the four NRs in the DWE, improve the legal and financial sustainability of the network, identify and demonstrate sustainable co-management models of DWE NRs and biodiversity to reduce human pressure on the wetlands, and enhance the conservation of particular vulnerable global important species and their habitats. This will be achieved through the following subcomponents:

2.1 Local Administrative Measures for NR (AMNR) decrees

To strengthen the legal status of the DWE NRs the project will provide legal support for the preparation and logistical support for the consultation of three AMNR decrees one for each of East, South and Hengling DL NRs. As part of the preparation three surveys on AMNR will be conducted by a specialist team supported by the NRs and forestry bureaus and three AMNR will be drafted and consulted with local stakeholders and governments through 12 consultation and validation workshops. The validated AMNR will be presented to local governments (county or Municipal in the case of more than one county involved) for their proclamation of the AMNR decree by the end of PY2.

Output 2.1.1 Three local decrees on Administrative Measures for NR (AMNR), one for each of East, South and Hengling Dongting Lake (DL) NRs, proclaimed by the end of PY2 (facilitating increased local government fund allocations).

2.2 Upgrading of NRs

As another element in strengthening the legal and management status of the DWE NRs the project will provide technical assistance in preparing the required documentation for the upgrading of South DL NR from a provincial NR to a national NR and for the Hengling NR to become a RAMSAR site by the end of PY3. West DL NR, which is also expected to be upgraded from a provincial NR to a national NR during PY1, has already presented the required documentation and the application to the State Forest Administration. As part of the required documentation for both the South DL and Hengling NRs the biodiversity baseline survey will be updated and a NR master plan and a Ramsar information sheet will be completed for South DL NR and Hengling NR respectively.

Output 2.1.2: West Dongting Lake NR and South Dongting Lake NR are up-graded from provincial NRs to National NRs and Hengling NR to Ramsar site by the end of PY3 (facilitating increased national government fund allocations)

2.3 NR Management Plans (NRMPs)

To strengthen the NR management, planning and follow up on actions the project will provide technical assistance and support for consultations with local governments, communities and private stakeholders for the preparation of four five-years NRMPs, one for each of the NRs in the DWE network. The MPs will be developed by four NR staff formulation teams which will be on-the-job trained in NR planning and management supported by an NR management specialist. The formulation will include analysis of main threats and management weaknesses, definition of objectives and prioritisation of actions for the next five years. The management plans will be presented to local governments (East, South and Hengling DL NRMPs) and the FDHP (West DL NRMP) for approval by PY2. Subsequently, the progress in the implementation of the MPs will be monitored and work plans will be updated on an annual basis. The MPs for East DL and Hengling Lake NRs will in particular include zoning adjustment, co-management arrangements, and actions for habitat improvement. The MP for West DL NR will in particular include actions to strengthen the NR Management Bureau, co-management arrangements, and actions for habitat improvement. Likewise the MP for South DL NR will in particular focus on actions to strengthen the NR Management Bureau.

Output 2.1.3: Four five-years NR management plans (NRMP) updated for 2013-2018 and at least 20 NR staff trained in NR planning and management strengthening the DWE NR network

2.4 Strengthening of NR management capacities

This subcomponent will support the implementation of priority actions of the NRMPs through investments and technical assistance for capacity development. All four NRs will be supported with patrol and monitoring equipment to strengthen surveillance, and government co-financing will be invested in the construction of an animal rescue centre, bird watching corridor, and visitor centre in East DL NR, an office building in Hengling Lake NR, and an office building and an animal rescue centre in South DL NR. Capacities will be strengthened at the NR network level through: a) training tours for 20 (two trips of 10) NR staff to other NRs in China with good examples of co-management models, training tours for 16 NR staff to other NRs in China with good examples of eco-tourism activities, and secondment of 8 NR

staff for 1 month each to flagship examples of well managed wetlands NR in China; b) training course of 20 NR staff 6 days in public communication and environmental education and training course of 16 NR staff 1 day in ecotourism in NR; and c) training-by-doing of 8 NR staff developing projects for fund raising and setting up planning and monitoring mechanism for project implementation, and training-by-doing in the field (3 x 10days) of 28 NR staff in wetlands biodiversity monitoring and conservation.

Output 2.1.4: Capacities for NR management strengthened through: a) training of 100 NR staff in BD monitoring and conservation measures, eco-tourism in NRs, law enforcement and co-management mechanism, and public communication and awareness raising; and b) upgrading of infrastructure, patrol and monitoring equipment in three DL NRs (West, South and Hengling).

2.5 NR co-management models

This subcomponent will support the four NRs in developing four co-management demonstration models, which will both include technical assistance and investments (the latter financed by participating farmers and fishermen), to address priority threats from the local population's production activities on the conservation of biodiversity in NR core areas and experimental zones. The approach of the 4 models will in particular take into account the needs and inclusion of vulnerable groups, the application of participatory methodologies together with a clear gender strategy giving opportunities to rural women often left behind with the responsibility for farming and fishing activities while the men are migrating to the cities in search for jobs (please see section 5.1 for further details regarding social and gender sustainability of project activities). The four models will consist in:

- a) East DL NR experimental zone: This pilot demonstration will support the development of an agriculture integrated management model addressing the threat from vegetable production in the winter season reducing the area available for migratory winter bird feeding. In PY1 a detailed socio-economic and biodiversity feasibility study will be conducted of the establishment of land cultivation plans restoring winter vegetable production areas into paddy harvested fields, sustained by adding a market premium to the biodiversity friendly rice production. A preliminary economic, social and biodiversity feasibility study has been conducted, but needs to be complemented and updated. Initial discussions have already been held with rice producing enterprises with experience in biodiversity friendly rice production and markets. Under a formal agreement between all partners these enterprises will be invited to work in collaboration with local farmer communities, CAS, and East DL NR management bureau to develop and implement land cultivation plans incorporating the conservation of winter feeding areas for migratory birds. Two different approaches will be sought in accordance with the current land tenure and use in the experimental zone: one for the area under Jianxin State farm covering 170 ha.; and one for 30 ha cultivated by 20 individual farming households. Farmers will be trained and receive technical assistance in biodiversity friendly rice production and marketing in PY2-5 to support the implementation of the cultivation plans, and the biodiversity as well as socioeconomic outcomes of the implementation of the cultivation plans will be systematic monitored. In PY4 the winter feeding area conservation co-management model and lessons learned based on cultivation plans will be documented. If demonstrated successful the model will be expanded to 500 additional ha. and more than 300 households in PY4.

- b) South DL NR core area: This pilot will seek to identify solutions and incentives for reducing the reed and poplar cultivation, which is fragmenting habitats for water birds and other wild life. 10 years contracts have been signed with and compensations have been paid to poplar enterprises for cutting trees and not planting new trees (using the SFA wetland subsidy scheme). However, these contracts will end in 2014 and another solution is urgently needed. A participatory analysis with the involvement of poplar enterprises and reed farmers will be conducted in PY1 to identify options and incentives for them to engage in reduction of the reed cultivation and poplar plantation areas. Solution options and incentives could include engagement of the reed farm staff in the NR management, conservation easement (utilized by the Nature Conservancy) which would allow poplar plantation owners to retain control of the land and gain tax credits and other incentives in return for setting aside some of their land for conservation, and the establishment of a more long term compensation scheme for ecosystem services. During PY2-5 priority solutions and incentives will be implemented and monitored. In PY5 the reed cultivation and poplar plantation reduction measures and the co-management model with reed farmers will be assessed and documented for further up-scaling
- c) Hengling NR experimental zone: This pilot will support the development and scaling up of a co-management model with local fisheries communities to address illegal fishing and restore fisheries resources to conserve the porpoises population feeding on fish. The co-management strategy in this pilot will use a combination of two approaches: 1) organic aquaculture; and 2) an ecosystem approach to and rights based management of fisheries. These two approaches can potentially be scaled up to other DL NRs. Based on previous local experiences with organic aquaculture an economic and social feasibility study and environmental assessment will be conducted in PY1 and an investment plan and business model for organic aquaculture with native species (fish, eel, tortoise, etc.) will be developed with local stakeholders. A formal agreement on a business plan and its up-front financing will be negotiated and signed between fishermen corporative (200 households) providing investment resources, Hengling NR providing resources for technical assistance, and Qingtan township issuing the contract for the use of water resources. During PY2-5 the fish farmers will make the agreed investments in infrastructure and equipments and they will be trained in organic aquaculture practices, certification, marketing and business management to support the implementation of the agreed business plans. The socio-economic and environmental outcome of the implementation of the business plans will be monitored and the organic aquaculture model and lessons learned will be documented in PY4 and expanded to 200 additional households in PY5. To complement the Organic aquaculture sustainable fisheries management plan will be developed with local fishermen and fisheries bureau in PY1 based on an ecosystem approach and rights based management covering 800 ha. An agreement will be negotiated and signed between Xiangyin County Bureau of Fisheries, local fishermen communities (200 households), and Hengling NR. During PY2-5 fishermen, County Bureau of Fishery and Hengling NR staff will be trained in ecosystem and rights based co-management of fishery resources and biodiversity friendly fishing practices and equipment. The ecosystem and biodiversity outcomes of the implementation of fisheries co-management plan (increase in population of Silver fish, carps and porpoises) will be monitored and the fisheries co-management model and lessons learned will be documented in PY4 and expanded to 1 000 additional ha. and 300 households in PY5.
- d) West DL NR core area: This pilot will support the development and scaling up of a model for eco-tourism co-management as an alternative to illegal fishing disturbing the

birds which have a particular high concentration in this area because of diversified habitats. In PY1 the project will support the participatory development of a Bird Habitat Improvement and Eco-tourism Development Plan covering 60 ha. The plan will include identified needs of tourism facilities, organization and regulation of activities, and a model for eco tourism operations. Training of an initial 20 households in developing ecotourism tour operations applying bird-friendly practices will also be supported in PY1. The implementation of the plan will start in PY2 with construction of tourism facilities including bird watching room, tourism trails, knowledge boards, and floating bridges financed by government co-financing. An additional 50 local fishermen will be trained during PY2-3 and socio economic and biodiversity outcomes of the implementation of the eco-tourism development plan monitored. The eco-tourism and bird biodiversity co-management model and lessons learned will be documentation in PY5 and expanded to 1 000 additional ha. and 300 fishermen households.

Further to the upscaling in DWE of the demonstration pilots built into PY4 and PY5, it is expected that the models, if successful, will serve as examples of co-management solutions to concrete conflicts between biodiversity conservation and local production activities in other wetland ecosystems in China.

Output 2.2.1: Four demonstration models for NR co-management implemented: a) agriculture integrated management model restoring paddy harvested fields as winter bird feeding ground on 700 ha involving 320 households in East DL NR; b) reed and poplar management model in South DL NR; c) organic fish farming (involving 400 households) and ecosystem and rights based fisheries co-management (involving 500 households) models to support the restoration of fisheries resources and maintain the porpoises population in 1,800 ha in Hengling NR experimental zone; d) eco-tourism and bird habitat conservation model conserving 60 ha of birds habitat and 70 additional households involved in eco-tourism operations in West DL NR.

2.6 Conservation of flagship species

In a joint effort at the NR network level between the four NRs, this subcomponent will through technical assistance support concrete actions improving the conservation of five particular threatened flagship species with global importance living in the DWE: finless porpoise; lesser white-fronted goose; black stork; Pere David's Deer; and the Whistle Swan. In PY1 five species conservation action plans will be developed for DWE and collaboration will be established with conservation plans and actions for the selected species for other geographical areas they migrate to. The systematic population monitoring system, using proxy indicators where direct monitoring is not possible, currently existing for the East DL NR, will be expanded to South, West, and Hengling DL NRs and improved with a habitat monitoring component supported by a GIS data base. During PY2-5 the project will support the implementation of priority actions from the five conservation action plans including: habitat restoration and improvement linked to co-management models supported under output 2.2.1; mitigation of threats (poisoning, hunting, trapping); public awareness; and law enforcement. The populations and their habitats will be systematically monitored.

Output 2.2.2: Conservation of 5 flagship biodiversity species (finless porpoise, lesser white-fronted goose, black stork, Pere David's Deer, Whistle Swan) in a common effort among all NRs through: a) development and implementation of conservation action plan; b) restoration of 6,000 ha of habitat; c) systematic monitoring of population or proxy indicators for population size supported by a GIS data base.

Component 3: Mainstreaming of Conservation of biodiversity in key sectors in DWE

The objective of component 3 is to improve the enabling environment for DWE biodiversity conservation mainstreaming in policies and regulations and in production processes and practices. This will be achieved through the following subcomponents:

3.1 Amendment of Wetland Protection Regulation of Hunan Province (WPRHP)

This subcomponent will provide the technical support from an environmental legal specialist and natural resources economist to prepare and negotiate an amendment to the Wetlands Protection Regulation of Hunan Province (WPRHP). The amendment should include clear provisions for unified coordination and effective management of wetlands biodiversity and ecosystems and mechanisms for compensation for conservation of biodiversity and ecosystem services. The pre-negotiated amendment should be presented to the Provincial People's Congress by the end of PY3 and its final proclamation is expected in the beginning of PY4.

Output 3.1.1: Amendment of Wetland Protection Regulation of Hunan Province (WPRHP) presented to the Provincial People's Congress by PY3 including in particular provisions for: a) integrated management of wetland biodiversity and ecosystems; and b) compensation mechanism for conservation of wetlands biodiversity and ecosystem services.

3.2 Alignment of sector policies and regulations

Based on the negotiated and consulted amendment to the WPRHP (output 3.1.1) and the AMNR (output 2.1.2) this subcomponent will provide technical assistance and support sector workshops to discuss and negotiate the alignment of sector policies with the WPRHP and AMNR decrees. The sectors invited to participate will be the ones with particular conflicting policies and regulations with the new improved instruments supporting conservation and sustainable use of DWE biodiversity such as fisheries, reed and/or poplar plantations, and sand mining.

Output 3.1.2: At least two sector policies (fisheries, reed and/or poplar plantation) are aligned with WPRHP, the Integrated DWEMP and the four AMNR decrees and NRMPs at local and provincial level by the end of the project

3.3 Strengthening capacities in enforcement of wetland conservation laws and regulations

This subcomponent will provide training of 180 provincial and local government officers in enforcement of wetlands conservation and sustainable use regulations. The training will take place during PY3-5 allowing the training material and content to be built on the amended WPRHP (output 3.1.1), the AMNR decree (output 2.1.2), the NRMPs (output 2.1.2), and initial experience with co-management models (output 2.2.1). The training will strengthen the trainee's knowledge on wetlands conservation laws and regulations as well as practical skills in law enforcement.

Output 3.1.3: Practical skills of 360 provincial and local government officers in enforcement of wetland conservation and sustainable use regulations enhanced

3.4 Strengthening capacities in biodiversity conservation practices in priority sectors

This subcomponent will support study visits for provincial and local government officials and private sector representatives to learn practical solutions for wetlands biodiversity conservation implemented in other wetlands in China. For many of the current sector activities, causing threats to DWE biodiversity, technical solutions and biodiversity friendly practices do exist and are applied other places in China but managers lack knowledge of good examples to support decision-making. Solutions to be studied include biodiversity conservation measures and practices in fishery management, pollution control from paper mills, sand mining and land-use planning for reed and poplar plantations.

Output 3.1.4: Increased capacity of 40 provincial and local government officials and private sector representatives in development and implementation of biodiversity conservation measures and practices in fishery management, pollution control from paper mills, sand mining and land-use planning for reed and poplar plantations

Component 4: Environmental education and awareness

The objective of component 4 is to enhance the awareness and knowledge about DWE services and biodiversity values in the local population and visitors to the NRs to increase the support for conservation measures and regulations. This will be achieved through the following subcomponents:

4.1 DWE biodiversity communication and information material and infrastructure

This subcomponent will provide support for communications specialists to design and produce high quality DWE biodiversity communication and awareness raising materials and cover costs of expendable and non expendable procurement of information material and infrastructure. Thematic brochures and billboard signs will be designed distributed and set up respectively covering four key issues for public awareness on DWE biodiversity value and conservation measures: a) flagship species conservation; b) rules and regulations for protection and use of wetlands biodiversity; c) success stories on organic aquaculture, eco-tourism, ecosystem and rights based management of fisheries, and bird-friendly cultivation plan; and d) NR demarcation. Finally, infrastructure and displays of visitors and other education centres will be improved to enhance the positive experience of and access to quality and inspiring information for NR and DWE visitors. This will include: a) construction of three visitors and education centers of West, South and Hengling DL NRs financed by government co-financing; b) improvement of displays in the four centers of the DWE NRs; and c) upgrading of displays in Qingshan polder organic aquaculture success story exhibition hall in West DL NR.

Output 4.1.1: 50,000 brochures distributed and system of 20 billboard signs set up on: a) flagship species conservation; b) rules and regulations for protection and use of wetlands biodiversity; c) success stories on organic aquaculture, eco-tourism, ecosystem and rights based management of fisheries, and bird-friendly cultivation plan; and d) NR demarcation

Output 4.1.2: Infrastructure and display of visitors and other education centres improved including: a) construction of three visitors and education centers of West, South and Hengling DL NRs; b) improvement of displays in four centers; and c) upgrading of displays in Qingshan polder organic aquaculture success story exhibition hall (West DL NR)

4.2 Special wetlands biodiversity campaigns and events

This subcomponent will support a variety of special campaigns and events of which some have already proven to be effective in raising awareness on DWE services and biodiversity value and conservation measures and capture extra human resources for the conservation work in the NR network. These special campaigns and events have been done at a pilot basis, but will with the technical and logistical support from this subcomponent be improved in their design, planning and organization and institutionalized in the NR annual work plans and budgets. The special campaigns will include the celebration of special days such as annual Wetlands day, annual Bird week, and bi-annual Bird watching race. The special events will be targeted at attracting extra human resources to the conservation work in the NRs and at the same time serve as education of in particular young people on wetlands biodiversity and conservation measures through summer holidays university volunteers camps.

Output 4.1.3: Special campaign and events organized and conducted including: a) 20 summer holiday university volunteers camps in each of the four NRs; and b) 40-60 campaigns on special days such as annual Wetlands day, annual Bird week, bi-annual Bird watching race

4.3 DWE conservation and sustainable use curricula for middle school

To reach the younger generation living in the DWE area, which could also have a positive impact on the perception and behaviour of their parents, this subcomponent will provide technical support in PY1 for the development of a middle school curricula on the value of DWE biodiversity and services (including flood control and water cleaning qualities), threats and conservation and sustainable use measures. The curricula will be developed in close consultation with the provincial education department and introduced in 4 schools in PY2 and in 16 additional schools in PY3.

Output 4.1.4: Curricula on DWE biodiversity conservation and sustainable use included in 20 middle schools in counties and townships around the lake reaching 30,000 students.

Component 5: Project M&E and information dissemination

The objective of component 5 is to insure a systematic results-based monitoring and evaluation of project progress towards achieving project outputs and outcome targets as established in the Project Results Framework as well as promote the wider dissemination of project results for replication in other wetlands ecosystems and NR networks. For further details please see section 4.5 project monitoring, section 4.6 project evaluations, and section 4.7 communication of project results and visibility.

Output 5.1.1: Project monitoring system providing six-monthly reports on progress in achieving project outputs and outcomes

Output 5.1.2: Midterm and final evaluation reports

Output 5.1.3: Project “best-practices” and “lessons-learned” in relation to co-management models, integrated DWE management experience, mainstreaming of wetlands biodiversity conservation in sectors disseminated via publications, project website and others.

2.5 GLOBAL ENVIRONMENTAL BENEFITS

- Improvement in threat scores for biodiversity in the four NRs in DWE: East DL from 52 to 47; West DL from 61 to 51; South DL from 57 to 50; and Hengling stabilised at 40.

- Improved biodiversity and endangered species indicators by the end of the project: (i) increase in total bird visitation by 10% in the four Dongting NRs; (ii) finless porpoise population maintained; (iii) lesser white-fronted goose population maintained; (iv) black stork population maintained; (v) 5% increase in Pere Davis deer population; (vi) Whistling Swan population maintained; (vii) increase from 2 to 5% appearance of Silver Fish in monitoring caches (ecosystem health indicator).
Baseline: (i) Total migratory bird visitation 104,000-130,000 (2008-2012); (ii) Finless porpoise: 100-150 in DWE (2011), ca. 800 total population; (iii) Lesser white-fronted goose (*Anser erythropus*): 18,000 in DWE (mostly in East DL NR) which is 50% of total global population; (iv) Black stork (*ciconia nigra*): 23 in DWE (Dec. 2011), 24,000-34,000 East Asia population; (v) Pere David's Deer (*Elaphurus Davidianus*): 25 in DWE (Jan 2012), 3000 global population; (vi) Whistling Swan (*Cygnus columbianus*): 800-1,000 in DWE (Nov-Dec 2011), 86,000 global population; and (vii) Silver fish (near endangered in IUCN Red List): 2% appearance rate in monitoring catches in DWE (2011)
- 3,560 ha applying biodiversity friendly management practices in the DWE (700 ha under bird-friendly rice production, 1,800 ha under an ecosystem approach to fisheries management and organic aquaculture, and 1060 ha under ecotourism conserving birds habitats.
- Poplar plantation reduced by 20,000 ha reducing habitat fragmentation.
Baseline: 400,000 ha

2.6 COST EFFECTIVENESS (alternative strategies and approaches considered)

The ecosystem, NR-network and inter-sectoral approach of the project will be cost effective in the medium and long term compared to previous species-by-species and NR-by-NR approaches to biodiversity conservation in Dongting Lake with limited emphasis on creating an enabling institutional, policy and regulatory environment for cross sector coordination and involvement.

The project design builds on and integrate already existing efforts and investments and avoids duplication of funding between NRs and sectors. As such the project will not establish a parallel monitoring system for the health of the DWE operated by the FDHP and NRMBs but rather try to establish an exchange and coordination platform for already exiting monitoring done by different sectors through the IIMS. Likewise, the project will not focus at establishing new scattered pilots for sustainable use and co-management and conservation of DWE resources and biodiversity, but try to consolidate and upscale existing experiences in co-management models. The project could also have taken a more narrow approach in terms of strengthening NR monitoring and surveillance to achieve improved biodiversity conservation, however, the combination with awareness raising and co-management, involving local communities and the private sector, facilitates that also private funds will be invested in biodiversity friendly production practices, which will lead to better results at a lower cost.

The increased networking and management effectiveness among the four NRs promoted by the project in solving conservation and sustainable use challenges at the DWE level is also more cost efficient in terms of hectares and habitats covered than an approach where only the East Dongting Lake NR is supported as a demonstration model (which was a more appropriate approach when conservation efforts in the Lake were more incipient). Cost sharing of training and other NR capacity building expenses is also an important element built into the project design which will not only ensure an efficient use of GEF fund but also a

more efficient use of public funds for NRs in the medium and long term. The efficiency of the GEF investment is USD 6.7/ha covered by the project. In comparison the previous GEF/UNDP/SFA project invested USD 10.5/ha covered in East Dongting lake NR.

2.7 INNOVATIVENESS

The innovative elements of the project include moving biodiversity conservation from a challenge that only concerns the conservation sector (Forestry Department and NRs) to a joint inter-institutional challenge at an ecosystem level supported by the Province governor. This is innovative in the context of China even though similar approaches are emerging in other parts of the country. While China is leading on Organic aquaculture because of a thousand of years long tradition, the introduction of open catch fisheries management based on an ecosystem approach and exclusive rights is still not widely used in China and it will be the first time in Dongting lake that a such approach will be implemented and scaled. There are several NR co-management experiences in China, but in the context of DWE the project will for the first time try to consolidate exiting scattered pilots in co-management models to be scaled up. The awareness raising activities builds on and consolidates successful innovations from previous projects in particular in the area of special events.

SECTION 3 – FEASIBILITY (Fundamental dimensions for high quality delivery)

3.1 ENVIRONMENTAL IMPACT ASSESSMENT

Based on the project objective, outcomes and outputs no adverse environmental or social impacts are likely and it conforms to FAO’s pre-approved list of projects excluded from a detailed environmental assessment. On the contrary the project and the GEF resources invested are expected to have positive impacts on the sustainability of fisheries resources, DWE biodiversity conservation and sustainable use, and conservation of habitats for global threatened species. The investments in organic aquaculture will follow China’s standards and legislation for organic fish farming including that the activity must be in harmony with the surrounding aquatic ecosystems.

3.2 RISK MANAGEMENT

Project risks have been identified and analyzed during the full project preparation and mitigation measures have been incorporated in the project design (see section 3.2.1 below). With the support from and under the supervision of FAO the Division of Wildlife Protection (DWP) of the FDHP is responsible for the day-to-day management of these risks and the effective implementation of mitigation measures. FDHP/DWP is also responsible for monitoring the effectiveness of mitigation measures and adjusting mitigation strategies as needed and identify and manage any eventual new risks not foreseen during project development in dialogue with FAO and other concerned project partners.

The six-monthly Project Progress Report (see section 4.5.3) is the main tool for project risk monitoring and management. The reports include a section on systematic following up on identified risks and mitigation actions in previous reporting periods and another section for identification of eventual new risks or risks that still need attention, their rating and mitigation actions including by whom and by when they should be completed. FAO will monitor the project risk management closely and follow up if needed providing support for the adjustment and implementation of risk mitigation strategies. Reporting on risk monitoring and rating will also be part of the annual Project Implementation Review prepared by FAO and submitted to the GEF Secretariat (see section 4.5.3).

3.2.1 Risks and mitigation measures

Table 3.1 below summarizes all risks identified, their rating, and mitigation measures incorporated in the design of project components.

