



Terminal Evaluation of Strengthening the Management Effectiveness of the Wetland Protected Area System in Hubei Province, China



Project implemented by: Forestry Department of Hubei Province

Project collaborating agencies: other Hubei departments

Project funded by: Global Environment Facility, UNDP, Government of China

Prepared for: UNDP China

October 25, 2018 Final Report

EXECUTIVE SUMMARY

Project Title:	CBPF-MSL: <i>Strengthening the Management Effectiveness of the Wetland Protected Area System in Hubei Province, China</i>		
UNDP Project ID (PIMS #):	4823	PIF Approval Date:	13 Apr 2012
GEF Project ID (PMIS #):	4870	CEO Endorsement Date:	01 Aug 2013
Award ID:	00072714	Project Document (ProDoc) Signature Date (project began):	17 Mar 2014
Country(ies):	China	Date project manager hired:	20 Mar 2014
Region:	Asia and the Pacific	Inception Workshop date:	12 June 2014
Focal Area:	Biodiversity	Midterm Review date:	Jun-Aug 2016
GEF-5 Strategic Programs:	BD-1, Outcome 1.1 BD-1, Outcome 1.2	Planned closing date:	16 Mar 2019
Trust Fund:	GEF TF	If revised, proposed closing date:	N/A
Executing Agency:	Forestry Department of Hubei Province		
Other execution partners:	other provincial departments and local governments		
Project Financing:	at CEO endorsement (USD)	exp at Terminal Evaluation (USD)	
GEF financing (cash):	\$US 2,654,771 grant	\$US 2,231,879 (exp to 31 Jul)	
UNDP contribution (cash):	\$US 700,000 grant	\$US 700,000 (Coca-Cola projects)	
Government grants (cash):	\$US 10,868,000	\$US 47,445,156 (35,462,031 Gov China + 11,983,125 Hubei)	
Government in-kind:	\$US 6,590,634	\$US 289,062	
Total co-financing:	\$US 17,458,634	\$US 47,734,218 (see Annex 7)	
PROJECT TOTAL COSTS	\$US 38,272,039	\$US 50,666,097	

Source: Project Document and Project Management Office, data to 31 July, 2018

The Terminal Evaluation (TE) is an independent review, prepared in accordance with UNDP-GEF guidelines, of the progress made in achieving expected project outcomes; the relevance, effectiveness, efficiency and timeliness of project implementation; the issues requiring decisions and actions; and the lessons learned about project design, implementation and management. The TE mission occurred during July 22-Aug 8, 2018 and involved site visits and interviews and group discussions with 86 government officials and stakeholders.

The project was designed to directly target barriers through a series of steps intended to enhance the management effectiveness of wetland protected areas. Lack of a clear and formal wetland conservation strategy and working mechanism across government sectors on both

provincial and basin levels as well as the low capacity of management staff were the major barriers limiting PA management effectiveness.

The project has substantially achieved most of the expected results through a dedicated team at the Hubei Forestry Department. By officially issuing an Action Plan in Four Lakes (Sihu) Basin (Jingzhou) and individual management plans for WPAs as well as formally establishing a provincial wetland conservation consultative group and a Sihu Basin Wetland Conservation Committee, the project has successfully helped to reduce barriers limiting the wetland management effectiveness. This framework and the following key outputs provide the structure for ongoing development of the wetland management programme:

- Document of Provincial Consultative Group of Wetland Conservation
- Basic Study and Interpretation of Implementation Program of Wetland Conservation and Restoration System in Hubei
- Implementation Program of Wetland Conservation and Restoration System in Hubei
- Provincial Database System of Wetland Biodiversity Monitoring
- Gap analysing of wetland laws and policies in Hubei and the discussion of framework of Hubei Wetland Conservation Regulation
- Wetland Park Management Measure of Hubei
- Document of Honghu Watershed Management Council
- Patrolling, Enforcement and Monitoring System of Honghu
- Wetland Conservation Action Plan of Sihu Drainage Basin (Jingzhou Municipality)
- Master Plan of Honghu National Nature Reserve (2016-2025)
- Program for Water Quality Improvement and Pollution Control in Honghu
- Training Plan for the Project
- Training Textbook of Project
- Co-management agreement of Honghu WPA
- Co-management agreement of Longganhu WPA
- Co-management agreement of Shishou Milu WPA
- Co-management agreement of Tian'ezhou Dolphine WPA
- Suggestion of the Eco-compensation Measures of Returning Farmland to Wetland in the Swan Oxbow
- Suggestion of the Water-level Control in the Swan Oxbow
- Management plan of Honghu WPA
- Management plan of Longganhu WPA
- Management plan of Tian'ezhou WPA
- Business plan of the project
- Report of fish-net removal and fishermen resettlement in Honghu
- Capacity assessment report of Chenhu WPA
- Capacity assessment report of Longganhu WPA
- Monitoring plan of the project sites
- EHI Report of the project

- METT Report of the project
- PMO-1 Project Management Measures
- PMO-2 Project Communication Strategy¹

The project has also greatly strengthened wetland management effectiveness at the WPA level by providing trainings, formulating management, business and monitoring plans as well as providing relevant equipment. Achievements are summarized in **Annex 6**. The monitoring data indicate significant improvement in management effectiveness, ecosystem health and water quality.