Table 3.1: Project risk, their rating and mitigation measures

| Risk type | Risk level | Mitigation measure |
|---|-------------------|--|
| The demanding and complex integrated DWEMP fails to get buy-in from economic sectors who are used to the business-as-usual sectoral planning approach | Medium | Through the DLCC capacities of the sectors will be build in integrated ecosystem management and planning and all sectors will be involved in threat analysis, and defining and prioritizing solution options to be included in the DWEMP. An important milestone included in the project’s Results Framework is the approval of the DWEMP by the provincial government which will support the buy-in of the provincial government institutions. During project preparation key stakeholders have shown widespread financial and political support to the project and the |

| | | |
|--|--------|---|
| | | establishment of an integrated DWE management and planning approach. These include at the national level the Ministry of Finance and at the provincial level the Departments of Finance and Forestry as well as municipalities at the local level. |
| Unwillingness of production sectors to adopt biodiversity friendly practices in policies and development plans and the management and use of DWE resources | Medium | This risk will be mitigated through awareness raising and capacity building in adverse impacts and threats on DWE services and biodiversity and practical solution options. Local farmers and fishery communities and private sector companies will be involved in the implementation of co-management models seeking sustainable co-benefits for local socio-economic conditions and biodiversity conservation. Also public decision makers will be addressed in awareness raising and training activities to promote biodiversity valuation in sector development policies, plans and regulations. This risk has also been partly mitigated by a recent shift in national government priorities beginning in 2007 placing greater emphasis on environmental quality. |
| The amendment of the WPRHP will be blocked by some sectors with conflicting economic interest | Low | During project preparation wide support to an amendment of the WPRHP was confirmed. The amendment will be widely consulted in the DLCC to insure consensus has been achieved before it is submitted for approval. |
| Some institutions important for the implementation of the IIMS may be reluctant to engaging in information sharing which could be a sensitive issue | Low | The enabling environment for all key institutions participation will be established through the DLCC and negotiation for the conditions for information sharing will be done. The system may start operating with all institutions interested from the beginning and then link in more reluctant institutions later, when the benefit of the platform has been proved. |
| Climatic change | Medium | The middle Yangtze River Basin, which encompasses the Dongting Lake region, is subject to extreme climate events (primarily precipitation and droughts), which appear to have increased in both intensity and frequency in recent years. These events are projected to continue or increase under most future climate change scenarios and will likely adversely impact the DWE and component habitats and biodiversity that it supports as well as the livelihoods of community who depend on its resources. By strengthening management and improving the environmental “health” of the Wetlands, the project will help build the ecosystem’s resilience to climate change. Providing support to local communities through sustainable/alternative livelihoods will enable them to better cope with climate change impacts. |

3.2.2 Fiduciary risk analysis and mitigation measures

China’s overall fiduciary environment was in the World Bank Country Partnership Strategy (CPS) with China 2009-2012 characterized as improving with some weaknesses as follows. Procurement of goods and works seemed to be done through competitive transparent bidding processes, but the contracting of consultants was assessed to be not always competitive but more based on already established relationships with research institutions than ensuring that a consultant with the correct qualifications able to deliver quality products is hired for the job. The financial management was assessed to be of medium quality. As a consequence the World Bank (WB) has the last five years provided substantial training of the Ministry of Finance (MOF) staff in public financial management and supervision complying with international acceptable standards. Project financial management is now undertaken in

accordance with Circular 13 issued by the MOF for all donor funds. Further, the China National Audit Office (CNAO) Foreign Funds Application Audit Department conducts audits of projects. CNAO is also increasing its focus on performance audits and assessment of sustainable development. The results of the project financial and performance audits are now made available to the public. The WB CPS with China 2013-2016 states that the Bank will continue to support greater use of country systems for financial management, procurement, contracting, monitoring and control. The WB and the Asian Development Bank are working together to help harmonize procurement legislation and prepare model bidding documents. The Governments own systems for financial management is already harmonized with international fiduciary standards and best practices. The DWE Project to be executed by the FDHP will benefit from these improved capacities and instruments at the national level.

As part of the preparation of the DWE Project an assessment of FDHP's fiduciary standards and related risks for the project execution were conducted including FDHP's capacities to comply with financial, procurement and project monitoring and reporting and the overall fiduciary risk was rated as very low. The full assessment is available on FAO Field Project Management Information System (FPMIS). The FDHP and in particular the Division of Wildlife Protection (DWP) has previous executed various projects financed by multilateral and bilateral donors which has contributed to its high fiduciary standards and capacities. These operations include: i) Improvement of Oil Tea Plantation and Afforestation Project (1982-1988, USD 1 million provided by FAO/WFP); ii) Hunan Biological Afforestation Project in Dongting Lake Region (phase 1: 1998-2009, phase 2: 2009-2013, and phase 3: Loan Project 2013-2018 (under preparation), USD 42 million financed by the German Development Cooperation KfW); iii) Forest Sustainable Development Project (2000-2009, Euro 5 million financed by the European Union and USD 2 million financed by the World Bank); and iv) Wetland Biodiversity Conservation and Sustainable Use in China (2000-2009, USD 2 million financed by GEF with UNDP as the implementing agency).

These projects have all been executed by FDHP/DWP staffs which have been very stable the last 15 years allowing for sustainability of built capacities and project management structures and clear definitions of tasks of the various staff involved. In particular the UNDP/GEF wetlands conservation project has made FDHP/DWP staff familiar with monitoring and reporting requirements and procedures related to GEF projects. FDHP uses separate systems for project financial planning and budgeting management for projects financed by external donors in line with the project implementation manual in each case. Financial management software (programmed excel spreadsheet) is used for keeping the daily expenditure records and for establishing the financial summary and balance sheets for financial reports. Supported by UNDP, FDHP has adopted International Accounting Standard-IAS and International Public Sector Accounting Standards (IPSAS) in its project accounting system which emphasize the transparency and accountability of public sector investment. Financial management was performed satisfactory by FDHP in the UNDP/GEF project. Also procurement and contracting is performed in accordance with international standards ensuring transparency, competitiveness and cost-effective use of public funds. The FDHP has an independent internal audit department performing annual audits of projects and external audits are performed by the CNAO.

In relation to project planning, monitoring and reporting minor deficiencies were identified in the monitoring and follow up with technical support of activities executed by the NRs. Also minor weaknesses were detected in classification and management of hard copies of the project related documents as part of the project's information management system. The

assessment also flags the funds flow via MOF and the Hunan Province Finance Department (HPFD), foreseen for this project (see section 4.2 below), as a potential risk for delays in project execution. In general, even though FDHP/DWP staffs have high capacity in financial, procurement and project management and reporting, they will need to be trained in FAO formats and procedures and also MOF procedures in relation to the transfer and management of funds.

To mitigate the minor fiduciary risks identified in the fiduciary risk assessment a Mitigation Plan for Fiduciary Risks has been agreed between the FAO Representation in China and the FDHP including deadlines for actions to be taken linked to funds transfer as presented in table 3.2 below:

Table 3.2: Mitigation plan for fiduciary risks

| Identified risks | Causes | Impacts | Mitigation measures and actions for correction |
|---|--|--|---|
| Funds Flow | Fund flow through HPFD | Might delay the fund flow from FAO to FDHP and NRs Risk is moderate and manageable | FAO, FDHP will coordinate with HPFD on the fund transfer issues and sign a Tripartite Project Execution Agreement between FAO, FDHP and HPFD for ensuring the timely fund flow and effective disbursement |
| Accounting Policies and financial formats and Procedures | Change of GEF Agency from UNDP to FAO FDHP/DWP staff are unfamiliar with policies, procedures, and formats of FAO | Reduce the accounting and financial management efficiency of FDHP Risk is moderate and manageable | FAO and FDHP will sign a Project Execution Agreement with specific description of the agreed policies, procedures and responsibilities of each party to ensure smooth implementation. FDHP/DWP should prepare a Project Implementation Manual (PIM) based on the project Executing Agreement signed by FAO, MOF and FDHP with more detail description on accounting and financial management and reporting procedures and steps aligned to FAO and MOF policies, and regulations. The PIM shall also include who to report to in case of suspicion of frauds, waste, or misuse of GEF funds and details responsibilities in the daily management within FDHP/DWP. The PIM should be submitted and cleared by FAO. Time of action: before first disbursement. FAO and MOF will provide training of FDHP/DWP financial management staff on FAO and MOF account and financial management policies, procedures, reporting formats, accounting methodologies, etc. Time of action: Before second disbursement. |
| Reporting and Monitoring | Change of GEF Agency from UNDP to FAO FDHP/DWP staff are unfamiliar with, reporting formats and procedures for project progress | May cause difficulty and problems in the project initiating period Moderate risk, can be mitigated through training | Incorporate detailed roles and responsibilities (putting emphasis on FDHP/DWP responsibilities for filed supervision visits to give technical support to NRs and activities on-the-ground achieve quality project outputs and outcomes), formats and steps for project progress monitoring into the PIM. Time of action: before first disbursement. FAO training of FDHP/DWP staff in FAO |

| | | | |
|------------------------------------|---|---|--|
| | monitoring | | project monitoring and progress reporting based on Results Based Management (RBM). Time of action: Before second disbursement. |
| Project Information Systems | Project documents and reports are not systematically managed, categorized and unified | Affect the information sharing and preparation of project audits and evaluation reports | FDHP/DWP should: i) unify the file and document management and appoint one responsible staff; ii) reclassify previous project documents in the current files; and iii) establish a user-friendly unified document management catalogue and document retrieve list. Time of action: Before second disbursement. |

SECTION 4 – IMPLEMENTATION AND MANAGEMENT ARRANGEMENTS

4.1 INSTITUTIONAL ARRANGEMENTS

The Project will be a provincial project with the participation of provincial and local government bureaus, NR Administrative Bureaus, and the communities located in the DWE area. The Forestry Department of Hunan Province (FDHP) will be the lead government counterpart and Executing Agency with overall responsibility for the Project and ensuring coordination and collaboration between the four NR Administrative Bureaus, other provincial and local governments bureaus, and local communities and the Project's five components. The FDHP is a governmental line agency, directly under the administration of the Hunan Provincial Government. Its mandate includes management of forest resources, conservation and protection of wetland and forestry biodiversity, and wildlife protection.

The FDHP coordinating leadership of the project will be primarily through its Division of Wildlife Protection (DWP/FDHP) which is responsible for: (i) administrating, supervising and guiding conservation, management and sustainable use of land and wetland wildlife and biodiversity; (ii) coordinating the implementation of the international agreement on protection and conservation of endangered wildlife, biodiversity and wetland protection; (iii) administration and inspection of the import and export of wildlife and relevant products; (iv) drafting policies, regulations and technical documents for protection and management of wild animals and plants in the province; (v) reviewing feasibility reports and applications, approving the establishment, and guiding and supervising the creation and management of forest and wetland NRs in the province; (vi) organizing and guiding the planning of management activities in the NRs and drafting relevant technical guidelines and regulations; (vii) coordinating and supervising the enforcement of forest and wetland protection law and sanctioning law violation cases; (viii) provincial natural forest protection planning and administration; (ix) implementation and coordination of international wild animal and plant protection projects; and (x) administrating the establishment and operation of wildlife rescue stations and centres in the province.

The FDHP will be responsible, together with FAO, for providing technical assistance, supervision and monitoring of the project components. In addition FDHP will also be responsible for supporting technical outputs under component 1 and 3 including facilitating activities supporting: (i) the strengthening of the Dongting Lake Conservation Commission (DLCC); (ii) the updating of the biodiversity and ecosystem baseline and threat analysis; (iii) the development and implementation of the integrated DWE management plan; (iv) The establishment and operation of the Integrated Information Management System (IIMS) on status of biodiversity, ecosystem services, and socioeconomic indicators; (v) development and approval of the amendment of the Wetland Protection Regulation of Hunan Province and subsequent alignment of sector policies and regulations; and (vi) the strengthening of capacities in enforcement of wetland conservation laws and regulations, and in biodiversity conservation practices in priority sectors.

Activities in the four NRs, component 2 and 4, will be overseen by the respective NRMBs whom will be co-executing partners. The NRMBs have primary responsibilities for managing the NRs including development and implementation of NR management plans, biodiversity conservation surveillance and monitoring, and co-management with local communities. The NRMBs are directly under the FDHP but must also operate in accordance with municipal and

county administrative decrees. The Forestry and Fisheries Administrations of Yueyang, Changde, and Yiyang municipalities and of Xiangyin county are as such important partners for the activities to be implemented in NR core and experimental zones. The four NRMBs will have the main responsibility for coordinating field level activities in collaboration with local governments, communities and the private sector.

FAO and FDHP will work in close collaboration with executing agencies of other projects to identify opportunities and facilitate mechanisms to achieve synergies with relevant GEF-supported projects and projects supported by other donors or the Chinese government. These efforts will be facilitated through: (i) informal communications between the GEF Agencies; (ii) sharing of data and dissemination materials between projects; and (iii) strengthening of the DLCC and other existing fora composed of representatives of government agencies, private sector and civil society to address issues of common concern that effect the ecological health and productivity of the DWE. To ensure that existing opportunities from coordination and collaboration between different initiatives are realized explicit coordination requirements have been included in the Project Management Office's scope of work (see below). Inter-agency and project coordination will be facilitated by FAO's participation in the CBPFA partner roundtable and the GEF5 UNDP/China Wetlands Programme, project staff participation in relevant public fora, cross-site visits, exchange of information, postings on the project website and mailings of relevant publications and newsletter. In particular the project should seek coordination and exchange with the following institutions and initiatives:

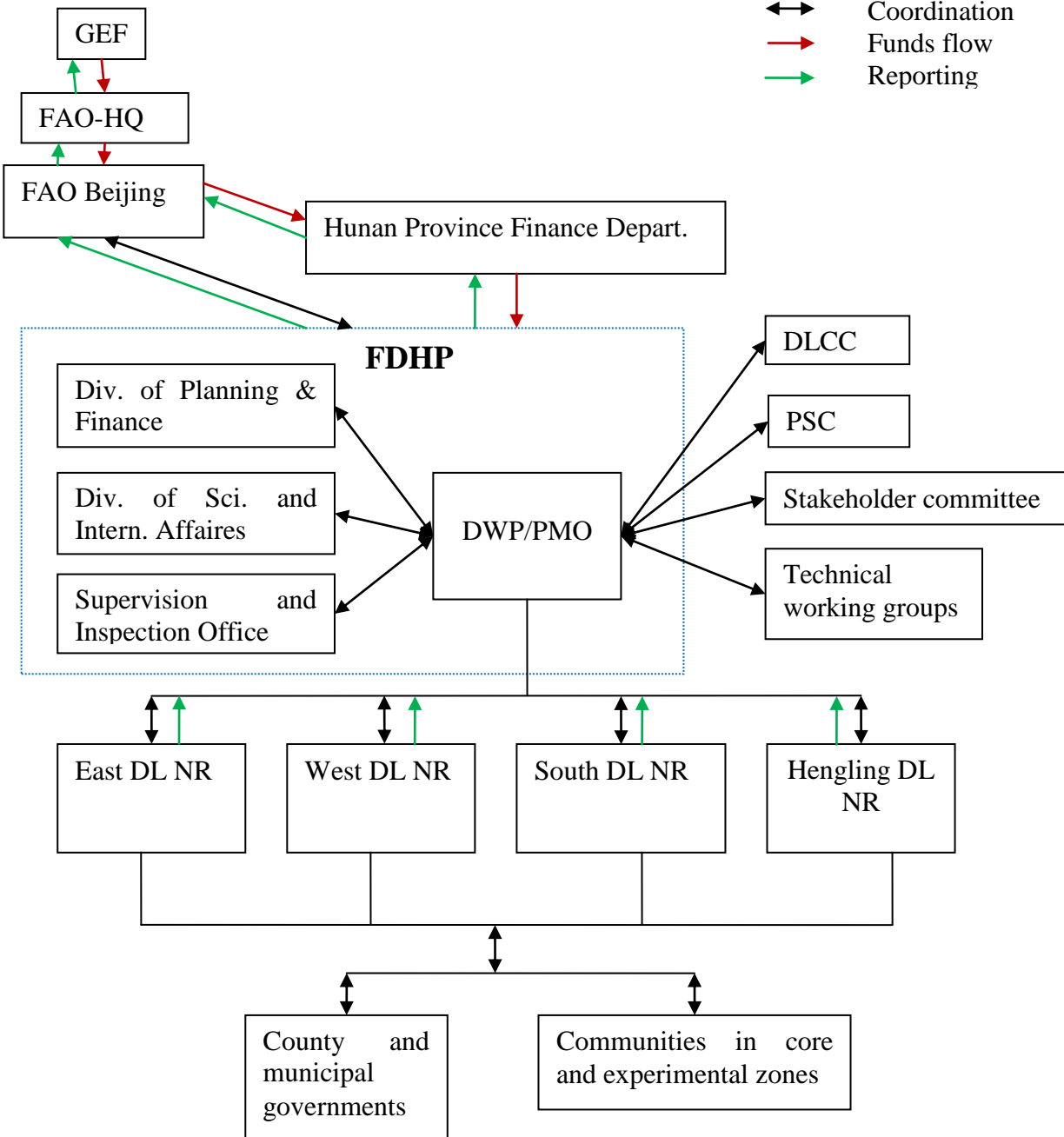
- The NR strengthening programme initiated in 2006 by the SFA and covering China's 1,800 NRs. East Dongting Lake NR is selected among 51 pilot NRs demonstrating "best practices". Through this initiative project supported success practices supported by the project such as the co-management models will be disseminated to other NRs in China
- The World Wildlife Fund (WWF) China ongoing program with Hunan Province in support of integrated river basin management (IRBM) in the middle and lower Yangtze ("Partnership for a Living Yangtze") which could benefit from coordination of activities with the present project for the integrated management of the DWE.
- The WWF-China, CTGPC and Ministry of Water Resources partnership on monitoring of TGD's impacts on biodiversity, protocols for sustainable hydropower management and environmental flows. Coordination and complementarities with this initiative is very important for the success of the present project because of its potential positive impact on the distorted hydrological cycle in the DWE its services and biodiversity.
- Sino-German Project on Wetland Biodiversity Conservation in China (2010-2014), which can provide lessons learned and best practices to the project.
- The six wetlands projects under the GEF5 UNDP/China Wetlands Programme including in particular the FAO supported project "Piloting Provincial-level Wetland PA System in Jiangxi Province" which has the Poyang Lake downstream from the DWE as particular focus for strengthening NR management, and conservation actions with local communities. FAO will facilitate the coordination and exchange between the Wetlands programme, in particular the Poyang Lake project, and the DWE project through coordination with UNDP as the lead agency for the Wetlands programme, facilitation of exchange visit between the Poyang Lake and the DWE project, and ensuring the exchange of lessons learned and good practices between both projects.
- The FAO/GEF State Oceanic Administration of China supported project "Demonstration of Estuarine Biodiversity Conservation, Restoration and Protected

Area Networking in China”. Also in this case FAO will facilitate the coordination and exchange between the two projects.

4.2 IMPLEMENTATION ARRANGEMENTS

The Food and Agriculture Organization (FAO) will be the GEF Agency responsible for supervision, and provision of technical guidance during the implementation of the project. The Executing Partner (EP) responsible for the project execution will be the People’s Republic of China (PRC) represented by the Forestry Department of Hunan Province (FDHP). Specifically, the Project will be implemented through the Division of Wildlife Protection (DWP/FDHP) of the FDHP and the creation of a Project Management Office (PMO). The four NRMBs for West, East, South and Hengling Dongting Lake NRs will be co-executing partners supporting the day-to-day operations of activities supported in the NR core and experimental zones. A Project Steering Committee (PSC) will be set up to provide oversight of and coordinate the planning of project implementation (see below). Stakeholder committees and technical working groups will be established as needed under the different components. The Project will be managed through the institutional structure depicted in Figure 4.1 below.

Figure 4.1. Institutional Arrangements for Implementation of the project *Securing Biodiversity Conservation and Sustainable Use in China's Dongting Lake Protected Area*



The roles and responsibilities of the main institutional units involved in project implementation are the following:

National level

Ministry of Finance (MOF) is the GEF Operational Focal point of China responsible for coordinating the programming of GEF resources and overseeing the China GEF portfolio with the GEF Agencies. MOF’s specific responsibilities will be: monitoring and review of annual Project Implementation Review Reports and organization of post project impact and

evaluation studies (national evaluation of project) which will be shared with all project partners.

Provincial level

Hunan Province Finance Department (HPFD) will receive the GEF project funds from FAO on behalf of the Chinese Government in a special separate grant account and forward the funds on to FDHP. The HPFD is a member of the DLCC and will participate in project oversight and support fund availability for the committed co-financing.

Forestry Department Hunan Province (FDHP) will be the **project Executing Partner** directly responsible for technical implementation of project activities, day-to-day monitoring as well as financial management and purchase of goods, minor works, and services (procurement). The Deputy Director General of FDHP will chair the Project Steering Committee and annual project review and planning meetings. FDHP will enter into an Execution Agreement with FAO allowing for the purchase of goods, minor works, and services needed to execute the project. FAO will ensure that the FDHP rules and procedures for project execution are acceptable in accordance with FAO rules and regulations and GEF minimum fiduciary standards, and FDHP will follow in particular rules defined in the Execution Agreement. The Execution Agreement will outline in details the roles and responsibilities of FDHP and procedures with respect to financial management, procurement, recruitment, project progress reporting, financial reporting and audit, copyright, and other legal aspects of collaboration. A detailed Project Implementation Manual (PIM) will be prepared by the HPFD and cleared by FAO before the first transfer of funds. The Manual will establish rules, detailed procedures and responsibilities in relation to all aspects of the project operation based on the Execution Agreement, rules and regulations of the FDHP, and financial rules and regulations of the HPFD.

FDHP will use its own financial management, output and outcome monitoring, and procurement systems and procedures adjusted to FAO Rules and GEF minimum fiduciary standards. FDHP will submit procurement and contract documentation for prior clearance by FAO (see sections 4.3.6 and 4.4 below), and six-monthly statements of expenditures and cash transfer requests based on the updated AWP/B including a detailed budget for the following six months period, and annual audited financial statements to the FAO Representation in China. Further, FDHP will prepare and submit to the FAO Representation Project Progress Reports (PPR), Annual Work Plans and Budgets (AWP/B), and all documentation needed for the preparation of the annual Project Implementation Review (PIR) (see section 4.5.3 below).

The institutional arrangements for project implementation provide for the use of the existing structure within the FDHP. The FDHP's participation will be primarily through its Division of DWP/FDHP supported by its Division of Planning and Finance, Division of Science and International Affairs, and its Supervision and Inspection Office.

- Division of Wildlife Protection (DWP/FDHP) is the focal point for all formal exchanges and collaboration with international agencies in relation to implementation and coordination of wild animal and plant protection projects with international support. The Division will be responsible for: (i) planning and monitoring of the technical aspects of the Project, including regular visits to project intervention areas and monitoring progress in achieving project outcomes and outputs, preparation and submission to FAO of periodic progress and technical reports, and regular consultations with beneficiaries and contractors; (ii) developing and reviewing work plans; (iii) 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 FAO China Office); (iv) maintaining a separate project account for project funds; (v) ensuring funds are used in accordance with agreed work plans and project budget; (vi) preparing, authorizing and adjusting commitments and expenditures; (vii) ensuring timely disbursements, financial recording and reporting against output based budgets and work plans (in English); (viii) managing and maintaining budgets, including tracking commitments, expenditures and planned expenditures against output based budget and work plan (in English); (ix) coordinating the financing from FAO/GEF with that from other sources; (x) resource mobilization of baseline and co-finance as contemplated in the project document; and (xi) maintaining productive, regular and professional communication with FAO and other project stakeholders to ensure the smooth progress of project implementation.

- **Division of Planning and Finance** will be responsible for the oversight of the financial management of the project in compliance with financial rules and procedures of the FDHP and MOF for international funded projects and rules and procedures detailed in the project Execution Agreement and the PIM. The Division will certify all financial reports on the expenditure, planning and request for transfer of project funds. Further, the Division will provide support in raising co-financing and audits of the project.

- **Division of Science and International Affairs** will support the project in review of technical studies for the biodiversity and ecosystem status and threat analysis (output 1.1.2) including: i) an updating of the valuation and status of DWE biodiversity and ecosystem services; ii) a diagnostic of impacts on biodiversity from different sectors and identification of response options; and iii) an evaluation of options and priorities for land and water use plans valuating biodiversity. Further, the Division will provide support in sending official invitation letters to international consultants on behalf of the FDHP.

- **Supervision and Inspection Office** will be responsible for supervision of staff performance and the independent annual internal audit of the project in collaboration with the Division of Planning and Finance and facilitate external audits of the project (see section 4.3.6 below). The procedures and contents to be audited are following the governmental public project auditing regulations.

Project Management Office (PMO) will be established in **DWP/FDHP** in Changsha and will be responsible for day-to-day project operations. The role of the PMO will be, in close consultation with the PSC and TWG members (see below), to ensure the coordination and execution of the Project through the timely and efficient implementation of annual work plans. The PMO will act as secretariat to the PSC. It will coordinate work and follow closely the implementation of project activities, handle day-to-day project issues and requirements, coordinate project interventions with other on-going activities and ensure a high degree of provincial and local inter-institutional collaboration, monitor project progress and ensure the timely delivery of inputs and outputs. It will organize workshops and annual meetings for the Project for monitoring project progress and develop work plans with detailed budget for the next year to be approved by the PSC. It will be responsible for implementing the project's M&E plan, managing its monitoring system and communication programme, the elaboration of six-monthly Project Progress and Financial reports and assist in the preparation of the annual Project Implementation Review (PIR) and midterm and final evaluations. Project Progress Reports on implemented activities and progress in achieving project outputs and outcomes, and financial statements of expenditures and status for the previous year will be

submitted together with the Annual Work Plan and detailed Budget (AWP/B) to the PSC and FAO via DWP's Project Director.

The PMO will consist of the following DWP/FDHP staff financed by the FDHP co-financing: (i) a part time Project Director (PD) in charge of overall coordination and supervision of the project and coordination with other province sector departments; (ii) a part-time Financial Manager in charge of preparing detailed budgets for cash transfer requests based on the AWP/B and project account cash balance, keeping the financial records and regular review of the project account, reviewing the receipts and financial reports submitted by NRs and preparing six-monthly financial statement of expenditures, preparing the personnel and services contracting and procurement documents and participate in contracting and procurement processes including of submission of documentation to FAO for ex-antes clearances, and preparing relevant documents for internal and external financial audits; (iii) a full-time Technical Manager in charge of project daily management and technical supervision including, preparing AWP/B and allocating tasks to NRs, preparing TOR and technical requirements for consultancy services contracting documents and material and equipment procurement documents, providing technical supervision and guidance to the NR in implementing project activities, conducting regular field supervision visits and provide on-site guidance to NR technical staff, day-to-day coordination and communication with NR staff in charge of the GEF project, and preparing the project progress reports; (iv) a part time Cashier and Document Manager in charge of managing cash money expenditures, managing project information and documentation, and distribution of project reports, news letter and training materials to relevant stakeholders; and (v) a part time Monitoring and Evaluations officer in charge of project M&E, conducting regularly field M&E visits to NR and project sites, assisting the Technical Manager in preparing six-monthly Project Progress Reports monitoring progress in achieving project outputs and outcome indicators, and assisting the Financial Manager in preparing financial reports. To further strengthen the PMO the GEF resources will finance a part time Administrative Assistance and a part time Project Technical Advisor that support the Technical Manager with technical and operational guidance, assist in the preparation of the English version of Project Progress Reports, monitor the progress in achieving project outcome and output indicators, and propose eventual shifts in project implementation strategies if the project is not performing as planned. FDHP will also provide office space, equipment and utilities and finance logistics and part of travel as a counterpart contribution to project management.

NR Co-executing partners. The four NR Administrative Bureaus for West, East, South and Hengling DL NRs will be co-executing partners supporting the day-to-day operations of activities supported in the NR core and experimental zones in component 2 and 4. The NR Administrative Bureaus will be responsible for: (i) execution and coordination of project activities, via Stakeholder Committees (see below), with local counties and municipal governments as well as key stakeholders for the success of co-management models to be implemented in component 2 including local farming and fishing communities, state farms and the private sector involved in poplar plantation, reed cultivation, and bird-friendly rice production; (ii) participating in project workshops and annual meetings on monitoring project progress and assist the development of AWP/B for the next year in particular for component 2 and 4; (iii) monitoring project activities and progress in achieving project outputs and outcomes in each NR and provide timely inputs to six-monthly project progress and financial reports.