The project is noteworthy for the large government co-financing of over \$47 M to complement the small \$2.65 M GEF funding (74% spent to July 2018). According to participants, this level of government support would not have been possible without the international profile and expertise associated with GEF/UNDP involvement.

The project has resulted in over 319,000 ha of wetland protection and new/upgraded Wetland Protected Areas (WPAs) designation of 282,246 ha. It has developed management plans and studies and established the institutional and co-management processes within a very short period of time. This expansion and the financing commitments of government have significantly exceeded project targets. WPA staffing however has not grown commensurate with increased protected area. Technical studies have been completed on key basin and PA management issues related to water quality, species distribution, habitat availability, and lake regulation, but there are also important decisions to be made on the specific management strategies that will require further, in-depth assessment.

The project has been successful at integrating wetland conservation in development policy and plans. Laws, regulations and studies have been completed and actions undertaken to address threats to wetlands. Hubei Province has officially approved and issued a majority of the project outputs, while the remaining were approved and issued by the Forestry Department, which shows high commitment of wetland conservation in the province. Public awareness has been greatly improved through the project. The project has developed textbooks on wetland conservation in two cities, one of which is in use by all Grade 5 students.

¹ Hubei GEF Wetland Project Office, Project Final Report, Annex: Project outputs (reports from the service contractors), July 2018, p.88.

The project implementation has been generally well organized. The management staff of PMO have coordinated with other government sectors which is reflected in the full support of the provincial government as well as relevant government sectors in approving and issuing the project outputs. WPA management and business plans have been prepared to provide general direction on goals and objectives and potential implementation projects, and preliminary training has involved staff from all of the 8 project WPAs as well as other PAs in the province. However, to date, there are no post-training surveys or updated capacity assessments to determine the exact status of PA management institutions.

Resettlement of the Honghu fishing community has involved provision of housing for over 6000 people and compensation but the target of 25% livelihood security for displaced fishermen has been difficult to achieve. Some of the resettled fishermen prefer tourism jobs related to the nature reserves as it is more similar to their original lifestyle. The co-management approach has been introduced by the project with some positive results; further development and refinement of the government and community consultation processes will be needed.

Despite the many substantial capacity development achievements of the project, in the view of the International Consultant, there are some remaining issues, particularly in regard to the hydrological system management of Honghu Lake and Sihui drainage basin complex, the balancing of multiple objectives, and the connectivity with other wetlands and Yangtze River. The consultant suggests that more precise ecosystem management objectives and full hydrological and limnological assessment are needed as the basis for implementing the approved management plans, and that some risks exist in lake eutrophication and managing water balance in the project drainages. The overall scheme for Yangtze River connectivity and wetland flood attenuation should also be clearly presented and integrated into the program.

There is high level of commitment and momentum that has been established for Hubei wetlands conservation and restoration. This includes new coordination and consultative governance mechanisms and improved monitoring, management and business planning, along with a willingness to invest in major corrective actions needed to improve water quality and habitat conditions. The Project Team has worked hard to fulfill the expectations of the project and made a significant contribution toward wetland conservation and restoration in Hubei. Consolidating the progress, confirming the wetland management strategies for the ongoing

implementation phase, and sharing the results of the project should be the primary focus for the remaining six months of the project.

The Terminal Evaluation provided the following rating based on the UNDP/GEF criteria:

Rating Criteria (UNDP/GEF TE)	Rate	Reasons for rating
1. Monitoring and Evaluation		
M&E design at entry	MS	No M&E officer duties and assigned responsibilities. There are also moderate shortcomings in the sole dependence on quantitative, generalized rating systems on environmental health and management effectiveness that do not sufficiently measure particular management issues, risks and constraints at nature reserves. These are mandatory GEF monitoring tools. Lack of explanation of the factors affecting monitoring scores and capacity development outcomes can create over-simplified conclusions.
M&E Plan Implementation	S	The project effectively implemented the M&E plan and provided regular monitoring of baseline, mid-term and final status of the project indicators and targets. However, gaps or weakness noted by project participants on training, resources, communications and other issues are not reflected in the quantitative monitoring system data.
Overall quality of M&E	S	The results framework M&E strategy was adequate, although it focused mostly on quantitative measures to the exclusion of qualitative measures; no recognition of data reliability issues, environmental risks and uncertainties in the management strategies. Capacity development results may be over-stated based on TE discussions. Quarterly and annual reporting however complied with UNDP/GEF requirements.
2. IA& EA Execution		
Quality of UNDP Implementation	S	UNDP provided regular oversight of progress and adaptive management responses with the necessary follow-up action to adjust the activity program as needed for adaptive management. No significant operational issues identified. This rating is consistent with UNDP and project staff PIR ratings.
Quality of Execution - Executing Agency	S	The Hubei Forestry Dept. effectively coordinated government departments and local government, although more inputs from Dept. of Water Resources would have been preferable. The PMO diligently organized workplans, administered contracts and implemented the activity program at provincial, basin, and wetland sites. Technical quality assurance of wetland plans limit the rating to Satisfactory. This rating is consistent with UNDP and project staff PIR ratings.
Overall quality of Implementation / Execution	S	There was a reasonable level of effectiveness and responsiveness to issues that arose. The implementation has generally met expectations in the project document and GEF project management requirements, with some reservations about the level of technical oversight needed

		for complex wetland systems. This rating is consistent with the UNDP and project staff PIR ratings.
3. Assessment of Outcomes		
Relevance	<i>R</i>	The project has directly assisted and been aligned with government policy and commitment to wetland conservation.
Effectiveness	<i>S</i>	The targets have been met or exceeded. The provincial framework has been firmly established; basin wide planning and coordinating committees have been created; wetland demonstration sites have provided models intended for replication. Uptake of project outputs by PA staff through short term training may not sufficient in some cases outside of the demonstration sites. Further-capacity development and effectiveness of the management plans to assist PA authorities in achieving well-defined conservation and restoration objectives and implementation strategies remains to be seen at this stage. The rating is consistent with UNDP and project staff PIR ratings.
Efficiency	<i>S</i>	Most of the work has been completed on time and to a generally sufficient standard as per the project results framework. WPAs are administered by different departments and many of the project outputs have been delivered by external institutes and consultancies (service providers), the full use and uptake of which by PA staff may be uncertain in the view of the international consultant due to the short-term capacity development and staff recruitment plan.
Overall Project Outcome Rating	<i>S</i>	Substantive results have been generated in expanded WPAs, improved frameworks for regulation and conservation along with new coordination and consultation arrangements and enhanced biodiversity monitoring and patrolling. Targets have been over-achieved but management strategies need some further clarification and ecological risks at Honghu Lake may not be fully recognized. This rating is consistent with UNDP and project staff PIR ratings.
4. Sustainability		
Financial resources:	<i>L</i>	Increased budgets for wetland conservation and PA management operations have been committed by government.
Socio-political:	<i>L</i>	Increased policy and public support for wetland expansion and management and support for reducing human use and development of the wetlands should assist sustainability.
Institutional framework and governance:	<i>L</i>	New coordination and consultation mechanisms have been introduced, along with intra-basin management strategies and committees, and increased capacities with PA authorities.
Environmental:	<i>L</i>	Improved water quality and biodiversity abundance is appearing in wetland surveys. But there also remain risks in long term management of water use conflicts and environmental quality that are not yet fully recognized and addressed (considered by project staff as outside the mandate of the project). Wetland management

		strategies are not well articulated and understood by stakeholders despite many important studies. This rating assumes that ecosystem risks are recognized and can be effectively managed.
Overall likelihood of sustainability:	<i>L</i>	The momentum generated by the project and the ongoing government commitment to wetland conservation indicates a high likelihood of sustainability of the project results provided funding is assured and assists capacity development.

Note: The National Consultant rates the Quality of Execution - Executing Agency and the Assessment of Outcomes – Effectiveness as *HS*, as explained in section 4.0 of the report.

The following Terminal Evaluation recommendations are presented for implementation during the final stages of the project:

Recommendation 1: The Hubei GEF Wetland Project Office should undertake and distribute a ‘state of the wetland’ report for Honghu Lake that identifies the limnological and ecological status of the lake and assesses the effectiveness and impact of the conservation programme.

Recommendation 2: The Honghu Drainage Basin Wetland Committee should undertake an independent technical review of the *Wetland Action Plan of Sihou Drainage Basin*, to ensure the feasibility of hydrological system improvements and to propose an implementation program.

Recommendation 3: The Hubei GEF Wetland Project Office should develop and implement a rigorous monitoring and evaluation plan for the *Implementation Program of Wetland Conservation and Restoration System in Hubei*.

Recommendation 4: The Hubei GEF Wetland Project Office should review and clarify roles, responsibilities and protocols for biodiversity and water quality monitoring in the Shishou, and Tian’ezhou protected areas with the aim of enhancing technical cooperation between the Provincial agencies and the local township for a coordinated monitoring framework.

Recommendation 5: The Hubei GEF Wetland Project Office should establish a process, in conjunction with river/lake chiefs, for an annual socio-economic survey and report on the status of households displaced from the wetland nature reserves, housing and employment conditions, and any remaining resettlement issues (conducted and financed by government).

Recommendation 6: The Hubei GEF Wetland Project Office should prepare a list of Biodiversity Research Priorities (themes and projects) in conjunction with PA management issues as a basis for future collaboration with universities (national and international).

Recommendation 7: The Hubei GEF Wetland Project Office should prepare a proposal for a bird watching guide service on Honghu Lake through retraining of displaced local fishermen, and wildlife viewing opportunities on the reserve boundaries.

Recommendation 8: The Hubei GEF Wetland Project Office should initiate a workshop on provincial wetland management planning processes and capacity building experiences in conjunction with the Yangtze River Conservation Network.

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Acronyms and abbreviations

BC	Biodiversity conservation
CAS	China Academy of Sciences
CBPF	China Biodiversity Partnership Framework
CTA	Chief Technical Advisor
EHI	Environmental Health Indicators
FMB	Forestry Management Bureau
GEF	Global Environment Facility
GPS	Geographical positioning system
Ha	Hectares
KPI	Key Performance Indicators
M&E	Monitoring and Evaluation
METT	Management Effectiveness Tracking Tool
MTR	Mid Term Review
MSL	GEF/UNDP Main Streams of Life programme
NFGA	National Forestry and Grasslands Administration
NNR	National Nature Reserve
NPMO	National Project Management Office
NWP	National Wetland Park
PA	Protected Areas
PPG	Project Preparation Grant under GEF
PMO	Project Management Office
PSC	Project Steering Committee
RMB	Chinese currency
RTA	UNDP/GEF Regional Technical Advisor
SFA	State Forestry Administration
SFGA	State Forests and Grasslands Administration
TRAC	Target resource assignment for core UNDP funds
UNDP	UN Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
USD	United States dollar
WPA	Wetland Protected Area

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The views presented in this report are based on professional judgements of the International Consultant given the available information, interviews and site visits during the TE mission. He is solely responsible for the content of the report, which may not necessarily reflect the views of the National Consultant, UNDP or Government of China.