Each NR Administrative Bureaus will appoint a NR Project Manager and enter into an agreement with the FDHP allowing for the reimbursement funds for the purchase of minor

expendable goods, minor works, and services in relation to workshops and meetings needed to execute project activities in each NR. Purchase of non-expendable equipment and contracting of local and national consultancy services will be done by the FDHP/PMO including the management of related contracts. The NR Administrative Bureaus will be responsible for keeping financial records and original receipts and documentation for each expenditure for project activities financed by GEF funds and applying the PIM for all contracting and procurement processes, financial management and project monitoring. Funds will be transferred from the FDHP to the NRs based on six-monthly updates of the AWP and detailed budget, the statement of expenditures of previous transferred funds, and progress reports on achieving planned project outputs.

GEF Agency

The Food and Agriculture Organization (FAO) will be the GEF Agency of the Project. FAO will provide supervision and technical guidance services during the project execution. Administration of the GEF grant will be in compliance with the rules and procedures of FAO, and in accordance with the agreement between FAO and the GEF Trustee.

As the GEF agency for the project, FAO will:

- Manage and disburse funds from GEF in accordance with the rules and procedures of FAO;
- Enter into an Execution Agreement with Forestry Department Hunan Province as the national executing agency for the provision of services to the project and the Finance Department of Hunan Province which will be the funds recipient;
- Oversee project implementation in accordance with the project document, work plans, budgets, agreements with co-financiers and the rules and procedures of FAO;
- Provide technical guidance to ensure that appropriate technical quality is applied to all activities concerned biodiversity conservation, restoration and NR networking and co-management in the Dongting Lake wetlands ecosystem;
- Carry out at least one supervision mission per year; and
- Report to the GEF Secretariat and Evaluation Office, through the annual Project Implementation Review, on project progress and provide financial reports to the GEF Trustee.

The FAO Representative in China, assisted by the FAO Project Task Manager (see below), will be the Budget Holder (BH) and responsible for the management of the GEF resources and all aspects in the Execution Agreement that will be signed between FAO and FDHP. As a first step in project start-up, the FAO Representation in China will establish an interdisciplinary Project Task Force within FAO to guide the implementation of the project. The FAO Representative will in particular be responsible for: (1) disbursement of GEF funds to FDHP based on satisfactory reporting on project progress and statement of expenditures (see section 4.3.6 on disbursements and section 4.5.3 on reporting); (2) review of financial reports and supervision of FDHP's financial management and use of resources (see section 4.3.6 on financial management and section 4.5.3 on reporting), including clearance of Budget Revisions in consultation with the FAO Lead Technical Officer (LTO see below) for submission to TCI/GEF Coordination Unit for approval; and (3) supervision of contracting and procurement processes executed by FDHP (see section 4.4 below).

The FAO Representative will, in consultation with the FAO Lead Technical Officer (LTO), Lead Technical Unit (LTU) (see below), and the GEF Coordination Unit, give no-objection to

AWP/B submitted by FDHP. Disbursement of GEF funds for the provision of goods, minor works, and services to the project will be carried out by the FAO Representative in accordance with the provisions of the Execution Agreement. The disbursement will be carried out upon submission by the FDHP to the FAO Representative of six-monthly financial statements of expenditures, procurement and contract documentation, and disbursement requests based on an updated AWP/B including detailed budget for the following six months period to be cleared and approved by the Representative. Further, the disbursements are also subject to submission of a Project Progress Report to be approved by the FAO LTO. The Budget Holder will submit the financial statement of expenditures, the disbursements requests, and the Project Progress Report to the GEF Coordination Unit in the Investment Centre Division (TCI) for clearance and uploading on the FPMIS before the disbursement can be finally approved by the Representative.

A Project Task Manager (PTM) will be appointed by FAO in the FAO Office in China, in consultation with the LTO, LTU and the GEF Unit. The PTM will, under direct supervision of the FAO Representative in China, support the FAO Representative in the supervision of financial management, project progress, procurement and contracting processes, and in the provision of technical guidance to the project, in close consultation with the LTO, and the Project Task Force. The PTM will be paid from GEF fee resources and will have the following main tasks:

- Review project progress reports from FDHP and submit them to the LTO for approval and subsequently to the GEF Coordination Unit for final approval and uploading on the FPMIS;
- Participate in annual project progress review and planning workshops, and review, provide comments, and advise the FAO Representative on giving no-objection to AWP/B in consultation with the LTO, LTU and the GEF Coordination;
- Review procurement and contract documentation submitted by FDHP for procurement and contracts to be financed by GEF resources and advise the FAO Representative on giving no-objection, in close consultation with the LTO and the GEF Coordination Unit;
- Review FDHP project financial statement of expenditures using GEF resources and Cash Transfer Requests of GEF resources in accordance with the AWP/B and previous Cash Transfer Requests submitted by FDHP and advise the FAO Representative on his/her clearance of statements of expenditures and approval of cash transfers in consultation with the LTO and the GEF Coordination Unit;
- Review reports on executed co-financing to be submitted by FDHP;
- Conduct periodic supervision missions and support the provision of FAO technical and results-based management input to the project;
- Support the LTO in preparing the annual Project Implementation Review (PIR) report;
- Represent FAO in the Project Steering Committee (see below) and interview and selection panels for key project positions to be financed by GEF resources;
- Prepare draft TOR for mid-term and final evaluations, in consultation with the FAO Evaluation Office, the LTO, the LTU and the GEF Coordination Unit, support the organization of the mid-term and final evaluations, contribute to the development of an eventual agreed adjustment plan in project execution approach and supervise its implementation.

The FAO Lead Technical Unit will be the Fisheries and Aquaculture Resources Use and Conservation Division (FIR) of the Fisheries and Aquaculture Department of FAO and a

Lead Technical Officer with specific expertise in an ecosystem approach to fisheries management and/or wetlands conservation will be appointed in the FAO Regional Office for Asia and the Pacific (RAP). The LTU will via the LTO provide technical advice and backstopping to the project and support the FAO Project Task Manager in responding to requests from FDHP for guidance on specific technical issues during project execution. The LTO, supported by the LTU when needed, will be responsible for:

- review and ensure clearance by the relevant FAO technical officers of TORs for consultancies and contracts to be performed under the project and to CVs and technical proposals short-listed by the FDHP for key project positions, goods, minor works, and services to be financed by GEF resources;
- supported by the FAO Project Task Manager, review and ensure clearance by the relevant FAO technical officers of final technical products delivered by consultants and contract holders financed by GEF resources before the final payment can be processed;
- assist with review and provision of technical comments to draft technical products/reports on request from the FDHP during project execution;
- review and approve project progress reports submitted by FDHP to the FAO Representation in China in coordination with the FAO Project Task Manager;
- support the FAO Representative in reviewing, revising and giving no-objection to AWP/B submitted by the FDHP and to be approved by the Project Steering Committee;
- prepare the annual Project Implementation Review report, supported by the FAO Project Task Manager and inputs from the FDHP, to be submitted for clearance and completion by the GEF Coordination (TCI) which will subsequently submit the PIR to the GEF Secretariat and Evaluation Office as part of the Annual Monitoring Review report of the FAO-GEF portfolio. The LTO, supported by the Project Task Manager, must ensure that FDHP has provided information on co-financing provided during the course of the year for inclusion in the PIR;
- field annual (or as needed) project supervision missions;
- review and revise TORs for the mid-term evaluation, participate in review mission including the mid-term workshop with all key project stakeholders, development of an eventual agreed adjustment plan in project execution approach, and supervise its implementation supported by the FAO Project Task Manager.
- review and revise TORs for the final evaluation, participate in the final project closure workshop with all key project stakeholders and the development of and follow up on recommendations on how to insure sustainability of project outputs and results after the end of the project

The **GEF Coordination Unit (TCI)** will review and approve project progress reports, project reviews, and financial reports and budget revisions. The GEF Coordination Unit will review and clear the annual PIR and undertake supervision missions if considered necessary. The PIRs will be included in the FAO GEF Annual Monitoring Review submitted to GEF by the GEF Coordination Unit. The GEF Coordination Unit will also participate in the mid-term and final evaluations and the development of corrective actions in the project implementation strategy in the case needed to mitigate eventual risks affecting the timely and effective implementation of the project. The GEF Coordination Unit will in collaboration with the FAO Finance Division request transfer of project funds from the GEF Trustee based on six-monthly projections of funds needed. The GEF Coordination Unit will support the FAO

Representation in China in all aspects of supervising the NEX implementation modality that this project is following.

The FAO Finance Division will provide annual Financial Reports to the GEF Trustee and, in collaboration with the GEF Coordination Unit, call for project funds on a six-monthly basis from the GEF Trustee.

Committees and working groups

Project Steering Committee (PSC). A project PSC will be established chaired by the Deputy Director General of FDHP and with the participation of the Forestry Administration of Yueyang Prefecture, Bureaus from relevant counties; directors of DWP, the four NR Administrative Bureaus, and Foreign Fund Management Division of DOF, and at least one member from the Stakeholder Committee (SC – see below), Hunan Province Finance Department, and FAO. The PSC will meet minimally two times per year and its specific responsibilities will be: (i) overall oversight of project progress and achievement of planned results as presented in six-monthly Project Progress Reports; (ii) take decisions in the course of the practical organization, coordination and implementation of the project; (iii) facilitate cooperation between FDHP and project participating partners and project support at the local level; (iv) advise the PMO on other on-going and planned activities facilitating collaboration between the Project and other programmes, projects and initiatives in DWE; (v) facilitate that co-financing support is provided in a timely and effective manner; and (vi) review six-monthly Project Progress and Financial Reports and approve AWP/B.

Technical Working Groups (TWG) will be established to provide technical advice on specific project components and outputs and may among others be composed of FDHP technical staff representing all departments participating in the Project (e.g., Division of Science and International Affairs, Division of Planning and Finance), technical staff from other sector departments of the provincial government involved in the management and/or use of the DWE, Chinese Academy of Science, ASEM Water Resources Research and Development Center, Hunan Forestry Planning and Designing Institute, Wetland Research Centre of Hunan Province, Hunan Academy of Forestry, Dongting Lake Station for Wetland Ecosystem Research (the Chinese Academy of Sciences), WWF Changsha Office, and FAO. The main tasks of the TWGs will be to provide technical advice to the PSC, backstop the PMO on request, advise the PMO on other on-going and planned activities and facilitate collaboration between the Project and other programmes, projects, and initiatives of sector agencies and research institutions. The TWGs may also be involved in technical evaluation of project progress and outputs, and identification of possible solutions and/or changes in project activities when technical issues arise in the course of project implementation.

Stakeholder Committees (SC). At least four stakeholder committees will be established, one for each of the NRs. The mandate of the SCs will be to: (i) provide advice on relevant policies, actions and measures in particular in relation to the establishment of co-management models to be supported in component 2; (ii) provide new ideas and thinking on conflict resolution over DWE resources, co-management options for increased biodiversity conservation and sustainable use, and creative initiatives on how to increase public awareness of DWE biodiversity value, threats and conservation measures to be supported under the project component 4; and (iii) promote communications between the government agencies and local communities and the private sector. The composition of the SCs will include representatives from local farming and fishing communities, municipal and county

governments, state farms and the private sector involved in poplar plantation, reed cultivation, and bird-friendly rice production.

4.3 FINANCIAL PLANNING AND MANAGEMENT

4.3.1 Financial plan (by subcomponent, outputs and co-financier)

The total cost of the project will be USD 10.55 million, to be financed through a USD 2.95 million GEF grant and USD 7.5 million in co-financing from: (i) FDHP, the NRMBs and other provincial and local government departments (USD 2.9 million); (ii) the *National Wetland Conservation Programme* (NWCP) through the FDHP (USD 1.5 million); (iii) the *Wetland Conservation Subsidy Programme* (WCSP) through the FDHP (USD 1 million); (iv) the *National Nature Reserve Development Programme* through (NNRDP) the FDHP (USD 2 million); and (v) FAO (USD 0.2 million). Table 4.2 below shows the cost by component and outputs and by sources of financing and table 4.3 below shows the sources and type of confirmed co-financing. The FAO will, as the GEF Agency, **only be responsible** for the execution of the GEF resources and the FAO co-financing.

Table 4.2: Project Cost by Component, outputs and co-financier

| Component/output | FDHP and NRMBs | NWCP | WCSP | NNRDP | FAO | Total Co-financing | % Co-financing | GEF | % GEF | Total |
|--|------------------|------------------|----------------|------------------|---------------|--------------------|----------------|------------------|------------|------------------|
| Comp. 1: Integrated monitoring and management | 242,000 | 120,000 | 290,000 | - | 20,000 | 672,000 | 62% | 420,200 | 38% | 1,092,200 |
| O 1.1.1: Strengthening of the DLCC | 25,000 | - | - | - | - | 25,000 | 70% | 10,700 | 30% | 35,700 |
| O 1.1.2: BD and ES baseline and threat analysis | 64,000 | - | 90,000 | - | 10,000 | 164,000 | 45% | 198,000 | 55% | 362,000 |
| O 1.1.3: Integrated DWE management and planning | 120,000 | 120,000 | - | - | 10,000 | 250,000 | 73% | 90,700 | 27% | 340,700 |
| O 1.1.4: DWE IIMS | 33,000 | - | 200,000 | - | - | 233,000 | 66% | 120,800 | 34% | 353,800 |
| Component 2: NR management strengthening | 513,000 | 1,380,000 | 560,000 | 1,970,000 | 60,000 | 4,483,000 | 77% | 1,359,200 | 23% | 5,842,200 |
| O 2.1.1-2.1.2: Local AMNR decrees and upgrading of NRs | 138,000 | - | - | - | - | 138,000 | 32% | 295,500 | 68% | 433,500 |
| O 2.1.3: 4 five-years NRMPs | 68,000 | - | - | - | - | 68,000 | 58% | 50,100 | 42% | 118,100 |
| O 2.1.4: Training, equipment and infrastructure | 173,000 | 630,000 | 200,000 | 1,970,000 | 10,000 | 2,983,000 | 90% | 315,200 | 10% | 3,298,200 |
| O 2.2.1: NR co-management models | 88,000 | 350,000 | - | - | 50,000 | 488,000 | 44% | 622,100 | 56% | 1,110,100 |
| O 2.2.2: Conservation of flagship species | 46,000 | 400,000 | 360,000 | - | - | 806,000 | 91% | 76,300 | 9% | 882,300 |
| Component 3: Mainstreaming BD in Sectors | 263,000 | - | 100,000 | - | 10,000 | 373,000 | 61% | 239,350 | 39% | 612,350 |
| O 3.1.1-3.1.2: Amendment of WRHP and alignment of sector policies | 55,000 | - | - | - | - | 55,000 | 35% | 101,500 | 65% | 156,500 |
| O 3.1.3: Capacities for regulations enforcement | 200,000 | - | 50,000 | - | - | 250,000 | 77% | 72,950 | 23% | 322,950 |
| O 3.1.4: Capacities for BD conservation practices | 8,000 | - | 50,000 | - | 10,000 | 68,000 | 51% | 64,900 | 49% | 132,900 |
| Component 4: Environmental education and awareness | 1,099,000 | - | 50,000 | 30,000 | - | 1,179,000 | 73% | 430,220 | 27% | 1,609,220 |
| O 4.1.1-4.1.2: Brochures, billboards and upgrading of visitors centers | 943,000 | - | 50,000 | 30,000 | - | 1,023,000 | 77% | 307,000 | 23% | 1,330,000 |
| O 4.1.3: Wetlands biodiversity campaigns and events | 132,000 | - | - | - | - | 132,000 | 73% | 48,480 | 27% | 180,480 |
| O 4.1.4: Curricula for middle school | 24,000 | - | - | - | - | 24,000 | 24% | 74,740 | 76% | 98,740 |
| Component 5: M&E and information | 300,000 | - | - | - | 90,000 | 390,000 | 51% | 372,150 | 49% | 762,150 |

| | | | | | | | | | | |
|------------------------------------|------------------|------------------|------------------|------------------|----------------|------------------|------------|------------------|------------|-------------------|
| O 5.1.1-5.1.2: Project M&E | 170,000 | - | - | - | 80,000 | 250,000 | 48% | 271,150 | 52% | 521,150 |
| O 5.1.3: Information dissemination | 130,000 | - | - | - | 10,000 | 140,000 | 58% | 101,000 | 42% | 241,000 |
| Project Management | 483,000 | - | - | - | 20,000 | 503,000 | 80% | 128,880 | 20% | 631,880 |
| Total Project | 2,900,000 | 1,500,000 | 1,000,000 | 2,000,000 | 200,000 | 7,600,000 | 72% | 2,950,000 | 28% | 10,550,000 |

Table 4.3: Source and type of confirmed co-financing

| <i>Name of Co-financier (source)</i> | <i>Classification</i> | <i>Type</i> | <i>Amount</i> | <i>%</i> |
|---|-----------------------|-------------|------------------|------------|
| FDHP, the NRMBs and other provincial and local government departments | Province Government | Cash | 1,338,000 | 18 |
| FDHP, the NRMBs and other provincial and local government departments | Province Government | In-kind | 1,562,000 | 20 |
| <i>National Wetland Conservation Programme</i> through the FDHP | National Government | Cash | 1,500,000 | 20 |
| <i>Wetland Conservation Subsidy Programme</i> through the FDHP | National Government | Cash | 1,000,000 | 13 |
| <i>National Wildlife Conservation and Nature Reserve Development Programme</i> through the FDHP | National Government | Cash | 2,000,000 | 26 |
| FAO | GEF Agency | In-kind | 200,000 | 3 |
| Total Co-financing | | | 7,600,000 | 100 |

4.3.2 GEF inputs

The requested GEF grant will be allocated mainly in support of capacity building, policy and legal studies and preparation of normative instruments, technical assistance for technical studies, the preparation of plans, and finding technical solutions for sustainable biodiversity conservation and DWE use in co-management models and flagship species conservation strategies. GEF resources will also finance procures, billboards and publications for awareness raising and education on DWE biodiversity values, threats and conservation measures.

4.3.3 Government inputs

The government in-kind co-financing will mainly consist in staff time, office space and utilities, and support for local travel. The government Cash co-financing will support improvement of infrastructure of visitors and education centres in the NRs, equipment for wetlands ecosystem services and biodiversity monitoring, and restoration of wetlands habitat.

4.3.4 FAO inputs

FAO co-financing will be used to support technical assistance

4.3.5 Other co-financiers inputs

Farmers and fishermen participating in the co-management models will contribute with parallel financing in terms of their time and fishing boats for biodiversity monitoring and tourism activities, and will also provide resources to invest in organic aquaculture and bird-friendly rise farming activities.

4.3.6 Financial management of and reporting on GEF resources

Financial management and reporting in relation to the GEF resources will be carried out in accordance with FAO's rules and procedures and as described in the Execution Agreement between FAO, HPFD, and FDHP. In accordance with the project budget, FAO shall provide cash advances in US dollars up to the total of USD 2 950 000.

FDHP shall provide project execution services in accordance with its own regulations, rules and procedures adjusted to FAO rules and regulations and GEF minimum fiduciary standards as established in the Execution Agreement to ensure that the project funds are properly administered and expended. FDHP shall maintain a project account for the funds received from FAO in accordance with accepted accounting standards.

Financial statements and reporting

All financial reporting shall be in US dollars, and any exchange differences accounted for within the GEF-approved US dollar project budget. Within 15 days of the end of each six month, i.e. on or before 15 July and 15 January, FDHP shall submit six-monthly statements of expenditure of GEF resources to the HPFD and the FAO Office in China (see format in Execution Agreement Annex 6.C). The purpose of the financial statement is to list the expenditures incurred on the project on a six monthly basis so as to monitor project progress and to reconcile outstanding advances during the six month period. The financial statement shall contain information that forms the basis of a periodic financial review and its timely submission will be a prerequisite to the continued disbursements of funds to FDHP via the HPFD.

FDHP shall prepare annual financial reports on the use of the GEF resources to be submitted with the 2nd six monthly Project Progress Report, showing amount budgeted for the year, amount expended since the beginning of the year, including un-liquidated obligations (commitments) as follows:

1. Details of project expenditures on an output-by-output basis, reported in line with project budget lines as set out in the project budget included in this Project Document appendix 3, as at 31 December each year.
2. A final statement of account in line with the project budget included in this Project Document appendix 3, reflecting actual final expenditures under the project, when all obligations have been liquidated.
3. An annual budget revision will be prepared for review and clearance by the FAO Representation in China, the LTO, and the GEF Coordination Unit. The budget revision will be posted in the FPMIS by the GEF Coordination Unit.

These financial reports are submitted by the FDHP to the HPFD and the FAO Representation in China and reviewed and cleared by the FAO Representative supported by the Project Task Manager, monitored by the LTO, and with previous internal clearance from the FAO GEF Coordination Unit.

Financial reports for submission to the donor (GEF) will be prepared in accordance with the provisions in the Financial Procedures Agreement with the GEF Trustee and submitted by the FAO Finance Division (CSFE).

Disbursements of Funds

FAO shall transfer the amount of **USD 2 950 000** of GEF funds payable in instalments, as outlined below, to FDHP via the HPFD to carry out the GEF financed project activities as described in this Project Document. FDHP shall prepare and submit to HPFD and the FAO, together with the Annual Work Plan, a detailed budget to facilitate the predictability of the needed funds for the year. The first instalment of USD 147 500 (5 percent of the approved GEF amount) shall be advanced to FDHP via the HPFD within two weeks following signature of the Execution Agreement subject to submission by FDHP to FAO of all progress and completion reports on all actions agreed in the mitigation plan of fiduciary risks (as referred to in section 3.2.2) with the exemption of training of PMO staff in reporting and monitoring and the establishment of a unified document management system which should be completed in the end of the first reporting period.

Subsequently, FDHP shall prepare and submit to HPFD and FAO cash transfer requests (see format Execution agreement Annex 4.D) based on the updated AWP/B including the budget for the following six month together with the six-monthly statements of expenditures of GEF resources. The second and subsequent instalments shall be advanced to the FDHP via the HPFD within two weeks upon submission of a satisfactory financial statements of expenditures report, project progress reports (see section 4.5.3 below), and an updated AWP/B including the budget for the following six month. The FAO Representative in China, supported by the FAO Project Task Manager, should certify that reporting requirements under the terms of the Execution Agreement have been met and that project progress reports for the activities completed have been submitted to and accepted by FAO as showing satisfactory management and use of GEF resources. Reports should be submitted to the LTO/LTU for review and the GEF Coordination for review and clearance of the cash transfer request. All reports should be posted on the FPMIS.

Responsibility for Cost Overruns

FAO will make available to the Executing Partner a financial contribution in the amount of **USD 2 950 000** (two million nine hundred and fifty thousand United States Dollars). FDHP shall utilize the GEF project funds in strict compliance with the project document. FDHP shall be authorized to make variations not exceeding 20 percent on any total output budget line or any cost category line of the project budget provided that the total allocated for the specific budgeted project component is not exceeded and the reallocation of funds does not impact the achievement of any project output as per the project Results Framework Appendix 1. Any variations exceeding 20 percent on any total output budget line or any cost category line, that may be necessary for the proper and successful implementation of the project, shall be subject to prior consultations with and approval by FAO. In such a case, a revision to the FAO-GEF budget in the project document should be prepared by FDHP and approved by the FAO Representative in China, the LTO and the GEF coordination Unit. Cost overruns shall be the sole responsibility of the FDHP.

Audit

FDHP and HPFD will ensure external audit, consistent with recognized international auditing standards, of its project accounts and records in relation to activities and expenditures related to the project. The audit reports will be provided to FAO and may be shared with the GEF Trustee if this is requested. FDHP and HPFD shall submit to FAO an **annual externally**

audited financial statement of the GEF project account within three months following the completion of each annual accounting period during the project.

4.4 PROCUREMENT

FDHP will procure the equipment and services provided for in the detailed budget Appendix 3 of this Project Document and AWP/B following its own rules and regulations in compliance with generally accepted international standards for public sector procurement as detailed in the Execution Agreement. FDHP will ensure that its procurement rules and procedures and their implementation ensure that the procurement process is transparent, fair and competitive.

Before the commencement of procurement, FDHP shall update the project procurement plan (Appendix 5, to be prepared following project approval) to be reviewed at the project inception and cleared by the FAO Representative in China. The procurement plan shall be updated by FDHP every six months and submitted to and cleared by the FAO Representative in China with the six-monthly financial statement of expenditure report, Project Progress Report, and Cash Transfer Requests for the next instalment of funds. FAO supervision of contracting and procurement processes will be executed as follows:¹¹

- a. All individual consultants contracts for an amount > USD 20 000 will be subject to FAO participation in selection panel and prior clearance of contracting process, Terms of Reference (TORs) and Curriculum Vitae (CVs).
- b. All consultant firms/NGOs contracts will be subject to FAO prior clearance of contracting process, TOR and technical proposals.
- c. There will be no single procurement of goods (non-expendable procurement) for an amount > USD 100 000. All procurement of goods will be subject to FAO prior clearance of bidding process, material and offers (single procurement amount < USD 100 000 and > USD 50 000) or technical specifications and price quotation comparison (single procurement amount < USD 50 000).
- d. All documentation related to non-expendable procurement and procurement of non-consultancy services in relation to training and workshops events shall be submitted to FAO for post review together with the six-monthly Financial Statements of Expenditures reports.

4.5 MONITORING AND REPORTING

Monitoring and evaluation of progress in achieving project results and objectives will be done based on the targets and indicators established in the Project Results Framework (Appendix 1 and described in section 2.3 and 2.4). The project Monitoring and Evaluation Plan has been budgeted at USD 126 250 in GEF resources which will be complemented by co-financing and agency fee resources (see table in section 4.5.4). Monitoring and evaluation activities will follow FAO and GEF monitoring and evaluation policies and guidelines. Supported by component 5 the project monitoring and evaluation system will also facilitate learning and mainstreaming of project outcomes and lessons learned in relation to co-management models,

¹¹ These procedures for supervision of contracting and procurement processes will be revised after the first project year where some of the prior clearances by FAO of contracts and procurements may not be required depending on the performance of FDHP in managing contracting and procurement processes

integrated DWE management experience, and mainstreaming of wetlands biodiversity conservation in sector policies and development plans.

4.5.1 Oversight and monitoring responsibilities

The M&E tasks and responsibilities, clearly defined in the Projects detailed Monitoring Plan (see below), will be achieved through: (i) day-to-day monitoring and supervision missions of project progress (PMO and NR Project Manager); (ii) technical monitoring of biodiversity and ecosystem “status” indicators (PMO and NR Project Manager in coordination with other relevant participating provincial technical units); (iii) specific monitoring plans for co-management models and for the implementation of the flagship species conservation plans (PMO and NR Project Manager with support from local communities and other stakeholders); (iv) midterm and final evaluations (independent consultants and FAO Evaluation Office); and (v) continual oversight, monitoring and supervision missions (FAO).

At the initiation of implementation of the GEF Project, the PMO will set up a project progress monitoring system strictly coordinated with subsystems in each of the NR Administrative Bureaus. Participatory mechanisms and methodologies for systematic data collection and recording will be developed in support of outcome and output indicator monitoring and evaluation. During the inception workshop (see section 4.5.3 below), M&E related tasks to be addressed will include: (i) presentation and clarification (if needed) of the project’s Results framework with all project stakeholders; (ii) review of the M&E indicators and their baseline; (iii) drafting the required clauses to include in consultants’ contracts to ensure they complete their M&E reporting functions (if relevant); and (iv) clarification of the respective M&E tasks among the Project’s different stakeholders. One of the main outputs of the workshop will be a detailed monitoring plan agreed to by all stakeholders based on the monitoring and evaluation plan summary presented in section 4.5.4 below.