1. Introduction

1.1 Purpose of the evaluation

The wetlands in Hubei province provide refuge to a host of globally significant species, including freshwater porpoise, Pere David's deer and hundreds of migratory bird species but they have suffered from a drastic reduction in their size, ecological integrity and ecosystem services. The remaining wetlands are relegated to a few protected areas that remain highly vulnerable to both internal and external threats. The focus of this project is on integration of wetland ecosystem conservation in provincial structures and plans, intra-basin wetland management and enhancing capacity to manage wetland conservation threats at provincial, water-basin and local levels.

The Project Document states that the premise of the project is to build replicable models for ecosystem-based management of wetlands protected areas. This includes vastly improved and inclusive mechanisms for protected area management that incorporate a broad range of private and government stakeholders. Lessons generated from the Hubei project are intended to be used to build capacity across the protected area system. The intention is to create a cohort of protected area managers in eight target protected areas with formal and informal learning, generating a legacy of materials that may be applied to other areas and facilitating replication and upscaling of best practices. Improved management plans are expected to become the basis for both water-basin and provincial wide wetlands conservation initiatives, e.g., basin management strategy and provincial wetlands strategy, further stimulating replication.

The **Hubei Project** had a budget of about \$20 M USD at approval, with about \$10.87 M provided by the Government of China, \$2.65 M from the Global Environment Facility and another \$6.5 M from in-kind contributions from participating agencies. The project commenced Mar. 17, 2014 and is scheduled for completion Mar. 16, 2019.

This Terminal Evaluation (TE) is an independent review prepared in accordance with UNDP-GEF guidelines, of the progress made in achieving the expected project outcomes. The project performance is assessed based on expectations set out in the project's logical framework/results framework, and lessons learned about project design, implementation and management. The Terms of Reference specify that the evaluation is to conform to the *Guidance*

for Conducting Terminal Evaluations of UNDP-Supported GEF-Financed Projects (UNDP Evaluation Office, 2012) and to address five evaluation criteria: Relevance, Effectiveness, Efficiency, Sustainability and Impact. This includes review of financial aspects of the project, including the extent of co-financing planned and realized, and any variances between planned and actual expenditures. The Terms of Reference are presented in **Annex 1**.

1.2 Background

Hubei is an important part of the Yangtze River wetland ecosystems. Many of Hubei's globally significant species depend directly upon wetlands for survival in Hubei. The government commitment to protecting, conserving and restoring the wetlands in Hubei Province is rooted in the 'ecological civilization' concept adopted at the 18th National Congress of the Communist Party of China and in the preparation of *the National Wetland Conservation Action Plan*.

Hubei province is known in China as the "province with thousand lakes". There are 1.4 million hectares of wetland in the province, accounting for 7.8% of the total area of the province. Several globally and national important species occur in these wetlands, including Père David's deer, Chinese sturgeon, Chinese paddlefish, Giant salamander, freshwater dolphin and porpoise and the very rare Dawn Redwood. Hubei's wetlands provide critical migratory bird habitat. Tens of thousands of birds representing over one hundred species descend upon Hubei's wetlands each winter. The province provides habitat for 95% of the wintering Siberian crane population and 80% of the world's lesser white-fronted geese population. Many other globally significant bird species occur in Hubei's wetlands, where four Important Bird Areas (IBAS) also occur: Tian'ezhou Dolphin NNR, Honghu NNR, Chenhu PNR, and Longganhu NNR.

The project is being implemented in eight wetland protected areas, five of which are national nature reserves and three provincial nature reserves (see Figure 1). Table 1 summarizes the main activities in each of the reserves. Three of the reserves were selected at mid-term early last year for demonstration sites – Honghu, Tian'ezhou and Longganhu reserves. The project has been implemented at a time of both rapid development and environmental protection commitment in China. The 12th National Five-year Plan (2011-2015) and the National Biodiversity Conservation Strategy and Action Plan (NBSAP 2011-2030) support environmental protection and sustainable growth, and enhancing wetland conservation and restoration.