The day-to-day monitoring of the Project implementation will be the responsibility of the PMO driven by the preparation and implementation of an AWP/B followed up through six-monthly PPRs. The preparation of the AWP/B and six-monthly PPRs will represent the product of a unified planning process between main project partners. As tools for results-based-management (RBM), the AWP/B will identify the actions proposed for the coming project year and provide the necessary details on output targets to be achieved, and the PPRs will report on the monitoring of the implementation of actions and the achievement of output targets. NR-specific inputs to the AWP/B and the PPRs will be prepared based on participatory planning and progress review with local stakeholders and coordinated through the PMO and NR Project Managers and facilitated through project planning and progress review workshops. These inputs would be consolidated by the respective NR Project Managers before forwarding them to the PMO who will consolidate into a draft AWP/B and PPRs. An annual project progress review and planning meeting should be held with the participation of the DWP/PMO and the NR Administrative bureaus to finalize the AWP/B and PPRs. Subsequently the AWP/B and PPRs are submitted to the PSC for approval (AWP/B) and Review (PPRs) and to FAO for approval. The AWP/B will be developed in a manner consistent with the project’s Results Framework to ensure adequate fulfilment and monitoring of project outputs and outcomes.

Following the approval of the Project, the project’s first year AWP/B will be adjusted (either reduced or expanded in time) to synchronize it with an annual reporting calendar. In subsequent years, the work plan and budget will follow an annual preparation and reporting cycle as specified in section 4.5.3 below.

4.5.2 Indicators and information sources

To monitor project outputs and outcomes including contributions to global environmental benefits specific indicators have been established in the Results Framework (see Appendix 1). The framework's indicators and means of verification will be applied to monitor both project performance and impact. Following FAO's monitoring procedures and progress reporting formats data collected will be of sufficient detail to be able to track specific outputs and outcomes and flag project risks early on. Output target indicators will be monitored on a six-monthly basis and outcome target indicators will be monitored on an annual basis if possible or as part of the mid-term and final evaluations.

The project output and outcome indicators have been designed to monitor on-the-ground impacts and progress in building and consolidating capacities for DWE integrated management and biodiversity conservation and sustainable use both at NR and FDHP and DLCC institutional level as well as at the level of farming and fishing communities and the private sectors impacting and using DWE services and biodiversity.

On-the-ground impact indicators will track:

The level of adoption by farmers and fishermen of biodiversity-friendly production practices, their income increase, and hectares covered – hectares covered and farmers involved in restoring paddy harvested fields as winter bird feeding ground and the resulting income increase; hectares of poplar plantations reduced; hectares covered and fishermen involved in organic fish farming and ecosystem and rights based fisheries co-management and resulting income increase; and hectares covered and fishermen involved in eco-tourism and bird habitat conservation and the resulting income increase. The baseline and target for these indicators are established in the Project Results Framework and will be fine-tuned and included in the plan for each co-management model. Their systematic monitoring will be done with the involvement of participating NR Administrative Bureaus and farming and fishing communities.

Increase in biodiversity including in populations of endangered species and ecosystem health – changes in total bird visitation and in the population of finless porpoise, lesser white-fronted goose, black stork, Pere Davis deer, whistling swan, and in the appearance of Silver Fish in monitoring caches (ecosystem health indicator). The baseline and target for these indicators are established in the Project Results Framework and will be monitored as part of the NR's biodiversity monitoring systems. Other indicators for ecosystem health will be selected and monitored as part of the IIMS to be established supported by component 1. (see output 1.1.4 above).

The capacity building process indicators will capture:

Legal and planning instruments developed - Integrated DWE management plan incorporating valuation of biodiversity approved by DLCC; increase in government budget allocations for NRs; Information Management System (IIMS) on status of biodiversity, ecosystem services, and socioeconomic indicators supporting DWE management and decision-making at municipal, province and NR levels; local decrees on Administrative Measures for NR; five-years NR management plans; Amendment of Wetland Protection Regulation of Hunan Province (WPRHP) presented to the Provincial People's Congress including in particular provisions for: a) integrated management of wetland biodiversity and ecosystems; and b)

compensation mechanism for conservation of wetlands biodiversity and ecosystem services.

Level of mainstreaming of biodiversity conservation in policies and legal instruments – sector policies (e.i. fisheries, reed and/or poplar plantation, sand mining) aligned with WPRHP, the Integrated DWEMP and the four AMNR decrees and NRMPs.

Levels of created human capacities and awareness – number of NR staff with enhanced capacities in BD monitoring and conservation measures, eco-tourism in NRs, law enforcement and co-management mechanism, and public communication and awareness raising; number of farmers and fishermen trained and participating in: a) bird-friendly rice cultivation and marketing, b) organic aquaculture practices, certification, marketing and business management, and c) developing ecotourism tour operations applying bird-friendly practices; number of farmers, County Bureau of Fishery staff, and NR staff trained and participating in ecosystem and rights based co-management of fishery resources and biodiversity friendly fishing practices and equipment; improvement in management effectiveness of NRs monitored through the BD management effectiveness tracking tool; number of provincial and local government officers with enhanced skills in enforcement of wetland conservation and sustainable use regulations; number of provincial and local government officials and private sector representatives with increased capacities in development and implementation of biodiversity conservation measures and practices in fishery management, pollution control from paper mills, sand mining and land-use planning for reed and poplar plantations; number of middle school students with increased knowledge about DWE biodiversity conservation and sustainable use; and level of awareness among the local population on DWE biodiversity value, use and wetlands protection regulations.

The main sources of information to support the M&E program will be: (i) the NR's biodiversity monitoring systems and the IIMS; (ii) participative progress monitoring and workshops with beneficiaries; (iii) on-site monitoring of the implementation of the co-management models; (iv) project progress reports prepared by the PMO with inputs from the NR Project Managers; (v) consultants reports; (vi) participants training tests and evaluations; (vii) mid-term and final evaluations completed by independent consultants; (viii) financial reports and budget revisions; (ix) Project Implementation Reviews prepared by the FAO Lead Technical Officer supported by the Project Task Manager in the FAO Office in Beijing and the PMO; (ix) FAO supervision mission reports; and (x) post project impact and evaluation studies (national evaluation of project) organized by the Ministry of Finance and shared with all project partners.

4.5.3 Reports and their schedule

Specific reports that will be prepared under the M&E program are: (i) Project inception report; (ii) Annual Work Plan and Budget (AWP/B); (iii) Project Progress Reports (PPRs); (iv) annual Project Implementation Review (PIR); (v) Technical Reports; (vi) co-financing Reports; and (vii) Terminal Report. In addition, assessment of the GEF Monitoring Evaluation Tracking Tools (METTs) against the baseline (completed during project preparation) will be required at midterm and final project evaluation.

Project Inception Report. After FAO approval of the project and signature of the Execution Agreement an inception workshop will be held. Immediately after the workshop, FDHP will prepare a project inception report in consultation with the FAO Project Task Manager and other project partners. The report will include a narrative on the institutional roles and responsibilities and coordinating action of project partners, progress to date on project

establishment and start-up activities and an update of any changed external conditions that may affect project implementation. It will also include a detailed first year AWP/B, a detailed project monitoring plan based on the monitoring and evaluation plan summary presented in section 4.5.4 below, and a progress and completion report on all actions agreed in the mitigation plan of fiduciary risks (as referred to in section 3.2.2). The draft inception report will be circulated to FAO and the PSC for review and comments before its finalization, no later than three months after project start-up. The report should be cleared by the FAO BH, LTO, LTU and the FAO GEF Coordination Unit and uploaded in FPMIS by the LTO.

Annual Work Plan and Budget (AWP/B). FDHP/DWP will submit to the FAO Representation in China a draft Annual Work Plan and Budget no later than 10 January. The AWP/B should include detailed activities to be implemented by project outputs and divided into monthly timeframes and targets and milestone dates for output indicators to be achieved during the year. A detailed project budget for the activities to be implemented during the year should also be included together with all monitoring and supervision activities required during the year. The draft AWP/B is circulated to and reviewed by the FAO Project Task Force, DWP/PMO incorporates eventual comments and the final AWP/B is sent to the PSC for approval and to the FAO for final no-objection and upload in FPMIS by the GEF Coordination Unit. (See AWP/B format in Execution Agreement Annex 4.B)

Project Progress Reports (PPR): FDHP/DWP will prepare six-monthly PPRs and submit them to the FAO Representation in China no later than July 15 (covering the period January through June) and 15 January (covering the period July through December). The 1st semester six months report should be accompanied by the updated AWP/B, for review and no-objection by FAO. The PPR are used to identify constraints, problems or bottlenecks that impede timely implementation and take appropriate remedial action. PPRs will be prepared based on the systematic monitoring of output and outcome indicators identified in the project's Results Framework Appendix 1). The FAO Project Task Manager will review the progress reports and collect and consolidates eventual FAO comments from the LTO, LTU, the GEF Coordination Unit, and the Budget Holder Office and provide these comments to the DWP/PMO. When comments have been duly incorporated the LTO will give final approval and submit the final PPR to the GEF coordination Unit for final clearance and upload in FPMIS. (See PPR format in Execution Agreement Annex 4.A).

Annual Project Implementation Review (PIR): The LTO supported by the LTU and the FAO Project Task Manager and with inputs from the DWP/PMO, will prepare an annual PIR covering the period July (the previous year) through June (current year) to be submitted to the GEF Coordination Unit for review and approval no later than 31 July. The GEF Coordination will upload the final report on FAO FPMIS and submit it to the GEF Secretariat and Evaluation Office as part of the Annual Monitoring Review report of the FAO-GEF portfolio. The GEF Coordination Unit will provide the updated format when the first PIR is due.

Technical Reports: Technical reports will be prepared as part of project outputs and to document and share project outcomes and lessons learned. The drafts of any technical reports must be submitted by FDHP to the FAO Representation in China who will share it with the LTO and LTU for review and clearance and to the GEF Coordination Unit for information and eventual comments, prior to finalization and publication. Copies of the technical reports will be distributed to the PSC and other project partners as appropriate. The final reports will be posted on the FAO FPMIS by the BH.

Co-financing Reports: FDHP/DWP will be responsible for collecting the required information and reporting on in-kind and cash co-financing provided by FDHP, NR Administrative Bureaus, Farmers and Fishermen and eventual other partners not foreseen in the Project Document. FDHP/DWP will submit the report to the FAO Representation in China (which will add the FAO co-financing) in a timely manner on or before 31 July covering the period July (the previous year) through June (current year). (See co-financing report format in Execution Agreement Annex 4.E).

GEF BD Tracking Tool: Following the GEF policies and procedures, the tracking tool for biodiversity focal area will be submitted at three moments: (i) with the project document at CEO endorsement; (ii) at the project’s mid-term evaluation; and (iii) with the project’s final evaluation or final completion report.

Terminal Report: Within two months before the end date of the Execution Agreement FDHP/DWP will submit to the FAO Representation in China a draft Terminal Report. The main purpose of the final report is to give guidance at ministerial or senior government level on the policy decisions required for the follow-up of the Project, and to provide the donor with information on how the funds were utilized. The terminal report is accordingly a concise account of the **main products, results, conclusions and recommendations** of the Project, without unnecessary background, narrative or technical details. The target readership consists of persons who are not necessarily technical specialists but who need to understand the policy implications of technical findings and needs for insuring sustainability of project results. Work is assessed, lessons learned are summarized, and recommendations are expressed in terms of their application to the province’s and country’s further development of wetlands ecosystem management in the context of its development priorities as well as in practical execution terms. This report will specifically include the findings of the final evaluation as described in section 4.6 below. A final project review meeting should be held to discuss the draft terminal report before it is finalized by the DWP/PMO and approved by the FAO LTO, LTU and the GEF Coordination Unit. (See instructions for Terminal Report in Execution Agreement Annex 4.F).

4.5.4 Monitoring and evaluation plan summary

Table 4.4 below provides a summary of the main M&E reports, responsible parties and timeframe.

| Type of M&E Activity | Responsible Parties | Time-frame | Budgeted costs |
|-------------------------------|--|---------------------------------------|---|
| Inception Workshop | FDHP/PMO, FAO Project Task Manager (PTM) supported by the FAO LTO, BH, and the GEF Coordination Unit | Within two months of project start up | USD 2 000 |
| Project Inception Report | FDHP/PMO, FAO PTM cleared by FAO LTO, LTU, BH, and the GEF Coordination Unit | Immediately after workshop | - |
| Field based impact monitoring | FDHP/PMO, participating NRMBs and other relevant line agencies. | Continually | USD 27 910 (5 % of time of the Chief Technical Advisor (CTA), training and coordination workshop for establishing and operating of the IIMS, and 3% of time of subject specialists) |

| Type of M&E Activity | Responsible Parties | Time-frame | Budgeted costs |
|--|--|--|--|
| Supervision visits and rating of progress in PPRs and PIRs | FDHP/PMO, FAO LTO/LTU and GEF Coordination Unit | Annual or as required | The visits of the FAO LTO/LTU and the GEF Coordination Unit will be paid by GEF agency fee. The visits of the PMO/FDHP will be paid from the project travel budget |
| Project Progress Reports | FDHP/PMO, with inputs from NR Project Managers and other partners | Six-monthly | USD 34 340 (10% of the time of the CTA and 7% of time of subject specialists) |
| Project Implementation Review report | FAO PTM and LTO supported by the LTU, FDHP/PMO and NR Project Managers and cleared and submitted by the GEF Coordination Unit to the GEF Secretariat | Annual | Paid by GEF agency fee |
| Co-financing Reports | FDHP/PMO and NR Project Managers | Annual | USD 2 000 (5% of the time of the Project administrative Assistance) |
| Technical reports | FDHP/PMO, PTM/LTO/LTU | As appropriate | - |
| Mid-term Evaluation | External Consultant, FAO independent evaluation unit in consultation with the project team including the GEF Coordination Unit and other partners | At mid-point of project implementation | USD 30 000 for external consultant. In addition, either FAO staff time and travel or an additional consultant will be paid through the agency fee |
| Final evaluation | External Consultant, FAO independent evaluation unit in consultation with the project team including the GEF Coordination Unit and other partners | At the end of project implementation | USD 30 000 for external consultant. In addition, either FAO staff time and travel or an additional consultant will be paid through the agency fee |
| Terminal Report | FDHP/PMO, PTM/LTO/LTU, TSCR report Unit | At least two months before the end date of the Execution Agreement | - |
| Total Budget | | | USD 126 250 |

4.6 PROVISION FOR EVALUATIONS

An independent Mid-Term Evaluation (MTE) will be undertaken towards the end of the third project year to review progress and effectiveness of implementation in terms of achieving project objective, outcomes and outputs. Findings and recommendations of this evaluation will be instrumental for bringing improvement in the overall project design and execution strategy for the remaining period of the project's term if necessary. FAO will arrange for the MTE in consultation with project management. The evaluation will, *inter alia*:

- (i) review the effectiveness, efficiency and timeliness of project implementation;
- (ii) analyse effectiveness of partnership arrangements;
- (iii) identify issues requiring decisions and remedial actions;
- (iv) propose any mid-course corrections and/or adjustments to the implementation strategy as necessary; and
- (v) highlight technical achievements and lessons learned derived from project design, implementation and management.

An independent Final Evaluation (FE) will be carried out three months prior to the terminal review meeting of the project partners. The FE would aim to identify the project impacts and sustainability of project results and the degree of achievement of long-term results. This Evaluation would also have the purpose of indicating future actions needed to sustain project results, expand on the existing Project in subsequent phases, mainstream and up-scale its products and practices, and disseminate information to management authorities responsible for the management of other Chinese wetlands ecosystems to assure continuity of the processes initiated by the Project.

Some critical issues to be evaluated in the midterm and final evaluations will be: (i) progress in monitoring and achieving improvements in key DWE biodiversity, ecosystem services, and socioeconomic indicators through NR monitoring systems and the IIMS and the level of data and information accessibility; (ii) the functioning and effectiveness of the DLCC as an inter-institutional coordination mechanism in developing and implementing integrated planning in support for biodiversity and wetlands ecosystem and addressing key biodiversity threats; (iii) the level of capacities and involvement of NR staff in NR networking and strengthening and progress in outcomes in terms of improved management effectiveness at the network and individual NR levels; (iv) the level of involvement of farmers and fishermen in co-management models and their increased capacities and local socio-economic benefits to sustain the models at medium and long term and assess if the models should be expanded; (v) progress in building capacities on biodiversity friendly production practices in key sectors using and impacting DWE ecosystems and the mainstreaming of biodiversity conservation and sustainable use in sector policies, regulations and development plans; (vi) the level of local awareness on the value of DWE services and biodiversity and wetlands protection regulations and involvement of men as well as women in local conservation events.

The FAO Project Task Manager will prepare the first draft of the Terms of Reference for the mid-term and the final evaluations and consult with and incorporate comments from FDHP, the FAO budget holder, the FAO Lead Technical Unit and Officer, and the FAO GEF Coordination Unit. Subsequently the TORs will be sent to the FAO Office of Evaluation for finalization, in accordance with FAO evaluation procedures and taking into consideration evolving guidance from the GEF Evaluation Office. The TORs and the reports will be discussed with and commented upon by the project partners.

4.7 COMMUNICATION OF PROJECT RESULTS AND VISIBILITY

Giving high visibility to the Project and ensuring effective communications in support of the project's message has been addressed in a number of activities that have been incorporated into its design. These include: (i) the strengthening of the DLCC under component 1 which will give visibility of the project among high-level sector decision-makers; (ii) several communication initiatives under component 4 strengthening already existing awareness raising activities such as telefilms and brochures on the DWE biodiversity and conservation measures, improved displays at visitors and education centres, and special biodiversity events; and (iii) for the more distant community including other stakeholders in China and beyond, the establishment of a project website, issuing of periodic project newsletter, and three specific "best practices and lessons learned" publications supported under component 5. These publications will include "best practices and lessons learned" in: a) DWE integrated management; b) mainstreaming conservation of wetlands biodiversity in sectors ; and c) in co-management models.

SECTION 5 – SUSTAINABILITY OF RESULTS

5.1 SOCIAL SUSTAINABILITY

Short and medium term socio-economic benefits will be created mostly in component 2 through co-management models providing income generating opportunities from sustainable managed fisheries resources, aquaculture, eco-tourism and bird friendly rice cultivation. Co-management in the context of this project is defined as a partnership arrangement between government and the local community of resource users, and in some cases also connected with agents such as NGOs, research institutions, private sector companies, and other resource stakeholders. The aim is to share the responsibility and authority for management of resources within the DWE NRs in a sustainable manner with positive impacts on DWE and biodiversity as well as on the socioeconomic opportunities for the population dependent on the DWE resources.

To enhance the social sustainability of the co-management approach to fisheries resources the rights-based approach to fisheries will seek to reinforce local fisheries dependent communities claim for recognition in local and provincial policy and service provision and for legal protections. At the same time the model will support legitimate livelihood actions based on rights to access fisheries resources within established areas of the DWE under an ecosystem management approach. This approach will be further established during the project implementation linking responsibilities with protected rights for men as well as women.

Like in many rural areas in China the DWE is characterized by, that in particular the men migrate to the cities in search for work and income generating activities while the women stays behind as primary labor force for rural production activities such as farming and fishing. That means that production decision power has been transferred to women, indicating improvement of women's status and changes in family decision-making in relation to rural productive activities around the lake. It has also made women more aware of income generating opportunities from diversified parallel activities such as gathering and selling edible wetland plants, reeds harvesting, and other scattered economic activities (poultry and vegetables), and selling handiwork or self-made food to tourists, etc. However, it's still difficult for women to play a dominant role in organized and well articulated rural production activities, and the incremental value of diversified parallel activities are often underestimated and not supported.

As an area with rich wetland resources and long history of sustaining livelihoods for individual families as well as for communities, social relations and supports have covered almost all aspects of production activities and livelihood in the lake area. In the context of growth in rural migrant workers to the cities, the women staying at home have played an irreplaceable role in keeping social connections and conventional rural orders. They have maintained the integrity and continuity for family and for the lake area.

In that sense the project in its co-management activities has an important opportunity to assist in developing communication platforms, aiming at promoting the exchange of information, ideas, skills, experience, and organization of cooperation in production activities (rice farming, aquaculture, sustainable fisheries and small tourism businesses) improving market links and diversifying income opportunities benefitting women and the general social capital in Dongting Lake.

Before the implementation of each co-management model detailed social, gender and economic feasibility studies will be conducted to identify strategies to enhance local socio-economic benefits. Special attention will be given to the inclusion of vulnerable groups and women as well as men. Economic incentive mechanism will be included in the up-scaling strategies for each model to be prepared in project year 4 as well as medium term strategies for continues support for the established market links vital for the sustainability and up-scaling of the models after the end of the project. Long term socio-economic benefits will result from recovered and sustained flow of DWE services.

5.2 ENVIRONMENTAL SUSTAINABILITY

The project objective, outcomes and outputs are in themselves addressing barriers for the environmental sustainability of the DWE. The project and the GEF resources invested are expected to have positive impacts on the sustainability of fisheries resources, DWE biodiversity conservation and sustainable use, and conservation of habitats for global threatened species (see also section 3.1 above).

5.3 FINANCIAL AND ECONOMIC SUSTAINABILITY

NR management, biodiversity and ecosystem services conservation will always need support from public funding, and China has, over the last decade, shown significant political commitment and capacity to provide increased financing for these ends. This is also evident from the significant government co-financing provided for this project. In addition, the project seeks to create economic and financial sustainability for the conservation investments in the DWE by engaging economic sectors and local communities in co-management actions sustained by socio-economic co-benefits, and the preparation of compensation mechanism for conservation activities. This will increase private sector investments in recovery of fisheries resources, conservation of habitats for endangered species with a value for ecotourism activities, and conservation of DWE flood control and water cleaning functions.

5.4 SUSTAINABILITY OF CAPACITIES DEVELOPED

The capacities developed will mainly be sustained by their anchoring in key institutions operating in the DWE including FDHP, NRMB, and the DLCC. The co-financing provided by these institutions to sustain capacity building processes already from the beginning of the project provides important initial conditions for the sustainability also after the end of the project. Taking into account lessons learned from previous organic aquaculture pilots the participants in co-management models will receive technical assistance in the medium term to reinforce and sustain capacities built until sustainability is obtained.

5.5 APPROPRIATENESS OF TECHNOLOGY INTRODUCED

The project will in particular support the substitution of illegal fishing technologies with options already well known and supported by FAO through the Code of Conduct for Responsible Fisheries. Technologies used for organic aquaculture will follow the corresponding Chinese regulation and FAO guidelines as well as lessons learned from previous experiences in the DWE.

5.6 REPLICABILITY AND SCALING UP

Strategies for up-scaling of in particular co-management models are built into the project design. The project will try to build bridge from the pilot stage of sustainable use of DWE resources and conservation of biodiversity which has already been practiced in the DWE to a consolidation phase of models and their up-scaling. Because of the many parallel wetlands conservation projects there are also good opportunities for exchange and scaling up successful management approaches and practices in other wetlands ecosystems in China.

APPENDICES

APPENDIX 1: RESULTS MATRIX

Project impacts linked to outcomes:

| Impact | Baseline | Outcome indicators | Assumptions | Monitoring milestones towards achieving outcomes |
|--|--|---|--|---|
| <p>Global Environmental Objective: The goal of the proposed project is to secure the conservation of biodiversity of global importance in the Dongting Lake through strengthening existing management efforts and the promotion of the Wetland's long-term sustainable development. Specifically, the project objectives are to: (i) strengthen the existing institutional and policy framework; (ii) promote an integrated, ecosystem-wide planning and management approach; (iii) strengthen the existing network of wetland nature reserves; (iv) demonstrate sustainable co-management models</p> | <p>Component 1: 1.1 A circular creating the Dongting Lake Conservation Committee (DLCC) and appointing the chairman and members was issued by the provincial government in 2007. However, the committee is still not operating, the sectors are not sharing existing monitoring data and analysis weakening sound decision making, and a sector integrated planning and ecosystem conservation approach is lacking. No key biodiversity threats have been addressed so far.</p> | <p>Component 1: 1.1 DLCC is fulfilling its function coordinating the implementation of the DWEMP and at least two key biodiversity threats addressed (sand mining threatening porpoises, poplar plantations, and/or unsustainable fisheries) by the end of project.</p> | <p>Component 1: High level political support from all main sectors to the work of the DLCC and the implementation of the DWEMP</p> | <p>PY (Project Year) 1 and 2: Assess the progress in agreement on 5 years WP for the DLCC, the development and approval of the DWEMP, and the development of the IIMS platform. Adjust inter-institutional coordination approach if needed as to start implementation of the instruments in PY3 PY 3 and 4: Monitor the progress in and outputs of the implementation of the DWEMP and the IIM and adjust strategy if needed. Midterm evaluation: Evaluate the functioning and effectiveness of the DLCC as an inter-institutional coordination and planning mechanism in support for the sustainable use of biodiversity and DWE and addressing key threats. Evaluate the progress in monitoring key DWE indicators through the NR monitoring systems and the IIMS and the level of data and information accessibility. Adjust inter-institutional coordination approach if necessary.</p> |
| | <p>Component 2: 2.1a Management effectiveness assessment scores: East DL 61; West DL 54; South DL 56; and Hengling 53. Threat score: East DL 56; West DL 63; South DL 57; and Hengling 61. 2.1b: 20 million/year 2.2.a (i) Total migratory bird visitation 104,000-130,000 (2008-2012). (ii) Finless porpoise: 100-150 in DWE (2011), ca. 800 total population. (iii) Lesser white-fronted goose (Anser erythropus): 18,000 in DWE (mostly in East DL NR) which is 50% of total global population. (iv) Black stork (ciconia nigra): 23 in DWE (Dec. 2011), 24,000-24,000</p> | <p>Component 2: 2.1a Improvement in management effectiveness of NRs by the end of the project monitored through the BD management effectiveness tracking tool: (a) NR management effectiveness assessment improved for: East Dongting Lake (DL) from 61 to 70; West DL from 54 to 70; South DL from 56 to 68; and Hengling from 53 to 66; (b) threat score decreased for: East DL from 56 to 47; West DL from 63 to 51; South DL from 57 to 50; and Hengling from 61 to 40 2.1b: 50% increase in national and local governmental budget allocations to PA management 2.2.a Improved biodiversity and endangered species indicators by the end of the project: (i) increase in total bird visitation by 10% in the four Dongting NRs; (ii) finless porpoise</p> | <p>Component 2: Maintained local government support for proclaiming AMNRs; SFA will approve upgrading of NRs; NRs able to maintain staff trained; Fisheries and farmers communities interested in participating in co-management demonstration model interest expressed by business partners maintained to secure marked links for biodiversity friendly products</p> | <p>PY 1 and 2: Assess the progress in capacity building of NR staff the development and approval of the NR upgrading, AMNRs and the NRMPs. Adjust capacity building strategy if necessary as to start the effective implementation of the AMNRs in PY3. Assess the progress in capacity building of farmers, fishers, and local governments and the design and agreements on co-management demonstration models and business plans in PY1. Adjust scope and approach of the models if needed (as a result of detailed feasibility studies) as to start implementation of the demonstration models in PY2. PY 3 and 4: Monitor the progress in and outputs of the implementation of the NRMPs and adjust the strategy for NR management effectiveness strengthening if needed. Monitor progress in and outputs of the implementation of the co-management demonstration models and adjust the design of the model as needed as to start up scaling in PY5 if evaluated to be feasible. Midterm evaluation: Evaluate the level of capacities and involvement of NR staff in NR networking and strengthening and progress in improved management effectiveness at the network and individual NR levels and adjust capacity building and network support strategy if needed. Further, evaluate the level of involvement of farmers and fishermen in co-management models and their increased capacities and local socio-</p> |

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| <p>of DWE and biodiversity friendly production practices to reduce human activity pressure on the Wetlands; and (v) increase institutional capacity and public awareness and support for wetlands conservation.</p> | <p>East Asia population. (v) Pere David's Deer (Elaphurus Davidianus): 25 in DWE (Jan 2012), 3000 global population. (vi) Whistling Swan (Cygnus columbianus): 800-1,000 in DWE (Nov-Dec 2011), 86,000 global population. (vii) Silver fish (near endangered in IUCN Red List): 2% appearance rate in monitoring catches in DWE (2011)</p> <p>2.2.b (i) income baseline to be established in PY1</p> | <p>population maintained; (iii) lesser white-fronted goose population maintained; (iv) black stork population maintained; (v) 5% increase in Pere Davis deer population; (vi) Whistling Swan population maintained; (vii) increase from 2 to 5% appearance of Silver Fish in monitoring caches (ecosystem health indicator)</p> <p>2.2.b Improved income indicators for households (of which 60% are represented by women as the main participant and beneficiary)¹²involved in co-management demonstration models (i) 320 farming households involved in bird-friendly rice production increasing their household income with at least 30% in East DL NR; (ii) 400 households involved in organic fish farming and 500 households involved in rights based fisheries co-management to support the restoration of fisheries resources increasing their income with at least 100% in Hengling NR experimental zone; (iii) 70 households incorporated in eco-tourism operations and bird habitat conservation increasing their income with at least 100% in West DL NR.</p> | | <p>economic benefits to sustain the models at medium and long term and assess if the models should be expanded</p> |
| <p><u>Project Development Objective:</u> Recover fish stocks and promote sustainable fish farming and rice production supporting livelihoods and income generation for local fisheries and farming communities</p> | <p><u>Component 3:</u> 3.1.a There is knowledge on technical solutions and biodiversity friendly practices among technical staff but managers lack knowledge on good examples to support their decision-making</p> <p>3.1.b 400,000 ha.</p> | <p><u>Component 3:</u> 3.1.a GEF BD objective 2 tracking tool score on biodiversity conservation integration in sector policies and regulations increased from 17 to 23 (out of 36 possible scores) for the sectors influencing on DWE</p> <p>3.1.b Poplar plantation reduced by 20,000 ha by the end of the project</p> | <p><u>Component 3:</u> High level political support from all main sectors for integrating biodiversity friendly policies, regulations and management practices</p> | <p><u>PY 1 and 2:</u> Monitor the progress in the preparation and approval of the WPRHP and ensure continuous high level political support as to start its implementation in sector policies and capacities in PY3 <u>PY 3 and 4:</u> Monitor the progress in mainstreaming DWE BD conservation in sector policies and practices and adjust capacity building and mainstreaming strategy if needed <u>Midterm evaluation:</u> Evaluate progress in building capacities on biodiversity friendly production practices in key sectors and the mainstreaming of biodiversity conservation and sustainable use in sector policies, regulations and development plans and adjust capacity building strategy if needed.</p> |
| | <p><u>Component 4:</u> 4.1 Less than 10% of the local population knows about wetlands</p> | <p><u>Component 4:</u> 4.1 Awareness among the local population on DWE biodiversity value, use and wetlands</p> | <p><u>Component 4:</u> Promised co-financing for infrastructure of</p> | <p><u>PY 1 to 4:</u> Monitor the progress in improving quality and effectiveness of awareness raising materials, tools, infrastructure and events and adjust awareness raising strategy if necessary.</p> |

¹² Due to male migration out of the area, please see section 5.1

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| | provincial regulation | protection regulations increased to 30%. | visitors and education centres will be invested as planned | <u>Midterm evaluation:</u> Evaluate the level of local awareness on the value of DWE services and biodiversity and wetlands protection regulations and involvement of men as well as women in local conservation events and adjust awareness raising strategy if needed. |
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Project outcomes linked to outputs:

| | Baseline | Milestones towards achieving output and outcome targets | | | | | Data Collection and Reporting | | |
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| | | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Means of verification | Responsible for Data Collection | |
| Component 1: Strengthening of institutional capacities for integrated monitoring and management of biodiversity in DWE | | | | | | | | | |
| Outcome 1.1: DLCC is fulfilling its function coordinating the implementation of the DWEMP and at least two key biodiversity threats addressed (sand mining threatening porpoises, poplar plantations, and/or un-sustainable fisheries) by the end of project. | No issue addressed by the DLCC | | | One key biodiversity threat issue addressed | | One key biodiversity threat issue addressed | DLCC minutes; annual DWE MP implementation progress reports; PPR; project midterm and final evaluations | PMO/FDHP; midterm and final evaluations teams | |
| Output 1.1.1: DLCC strengthened by the end of the project with: i) a functioning secretariat in FDHP (two half-time staffs, office equipment and operations budget); ii) agreed operations procedures; iii) agreed five years work plan; and iii) at least one meeting per year held | A circular creating the DLCC and appointing the chairman and members was issued by the provincial government in 2007. However, DLCC does not have operations budget and procedures or a work plan and no meetings have been held | 1) two part time staff seconded to the Secretariat of the DLCC; 2) Office space provided by the FDHP and equipment procured; 3) Budget for operations available | Operations procedures and five year work plan agreed through two DLCC workshops/ meetings | One DLCC meeting held, progress in implementation of work plan monitored | One DLCC meeting held, progress in implementation of work plan monitored | One DLCC meeting held, progress in implementation of work plan monitored | Budget assigned for DLCC Secretariat; operations procedures; 5 years Work Plan and its annual implementation progress reports; minutes of meetings; PPR | PMO/FDHP | |
| Output 1.1.2: Updated detailed biodiversity baseline and threat analysis by the end of PY1 including three technical reports on: a) DWE biodiversity and ecosystem services value | Separate studies exist on various aspects of the DWE and pressures but findings are not integrated in management planning. Among others there is a study on the valuation of DWE ecosystem services | Three draft reports prepared within 9 months of the project implementation and consulted with focus groups (at least three meetings per report) from relevant sectors before | | | | | Technical reports; minutes from focus group consultations; PPR | PMO/FDHP; Project Expert groups | |

| | Baseline | Milestones towards achieving output and outcome targets | | | | | Data Collection and Reporting | |
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| | | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Means of verification | Responsible for Data Collection |
| and status; b) impacts on biodiversity from different sectors and response options; and c) options and priorities for land and water use plans valuating biodiversity | that needs to be updated | finalization by the end of PY1 | | | | | | |
| Output 1.1.3: Integrated DWE management plan (MP) incorporating valuation of biodiversity approved by DLCC by PY3 and under initial implementation by the end of the project | A framework master plan exists but lacks detailed actions and implementation capacity among relevant agencies at different levels need to be strengthened. Stakeholders also lack mechanisms to participate in DWE management planning. | Formulation of mission and specific objectives for DWE MP based on public consultation led by the DLCC. | 1) Financial and economic feasibility analysis of alternative response measures to mitigate DWE threats; 2) Draft MP shared with stakeholders and feedback responded and incorporated; 3) MP implementation monitoring system agreed with indicators for progress in achieving MP objectives and outputs | Final plan approved by DLCC and implementation initiated | Progress in implementation monitored | Progress in implementation monitored | Minutes from stakeholder consultations and comments received; Draft and final DWE MP; MP implementation monitoring report; PPR | PMO/FDHP; Experts supporting the formulation of the DWE MP |
| Output 1.1.4: DWE Integrated Information Management System (IIMS) on status of biodiversity, ecosystem services, and socio-economic indicators is operating providing data and analysis for DWE management and decision-making at municipal, province and NR levels by PY2. | Information systems and data are owned by different public institutions while protocols and platform for sharing do not exist. | 1) IIMS platform designed; 2) Focal point for IIMS designated in provincial departments of Environment Protection, Water Resources, Fisheries, NRs, FDHP, and CAS; 3) Data entries determined by focal points and staff trained in operation of the IIMS. | 1) Baseline level data recorded in IIMS; 2) Public access to information is enabled under agreed level of information disclosure | 1) IIMS is updated with ongoing monitoring programs 2) Bi-annual status report on DWE services and biodiversity published | IIMS is updated with ongoing monitoring programs | 1) IIMS is updated with ongoing monitoring programs 2) Bi-annual status report on DWE services and biodiversity published | Bi-annual status reports produced by the IIMS; existence of platform; Training reports detailing number of staff trained and organizations represented; PPR | PMO/FDHP; Information system expert; IIMS focal points |

| | Baseline | Milestones towards achieving output and outcome targets | | | | | Data Collection and Reporting | |
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| | | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Means of verification | Responsible for Data Collection |
| Component 2: Strengthening of management effectiveness of DWE NRs network | | | | | | | | |
| Outcome 2.1a: Improvement in management effectiveness of NRs by the end of the project monitored through the BD management effectiveness tracking tool: (a) NR management effectiveness assessment improved for: East Dongting Lake (DL) from 61 to 70; West DL from 54 to 70; South DL from 56 to 68; and Hengling from 53 to 66; (b) threat score decreased for: East DL from 56 to 47; West DL from 63 to 51; South DL from 57 to 50; and Hengling from 61 to 40 | Management effectiveness assessment scores: East DL 61; West DL 54; South DL 56; and Hengling 53 Threat score: East DL 56; West DL 63; South DL 57; and Hengling 61 | | | Management effectiveness assessment scores: East DL 62; West DL 62; South DL 60; and Hengling 60 Threat score: East DL 50; West DL 57; South DL 55; and Hengling 40 | | Management effectiveness assessment scores: East DL 70; West DL 70; South DL 68; and Hengling 66 Threat score: East DL 47; West DL 51; South DL 50; and Hengling 40 | BD management effectiveness tracking tool; Midterm and final evaluations | PMO/FDHP; NR bureaus; local governments |
| Outcome 2.1b: 50% increase in national and local governmental budget allocations to PA management | 20 million/year | | | 25% increase | | 50% increase | PA budgets; Midterm and final evaluations | PMO/FDHP; NR bureaus; local governments |
| Output 2.1.1: Three local decrees on Administrative Measures for NR (AMNR), one for each of East, South and Hengling Dongting Lake (DL) NRs, proclaimed by the end of PY2 (facilitating | The NRs are established by provincial and central government approval and West DL also has a county decree. For South, East and Hengling DL NRs there has been no progress so far on local decrees on AMNR | 1) Three surveys on AMNR for East, South and Hengling DL NRs conducted; 2) Three AMNR drafted; 3) Nine consultation workshops on draft AMNR, three for each NR | 1) Three final validation workshops AMNR, one for each NR; 2) Three AMNR proclaimed by local governments (county or Municipality) | | | | Survey reports; Draft and final AMNR; proclamation of AMNR; PPR. | PMO/FDHP; NR bureaus; Forestry bureaus at provincial, municipality, and county level |

| | Baseline | Milestones towards achieving output and outcome targets | | | | | Data Collection and Reporting | |
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| | | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Means of verification | Responsible for Data Collection |
| increased local government budget allocation) | | | | | | | | |
| Output 2.1.2: West Dongting Lake NR and South Dongting Lake NR are upgraded from provincial NRs to National NRs and Hengling NR to Ramsar site by the end of PY3 (facilitating increased national government budget allocation). | West DL NR has presented documentation (master plan, biodiversity baseline survey) and application to SFA. South DL NR and Hengling NR are planning to start the documentation and application procedure in 2013. Both NRs need updating of their biodiversity baseline. | 1) Updated biodiversity baseline survey and master plan for South DL NR; 2) Ramsar information sheet based on updated biodiversity survey for Hengling NR; 3) Official approval of upgrading of West DL NR by State Council. | 1) Application for upgrading of South DL NR submitted to SFA; 2) Application for recognition as Ramsar site for Hengling NR submitted to SFA | 1) Official approval of upgrading of South DL NR by State Council. 2) Designation of Hengling NR as RAMSAR site by the State Council (to be approved by Ramsar Secretariat) | | | Biodiversity baseline survey and master; Ramsar information sheet; Applications; provincial and central government approval; PPR | PMO/FDHP; NR bureaus; Forestry bureaus at provincial, municipality, and county level |
| Output 2.1.3: Four five-years NR management plans (NRMP) updated for 2013-2018 and at least 20 NR staff trained in NR planning and management strengthening the DWE NR network | The four DL NRs have 15-years master plans but they are outdated and do not provide concrete priorities, activities and work planning for a more short and medium term period (five years) such as much needed zoning and use regulation and co-management mechanisms. | 1) Four NR staff formulation teams established and on-the-job trained in NR planning and management; 2) 16 objective, approach and priority setting consultations held with local governments, community and private stakeholders, four for each DL NR; 3) Four NRMPs presented to local governments (East, South and Hengling DL NRMPs) and Provincial Forestry Department (West DL NRMP) for approval | Four five-years NRMPs approved by local government or Provincial Forestry Department respectively | Progress in implementation of the four NRMPs monitored and work plan updated | Progress in implementation of the four NRMPs monitored and work plan updated | Progress in implementation of the four NRMPs monitored and work plan updated | Minutes of consultation workshops; Five-years NRMPs; NRMPs implementation progress reports; PPR | PMO/FDHP; NR bureaus |
| Output 2.1.4: Capacities for NR management strengthened through: a) | Staff trained mostly in bird monitoring and protection during the UNDP/GEF | 1) Patrol and monitoring equipment purchased for all four NRs; | 1) 20 Staff trained 2) Infrastructure and equipment maintained | 1) 20 Staff trained 2) Infrastructure | 1) 20 Staff trained 2) Infrastructure | 1) 20 Staff trained 2) Infrastructure | Training participation lists and final | PMO/FDHP; NR bureaus |

| | Baseline | Milestones towards achieving output and outcome targets | | | | | Data Collection and Reporting | |
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| | | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Means of verification | Responsible for Data Collection |
| training of 100 NR staff in BD monitoring and conservation measures, eco-tourism in NRs, law enforcement and co-management mechanism, and public communication and awareness raising; and b) up-grating of infrastructure, patrol and monitoring equipment in three DL NRs (West, South and Hengling). | project, but there has been changes in staff and capacities need to be broadened to other species and issues important for NR management. Only East DL NR is adequately equipped for monitoring and provision of services to visitors including a training center and 4 management stations | 2) Animal rescue centre, bird watching corridor, and visitor centre constructed in East DL NR 3) Office building constructed in Hengling NR 4) Office building and animal rescue centre constructed in South DL NR | | and equipment maintained | and equipment maintained | and equipment maintained | test results; Verification of infrastructure and equipment in situ; PPR | |
| Outcome 2.2.a: Improved biodiversity and endangered species indicators by the end of the project in DWE: (i) increase in total bird visitation by 10% in the four DL NRs; (ii) finless porpoise population maintained; (iii) lesser white-fronted goose population maintained; (iv) black stork population maintained; (v) 5% increase in Pere David's deer population; (vi) Whistling Swan population maintained; (vii) increase from 2 to 5% appearance of Silver Fish in monitoring caches (ecosystem health indicator) | (i) Total migratory bird visitation 104,000-130,000 (2008-2012); (ii) Finless porpoise: 100-150 in DWE (2011), ca. 800 total population; (iii) Lesser white-fronted goose (Anser erythropus): 18,000 in DWE (mostly in East DL NR) which is 50% of total global population; (iv) Black stork (ciconia nigra): 23 in DWE (Dec. 2011), 24,000-34,000 East Asia population; (v) Pere David's Deer (Elaphurus Davidianus): 25 in DWE (Jan 2012), 3000 global population; (vi) Whistling Swan (Cygnus columbianus): 800-1,000 in DWE (Nov-Dec 2011), 86,000 global population; (vii) Silver fish (near | | | | | (i) Total migratory bird visitation 114,400-143,000; (ii) Finless porpoise: 100-150; (iii) Lesser white-fronted goose (Anser erythropus): 18,000; (iv) Black stork (ciconia nigra): 23; (v) Pere David's Deer (Elaphurus Davidianus): 26-27; (vi) Whistling Swan (Cygnus columbianus): 800-1,000; (vii) | Population monitoring system; Final evaluations | PMO/FDHP; NR bureaus; local governments |

| | Baseline | Milestones towards achieving output and outcome targets | | | | | Data Collection and Reporting | | |
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| | | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Means of verification | Responsible for Data Collection | |
| | endangered in IUCN Read List): 2% appearance rate in monitoring catches in DWE (2011) | | | | | | Silver fish: 5% appearance rate in monitoring catches | | |
| Outcome 2.2.b: Improved income indicators for households (of which 60% are represented by women as the main participant and beneficiary) involved in co-management demonstration models: (i) 320 farming households have increased their income with at least 30% in East DL NR from bird-friendly rice production; (ii) 400 households involved in organic fish farming and 500 households involved in rights based fisheries co-management to support the restoration of fisheries resources have increased their income with at least 100% in Hengling NR experimental zone; (iii) 70 households have increased their income with at least 100% in West DL NR from eco-tourism operations and bird habitat conservation | 2.2.b (i) income baseline to be established in PY1 | | | (i) 20 farming households involved with 30% increase in income; (ii) 400 households involved (200 in organic fish farming and 200 in rights based fisheries co-management) with 100% increase in income; (iii) 70 households incorporated and their income increased with 100% | | | (i) 320 farming households involved with 30% increase in income; (ii) 900 households involved (400 in organic fish farming and 500 in rights based fisheries co-management) with 100% increase in income; (iii) 70 households incorporated and their income increased with 100% | Co-management models monitoring reports; Midterm and final evaluations | PMO/FDHP; NR bureaus; local governments; farmers and fishers |
| Output 2.2.1: Four demonstration models for NR co-management | a) 700 ha converted to vegetable production in winter season reducing | a) Detailed feasibility study; two agreements negotiated and signed | a) Farmers trained, cultivation plans under implementation and | a) Farmers trained, cultivation plans | a) Farmers trained, cultivation plans | a) Farmers trained, cultivation | PPR and: a) Training | PMO/FDHP; NR bureaus; local | |

| | Baseline | Milestones towards achieving output and outcome targets | | | | | Data Collection and Reporting | |
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| | | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Means of verification | Responsible for Data Collection |
| <p>implemented:</p> <p>a) agriculture integrated management model restoring paddy harvested fields as winter bird feeding ground on 700 ha involving 320 households in East DL NR;</p> <p>b) reed and poplar management model in South DL NR;</p> <p>c) organic fish farming (involving 400 households) and ecosystem and rights based fisheries co-management (involving 500 households) models to support the restoration of fisheries resources and maintain the porpoises population in 1,800 ha in Hengling NR experimental zone;</p> <p>d) eco-tourism and bird habitat conservation model conserving 60 ha of birds habitat and 70 additional households involved in eco-tourism operations in West DL NR.</p> | <p>migratory birds feeding area in NR experimental zone. Preliminary economic, social and biodiversity feasibility study has been conducted. Framework of agreement has been discussed among partners.</p> <p>b) 10,000 ha of monoculture of poplar and reed in NR core zone are fragmenting habitats. 10 years compensation contracts with poplar enterprises for cutting threes and not planting new threes runs out in 2014.</p> <p>c) 200 households involved in Illegal fishing in Hengling NR and experimental zone resulting in fish stocks under high pressure as evidenced by the silver fish ecosystem health indicator (2% appearance rate in monitoring catches in Henglinghu NR) and the decreasing population of porpoises (20-30 individuals left in Hengling lake which might be difficult to monitor but it feeds on 4 carp species as an important food source</p> | <p>between: 1) enterprise, farmers community (20 households), CAS and East DL NR (30 ha); 2) enterprise, farmers community, Jianxin state farm, CAS and East DL NR (170 ha). Development of land cultivation plan</p> <p>b) Participatory analysis of solution options and incentives identified for reed farms and enterprises to engage in reduction of reed cultivation and poplar plantation areas.</p> <p>c) Economic and social feasibility study, environmental assessment and investment plan and business model for organic aquaculture with native species (fish, eel, tortoise, etc.) developed with local stakeholders; agreement on business plan signed between fishermen corporative (200 households) providing investment resources, NR providing resources for technical assistance, and Qingtan township issuing the contract for use of water;</p> | <p>outcomes (increase in bird population and farmers economic benefits) monitored.</p> <p>b) Solution options and incentives implemented including engagement of reed farm staff in NR management</p> <p>c) Fish farmers trained in organic aquaculture practices, certification, marketing and business management; investment in infrastructure and equipment; implementation of business plan monitored; fishermen, County Bureau of Fishery and NR staff trained in ecosystem and rights based co-management of fishery resources and biodiversity friendly fishing practices and equipment; outcomes (increase in population of Silver fish, carps and porpoises) of the implementation of fisheries co-management plan monitored.</p> <p>d) Construction of tourism facilities</p> | <p>under implementation and outcomes monitored.</p> <p>b) Solution options and incentives implemented</p> <p>c) Fish farmers trained and implementation of business plan monitored; fishermen, County Bureau of Fishery and NR staff trained and outcome of the implementation of fisheries co-management plan monitored</p> <p>d) local fishermen trained (additional 20 households); outcomes of the implementation of the eco-tourism development plan monitored</p> | <p>under implementation and outcomes monitored. Co-management model and lessons learned documented and expanded to 500 additional ha. and more than 300 households</p> <p>b) Solution options and incentives implemented</p> <p>c) Organic aquaculture model and lessons learned documented and expanded to 200 additional households; fisheries co-management model and lessons learned documented and expanded to 1,000 additional ha. and 300 households</p> <p>d) outcomes of the</p> | <p>plans under implementation and outcomes monitored.</p> <p>b) Solution options and incentives implemented. Assessment of solution options and incentives and co-management model with reed farmers documented</p> <p>c) Fish farmers trained and implementation of business plan monitored; fishermen, County Bureau of Fishery and NR staff trained and outcome of the implementation of fisheries co-management plan monitored</p> <p>d) Documentation of lessons</p> | <p>results reports; cultivation plan monitoring reports; report documenting co-management model with farmers</p> <p>b) Assessment report on solution options and incentives; report documenting co-management model with reed farmers</p> <p>c) Economic and social feasibility study; environmental assessment; agreed investment and business plan and monitoring report; agreed sustainable fisheries management plan and monitoring</p> | governments |

| | Baseline | Milestones towards achieving output and outcome targets | | | | | Data Collection and Reporting | |
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| | | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Means of verification | Responsible for Data Collection |
| | <p>which can be monitored, baseline to be established in PY1).</p> <p>d) Illegal fishing activities by 70 fishing vessels are disturbing the birds in the West DL NR core area. Good opportunities for eco-tourism and birds biodiversity co-management because of high concentration of birds and diversified habitat which could reduce the pressure from illegal fishing and bring local economic benefits from birds biodiversity conservation. A pilot experience exist from Banbian Lake involving local population in bird conservation.</p> | <p>sustainable fisheries management plan based on an ecosystem approach and rights based management developed covering 800 ha and agreement signed between Xiangyin County Bureau of Fisheries, local fishermen communities (200 households), and Hengling NR.</p> <p>d) Birds habitat improvement (60 ha) and eco-tourism development plan identifying needs of tourism facilities, organization and regulation of activities, and model for eco tourism operations; local fishermen trained (20 households) in developing ecotourism tour operations applying bird-friendly practices</p> | <p>including bird watching room, tourism trails, knowledge boards, and floating bridges; local fishermen trained (additional 30 households); outcomes of the implementation of the eco-tourism development plan monitored</p> | | <p>implementation of the eco-tourism development plan monitored and eventual adjustment in training and technical assistance programme covering 70 households implemented to achieve sustainability</p> | <p>learned and eco-tourism co-management of birds biodiversity expanded to 1,000 additional ha. and 300 fishermen households</p> | <p>reports; training results reports; documentation of co-management model with fisheries communities</p> <p>d) Birds habitat improvement and eco-tourism development plan and monitoring reports; verification of infrastructure in-situ; training results reports</p> | |
| <p>Output 2.2.2: Conservation of 5 flagship biodiversity species (finless porpoise, lesser white-fronted goose, black stork, Pere David's Deer, Whistle Swan) in a common effort among all NRs through: a) development and implementation of</p> | <p>No specific action plans for flagship species have been established. CAS (Institute of aquatic biology) has a monitoring programme on finless porpoise and ex-situ conservation has started but no results yet. UNDP/GEF project (GEF ID: 623) established population monitoring</p> | <p>1) Five species conservation action plans developed for DWE and collaboration established with conservation plans for the selected species for other geographical areas they migrate to. 2) Systematic population monitoring system expanded to South, West,</p> | <p>1) Population and habitats systematically monitored 2) Priority actions from the five conservation action plans implemented including: habitat restoration and improvement (linked to co-management models (output 2.2.1)),</p> | <p>1) Population and habitats systematically monitored 2) Priority actions from the five conservation action plans implemented</p> | <p>1) Population and habitats systematically monitored 2) Priority actions from the five conservation action plans implemented</p> | <p>1) Population and habitats systematically monitored 2) Priority actions from the five conservation action plans implemented</p> | <p>Species conservation action plans; Monitoring reports; PPR</p> | <p>PMO/FDHP; NR bureaus; local governments</p> |

| | Baseline | Milestones towards achieving output and outcome targets | | | | | Data Collection and Reporting | |
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| | | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Means of verification | Responsible for Data Collection |
| conservation action plan; b) restoration of 6,000 ha of habitat; c) systematic monitoring of population or proxy indicators for population size supported by a GIS data base | system for East DL (which did not include habitat), but no monitoring system exist for at NR network and DWE ecosystem level. | and Hengling DL NRs and improved with habitat monitoring component supported by GIS data base | mitigation of threats (poisoning, hunting, trapping), public awareness, law enforcement. | | | | | |

| | Baseline | Milestones towards achieving output and outcome targets | | | | | Data Collection and Reporting | |
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| | | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Means of verification | Responsible for Data Collection |
| Component 3: Mainstreaming of biodiversity conservation in key sectors | | | | | | | | |
| Outcome 3.1.a: BD O2 tracking tool score on biodiversity conservation integration in policies and regulations increased from 17 to 23 (out of 36 possible) for the sectors influencing on DWE | 17 | | | 20 | | 23 | Legislations and regulations; BD O2 tracking tool | PMO/FDHP; midterm and final evaluation teams |
| Outcome 3.1.b: Poplar plantation reduced by 20,000 ha by the end of the project | 400,000 ha | | | 390,000 ha | | 380,000 ha | Poplar plantation survey; Midterm and final valuations | PMO/FDHP; midterm and final evaluation teams |
| Output 3.1.1: Amendment of Wetland Protection Regulation of Hunan Province (WPRHP) presented to the Provincial People's Congress by PY3 including in particular | WPRHP proclaimed in 2005 but without clear provisions for unified coordination and effective management of wetlands biodiversity and ecosystems and mechanisms for | 1) Two consultations supporting the development of an amendment of WPRHP conducted by FDHP; one at grassroots level and one at Municipality or provincial level. | 1) Two consultations conducted by Provincial Legislation Office; one within Hunan Province and one outside Hunan Province. 2) Two consultation workshops on the | 1) Two consultations conducted by Provincial People's Congress. 2) Two conferences on | 1) Amendment passed and proclaimed | | Consultation reports; Draft and final amendment; proclamation of amendment; PPR. | PMO/FDHP Forestry sector bureaus at provincial, municipality, and county level |

| | Baseline | Milestones towards achieving output and outcome targets | | | | | Data Collection and Reporting | |
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| | | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Means of verification | Responsible for Data Collection |
| provisions for: a) integrated management of wetland biodiversity and ecosystems; and b) compensation mechanism for conservation of wetlands biodiversity and ecosystem services | compensation for biodiversity and ecosystem services conservation. Some consultations have been conducted on wetland conservation as a whole, but none supporting an amendment of the WPRHP. | 2) First draft of the amendment presented to the Provincial Legislation office | amendment held; one for local governments and one for other relevant provincial sectors 3) Second draft of the amendment proposed to the Provincial People's Congress. | amendment convened, one for relevant sectors and one for congress men /women. 3) Amendment Finalized by Provincial Congress | | | | |
| Output 3.1.2: At least two sector policies (fisheries, reed and/or poplar plantation) are aligned with WPRHP, the Integrated DWEMP and the four AMNR decrees and NRMPs at local and provincial level by the end of the project | Conflicting regulation between NR master plans and regulations and sector policies and regulations | | | One sector policy aligned through two sector workshops | One sector policy aligned through two sector workshops | | Consultation workshop reports; policy documents; PPR | PMO/FDHP; sector bureaus |
| Output 3.1.3: Practical skills of 360 provincial and local government officers in enforcement of wetland conservation and sustainable use regulations enhanced | Trainings exist but without specific focus on compliance with wetland regulation | | | 120 | 120 | 120 | Training report and test results of participants; PPR | PMO/FDHP |
| Output 3.1.4: Increased capacity of 40 provincial and local government officials and private sector representatives in development and implementation of biodiversity conservation measures and practices in fishery management, | There is knowledge on technical solutions and biodiversity friendly practices among technical staff but managers lack knowledge on good examples to support their decision-making | Study visit plans prepared for provincial and local government officials and private sector representatives to learn practical solutions for wetlands biodiversity conservation and participants selected | One study visit conducted for 8-12 provincial and local government officials and private sector | Two study visit conducted for 8-12 provincial and local government officials and private sector representatives | One study visit for 8-12 provincial and local government officials and private sector representatives | | Workshop and study visit reports; PPR | PMO/FDHP |

| | Baseline | Milestones towards achieving output and outcome targets | | | | | Data Collection and Reporting | |
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| | | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Means of verification | Responsible for Data Collection |
| pollution control from paper mills, sand mining and land-use planning for reed and poplar plantations | | | | | | | | |

| | Baseline | Milestones towards achieving output and outcome targets | | | | | Data Collection and Reporting | |
|--|----------|---|--------|--------|--------|--------|-------------------------------|---------------------------------|
| | | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Means of verification | Responsible for Data Collection |