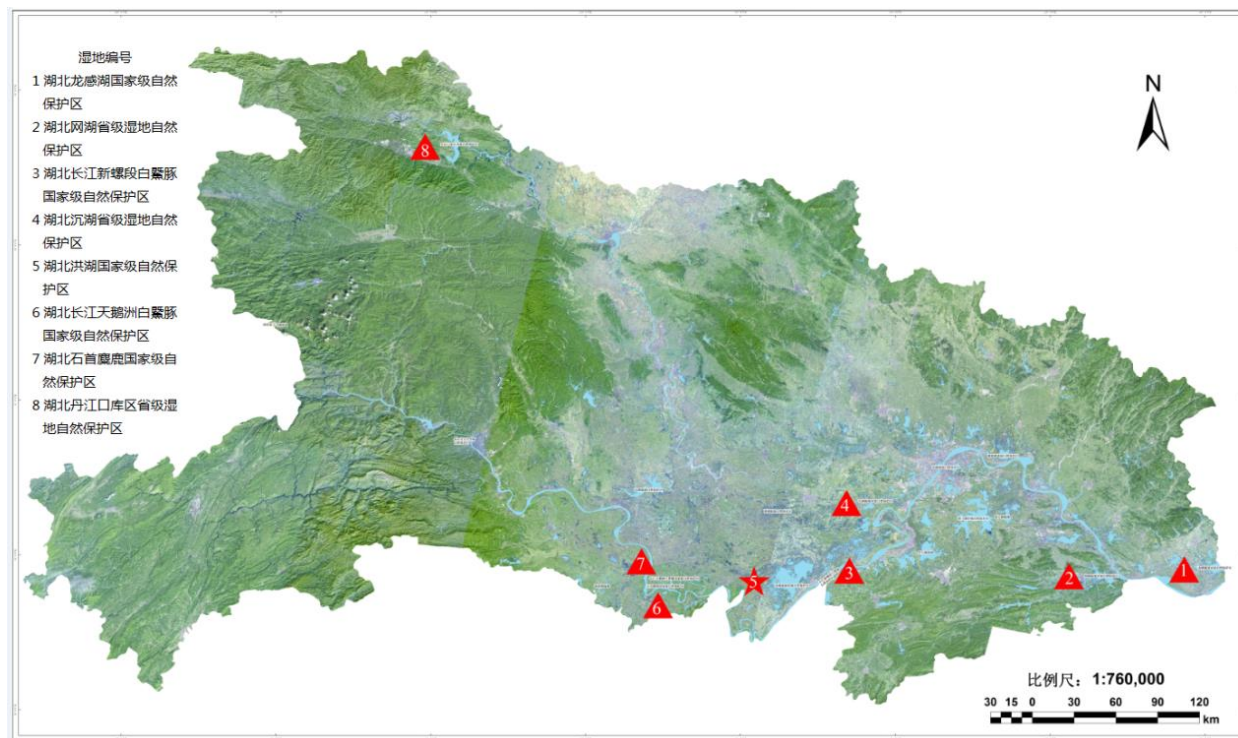


Figure 1: Project Wetland Protected Areas

Table 1: Project PA Locations and Activities

Protected Area	Designation	Ha	Location	Project activities and investments
Tianezhou	Hubei Tian'ezhou Dolphin National Nature Reserve	15,250	Shishou City, Hubei Province, including 89 km-long Yangtze River in Shishou section and swan oxbow of the Yangtze River	Formulating plans that will facilitate the management of WPA, including Management Plan of Tianezhou National Nature Reserve, Business Plan of Tianezhou National Nature Reserve, Business Capacity Analysis of Tianezhou National Nature Reserve, Monitoring Plan of Tianezhou National Nature Reserve. Establishing co-management committee Participating meetings or trainings of project Purchasing patrolling ship and other monitoring equipments. Producing promotion and education materials.
Shishou	Hubei Shishou Milu National Nature Reserve	1,567	Intersection of the north shore of the Yangtze River Oxbow (the middle and lower reaches of Yangtze River) Jiangnan Plain and Dongting Lake Plain	Formulating plans that will facilitate the management of WPA, including Monitoring Plan of Shishou Milu National Nature Reserve. Establishing co-management committee Participating meetings or trainings of project Purchasing monitoring equipments. Producing promotion and education materials.

Xinluoduan	Hubei Xinluoduan Dolphin National Nature Reserve	41,387	Luoshan to Xintankou section of middle reaches of the Yangtze River, the central south of Hubei Province, the southeastern tip of Jiangnan Plain, across Hunan and Hubei provinces and four counties	Formulating plans that will facilitate the management of WPA, including Monitoring Plan of Xinluoduan National Nature Reserve. Participating meetings or trainings of project Purchasing monitoring equipments. Producing promotion and education materials.
Longganhu	Hubei Longganhu National Nature Reserve	22,322	Middle reaches of Yangtze River in southern part of Huang Mei County in Hubei with south part is facing Jiangxi province and the east part in Anhui province	Formulating plans that will facilitate the management of WPA, including Management Plan of Longganhu National Nature Reserve, Business Plan of Longganhu National Nature Reserve, Monitoring Plan of Longganhu National Nature Reserve, WPA Ecological Valuation of Longganhu National Nature Reserve. Establishing co-management committee Participating meetings or trainings of project Purchasing monitoring equipments Developing biodiversity monitoring platform and database system as a pilot site Producing promotion and education materials.
Honghu	Hubei Honghu National Nature Reserve	41,412	Southeastern Hubei on north shore of the Yangtze River, bounded by Honghu causeway across Honghu City and Jianli County	Formulating plans that will facilitate the management of WPA, including Master Plan of Honghu National Nature Reserve, Wetland Conservation Action Plan of Sihou Drainage Basin (Jingzhou Municipality), Management Plan of Honghu National Nature Reserve, Business Plan of Honghu National Nature Reserve, Business Capacity Analysis of Honghu National Nature Reserve, Monitoring Plan of Honghu National Nature Reserve, Program of Water Quality Improvement of Honghu National Nature Reserve. Establishing Honghu Watershed Management Committee, Co-management Committee, and organizing regular meetings and trainings to committee members Participating meetings or trainings of project Purchasing patrolling ship and other monitoring equipments Developing biodiversity monitoring platform and database system as a pilot site Producing promotion and education materials.
Danjiangkou	Hubei Danjiangkou Provincial Nature Reserve	38,630	Reservoir wetland of the South-to-North Water Diversion Project at the	Formulating plans that will facilitate the management of WPA, including Monitoring Plan of Danjiangkou Provincial Nature Reserve. Participating meetings or trainings of project

			intersection of Hanjiang R. and Danjiangkou City, incl 13 towns	Purchasing monitoring equipments. Producing promotion and education materials.
Wanghu	Hubei Wanghu Provincial Nature Reserve	20,495	Middle and lower reaches of the Yangtze, the south bank of the mainstream of the Yangtze river, downstream of Fu river, east of Yangxin County of Huangshi Municipality	Formulating plans that will facilitate the management of WPA, including Monitoring Plan of Wanghu Provincial Nature Reserve. Participating meetings or trainings of project Purchasing monitoring equipments. Producing promotion and education materials.
Chenhu	Hubei Chenhu Provincial Nature Reserve	11,579	Middle reaches of the Yangtze River on the east edge of Jiangnan plain, southwest of Caidian District in Wuhan city	Formulating plans that will facilitate the management of WPA, including Monitoring Plan of Chenhu Provincial Nature Reserve, Scientific Investigation of Chenhu Provincial Nature Reserve, WPA Ecological Valuation of Chenhu Provincial Nature Reserve. Participating meetings or trainings of project Purchasing monitoring equipments. Producing promotion and education materials.

Source: PMO; information on project sites is from Project Documents

1.3 Methodology of the evaluation

The evaluation methodology was based on (a) review of documents, reports that describe progress on project outputs, outcomes and objectives as per indicators in the project design, (b) compilation of data on project deliverables and status of outputs, (c) discussion of key issues and lines of inquiry with project executive and management team regarding strengths and weaknesses of project design and execution, (d) self-assessment of achievements by project staff and participants, (e) interviews with project participants and stakeholders to verify achievements and to identify issues related to project design and implementation, (f) where feasible, group discussions to review project experiences and lessons learned, (g) site visits to compile evidence of achievements and to consult with beneficiaries and stakeholders, and (h) triangulation and corroboration of comments by participants regarding project results, implementation and lessons.

The TE Inception Report, submitted on July 17, 2018, described the data collection and analyses tasks which included:

- Preparation of a series of tables and request to project staff to compile data for background tables, as presented in Annex 3 of the Inception Report;
- Consolidation of project summary statements of achievements alongside comments by the TE consultants – presented in **Annex 6** of this report
- Analyses of the project design and assumptions, implementation performance and measurable results in comparison to the criteria, questions and indicators as set out in the Evaluation Matrix (**Annex 2**), and any gaps between design and delivery.
- Stakeholder interviews, assisted by an Interview Guide, to corroborate data on results, to identify implementation challenges and lessons learned, and to triangulate responses to interview questions;
- Field review of selected representative project sites and comparative before and after information, as available, to verify reported results on key project interventions.

Interviews were held with 86 participants (**Annex 4**) and site visits were made to Honghu NNR, Shishou Milu NNR and Tian’ezhou Dolphin NNR. The evaluation involved an objective and independent review of the *weight of evidence* compiled from reports, interviews/group discussions and site visits. Reasons for conclusions, ratings and recommendations were provided based on the evidence. The evaluation also considered key lessons from the project that have implications for the exit strategy and/or for future biodiversity conservation projects. In accordance with UNDP/GEF evaluation requirements, ratings have been provided for Relevance, Effectiveness, Efficiency, M&E and Sustainability.

Discussion of capacity building and mainstreaming into government systems, as per UNDP/GEF TE guidelines, has been incorporated into the section on evaluation of project outcome results.

2. The Project and Development Context

2.1 Project history

The wetlands in Hubei Province provide refuge to a host of globally significant species, including freshwater porpoise, Pere David’s deer (Milu) and hundreds of migratory bird species but they have suffered from a drastic reduction in their size, ecological integrity and ecosystem services. The remaining wetlands are relegated to a few protected areas that remain highly vulnerable to

both internal and external threats. The project was designed to directly target management barriers on three levels to enhance the wetland management effectiveness. Lack of clear and formal wetland conservation strategy and working mechanism across government sectors on provincial and basin levels as well as the low capacity of management staff were identified as the major barriers limiting its management effectiveness.

The project proposal was developed in conjunction with GEF objectives BD-1 objective: Improve Sustainability of Protected Area (PA) Systems and Outcome 1.1: Improved management effectiveness of existing and new PAs and Outcome 1.2: Increased revenue for PA systems to meet total expenditures required for management. The initial proposal was aligned with China's 12th National Five-year Plan (2011-2015) and the "eco-civilization" concept that give high priority to wetland conservation. The situation of development encroachment into the natural functions of Honghu Lake Nature Reserve and adjacent reserves particularly stimulated action on wetland conservation. The *China Biodiversity Partnership and Framework for Action* (CBPF) is China's primary investment strategy for biodiversity conservation through the GEF and other partners. This project has been designed to address urgent, priority and catalytic issues identified under the CBPF as part of the *GEF/UNDP Programme Main Streams of Life - Wetland PA System Strengthening for Biodiversity Conservation*, which is a sub-programme of the CBPF. The project is one of the six provincial level initiatives under the umbrella framework programme, and will contribute to the national level programme outcomes under three programmatic components.