Component 4: Environmental education and awareness

| | | | | | | | | |
|---|---|--|--|---------------|--|---------------|--|---|
| Outcome 4.1: Awareness among the local population on DWE biodiversity value, use and wetlands protection regulations increased to 30%. | Less than 10% of the local population knows about wetlands provincial regulation | | | 20% awareness | | 30% awareness | Awareness survey; midterm and final evaluation | PMO/FDHP; NR bureaus; midterm and final evaluations teams |
| Output 4.1.1: 50,000 brochures distributed and system of 20 billboard signs set up on: a) flagship species conservation; b) rules and regulations for protection and use of wetlands biodiversity; c) success stories on organic aquaculture, eco-tourism, ecosystem and rights based management of fisheries, and bird-friendly cultivation plan; and d) NR demarcation | Four brochures; two on East and South DL NR in general, one on some specific water bird species, and one on ecotourism in West DL NR 16 billboard signs in DWE marking core zone and communicating some rules and important habitats | 1) Brochures designed and 25,000 printed 2) 10 boards designed and set up | 1) Brochures designed and 25,000 printed 2) 10 boards designed and set up | | | | Brochures disseminated; billboard signs in situ; PPR | PMO/FDHP; NR bureaus |

| | Baseline | Milestones towards achieving output and outcome targets | | | | | Data Collection and Reporting | |
|--|---|---|--|--|---------------------------------|---|---|---|
| | | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Means of verification | Responsible for Data Collection |
| Output 4.1.2: Infrastructure and display of visitors and other education centres improved including: a) construction of three visitors and education centers of West, South and Hengling DL NRs; b) improvement of displays in four centers; and c) upgrading of displays in Qingshan polder organic aquaculture success story exhibition hall (West DL NR) | There are only 2 useful visitors and education centers in 4 NRs; The infrastructure needs improvements to meet the needs. | 1) Existing education center improved in West DL NR 2) Displays upgraded in Qingshan polder organic aquaculture success story exhibition hall (West DL NR) | 1) Visitors and education centers Hengling and South DL NRs constructed 2) Displays improved in 4 centers | | | | Visitors and education centers and exhibition hall verified in situ; Equipment list of centers; PPR | PMO/FDHP; NR bureaus; Hanshou Qingshan polder co-management association |
| Output 4.1.3: Special campaign and events organized and conducted including: a) 20 summer holiday university volunteers camps in each of the four NRs; and b) 40-60 campaigns on special days such as annual Wetlands day, annual Bird week, bi-annual Bird watching race | The activities are already been done, however improvements are needed in design, planning and organization of the events | 4 camps and 8-12 special events | 4 camps and 8-12 special events | 4 camps and 8-12 special events | 4 camps and 8-12 special events | 4 camps and 8-12 special events | Media reports; Camp and event agenda and summary report; PPR | PMO/FDHP; NR bureaus |
| Output 4.1.4: Curricula on DWE biodiversity conservation and sustainable use included in 20 middle schools in counties and townships around the lake reaching 30,000 students. | No curricula | | | Middle school curricula developed in consultation with the provincial education department | Curricula included in 4 schools | Curricula included in 16 additional schools | Curricula; verification of school classes in situ; PPR | PMO/FDHP; NR bureaus |

| | Baseline | Milestones towards achieving output and outcome targets | | | | | Data Collection and Reporting | |
|--|--|---|---|--|---|---|--|---------------------------------|
| | | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Means of verification | Responsible for Data Collection |
| Component 5 M&E and information dissemination | | | | | | | | |
| Outcome 5.1: Project implementation based on results based management and increased receptivity and adoption of DWE approach to “mainstreaming” biodiversity conservation in sector planning both in China and elsewhere | | | | 30-40% progress in achieving project outcomes | | Project outcomes achieved and showing sustainability | Midterm and final evaluations | PMO/FDHP, FAO |
| Output 5.1.1: Project monitoring system providing six-monthly reports on progress in achieving project outputs and outcomes | Project results framework with project output and outcome indicators, targets and baseline | Two six-monthly progress reports | Two six-monthly progress reports | Two six-monthly progress reports | Two six-monthly progress reports | Two six-monthly progress reports | PPRs | PMO/FDHP |
| Output 5.1.2: Midterm and final evaluation reports | N/A | | | Midterm evaluation report | | Final evaluation report | Evaluation reports | PMO/FDHP, FAO |
| Output 5.1.3: Project “best-practices” and “lessons-learned” in relation to co-management models, integrated DWE management experience, mainstreaming of wetlands biodiversity conservation in sectors disseminated via publications, project website and others. | N/A | 1) Website established 2) Periodic project news letter | 1) Updating of website 2) Periodic project news letter | 1) Publication on experiences and “best practices” in DWE integrated management 2) Updating of website 3) Periodic project news letter | Publication on “best practices” and “lessons learned” in mainstreaming conservation of wetlands biodiversity in sectors | Publication on “best practices” and lessons learned in co-management models | Publications; number of visitors on website; PPR | PMO/FDHP |

APPENDIX 2: WORK PLAN (RESULTS BASED)

| Output | Activities | Responsible institution/ entity | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | | Year 5 | | | |
|--|---|--|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|
| | | | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 |
| Component 1: Strengthening of institutional capacities for integrated monitoring and management of biodiversity in DWE | | | | | | | | | | | | | | | | | | | | | | |
| Output 1.1.1: DLCC (Dongting Lake Conservation Commission) strengthened by the end of the project with: i) a functioning secretariat in FDHP (two half-time staffs, office equipment and operations budget); ii) agreed operations procedures; iii) agreed five years work plan; and iii) at least one meeting per year held | 1. Contract institutional specialist to support the process of making the DLCC operative | FDHP | | | | | | | | | | | | | | | | | | | | |
| | 2. Two part time staff seconded to the Secretariat of the DLCC | FDHP | | | | | | | | | | | | | | | | | | | | |
| | 3. Office space provided by the FDHP and equipment procured | FDHP | | | | | | | | | | | | | | | | | | | | |
| | 4. Make budgetary provisions for the operation of the Secretariat | FDHP | | | | | | | | | | | | | | | | | | | | |
| | 5. Prepare, consult through workshops and obtain agreement on operations procedures and five year work plan for the DLCC | FDHP and DLCC members supported by the institutional specialist | | | | | | | | | | | | | | | | | | | | |
| | 6. Organize and hold DLCC meeting | FDHP and DLCC members | | | | | | | | | | | | | | | | | | | | |
| | 7. Monitor progress in implementation of DLCC five years work plan | FDHP and DLCC members | | | | | | | | | | | | | | | | | | | | |
| Output 1.1.2: Updated detailed biodiversity baseline and threat analysis by the end of PY1 including three technical reports on: a) DWE biodiversity and ecosystem services value and status; b) impacts on biodiversity from different sectors and response options; and c) options and priorities for land and water use plans valuating biodiversity | 1. Contract consultancy services for updating biodiversity baseline and threats analysis and elaboration of the DWEMP through competitive processes | FDHP with support from FAO | | | | | | | | | | | | | | | | | | | | |
| | 2. Conduct three technical studies and elaborate three draft reports | Consultancy service providers | | | | | | | | | | | | | | | | | | | | |
| | 3. Consult report findings and recommendations through at least 3 meetings per report with relevant sectors | FDHP, NRMBs, and consultancy service providers | | | | | | | | | | | | | | | | | | | | |
| | 4. Finalize reports | Consultancy service providers | | | | | | | | | | | | | | | | | | | | |
| Output 1.1.3 : Integrated DWE management plan (MP) | 1. Formulation of mission and specific objectives for the DWEMP through public consultations and based | DLCC, FDHP, and NRMBs supported by consultancy service providers | | | | | | | | | | | | | | | | | | | | |

| Output | Activities | Responsible institution/ entity | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | | Year 5 | | | |
|--|---|---|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|
| | | | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 |
| incorporating valuation of biodiversity approved by DLCC by PY3 and under initial implementation by the end of the project | on output 1.1.2 | | | | | | | | | | | | | | | | | | | | | |
| | 2. Conduct financial and economic feasibility analysis of alternative response measures to mitigate DWE threats | Consultancy service providers | | | | | | | | | | | | | | | | | | | | |
| | 3. Elaborate draft DWEMP | Consultancy service providers | | | | | | | | | | | | | | | | | | | | |
| | 4. Consult draft DWEMP with DLCC members and other stakeholders and respond and incorporate comments and recommendations | DLCC, FDHP, and NRMBs supported by consultancy service providers | | | | | | | | | | | | | | | | | | | | |
| | 5. Develop monitoring system for the implementation of the DWEMP including agreed indicators for progress in achieving the objectives and outputs of the plan | Consultancy service providers | | | | | | | | | | | | | | | | | | | | |
| | 6. Finalize DWEMP | Consultancy service providers | | | | | | | | | | | | | | | | | | | | |
| | 7. Present the DWEMP for approval by the DLCC | FDHP | | | | | | | | | | | | | | | | | | | | |
| | 8. Implementation of DWEMP prioritized immediate actions | DLCC, FDHP, and NRMBs and eventual other stakeholders | | | | | | | | | | | | | | | | | | | | |
| | 9. Monitor the progress in implementation of the DWEMP | FDHP and DLCC | | | | | | | | | | | | | | | | | | | | |
| Output 1.1.4: DWE Integrated Information Management System (IIMS) on status of biodiversity, ecosystem services, and socio-economic indicators is operating providing data and analysis for DWE management and decision-making at municipal, province and NR levels by PY2. | 1. Designate focal points for IIMS from the province departments of Environmental Protection, Water Resources, Fisheries and Forestry, NRs, and CAS | province departments of Environmental Protection, Water Resources, Fisheries and Forestry, NRs, and CAS | | | | | | | | | | | | | | | | | | | | |
| | 2. Contract information system specialist to support the design of the IIMS platform for integration of information and provide training to focal points in how to operate it | FDHP | | | | | | | | | | | | | | | | | | | | |
| | 3. Define data entries to the IIMS platform | IIMS focal points | | | | | | | | | | | | | | | | | | | | |
| | 4. Design IIMS platform | Information system specialist | | | | | | | | | | | | | | | | | | | | |
| | 5. Train focal points in operating the platform | Information system specialist | | | | | | | | | | | | | | | | | | | | |
| | 6. Record baseline level data in the IIMS | IIMS focal points supported by information system specialist | | | | | | | | | | | | | | | | | | | | |
| | 7. Discuss and agree on level of information disclosure to enable public access to the IIMS | IIMS focal points in consultation with their management | | | | | | | | | | | | | | | | | | | | |
| | 8. Continued updating of the IIMS with data from on- | IIMS focal points | | | | | | | | | | | | | | | | | | | | |

| Output | Activities | Responsible institution/ entity | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | | Year 5 | | | |
|---|--|--|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|
| | | | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 |
| | going monitoring programmes | | | | | | | | | | | | | | | | | | | | | |
| | 9. Preparation and publishing of bi-annual status report on DWE services and biodiversity | FDHP supported by IIMS focal points | | | | | | | | | | | | | | | | | | | | |
| Component 2: Strengthening of management effectiveness of DWE NRs network | | | | | | | | | | | | | | | | | | | | | | |
| Output 2.1.1: Three local decrees on Administrative Measures for NR (AMNR), one for each of East, South and Hengling Dongting Lake (DL) NRs, proclaimed by the end of PY2 (facilitating increased local government budget allocation). | 1. Contracting of NR legal specialists for surveys and preparation of AMNR through competitive process | FDHP with the participation of NRMBs and the Forestry Bureaus of Yueyang and Yiyang municipalities and Xiangyin county | | | | | | | | | | | | | | | | | | | | |
| | 2. Conduct three surveys on AMNR for East, South and Hengling DL NRs | NR legal specialist supported by NRMBs and the Forestry Bureaus of Yueyang and Yiyang municipalities and Xiangyin county | | | | | | | | | | | | | | | | | | | | |
| | 3. Draft three AMNR for East, South and Hengling DL NRs | NR legal specialist supported by NRMBs and the Forestry Bureaus of Yueyang and Yiyang municipalities and Xiangyin county | | | | | | | | | | | | | | | | | | | | |
| | 4 Hold nine local consultation workshops on draft AMNR, three for each NR (East, South, and Hengling) | Forestry Bureaus of Yueyang and Yiyang municipalities and Xiangyin county supported by Nr legal specialist and NRMBs | | | | | | | | | | | | | | | | | | | | |
| | 6. Adjust three draft AMNRs to recommendations from the consultations | NR legal specialist supported by NRMBs and the Forestry Bureaus of Yueyang and Yiyang municipalities and Xiangyin county | | | | | | | | | | | | | | | | | | | | |
| | 7. Hold three final validation workshops AMNR, one for each DL NRs East, South, and Hengling; | Forestry Bureaus of Yueyang and Yiyang municipalities and Xiangyin county supported by Nr legal specialist and NRMBs | | | | | | | | | | | | | | | | | | | | |
| | 8. Adjust three advanced draft AMNRs to recommendations from the final validation | NR legal specialist supported by NRMBs and the Forestry Bureaus of Yueyang and Yiyang municipalities and Xiangyin county | | | | | | | | | | | | | | | | | | | | |
| | 9. Local governments (county for Hengling and Municipal for south and East NRs) proclaim AMNRs | Yueyang and Yiyang municipalities and Xiangyin county | | | | | | | | | | | | | | | | | | | | |

| Output | Activities | Responsible institution/ entity | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | | Year 5 | | | | | |
|--|---|---|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|--|--|
| | | | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | | |
| Output 2.1.2: West Dongting Lake NR and South Dongting Lake NR are upgraded from provincial NRs to National NRs and Hengling NR to Ramsar site by the end of PY3 (facilitating increased national government budget allocation) | 1. Approve the upgrading of West DL NR to national NR by State Council. | State Council followed up by FDHP | | | | | | | | | | | | | | | | | | | | | | |
| | 2. Contract consultancy services for the preparation of the biodiversity baseline and master plan for South DL NR through a competitive process | FDHP with the participation of NRMBs | | | | | | | | | | | | | | | | | | | | | | |
| | 3. Contract consultancy services for the preparation of biodiversity baseline survey and Ramsar site sheet for Henglin DL NR | FDHP with the participation of NRMBs | | | | | | | | | | | | | | | | | | | | | | |
| | 4. Update biodiversity baseline survey and master plan for South DL NR | Consultancy service provider supported by FDHP and NRMBs | | | | | | | | | | | | | | | | | | | | | | |
| | 5. Updated biodiversity survey for Hengling NR and prepare Ramsar information sheet | Consultancy service provider supported by FDHP and NRMBs | | | | | | | | | | | | | | | | | | | | | | |
| | 6. Submit application for upgrading of South DL NR to SFA and follow up | FDHP supported by NRMB | | | | | | | | | | | | | | | | | | | | | | |
| | 7. Submit application for recognition as Ramsar site for Hengling NR to SFA and follow up | FDHP supported by NRMB | | | | | | | | | | | | | | | | | | | | | | |
| | 8. Approve the upgrading of South DL NR to national NR by State Council. | State Council followed up by FDHP | | | | | | | | | | | | | | | | | | | | | | |
| | 9. Designation of Hengling NR as Ramsar site by State Council. | State Council followed up by FDHP | | | | | | | | | | | | | | | | | | | | | | |
| Output 2.1.3 : Four five-years NR management plans (NRMP) updated for 2013-2018 and at least 20 NR staff trained in NR planning and management strengthening the DWE NR network | 1. Contract NR management specialist to support the development of 4 NRMPs through a competitive process | FDHP with the participation of NRMBs | | | | | | | | | | | | | | | | | | | | | | |
| | 2. Establish four NR staff formulation teams to participate and be | NRMBs | | | | | | | | | | | | | | | | | | | | | | |
| | 3. On-the-job trained of NR staff formulation team in NR planning and management | NR management specialist | | | | | | | | | | | | | | | | | | | | | | |
| | 4. Hold 16 objective, approach and priority setting consultations with local governments, community and private stakeholders, four for each DL NR | NRMBs supported by the NR management specialist | | | | | | | | | | | | | | | | | | | | | | |
| | 5. Prepare 4 NRMPs | four NR staff formulation teams supported by NR management consultant | | | | | | | | | | | | | | | | | | | | | | |
| | 6. Present NRMPs to local governments (East, South and Hengling NRMPs) and FDHP (West NR) for approval | NRMBs | | | | | | | | | | | | | | | | | | | | | | |
| | 7. Approve 4 NRMPs | Local governments and FDHP | | | | | | | | | | | | | | | | | | | | | | |

| Output | Activities | Responsible institution/ entity | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | | Year 5 | | | |
|---|--|---|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|
| | | | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 |
| | 8. Monitor progress in implementing NRMPs and update work plan | | | | | | | | | | | | | | | | | | | | | |
| Output 2.1.4: Capacities for NR management strengthened through: a) training of 100 NR staff in BD monitoring and conservation measures, ecotourism in NRs, law enforcement and co-management mechanism, and public communication and awareness raising; and b) upgrading of infrastructure, patrol and monitoring equipment in three DL NRs (West, South and Hengling). | 1. Purchase patrol and monitoring equipment for all four NR | FDHP in coordination with NRMBs | | | | | | | | | | | | | | | | | | | | |
| | 2. Construct animal rescue centre, bird watching corridor, and visitor centre in East DL NR, office building in Hengling NR, and office building and animal rescue centre in South DL NR | FDHP supported by NRMBs and local governments | | | | | | | | | | | | | | | | | | | | |
| | 3. Maintain equipment and infrastructure | NRMBs and local governments monitored by FDHP and FAO | | | | | | | | | | | | | | | | | | | | |
| | 4. Organize and execute study tours for 20 NR staff (two trips of 10) NR staff to other NRs in China with good examples of co-management models | FDHP supported by NRMBs | | | | | | | | | | | | | | | | | | | | |
| | 5. Organize and execute study tours for 16 NR staff to other NRs in China with good examples of ecotourism activities | FDHP supported by NRMBs | | | | | | | | | | | | | | | | | | | | |
| | 6. Organize and executed secondment of 8 NR staff for 1 months each to flagship examples of well managed wetlands NR in China | FDHP supported by NRMBs | | | | | | | | | | | | | | | | | | | | |
| | 7. Organize and execute training course of 20 NR staff 6 days in public communication and environmental education | FDHP supported by NRMBs | | | | | | | | | | | | | | | | | | | | |
| | 8. Organize and execute training course of 16 NR staff 1 day (plus trainer accompanying study tour) in ecotourism in NR | FDHP supported by NRMBs | | | | | | | | | | | | | | | | | | | | |
| | 9. Organize and execute training-by-doing of 8 NR staff developing projects for fund raising and setting up planning and monitoring mechanism for project implementation | FDHP supported by NRMBs | | | | | | | | | | | | | | | | | | | | |
| | 10. Organize and execute training-by-doing in the field (3 x 10days) of 20 NR staff in wetlands biodiversity monitoring | FDHP supported by NRMBs | | | | | | | | | | | | | | | | | | | | |
| Output 2.2.1: Four demonstration models for NR co-management implemented: a) agriculture integrated | 1.a Contract socio-economic specialist for feasibility study of agriculture integrated management model | FDHP supported by NRMB East DL NR | | | | | | | | | | | | | | | | | | | | |
| | 2.a Conduct detailed socio-economic feasibility study | Socio-economic specialist supported by NRMB East DL, farmers, enterprise, and | | | | | | | | | | | | | | | | | | | | |

| Output | Activities | Responsible institution/ entity | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | | Year 5 | | | | |
|---|--|---|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|--|
| | | | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | |
| management model restoring paddy harvested fields as winter bird feeding ground on 700 ha involving 320 households in East DL NR; b) reed and poplar management model in South DL NR; c) organic fish farming (involving 400 households) and ecosystem and rights based fisheries co-management (involving 500 households) models to support the restoration of fisheries resources and maintain the porpoises population in 1,800 ha in Hengling NR experimental zone; d) eco-tourism and bird habitat conservation model conserving 60 ha of birds habitat and 70 additional households involved in eco-tourism operations in West DL NR. | | Jianxin state farm | | | | | | | | | | | | | | | | | | | | | |
| | 3.a Negotiate two agreements on agriculture integrated management between: 1) enterprise, farmers community (20 households), CAS and East DL NR covering 30 ha; and 2) enterprise, farmers community, Jianxin state farm, CAS and East DL NR covering 170 ha. | NRMB East DL supported by farmers, enterprise, and Jianxin state farm | | | | | | | | | | | | | | | | | | | | | |
| | 4.a Contract bird specialist for integrated bird-friendly cultivation planning | FDHP supported by NRMB East DL NR | | | | | | | | | | | | | | | | | | | | | |
| | 5.a Develop bird-friendly land cultivation plan | Bird specialist supported by NRMB East DL, farmers, enterprise, and Jianxin state farm | | | | | | | | | | | | | | | | | | | | | |
| | 6.a Provide technical assistance and train farmers in implementation of the bird-friendly land cultivation plan | Socio-economic specialist supported by NRMB East DL and enterprise | | | | | | | | | | | | | | | | | | | | | |
| | 7.a Monitor outcome of the implementation of the bird-friendly land cultivation plan (increase in bird population and farmers economic benefits) | NRMB East DL supported by farmers, enterprise, and Jianxin state farm | | | | | | | | | | | | | | | | | | | | | |
| | 8.a Document co-management model and lessons learned and | NRMB East DL supported by farmers, enterprise, and Jianxin state farm | | | | | | | | | | | | | | | | | | | | | |
| | 9.a Expanded the model to 500 additional ha. and more than 300 additional households | NRMB East DL supported by farmers, enterprise, and Jianxin state farm | | | | | | | | | | | | | | | | | | | | | |
| | 1.b Contract land use specialist for diagnostic and identification of alternative solutions for reed and poplar plantations in South DL NR | FDHP supported by NRMB South DL NR | | | | | | | | | | | | | | | | | | | | | |
| | 2.b Conduct participatory analysis of solution options for ecosystem fragmentation caused by reed farming and poplar plantation.and incentives identified for reed farms and enterprises to engage in reduction of reed cultivation and poplar plantation areas. | Land-use specialist supported by FDHP and NRMB South DL NR | | | | | | | | | | | | | | | | | | | | | |
| | 3.b Consensus based identification of incentives for reed farms and enterprises to engage in reduction of reed cultivation and poplar plantation areas | Land-use specialist supported by NRMB South DL NR, reed farmers and poplar plantation enterprises | | | | | | | | | | | | | | | | | | | | | |
| | 4.b Implement Solution options and incentives | NRMB South DL NR and FDHP | | | | | | | | | | | | | | | | | | | | | |

| Output | Activities | Responsible institution/ entity | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | | Year 5 | | | |
|--------|---|---|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|
| | | | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 |
| | including engagement of reed farm staff in NR management | supported by reed farmers and poplar plantation enterprises | | | | | | | | | | | | | | | | | | | | |
| | 5.b Evaluate solution options and incentives and document co-management model with reed farmers | NRMB South DL NR and FDHP supported by reed farmers and poplar plantation enterprises | | | | | | | | | | | | | | | | | | | | |
| | 1.c Contract socio-economist to conduct socio-economic feasibility study of aquaculture development plans | FDHP supported by NRMB Henglin NR | | | | | | | | | | | | | | | | | | | | |
| | 2.c Contract aquaculture specialist for environmental feasibility study and development of investment plan for organic aquaculture | FDHP supported by NRMB Henglin NR | | | | | | | | | | | | | | | | | | | | |
| | 3.c Contract fisheries co-management specialist for the development of sustainable fisheries management plan based on an ecosystem approach | FDHP supported by NRMB Henglin NR | | | | | | | | | | | | | | | | | | | | |
| | 4.c Conduct detailed socio-economic feasibility study of organic aquaculture development plans and provide recommendations on best options for socio economic benefits including for vulnerable groups | Socio economic specialist consulting with local communities and supported by the Hengling NRMB | | | | | | | | | | | | | | | | | | | | |
| | 5.c Conduct environmental feasibility study of organic aquaculture development plans and prepare environmental management plan to insure the organic aquaculture plans are in harmony with the surrounding wetlands ecosystems, develop environmental management plan for the aquaculture plans and other documentation needed for Qingtan township issuing the contract for use of water | Aqua culture specialist consulting with local communities and supported by the Hengling NRMB and Qingtan township | | | | | | | | | | | | | | | | | | | | |
| | 6.c Prepare draft co-management investment plans and business model for organic aquaculture | Aqua culture specialist consulting with local communities and supported by the Hengling NRMB and Qingtan township | | | | | | | | | | | | | | | | | | | | |
| | 7.c Conduct consultation and negotiation workshops and signature of agreement on aquaculture business model between fishermen corporative (200 households) providing investment resources, NR providing resources for technical assistance, and Qingtan township issuing the contract for use of | Hengling NRMB supported by aquaculture specialist | | | | | | | | | | | | | | | | | | | | |