Prior to the project, efforts had been made to reduce aquaculture activities and improve the environmental conditions at Honghu Lake Nature Reserve, the most prominent of the wetland sites. Several projects had already been implemented to support restoration, infrastructure, capacity building, fence removal, invasive species removal, and enforcement, rehabilitation of displaced fishermen, eco-fishery development and general management. However, very few of these projects were successful due to lack of coordination and cooperation between different government sectors.

2.2 Problems that the projects seek to address

The project document identified the main threats to wetlands as: Degradation and loss of wetlands habitat, over-exploitation of wetlands species (plants, animals, and fish), and climate

change. Three barriers to wetland conservation and utilisation were also identified: 1) limited integration of wetland ecosystems issues within Provincial structures and plans; 2) limited experience with intra-basin ecosystem-based management of wetlands, and 3) limited tools and capacities for ecosystem-based wetland PA site management. Lack of clear and formal wetland conservation strategy and working mechanism across government sectors on provincial and basin levels as well as the low capacity of management staff are the fundamental cause for these barriers. These barriers at the provincial, drainage basin and PA site level are the primary focus of the project.

The project seeks to mainstream wetland conservation into Provincial level development planning. It has conducted assessment on wetland conservation capacity of the province as well as evaluated the current legal system for wetland conservation. The assessment reports were submitted to the provincial decision makers, who later produced wetland conservation regulations and management plans. It has attempted to demonstrate the importance of wetlands to the Provincial decision-makers through economic valuation study. The other problem to be addressed was the coordination apparatus at the Provincial level for integrating wetland issues into Provincial level decision making process and structures, with the hope of increased financial and political support.

At the intra-basin level, the challenge lies in the coordination between different administrative areas and government sectors as well as water management capacities. One water basin usually covers a number of administrative areas, where little coordination previously existed. Similarly, different government sectors within the same administrative area did not have a working mechanism for collaborating on wetland conservation. The project has endeavoured to “institute systems both at the province and PA sites systems for monitoring and improving efficiency of water distribution, use and allocation including assigning roles to units that have the required expertise”. In addition, the project seeks to “reduce the impacts from the various production sector activities on lake and freshwater biodiversity by developing sector specific standards and safeguards and in parallel with engineering a shift towards sustainable use of lake and fresh water biodiversity resources by local communities.

The issues identified at Hongu Lake are typical of many Hubei wetlands: heavy pollution, over fishing, weak infrastructure, contradiction between community co-management and economic development, limitation of management system and mechanism, fund shortage, limitation of

personnel structure and capacity.² The lack of inventory information and management capacity at the other wetland reserves and the continuing pressures of development around the reserves and impacts from infrastructure, tourism and pollution have also led to a decline in wetland values. The economic impacts of increased conservation on the local economy were deemed to be acceptable given the perilous state of some of the wetlands.³

2.3 Immediate and development objectives of the projects

The **project goal** is to improve the conservation and sustainable utilization of globally significant species.

The **project objective** is to strengthen the management effectiveness of the wetland protected area (WPA) system of Hubei Province in response to existing and emerging threats to the globally significant biodiversity and essential ecosystem services. The project document describes the expected end results as “an institutional and policy safety net for WPA’s that incorporates and coordinates conservation across all three management tiers: basin, province, and protected area.”

2.4 Main stakeholders

The key stakeholders are listed on Table 2. The 18 implementing partners/consultants, whose names are not listed here, are under the category of "Academic and Scientific Organizations".

Table 2: List of Stakeholders

Stakeholder	Relevance
National Government of China	
Ministry of Finance	Operational Focal Point (OFP). Coordination and implementation of GEF projects.
State Forestry Administration (including National Wetland Conservation Centre)	Responsible for forest lands, most of China’s nature reserves, wildlife issues, wildlife trade (CITES), wetlands protection (Ramsar Convention), drafting of departmental level regulations especially wetlands.
Hubei Provincial Government	
Hubei Provincial Government	Responsible for provincial administration, development planning and implementation, and planning and financing of the provincial PA system.
Hubei Province Forestry Department (including NR bureau)	Responsible for planning and managing the provincial PA system, conservation of fauna and flora in the province, and for wetland

² Management Plan for Honghu NNR.

³ The original GEF Project Identification Form stated: “These short-term negative impacts are predicted as very slight and will be more than off-set by long-term social gains. For instance, if current use rates of wetlands resources continue unabated, each of the pilot sites will very likely face ecological collapse”