| Output | Activities | Responsible institution/ entity | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | | Year 5 | | | |
|--------|--|--|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|
| | | | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 |
| | water; | | | | | | | | | | | | | | | | | | | | | |
| | 8.c Investment in organic fish farming infrastructure | Fish farming associations | | | | | | | | | | | | | | | | | | | | |
| | 9.c Training of of 270 fishermen in organic aquaculture practices, certification, marketing and business management | Aqua culture specialist supported by the Hengling NRMB | | | | | | | | | | | | | | | | | | | | |
| | 10.c Monitor implementation of organic aquaculture business plans including indicators on rate of return on investments, inclusion of vulnerable groups, and trends in illegal fishing activities in Hengling NR | Fish farming associations supported by Hengling NRMB | | | | | | | | | | | | | | | | | | | | |
| | 11.c Document organic aquaculture model and lessons learned | Hengling NRMB supported by fish farmers associations and Qingtan township | | | | | | | | | | | | | | | | | | | | |
| | 12.c Expand organic fish farming co-management model to 200 additional households; | Hengling NRMB supported by fish farmers associations and Qingtan township | | | | | | | | | | | | | | | | | | | | |
| | 13.c Conduct legal, economic and social feasibility study and prepare sustainable fisheries management plan based on an ecosystem approach and rights based management covering 800 ha in Hengling lake. | Fisheries co-management specialist, in consultation with fisheries communities and supported by Hengling NRMB and Xiangyin County Fisheries Bureau | | | | | | | | | | | | | | | | | | | | |
| | 14.c Hold consultation workshop and negotiated agreement on fisheries co-management plan signed between Xiangyin County Bureau of Fisheries, local fishermen communities (200 households), and Hengling NR | Hengling NRMB supported by fisheries co-management specialist | | | | | | | | | | | | | | | | | | | | |
| | 15.c Training of fishermen (270), County Bureau of Fishery and NR staff in ecosystem and rights based co-management of fishery resources and biodiversity friendly fishing practices and equipment; | Fisheries co-management specialist with support from Hengling NRMB and FAO | | | | | | | | | | | | | | | | | | | | |
| | 16.c Monitor implementation of fisheries co-management plans including its outcomes (increase in population of Silver fish, carps and porpoises). | Fishermen supported by Hengling NRMB and Xiangyin County Fisheries Bureau | | | | | | | | | | | | | | | | | | | | |
| | 17.c Document fisheries co-management model and lessons learned | Fisheries co-management specialist supported by fishermen, Hengling | | | | | | | | | | | | | | | | | | | | |

| Output | Activities | Responsible institution/ entity | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | | Year 5 | | | |
|--|---|---|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|
| | | | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 |
| | | NRMB and Xiangyin County Fisheries Bureau | | | | | | | | | | | | | | | | | | | | |
| | 18.c Expand to 1,000 additional ha. and 300 additional households | Fisheries co-management specialist supported by fishermen, Hengling NRMB and Xiangyin County Fisheries Bureau | | | | | | | | | | | | | | | | | | | | |
| | 1.d Contract eco-tourism specialist for the development of eco-tourism co-management model | FDHP supported by NRMB for West DL NR | | | | | | | | | | | | | | | | | | | | |
| | 2.d Conduct legal, socio-economic and environmental feasibility study and prepare bird habitat (60 ha) improvement and eco-tourism development plan identifying needs of tourism facilities, organization and regulation of activities, and model for eco tourism operations; | Ecotourism specialist in consultation with fishermen and supported by NRMB West DL NR | | | | | | | | | | | | | | | | | | | | |
| | 3.d Local fishermen trained (70 households) in developing ecotourism tour operations applying bird-friendly practices | Ecotourism specialist supported by NRMB West DL NR | | | | | | | | | | | | | | | | | | | | |
| | 4.d Construct tourism facilities including bird watching room, tourism trails, knowledge boards, and floating bridges; | NRMB West DL NR | | | | | | | | | | | | | | | | | | | | |
| | 5.d Monitor implementation of outcomes of the implementation of the eco-tourism development plan | Fishermen and other tourism operators supported by NRMB West DL NR | | | | | | | | | | | | | | | | | | | | |
| | 5.e Document lessons learned and eco-tourism co-management of birds biodiversity model | Ecotourism specialist supported by fishermen and NRMB West DL NR | | | | | | | | | | | | | | | | | | | | |
| | 5.f expand to 1,000 additional ha. and 300 fishermen households | Ecotourism specialist supported by fishermen and NRMB West DL NR | | | | | | | | | | | | | | | | | | | | |
| Output 2.2.2: Conservation of 5 flagship biodiversity species (finless porpoise, lesser white-fronted goose, black stork, Pere David’s Deer, Whistle Swan) in a common effort among all NRs through: a) development and | 1. Contract three specialists in selected flagship species (finless porpoises, Pere David’s Deer , and water birds) for the preparation of species conservation action plans. | FDHP supported by the four NRMBs | | | | | | | | | | | | | | | | | | | | |
| | 2. Develop five species conservation action plans for DWE and establish collaboration with conservation plans for the selected species for other geographical areas they migrate to. | Specialists in flagship species supported by the four NRMBs and local communities | | | | | | | | | | | | | | | | | | | | |

| Output | Activities | Responsible institution/ entity | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | | Year 5 | | | |
|--|--|---|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|
| | | | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 |
| implementation of conservation action plan; b) restoration of 6,000 ha of habitat; c) systematic monitoring of population or proxy indicators for population size supported by a GIS data base | 3. Expand population monitoring system from East DL NR to South, West, and Hengling DL NRs and develop and implement an habitat monitoring component supported by GIS data base | The four NRMBs supported by specialists in flagship species and local communities | | | | | | | | | | | | | | | | | | | | |
| | 4. Monitor status of populations and habitats | The four NRMBs supported by local communities | | | | | | | | | | | | | | | | | | | | |
| | 5. Implement priority actions from the five conservation action plans including: habitat restoration and improvement (linked to co-management models (output 2.2.1)), mitigation of threats (poisoning, hunting, trapping), public awareness, law enforcement. | The four NRMBs supported by FDHP and local communities | | | | | | | | | | | | | | | | | | | | |
| Component 3: Mainstreaming of biodiversity conservation in key sectors | | | | | | | | | | | | | | | | | | | | | | |
| Output 3.1.1: Amendment of Wetland Protection Regulation of Hunan Province (WPRHP) presented to the Provincial People's Congress by PY3 including in particular provisions for: a) integrated management of wetland biodiversity and ecosystems; and b) compensation mechanism for conservation of wetlands biodiversity and ecosystem services | 1. Contract Natural Resources Economist to support the preparation of the amendment of the WPRHP and alignment of sector policies | FDHP | | | | | | | | | | | | | | | | | | | | |
| | 2. Contract Environmental legal specialist to support the preparation of the amendment of the WPRHP and alignment of sector policies | FDHP | | | | | | | | | | | | | | | | | | | | |
| | 3. Conduct two consultations supporting the development of an amendment of WPRHP: one at grassroots level and one at Municipality or provincial level. | FDHP supported by the legal and NR economist specialists and NRMBs | | | | | | | | | | | | | | | | | | | | |
| | 4. Prepare first draft of the amendment | Legal and NR economist specialists supported by the FDHP and NRMBs | | | | | | | | | | | | | | | | | | | | |
| | 5. Present first draft to the Provincial Legislation office | FDHP | | | | | | | | | | | | | | | | | | | | |
| | 6. Conduct two consultations: one within Hunan Province and one outside Hunan Province. | Provincial Legislation Office supported by FDHP | | | | | | | | | | | | | | | | | | | | |
| | 7. Conduct two consultation workshops on the amendment: one for local governments and one for other relevant provincial sectors | FDHP supported by NRMBs | | | | | | | | | | | | | | | | | | | | |
| | 8. Propose the second draft of the amendment to the | Provincial Legislation Office supported | | | | | | | | | | | | | | | | | | | | |

| Output | Activities | Responsible institution/ entity | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | | Year 5 | | | |
|---|--|--|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|
| | | | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 |
| | Provincial People's Congress. | by FDHP | | | | | | | | | | | | | | | | | | | | |
| | 9. Conduct two consultations | Provincial People's Congress supported by FDHP | | | | | | | | | | | | | | | | | | | | |
| | 10 Convene two conferences on the amendment: one for relevant sectors and one for congress men /women | Provincial People's Congress supported by FDHP | | | | | | | | | | | | | | | | | | | | |
| | 11. Finalize amendment | Provincial People's Congress supported by FDHP | | | | | | | | | | | | | | | | | | | | |
| | 12. Pass and proclaim amendment | Provincial People's Congress | | | | | | | | | | | | | | | | | | | | |
| Output 3.1.2: At least two sector policies (fisheries, reed and/or poplar plantation) are aligned with WPRHP, the Integrated DWEMP and the four AMNR decrees and NRMPs at local and provincial level by the end of the project | 1. Conduct four sector workshops on the alignment of two sector policies | FDHP supported by NRMBs and sector bureaus | | | | | | | | | | | | | | | | | | | | |
| Output 3.1.3: Practical skills of 360 provincial and local government officers in enforcement of wetland conservation and sustainable use regulations enhanced | 1. Contract training facilitators | FDHP supported by NRMBs | | | | | | | | | | | | | | | | | | | | |
| | 2. Prepare training agenda and material | FDHP supported by NRMBs supported by training facilitators | | | | | | | | | | | | | | | | | | | | |
| | 3. Conduct 6 2-days training courses with 30 trainees in each and prepare training report with participants evaluations | FDHP supported by NRMBs supported by training facilitators | | | | | | | | | | | | | | | | | | | | |
| Output 3.1.4: Increased capacity of 40 provincial and local government officials and private sector representatives in development and implementation of biodiversity conservation measures and practices in fishery management, pollution control from paper mills, sand mining and land-use planning for reed and poplar plantations | 1. Select participants and prepare study visit plan for provincial and local government officials and private sector representatives to learn practical solutions for wetlands biodiversity conservation and participants selected | FDHP supported by sector bureaus and in consultation with the private sector | | | | | | | | | | | | | | | | | | | | |
| | 2. Organize logistics and conduct 3 7-days study tours with 8-12 participants in each | FDHP | | | | | | | | | | | | | | | | | | | | |
| | 3. Prepare study tour results report with participants evaluation | FDHP | | | | | | | | | | | | | | | | | | | | |

| Output | Activities | Responsible institution/ entity | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | | Year 5 | | | |
|---|---|--|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|
| | | | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 |
| Component 4: Environmental education and awareness | | | | | | | | | | | | | | | | | | | | | | |
| Output 4.1.1: 50,000 brochures distributed and system of 20 billboard signs set up on: a) flagship species conservation; b) rules and regulations for protection and use of wetlands biodiversity; c) success stories on organic aquaculture, eco-tourism, ecosystem and rights based management of fisheries, and bird-friendly cultivation plan; and d) NR demarcation | 1. Contract communication firm for the design of brochures | FDHP and NRMBs | | | | | | | | | | | | | | | | | | | | |
| | 2. Contract communication firm for the design of billboard signs | FDHP and NRMBs | | | | | | | | | | | | | | | | | | | | |
| | 3. Prepare text inputs and review the design of brochures and billboard signs before final editing and graphic design | NRMBs supported by FDHP | | | | | | | | | | | | | | | | | | | | |
| | 4 Set up billboard signs and distribute brochures | NRMBs | | | | | | | | | | | | | | | | | | | | |
| Output 4.1.2: Infrastructure and display of visitors and other education centres improved including: a) construction of three visitors and education centers of West, South and Hengling DL NRs; b) improvement of displays in four centers; and c) upgrading of displays in Qingshan polder organic aquaculture success story exhibition hall (West DL NR) | 1. Prepare technical specifications, call for price offers and procure displays for visitor centers | FDHP and NRMBs | | | | | | | | | | | | | | | | | | | | |
| | 2. Monitor that co-financing investments have been realized in visitors and education centres infrastructure | FDHP and NRMBs | | | | | | | | | | | | | | | | | | | | |
| Output 4.1.3: Special campaign and events organized and conducted including: a) 20 summer holiday university volunteers camps in each of the four NRs; and b) 40-60 campaigns on special days such as annual | 1. Contract public communications specialise | FDHP and NRMBs | | | | | | | | | | | | | | | | | | | | |
| | 2. Improve the design and planning of special events and campaign and prepare programme | NRMBs supported by communication specialist and FDHP | | | | | | | | | | | | | | | | | | | | |
| | 3. Select participants for summer holiday university volunteers camp | FDHP and NRMBs | | | | | | | | | | | | | | | | | | | | |
| | 4. Implement special events and camps and secure sustainable budgets for these events after the end of | NRMBs supported by communication specialist and FDHP | | | | | | | | | | | | | | | | | | | | |

| Output | Activities | Responsible institution/ entity | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | | Year 5 | | | |
|---|--|---|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|
| | | | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 |
| Wetlands day, annual Bird week, bi-annual Bird watching race | the project | | | | | | | | | | | | | | | | | | | | | |
| Output 4.1.4: Curricula on DWE biodiversity conservation and sustainable use included in 20 middle schools in counties and townships around the lake reaching 30,000 students. | 1. Contract service provider for the development of the middle school curricula | FDHP supported by NRMBs and the provincial education department | | | | | | | | | | | | | | | | | | | | |
| | 2. Prepare draft middle school curricula and education material | Service provider supported by FDHP, NRMBs and the provincial education department | | | | | | | | | | | | | | | | | | | | |
| | 3. Conduct consultation workshop on middle school curricula | FDHP supported by service provider, NRMBs and the provincial education department | | | | | | | | | | | | | | | | | | | | |
| | 4. Implement the curricular in schools around the DWE | Provincial education department supported by FDHP and NRMBs | | | | | | | | | | | | | | | | | | | | |
| Component 5: M&E and information dissemination | | | | | | | | | | | | | | | | | | | | | | |
| Output 5.1.1: Project monitoring system providing six-monthly reports on progress in achieving project outputs and outcomes | 1. Contract CTA to support setting up and implementing the project monitoring and reporting system | FDHP supported by FAO | | | | | | | | | | | | | | | | | | | | |
| | 2. Monitor project progress in the field and by reviewing consultants reports | FDHP supported by NRMBs, CTA and FAO | | | | | | | | | | | | | | | | | | | | |
| | 3. Prepare six-monthly project progress reports | FDHP supported by NRMBs and CTA | | | | | | | | | | | | | | | | | | | | |
| | 4. Provide inputs to the annual PIR | DFHP supported by NRMBs and CT. The PIR will be prepared by the FAO PTM | | | | | | | | | | | | | | | | | | | | |
| Output 5.1.2: Midterm and final evaluation reports | 1. Provide inputs to the TOR for midterm evaluation | FDHP supported by NRMBs, CTA | | | | | | | | | | | | | | | | | | | | |
| | 2. Support the organization and provide inputs for the midterm evaluation mission | FDHP supported by NRMBs, CTA | | | | | | | | | | | | | | | | | | | | |
| | 3. Organize midterm evaluation workshop and define and implement eventual adjustments in project implementation strategy | FDHP supported by NRMBs, CTA | | | | | | | | | | | | | | | | | | | | |
| | 4. Provide inputs for TOR for final evaluation | FDHP supported by NRMBs, CTA | | | | | | | | | | | | | | | | | | | | |
| | 5. Support the organization and provide inputs for the final evaluation mission | FDHP supported by NRMBs, CTA | | | | | | | | | | | | | | | | | | | | |
| | 3. Organize final evaluation workshop and define and implement strategy for sustaining project results | FDHP supported by NRMBs, CTA | | | | | | | | | | | | | | | | | | | | |

| Output | Activities | Responsible institution/ entity | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | | Year 5 | | | |
|--|--|---------------------------------|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|--------|-----|-----|-----|
| | | | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 | Q 1 | Q 2 | Q 3 | Q 4 |
| Output 5.1.3: Project “best-practices” and “lessons-learned” in relation to co-management models, integrated DWE management experience, mainstreaming of wetlands biodiversity conservation in sectors disseminated via publications, project website and others. | 1. Establish project website | FDHP | | | | | | | | | | | | | | | | | | | | |
| | 2. Update project website | FDHP supported by NRMBs | | | | | | | | | | | | | | | | | | | | |
| | 3. Prepare en disseminate six-monthly project newsletter | FDHP supported by NRMBs | | | | | | | | | | | | | | | | | | | | |
| | 4. Prepare and publish Publication on experiences and “best practices” in DWE integrated management | FDHP supported by NRMBs and CTA | | | | | | | | | | | | | | | | | | | | |
| | 5. Prepare and publish publication on “best practices” and “lessons learned” in mainstreaming conservation of wetlands biodiversity in sectors | FDHP supported by NRMBs and CTA | | | | | | | | | | | | | | | | | | | | |
| | 6. Prepare and publish publication on “best practices” and lessons learned in co-management models | FDHP supported by NRMBs and CTA | | | | | | | | | | | | | | | | | | | | |

APPENDIX 3: RESULTS BUDGET

| | | | | |
|---|---|---|---|---|
| Comp. 1: Integrated monitoring and management O 1.1.1: Strengthening of the DLCC O 1.1.2: BD and ES baseline and threat analysis O 1.1.3: Integrated DWE management and planning O 1.1.4: DWE IIMS | Component 2: NR management strengthening O 2.1.1-2.1.2: Local AMNR decrees and upgrading of NRs O 2.1.3: 4 five-years NRMPs O 2.1.4: Training, equipment and infrastructure O 2.2.1: NR co-management models | Component 3: Mainstreaming BD in Sectors O 3.1.1-3.1.2: Amendment of WRHP and alignment of sector policies O 3.1.3: Capacities for regulations enforcement O 3.1.4: Capacities for BD conservation practices | Component 4: Environmental education and awareness O 4.1.1-4.1.2: Brochures, billboards and upgrading of visitors centers O 4.1.3: Wetlands biodiversity campaigns and events O 4.1.4: Curricula for middle school | Component 5: M&E and information O 5.1.1-5.1.2: Project M&E O 5.1.3: Information dissemination |
|---|---|---|---|---|



Microsoft Office
Excel 97-2003 Works

The detailed budget per output can be found in this Excel:

| Oracle code and description | Unit | No. of units | Unit cost | BUDGET in USD | | | | | Total | Expenditures by year | | | | | |
|--|-------|--------------|-----------|---------------|---------|---------|---------|---------|--------|----------------------|--------|--------|--------|--------|--------|
| | | | | Comp 1: | Comp 2: | Comp 3: | Comp 4: | Comp 5: | PM | GEF | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| | | | | Total | Total | Total | Total | Total | | | | | | | |
| 5570 International Consultants | | | | | | | | | | | | | | | |
| | | | | 0 | | | | | | 0 | | | | | |
| Sub-total international Consultants | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| National consultants | | | | | | | | | | | | | | | |
| CTA PM | month | 25 | 5,000 | 0 | 0 | 0 | 0 | 125,000 | | 125,000 | 25,000 | 25,000 | 25,000 | 25,000 | 25,000 |
| Project administrative assistant | month | 20 | 2,000 | 0 | 0 | 0 | 0 | 0 | 40,000 | 40,000 | 8,000 | 8,000 | 8,000 | 8,000 | 8,000 |
| 1 Institutional specialist | month | 2 | 4,000 | 8,000 | 0 | 0 | 0 | 0 | | 8,000 | 4,000 | 4,000 | | | |
| 1 information system expert | month | 6 | 4,000 | 24,000 | 0 | 0 | 0 | 0 | | 24,000 | 12,000 | 4,000 | 4,000 | 4,000 | |
| 3 NR legal specialists for surveys and preparation of AMNR | month | 9 | 4,000 | 0 | 36,000 | 0 | 0 | 0 | | 36,000 | 20,000 | 16,000 | | | |

| | | | | BUDGET in USD | | | | | | Total | Expenditures by year | | | | |
|--|-------|--------------|-----------|---------------|---------|---------|---------|---------|--------|---------|----------------------|---------|---------|--------|--------|
| Oracle code and description | Unit | No. of units | Unit cost | Comp 1: | Comp 2: | Comp 3: | Comp 4: | Comp 5: | PM | GEF | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| | | | | Total | Total | Total | Total | Total | | | | | | | |
| 1 NR management specialist to support the development of 4 NRMPs | month | 4 | 4,000 | 0 | 16,000 | 0 | 0 | 0 | | 16,000 | 12,000 | 4,000 | | | |
| 1 social economist for feasibility study (East DL NR) | month | 2 | 4,000 | 0 | 8,000 | 0 | 0 | 0 | | 8,000 | 8,000 | | | | |
| 1 water bird specialist for integrated bird-friendly cultivation planning (East DL NR) | month | 6 | 4,000 | 0 | 24,000 | 0 | 0 | 0 | | 24,000 | 4,000 | 8,000 | 4,000 | 4,000 | 4,000 |
| 1 Land use specialist for diagnostic and identification of alternative solutions for reed and poplar plantations (South DL NR) | month | 3 | 4,000 | 0 | 12,000 | 0 | 0 | 0 | | 12,000 | 6,000 | 6,000 | | | |
| 1 Aquaculture specialist (Hengling West) | month | 10 | 4,000 | 0 | 40,000 | 0 | 0 | 0 | | 40,000 | 8,000 | 8,000 | 8,000 | 8,000 | 8,000 |
| 1 Socio economic and gender specialist (Hengling, West) | month | 6 | 4,000 | 0 | 24,000 | 0 | 0 | 0 | | 24,000 | 6,000 | 6,000 | 6,000 | 6,000 | |
| 1 Fisheries co-management specialist (Hengling West) | month | 15 | 4,000 | 0 | 60,000 | 0 | 0 | 0 | | 60,000 | 12,000 | 12,000 | 12,000 | 12,000 | 12,000 |
| 1 Ecotourism specialist (West) | month | 6 | 4,000 | 0 | 24,000 | 0 | 0 | 0 | | 24,000 | 6,000 | 6,000 | 4,000 | 4,000 | 4,000 |
| 1 Specialist in finless Porpoises | month | 4 | 4,000 | 0 | 16,000 | 0 | 0 | 0 | | 16,000 | 8,000 | 4,000 | 4,000 | | |
| 1 deer specialist | month | 4 | 4,000 | | 16,000 | 0 | 0 | | | 16,000 | 8,000 | 4,000 | 4,000 | | |
| 1 water bird specialist | month | 6 | 4,000 | | 24,000 | 0 | 0 | | | 24,000 | 4,000 | 6,000 | 6,000 | 4,000 | 4,000 |
| Environmental legal specialist amendment of WPRHP and alignment of sector policies | month | 8 | 4,000 | | | 32,000 | 0 | | | 32,000 | 8,000 | 8,000 | 8,000 | 8,000 | |
| NR economist amendment of WPRHP and alignment of sector policies | month | 8 | 4,000 | | | 32,000 | 0 | | | 32,000 | 8,000 | 8,000 | 8,000 | 8,000 | |
| Public communication specialist (event organizer) | month | 2 | 4,000 | | 0 | 0 | 8,000 | | | 8,000 | 2,000 | 2,000 | 2,000 | 1,000 | 1,000 |
| Sub-total national Consultants | | | | 32,000 | 300,000 | 64,000 | 8,000 | 125,000 | 40,000 | 569,000 | 169,000 | 139,000 | 103,000 | 92,000 | 66,000 |
| 5570 Sub-total consultants | | | | 32,000 | 300,000 | 64,000 | 8,000 | 125,000 | 40,000 | 569,000 | 169,000 | 139,000 | 103,000 | 92,000 | 66,000 |
| 5650 Contracts | | | | | | | | | | | | | | | |

| | | | | BUDGET in USD | | | | | | Total | Expenditures by year | | | | |
|--|---------------|--------------|-----------|---------------|---------|---------|---------|---------|--------|---------|----------------------|--------|---------|--------|--------|
| Oracle code and description | Unit | No. of units | Unit cost | Comp 1: | Comp 2: | Comp 3: | Comp 4: | Comp 5: | PM | GEF | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| | | | | Total | Total | Total | Total | Total | | | | | | | |
| Three technical studies and DWE integrated MP | Lump sum | 1 | 250,000 | 250,000 | 0 | 0 | 0 | 0 | | 250,000 | 250,000 | | | | |
| Biodiversity baseline and master plan (South DL NR) | Lump sum | 1 | 150,000 | 0 | 150,000 | 0 | 0 | 0 | | 150,000 | 150,000 | | | | |
| Biodiversity baseline survey and Ramsar site sheet | Lump sum | 1 | 80,000 | 0 | 80,000 | 0 | 0 | 0 | | 80,000 | 80,000 | | | | |
| Middle school curricula | Lump sum | 1 | 70,000 | 0 | 0 | 0 | 70,000 | 0 | | 70,000 | | | 70,000 | | |
| Midterm and final evaluation independent consultants | Lump sum | 2 | 40,000 | 0 | 0 | 0 | 0 | 80,000 | | 80,000 | | | 40,000 | | 40,000 |
| 5650 Sub-total Contracts | | | | 250,000 | 230,000 | 0 | 70,000 | 80,000 | 0 | 630,000 | 480,000 | 0 | 110,000 | 0 | 40,000 |
| 5900 Travel | | | | | | | | | | | | | | | |
| CTA PM National (4) and local | Lump sum year | 7 | 5,000 | | | | 0 | 35,000 | | 35,000 | 10,000 | 5,000 | 5,000 | 10,000 | 5,000 |
| Local travel PM | Lump sum year | 5 | 10,000 | | | | 0 | | 50,000 | 50,000 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 |
| AMNR 3 national consultants trips to East, South and Hengling NRs | Trips | 9 | 300 | 0 | 2,700 | 0 | 0 | 0 | | 2,700 | 1,800 | 900 | | | |
| NR management specialist supporting 4 NRMPs | Trips | 2 | 800 | | 1,600 | 0 | 0 | | | 1,600 | 1,600 | | | | |
| Study tours for 20 (two trips of 10) NR staff to other NRs in China with good examples of co-management models | Trips | 2 | 15,000 | | 30,000 | 0 | 0 | | | 30,000 | | 15,000 | | 15,000 | |
| Study tours for 16 NR staff to other NRs in China with good examples of eco-tourism activities | Trip | 1 | 26,000 | | 26,000 | 0 | 0 | | | 26,000 | | | 26,000 | | |
| Secondment of 8 NR staff for 1 months each to flagship examples of well managed wetlands NR in China | Trip | 8 | 1,000 | | 8,000 | 0 | 0 | | | 8,000 | | | 4,000 | 4,000 | |
| Socio economic specialist for (East DL NR) | Trip | 2 | 300 | | 600 | 0 | 0 | | | 600 | 600 | | | | |
| Water birds specialist (East DL NR) | Trip | 4 | 500 | | 2,000 | 0 | 0 | | | 2,000 | 500 | 500 | 500 | 500 | |
| Land-use planning specialist (South DL NR) | Trip | 2 | 500 | | 1,000 | 0 | 0 | | | 1,000 | 500 | 500 | | | |
| 1 Aquaculture specialist (Hengling | Trip | 10 | 500 | | 5,000 | 0 | 0 | | | 5,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 |

| | | | | BUDGET in USD | | | | | | Total | Expenditures by year | | | | |
|--|-------------|--------------|-----------|---------------|---------|---------|---------|---------|--------|---------|----------------------|--------|--------|--------|--------|
| Oracle code and description | Unit | No. of units | Unit cost | Comp 1: | Comp 2: | Comp 3: | Comp 4: | Comp 5: | PM | GEF | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| | | | | Total | Total | Total | Total | Total | | | | | | | |
| West) | | | | | | | | | | | | | | | |
| 1 Socioeconomist and gender specialist (Hengling West) | Trip | 6 | 500 | | 3,000 | 0 | 0 | | | 3,000 | 1,000 | 500 | 1,000 | 500 | |
| 1 Fisheries co-management specialist (Hengling West) | Trip | 10 | 500 | | 5,000 | 0 | 0 | | | 5,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 |
| Ecotourism specialist (West) | Trip | 4 | 500 | | 2,000 | 0 | 0 | | | 2,000 | 500 | 500 | 500 | 500 | |
| 1 Specialist in finless Porpoises | Trip | 3 | 500 | | 1,500 | 0 | 0 | | | 1,500 | 500 | 500 | 500 | | |
| 1 deer specialist | Trip | 3 | 500 | | 1,500 | 0 | 0 | | | 1,500 | 500 | 500 | 500 | | |
| 1 water bird specialist | Trip | 4 | 1,200 | | 4,800 | 0 | 0 | | | 4,800 | 1,200 | 2,400 | | 1,200 | |
| Environmental legal specialist amendment of WPRHP and alignment of sector policies | Trip | 8 | 500 | | 0 | 4,000 | 0 | | | 4,000 | 1,000 | 1,000 | 1,000 | 1,000 | |
| NR economist amendment of WPRHP and alignment of sector policies | Trip | 8 | 500 | | | 4,000 | 0 | | | 4,000 | 1,000 | 1,000 | 1,000 | 1,000 | |
| 7 days study visits for 10 agency officials and private sector representatives on solutions for wetlands biodiversity conservation | Trip | 4 | 16,000 | | | 64,000 | 0 | | | 64,000 | | 16,000 | 32,000 | 16,000 | |
| Student volunteers for wetlands BD conservation camps | Lump sum NR | 4 | 10,000 | | | 0 | 40,000 | | | 40,000 | | 10,000 | 10,000 | 10,000 | 10,000 |
| 5900 Sub-total travel | | | | 0 | 94,700 | 72,000 | 40,000 | 35,000 | 50,000 | 291,700 | 32,700 | 66,300 | 94,000 | 71,700 | 27,000 |
| 5023 Training and workshops | | | | | | | | | | | | | | | |
| Project coordination and annual work planning meetings | Meetings | 5 | 3,000 | 0 | 0 | 0 | 0 | 0 | 15,000 | 15,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 |
| Local consultation WS for DWE integrated MP (2 for each NR) | WS. | 8 | 2,000 | 16,000 | 0 | 0 | 0 | 0 | | 16,000 | 8,000 | 8,000 | | | |
| Technical consultation WS for DWE integrated MP | WS. | 5 | 2,000 | 10,000 | 0 | 0 | 0 | 0 | | 10,000 | 4,000 | 6,000 | | | |
| Provincial decision makers consultation WS (DLCC) for DWE integrated MP | WS. | 2 | 2,000 | 4,000 | 0 | 0 | 0 | 0 | | 4,000 | | 4,000 | | | |
| Provincial sector agency consultation WS for DWE integrated MP | WS. | 3 | 2,000 | 6,000 | 0 | 0 | 0 | 0 | | 6,000 | 4,000 | 2,000 | | | |

| Oracle code and description | Unit | No. of units | Unit cost | BUDGET in USD | | | | | | Total | Expenditures by year | | | | |
|--|----------|--------------|-----------|---------------|---------|---------|---------|---------|----|---------|----------------------|--------|--------|--------|--------|
| | | | | Comp 1: | Comp 2: | Comp 3: | Comp 4: | Comp 5: | PM | GEF | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| | | | | Total | Total | Total | Total | Total | | | | | | | |
| Training and coordination WS for establishing and operating IIMS | WS. | 6 | 2,000 | 12,000 | 0 | 0 | 0 | 0 | | 12,000 | 4,000 | 4,000 | 2,000 | 2000 | |
| Consultation workshops on AMNR (East, South, Hengling) | WS. | 9 | 2,000 | 0 | 18,000 | 0 | 0 | 0 | | 18,000 | 18,000 | | | | |
| Final validation workshops on AMNR (East, South, Hengling) | WS. | 3 | 2,000 | 0 | 6,000 | 0 | 0 | 0 | | 6,000 | | 6,000 | | | |
| Consultation workshops on NRMPs (East, South, West Hengling) | WS. | 16 | 2,000 | 0 | 32,000 | 0 | 0 | 0 | | 32,000 | 32,000 | | | | |
| Training course of 20 NR staff 6 days in public communication and environmental education | Course | 1 | 10,800 | 0 | 10,800 | 0 | 0 | 0 | | 10,800 | | 10,800 | | | |
| Training course of 16 NR staff 1 day (plus trainer accompanying study tour) in ecotourism in NR | Course | 1 | 2,900 | 0 | 2,900 | 0 | 0 | 0 | | 2,900 | | 2,900 | | | |
| Training-by-doing of 8 NR staff developing projects for fund raising and setting up planning and monitoring mechanism for project implementation | Lump sum | | 5,000 | 0 | 5,000 | 0 | 0 | 0 | | 5,000 | 1,000 | 2,000 | 1,000 | 1,000 | |
| Training-by-doing in the field (3 x 10days) of 20 NR staff in wetlands biodiversity monitoring | Lump sum | | 27,000 | 0 | 27,000 | 0 | 0 | 0 | | 27,000 | | 9,000 | 9,000 | 9,000 | |
| Consultation and negotiation workshop on integrated cultivation plan (East DL NR) | WS. | 2 | 2,000 | 0 | 4,000 | 0 | 0 | 0 | | 4,000 | 4,000 | | | | |
| Capacity building of 230 farmers in bird-friendly integrated cultivation plan and marketing of birdfriendly rise (East DL NR) | Lump sum | | 110,000 | 0 | 110,000 | 0 | 0 | 0 | | 110,000 | | 25,000 | 35,000 | 25,000 | 25,000 |
| Consultation workshops on land-use planning in relation to reed and poplar farms (South DL NR) | WS. | 2 | 2,000 | 0 | 4,000 | 0 | 0 | 0 | | 4,000 | 4,000 | | | | |
| Consultation workshops and agreement on aquaculture business model (Hengling West) | WS. | 4 | 2,000 | 0 | 8,000 | 0 | 0 | 0 | | 8,000 | 6,000 | 2,000 | | | |
| Capacity building of 270 fishermen in organic aquaculture (Hengling) | Lump sum | | 110,000 | 0 | 110,000 | 0 | 0 | 0 | | 110,000 | | 25,000 | 35,000 | 25,000 | 25,000 |

| | | | | BUDGET in USD | | | | | | Total | Expenditures by year | | | | |
|--|-------------|--------------|-----------|---------------|---------|---------|---------|---------|--------|---------|----------------------|---------|---------|---------|---------|
| Oracle code and description | Unit | No. of units | Unit cost | Comp 1: | Comp 2: | Comp 3: | Comp 4: | Comp 5: | PM | GEF | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| | | | | Total | Total | Total | Total | Total | | | | | | | |
| West) | | | | | | | | | | | | | | | |
| Consultation workshop and agreement on fisheries co-management plan (Hengling West) | WS. | 4 | 2,000 | 0 | 8,000 | 0 | 0 | 0 | | 8,000 | 6,000 | 2,000 | | | |
| Capacity building of 270 fishermen in ecosystem based approach to fisheries (Hengling and West) | Lump sum | | 110,000 | 0 | 110,000 | 0 | 0 | 0 | | 110,000 | | 25,000 | 35,000 | 25,000 | 25,000 |
| Consultation workshop on ecotourism development plan (West) | WS. | 2 | 2,000 | 0 | 4,000 | 0 | 0 | 0 | | 4,000 | 4,000 | | | | |
| Capacity building of 70 households in ecotourism tour operations applying bird-friendly practices | Lump sum | | 50,000 | 0 | 50,000 | 0 | 0 | 0 | | 50,000 | | 10,000 | 20,000 | 10,000 | 10,000 |
| Consultation WS on flagship species action plans | WS. | 6 | 2,000 | 0 | 12,000 | 0 | 0 | 0 | | 12,000 | 8,000 | 4,000 | | | |
| Consultation ws for formulation of the WPRHP amendment | WS. | 10 | 2,000 | 0 | 0 | 20,000 | 0 | 0 | | 20,000 | 20,000 | | | | |
| Sector WS for alignment of policies | WS. | 4 | 2,000 | 0 | 0 | 8,000 | 0 | 0 | | 8,000 | | | 4,000 | 4,000 | |
| 2 days training course of 30 provincial and local government officers in enforcement of wetlands regulations | Course | 12 | 6,000 | 0 | 0 | 72,000 | 0 | 0 | | 72,000 | | | 24,000 | 24,000 | 24,000 |
| Consultation WS middle school curricula | WS. | 2 | 2,000 | 0 | 0 | 0 | 4,000 | 0 | | 4,000 | | | 4,000 | | |
| 5023 Sub-total training | | | | 48,000 | 521,700 | 100,000 | 4,000 | 0 | 15,000 | 688,700 | 126,000 | 150,700 | 172,000 | 128,000 | 112,000 |
| 6000 Expendable procurement | | | | | | | | | | | | | | | |
| Brochures design and printing | Copy | 50,000 | 2 | 0 | 0 | 0 | 100,000 | 0 | | 100,000 | 50,000 | 50,000 | | | |
| Six-monthly project news letter 500 copies | Issue | 10 | 1,000 | 0 | 0 | 0 | 0 | 10,000 | | 10,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 |
| Best practices and lessons learned publications | Publication | 3 | 30,000 | 0 | 0 | 0 | 0 | 90,000 | | 90,000 | | | 30,000 | 30,000 | 30,000 |
| Bi-annual status report on DWE services and biodiversity | Report | 2 | 30,000 | 60,000 | 0 | 0 | 0 | 0 | | 60,000 | | | 30,000 | | 30,000 |
| 6000 Sub-total expendable procurement | | | | 60,000 | 0 | 0 | 100,000 | 100,000 | 0 | 260,000 | 52,000 | 52,000 | 62,000 | 32,000 | 62,000 |

| | | | | BUDGET in USD | | | | | | Total | Expenditures by year | | | | |
|---|-------------|--------------|-----------|---------------|-----------|---------|---------|---------|---------|-----------|----------------------|---------|---------|---------|---------|
| Oracle code and description | Unit | No. of units | Unit cost | Comp 1: | Comp 2: | Comp 3: | Comp 4: | Comp 5: | PM | GEF | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| | | | | Total | Total | Total | Total | Total | | | | | | | |
| 6100 Non-expendable procurement | | | | | | | | | | | | | | | |
| Pick up cars for patrolling and monitoring | Car | 2 | 30,000 | 0 | 30,000 | 0 | 0 | 30,000 | | 60,000 | 60,000 | | | | |
| Telescopes | Telescope | 4 | 5,000 | 0 | 20,000 | 0 | 0 | 0 | | 20,000 | 20,000 | | | | |
| Binoculars | Binocular | 8 | 3,000 | 0 | 24,000 | 0 | 0 | 0 | | 24,000 | 24,000 | | | | |
| Digital cameras | Camera | 4 | 5,000 | 0 | 20,000 | 0 | 0 | 0 | | 20,000 | 20,000 | | | | |
| Laptops | Laptop | 10 | 1,000 | 2,000 | 8,000 | 0 | 0 | 0 | 2,000 | 12,000 | 12,000 | | | | |
| GIS software | GIS | 1 | 16,400 | 16,400 | 0 | 0 | 0 | 0 | | 16,400 | 16,400 | | | | |
| Boat for patrolling and monitoring | Boat | 4 | 25,000 | 0 | 100,000 | 0 | 0 | 0 | | 100,000 | 100,000 | | | | |
| Printer | Printer | 1 | 600 | 600 | 0 | 0 | 0 | 0 | | 600 | 600 | | | | |
| Server for IIMS | Server | 1 | 6,000 | 6,000 | 0 | 0 | 0 | 0 | | 6,000 | 6,000 | | | | |
| Color printer for IIMS | Printer | 1 | 1,000 | 1,000 | 0 | 0 | 0 | 0 | | 1,000 | 1,000 | | | | |
| Billboard signs -info and demarcation | Signs | 20 | 5,000 | 0 | 0 | 0 | 100,000 | 0 | | 100,000 | 50,000 | 50,000 | | | |
| Displays for visitor centers for East Dongting Lake | Lump sum NR | 1 | 100,000 | 0 | 0 | 0 | 100,000 | 0 | | 100,000 | | 100,000 | | | |
| 6100 Sub-total non-expendable procurement | | | | 26,000 | 202,000 | 0 | 200,000 | 30,000 | 2,000 | 460,000 | 310,000 | 150,000 | 0 | 0 | 0 |
| 6300 GOE budget | | | | | | | | | | | | | | | |
| Miscellaneous including contingencies | | | | 4,200 | 10,800 | 3,350 | 8,220 | 2,150 | 6,880 | 35,600 | 2,800 | 5,000 | 7,000 | 9,000 | 10,000 |
| Auditing | Audit | 5 | 3,000 | 0 | 0 | 0 | 0 | 0 | 15,000 | 15,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 |
| 6300 Sub-total GOE budget | | | | 4,200 | 10,800 | 3,350 | 8,220 | 2,150 | 21,880 | 50,600 | 5,800 | 8,000 | 10,000 | 12,000 | 13,000 |
| TOTAL | | | | 420,200 | 1,359,200 | 239,350 | 430,220 | 372,150 | 128,880 | 2,950,000 | 1,175,500 | 566,000 | 551,000 | 335,700 | 320,000 |

| | | |
|------------------------------------|------------------|--------|
| SUBTOTAL Comp 1 | 420,200 | 14.2% |
| SUBTOTAL Comp 2 | 1,359,200 | 46.1% |
| SUBTOTAL Comp 3 | 239,350 | 8.1% |
| SUBTOTAL Comp 4 | 430,220 | 14.6% |
| SUBTOTAL Comp 5 | 372,150 | 12.6% |
| SUBTOTAL Project Management | 128,880 | 4.4% |
| TOTAL GEF | 2,950,000 | 100.0% |

APPENDIX 4: RISK MATRIX

See table 3.1 section 3.2.1 and table 3.2 section 3.2.2

APPENDIX 5: PROCUREMENT PLAN (TBD)

DATE:
PROJECT TITLE AND SYMBOL:

| Ref. No. | Requirement | Unit | Estimated Quantities | Estimated Cost | Unit Price | Solicitation Method | Procurement Method | Buyer | Targeted Tender Launch Date | Targeted Contract Award Date | Targeted Delivery Date | Final Destination and Delivery Terms | Status | Other Constraints/Considerations |
|----------|-------------|------|----------------------|----------------|------------|---------------------|--------------------|-------|-----------------------------|------------------------------|------------------------|--------------------------------------|--------|----------------------------------|
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APPENDIX 6: TERMS OF REFERENCE (TORS)

PEOPLE'S REPUBLIC OF CHINA

Securing Biodiversity Conservation and Sustainable Use in China's Dongting Lake Protected Areas.

FDHP-FAO-GEF

1. Draft Terms of Reference: Wetlands Specialist - Chief Technical Advisor (national consultant)

Background and Tasks:

The 5-year Project is a partnership between the Forestry Department of Hunan Province, the four Nature Reserve Management Bureaus (NRMBs) in Dongting Wetlands Ecosystems (DWE), FAO and the Global Environmental Facility (GEF). The goal of the proposed project is to secure the conservation of biodiversity of global importance in the Dongting Lake through strengthening existing management efforts and the promotion of the Wetland's long-term sustainable development. Specifically, the project objectives are to: (i) strengthen the existing institutional and policy framework; (ii) promote an integrated, ecosystem-wide planning and management approach; (iii) strengthen the existing network of wetland nature reserves; (iv) identify and demonstrate sustainable co-management models of DWE biodiversity and biodiversity friendly production practices to reduce human activity pressure on the Wetlands; and (v) increase institutional capacity and public awareness and support for wetlands.

Under the general supervision of the FDHP's Division of Wild Life Protection (DWP), the FAO Representative in China and in close collaboration with the Project Manager and the FAO Lead Technical Officer, and the FAO-GEF Coordination Unit in the Investment Centre in Rome (TCID), the Senior Wetlands specialist – Chief Technical Advisor (CTA) will have the following responsibilities and functions:

1. Providing technical support to all relevant aspects of the Project to include but not be limited to: (a) preparing TORs, (b) participation in the identification and selection of consultants, (c) monitoring the quality of the work of consultants and (d) review and evaluation of consultant products;
2. Responding to the technical needs of the DWP and the participating NRMBs when required;
3. Support in the identifying training opportunities for project and NR staff, decision-makers and the private sector using and impacting the DWE;
4. Provide technical advice to the Project Manager and PSC;
5. Provide training to the DWP's Project Management office (PMO) in Result Based Project Management when needed;
6. Support the DWE/PMO in writing six-monthly Project Progress Reports in English to be submitted to FAO.
7. Provide general technical guidance and support to the DWP/PMO, NRMBs and other

project partners and consultants

8. Establish communication linkages with technical counterparts in other national wetlands NR and projects and facilitate the exchange of information and building of partnerships;

9. Working closely with the national consultant on co-management models to ensure that project supported initiatives meet the standards of best practice as achieved elsewhere in China;

10. Ensure that the GEF BD tracking tools are filled out in correct and timely manner

11. Other tasks as needed.

Minimal Requirements:

The Senior wetlands specialist should have an advanced graduate degree, preferably in biodiversity conservation or some directly related field (e.g. wildlife, natural resource management, protected area management, etc.). He/she must have at least 7 years of experience working as a technical expert in nature reserves in China and familiar with both the administrative and technical aspects of wetlands biodiversity conservation. Experience in internationally funded projects will be especially considered.

Additional Requirements:

Language: Chinese and English
Headquarters: Home station, half time in Changsha, China
Duration: 25 person months throughout the 5 years of the Project.

PEOPLE'S REPUBLIC OF CHINA

Securing Biodiversity Conservation and Sustainable Use in China's Dongting Lake Protected Areas.

FDHP-FAO-GEF

2. Draft Terms of Reference: Administrative assistance (national consultant)

Background and Tasks:

The 5-year Project is a partnership between the Forestry Department of Hunan Province, the four Nature Reserve Management Bureaus (NRMBs) in Dongting Wetlands Ecosystems (DWE), FAO and the Global Environmental Facility (GEF). The goal of the proposed project is to secure the conservation of biodiversity of global importance in the Dongting Lake through strengthening existing management efforts and the promotion of the Wetland's long-term sustainable development. Specifically, the project objectives are to: (i) strengthen the existing institutional and policy framework; (ii) promote an integrated, ecosystem-wide planning and management approach; (iii) strengthen the existing network of wetland nature reserves; (iv) identify and demonstrate sustainable co-management models of DWE biodiversity and biodiversity friendly production practices to reduce human activity pressure on the Wetlands; and (v) increase institutional capacity and public awareness and support for wetlands.

Under the general supervision of the FDHP's Division of Wild Life Protection (DWP), and in close collaboration with the FAO Representative in China, the Project Manager and the FAO Lead Technical Officer, and the FAO-GEF Coordination Unit in the Investment Centre in Rome (TCID), the Administrative assistance will have the following responsibilities and functions:

1. Provide administrative and operational support to the project including but not be limited to: (a) manage files of documentation supporting contracting processes; (b) support the administration of contracts including payments; (c) monitor, collect information from partners and prepare co-financing reports; (d) support in drafting communication with partners and stake holders; and (e) provide support in organising meetings and workshops and travel;
2. Other tasks as needed.

Minimal Requirements:

The administrative assistance should be trained in public administration, secretary, or related field. He/she must have at least 3 years of experience providing administrative assistance to projects and programmes. Experience in internationally funded projects will be especially considered.

Additional Requirements:

Language: Chinese
Headquarters: FDHP in Changsha, China
Duration: 20 person months throughout the 5 years of the Project.

PEOPLE'S REPUBLIC OF CHINA

Securing Biodiversity Conservation and Sustainable Use in China's Dongting Lake Protected Areas.

FDHP-FAO-GEF

3. Draft Terms of Reference: Institutional Specialist (national consultant)

Background and Tasks:

The 5-year Project is a partnership between the Forestry Department of Hunan Province, the four Nature Reserve Management Bureaus (NRMBs) in Dongting Wetlands Ecosystems (DWE), FAO and the Global Environmental Facility (GEF). The goal of the proposed project is to secure the conservation of biodiversity of global importance in the Dongting Lake through strengthening existing management efforts and the promotion of the Wetland's long-term sustainable development. Specifically, the project objectives are to: (i) strengthen the existing institutional and policy framework; (ii) promote an integrated, ecosystem-wide planning and management approach; (iii) strengthen the existing network of wetland nature reserves; (iv) identify and demonstrate sustainable co-management models of DWE biodiversity and biodiversity friendly production practices to reduce human activity pressure on the Wetlands; and (v) increase institutional capacity and public awareness and support for wetlands.

Under the general supervision of the FDHP's Division of Wild Life Protection (DWP) and in close collaboration with the FAO Representative in China, Project Manager, and the FAO Lead Technical Officer, and the FAO-GEF Coordination Unit in the Investment Centre in Rome (TCID), the Institutional specialist will have the following responsibilities and tasks:

1. Support the FDHP in the process of making the Dongting Lake Conservation Committee (DLCC) operational
2. Visit DLCC member institutions and identify priority themes for the agenda of the DLCC for the next five year and the related political support
3. Prepare, consult through workshops and obtain agreement on operations procedures and five year work plan for the DLCC
4. Prepare a monitoring plan with the FDHP of the implementation of the DLCC five-years work plan with clearly set milestaone
5. Support in identifying training opportunities for DLCC members and decision-makers;
6. Provide institutional support and advice to the FDHP as needed to establish inter institutional coordination and integrated management of the DWE
7. Other tasks as needed.

Minimal Requirements:

The institutional specialist should have an advanced graduate degree, in public administration, economy, or related field. He/she must have at least 5 years of experience working as a technical expert in institutional matters in China and familiar with institutional and political matters in relation to environmental protection and nature conservation.

Additional Requirements:

Language: Chinese
Headquarters: Changsha, China
Duration: 2 person months over a two years period.

PEOPLE'S REPUBLIC OF CHINA

Securing Biodiversity Conservation and Sustainable Use in China's Dongting Lake Protected Areas.

FDHP-FAO-GEF

4. Draft Terms of Reference: Information system expert (national consultant)

Background and Tasks:

The 5-year Project is a partnership between the Forestry Department of Hunan Province, the four Nature Reserve Management Bureaus (NRMBs) in Dongting Wetlands Ecosystems (DWE), FAO and the Global Environmental Facility (GEF). The goal of the proposed project is to secure the conservation of biodiversity of global importance in the Dongting Lake through strengthening existing management efforts and the promotion of the Wetland's long-term sustainable development. Specifically, the project objectives are to: (i) strengthen the existing institutional and policy framework; (ii) promote an integrated, ecosystem-wide planning and management approach; (iii) strengthen the existing network of wetland nature reserves; (iv) identify and demonstrate sustainable co-management models of DWE biodiversity and biodiversity friendly production practices to reduce human activity pressure on the Wetlands; and (v) increase institutional capacity and public awareness and support for wetlands.

Under the general supervision of the FDHP's Division of Wild Life Protection (DWP) and in close collaboration with the FAO Representative in China, Project Manager, and the FAO Lead Technical Officer, and the FAO-GEF Coordination Unit in the Investment Centre in Rome (TCID), the Information system specialist will have the following responsibilities and tasks:

1. Visit and map government and research institutions conducting periodic monitoring of biophysical or biodiversity indicators for DWE as well as indicators related to land use and socio economic activities and conditions
2. Design a platform for the integration of information being the backbone in a new Integrated Information Management System (IIMS)
3. Provide training to IIMS institutional focal points in how to operate the platform
4. Support IIMS institutional focal points in entering the baseline data and agree on protocol for data updating, sharing and analysis
5. Other tasks as needed.

Minimal Requirements:

The information system specialist should have an advanced graduate degree, in information technology or related field. He/she must have at least 5 years of experience in working in building information system platforms for information sharing and management.

Additional Requirements:

Language: Chinese
Headquarters: Changsha, China
Duration: 6 person months over a four years period.

PEOPLE'S REPUBLIC OF CHINA

Securing Biodiversity Conservation and Sustainable Use in China's Dongting Lake Protected Areas.

FDHP-FAO-GEF

5. Draft Terms of Reference: NR legal experts (three national consultant)

Background and Tasks:

The 5-year Project is a partnership between the Forestry Department of Hunan Province, the four Nature Reserve Management Bureaus (NRMBs) in Dongting Wetlands Ecosystems (DWE), FAO and the Global Environmental Facility (GEF). The goal of the proposed project is to secure the conservation of biodiversity of global importance in the Dongting Lake through strengthening existing management efforts and the promotion of the Wetland's long-term sustainable development. Specifically, the project objectives are to: (i) strengthen the existing institutional and policy framework; (ii) promote an integrated, ecosystem-wide planning and management approach; (iii) strengthen the existing network of wetland nature reserves; (iv) identify and demonstrate sustainable co-management models of DWE biodiversity and biodiversity friendly production practices to reduce human activity pressure on the Wetlands; and (v) increase institutional capacity and public awareness and support for wetlands.

Under the general supervision of the FDHP's Division of Wild Life Protection (DWP) and in close collaboration with the FAO Representative in China, Project Manager, and the FAO Lead Technical Officer, and the FAO-GEF Coordination Unit in the Investment Centre in Rome (TCID), the NR legal expert will have the following responsibilities and tasks:

1. Conduct survey and identify needs for the elaboration of local government decree on Administrative Measures for Nature Reserve (AMNR)
2. Draft AMNR and support intensive local consultation processes
3. Provide legal advice to local governments and NR Management Bureaus
4. Incorporate comments received during the consultation process in final AMNR to be approved by the local governments
5. Other tasks as needed.

Minimal Requirements:

The NR legal specialist should have an advanced graduate degree, in environmental law. He/she must have at least 5 years of experience in working in China with environmental legal issues preferably related to the legal status of NRs.

Additional Requirements:

Language: Chinese

Headquarters: Changsha, China
Duration: 3 person months over a two years period.

APPENDIX 7 MAP DONGTING WETLANDS AND NATURE RESERVES