and wildlife protection bureau)	management. The main executing agency and PMU of the project.
Hubei Development and Reform Commission	Responsible for coordinating and implementation of development planning in Hubei Province and applying the ecological conservation and restoration project in the GEF Project such as Honghu Wetland. Member of Project Board.
Hubei Finance Department	Responsible for establishing and submitting of budget requirements, funds transfer and distribution. Member of Project Board.
Standing Committee of People's Congress of Hubei Province	Responsible for coordination of legislation and regulation functions in Hubei, including the provincial regulation of nature reserve management and regulation of wetland conservation. Member of Project Board.
Hubei Province Water Resource Department	Responsible for planning and controlling water resource planning and allocation. Critical stakeholder in the effort to ensure sufficient water flow to the target wetlands. Member of Project Board.
Hubei Province Tourism Department	Responsible for planning and implementing tourism development plans. High levels of collaboration and mainstreaming required to ensure tourism plans do not threaten NRs. Member of Project Board.
Hubei Province Environment Protection Department	Coordination of environmental issues, pollution and CBD implementation and reporting, execution of CBPF. Processing and coordination of drafting new legislation. Technically supports regulatory revisions. Member of Project Board.
Hubei Provincial Agriculture Department	Responsible for both agriculture and fisheries. Major stakeholder in terms of water use and sources of agricultural water pollution. Member of Project Board.
Sub-Provincial Government Agencies	
Municipal and County Agencies	The project will cover the territories of approximately 6 municipalities and 12 counties or cities. Representatives will participate in all outcome related activities, including wetlands conservation strategy design, implementation, and oversight.
Protected Area Agencies	Eight WPA's supporting mostly Outcome 3 outputs and activities. The Honghu PA will be responsible for supporting the design and implementation of Outcome 2 (basin level) activities.
Development Organizations and Donors	
UNDP	Responsible for the project coordination and implementation. The main implementer of the GEF Project.
Civil Society	
WWF	Supports biodiversity conservation in the Yangtze Eco-region including Yangtze Eco-regional Action Program and the Central and lower Yangtze and Yangtze Estuary Conservation Strategy and Honghu Lake restoration.
Hubei Wetland Fund	China's first established wetland foundation. Raises funds, promotes wetlands conservation, development of wetlands, provides technical and financial support for Hubei wetland protection.
Academic and Scientific Organizations	
Chinese Academy of Sciences, academic and other research institutes	Technical expertise available on hydrological, botanical and zoological aspects. Possible collaborator and consultants.
Local and Indigenous Communities	
Local communities	Several local communities that rely greatly upon wetlands for a variety of services, including commercial and subsistence use.
Private Sector	
Numerous	Tens of thousands of private stakeholders who live within and or proximate to Hubei's WPA's.

2.5 Expected results

The Hubei project has three expected outcomes:

1. Establishment of provincial level capacity to identify and alleviate wetlands conservation threats;
2. Establishment of water-basin level capacity to identify and alleviate wetlands conservation threats;
3. Establishment of protected area administration capacity to identify and alleviate wetlands conservation threats.

3. Evaluation Findings

3.1 Project Formulation

3.1.1 Country ownership

There is a high level of country ownership based on the strong interest and commitment from all levels. The project document points out that the project is well aligned with the 12th National Five-year Plan (2011-2015) that supports biodiversity conservation, strengthening monitoring in Nature Reserves (NR) and improving their management and protection. The project assists the State Forestry Administration (SFA) target to protect 55% of the natural wetlands in China by the end of 2015, and the National Biodiversity Conservation Strategy and Action Plan (NBSAP 2011-2030). It is part of the China Biodiversity Partnership and Framework for Action (CBPF), which is China's primary investment strategy for biodiversity conservation through the GEF and other partners. Central government policy directives have generated new laws and initiatives at expanding and upgrading WPAs. China's wetlands protection policy was established in the 2013 [Regulations for Conservation and Management of Wetlands](#) and the introduction of *ecological redlines* that identify wetlands designated for protection. The government also established the *National Wetland Conservation Program (2004-2030)* with a *long-term* goal of establishing 713 wetland reserves or wetland conservation sites by 2030, including 80 wetland sites of international importance and to effectively protect more than 90% of natural wetlands by 2030. Hubei Province implemented the system of Lake/River Heads to lead wetland protection and restoration, adopted the *Lake Protection Regulations of Hubei Province* and established 3 International Important Wetlands, 5 National Wetland Nature

Reserves, 11 Nature Reserves at provincial level, 8 at municipal and county levels and 27 Wetland Protection Plots.⁴

The development of wetland management capacity is therefore a national and provincial priority and the project has played a key role in the evolution of the national biodiversity conservation partnership and the related GEF/UNDP Main Streams of Life Programme. The Hubei Government has made major changes to settlements, infrastructure, institutions and regulations as a result of the project, reflecting a deep commitment to the aims of the project.

3.1.2 Management structure and implementation strategy

Figure 2 outlines the project management structure. The PSC, as the project leader group on the provincial level, provides executive leadership and is formed by a number of provincial government sectors who carry equal voting weight. It includes Forestry Department, Development and Reform Commission, Environmental Protection Department, Finance Department, Agriculture Department, Water Resources Department, as well as UNDP. The representatives from the 8 demonstration sites are also present at PSC annual meetings. In addition, the PA authorities form co-management committees with local stakeholders and provide guidance and coordination service.

The PSC provided annual discussion of progress and approval of workplans (meeting frequency changed to twice a year after MTR with one indoor meeting to discuss workplan and progress and one outdoor meeting to assess project progress on site). The project document proposed a strategic workplan to map and help guide project activity from inception to completion, but the project instead used a two-year workplan process. The PMO, based in Hubei Forestry Department, had the main duty to guide, coordinate and implement project activities, with regular administrative, technical and managerial support from UNDP CO. Links to the other five UNDP-GEF projects and one FAO project were indirect and ad hoc in sharing information and resources. Not shown here is the important role of the CTAs. The CTA played a role of technical guidance for the project's implementation, including promoting technical qualities for all outcomes and outputs, overseeing the progress of the project's implementation at provincial, municipal and PA levels, and reviewing all kinds of reports (PIR, APR, QR, self-assessment report, Two-Year Plan, service providers' reports, etc.), by the supporting from PMO and UNDP.

⁴ http://english.forestry.gov.cn/index.php?option=com_content&view=category&id=18&Itemid=114

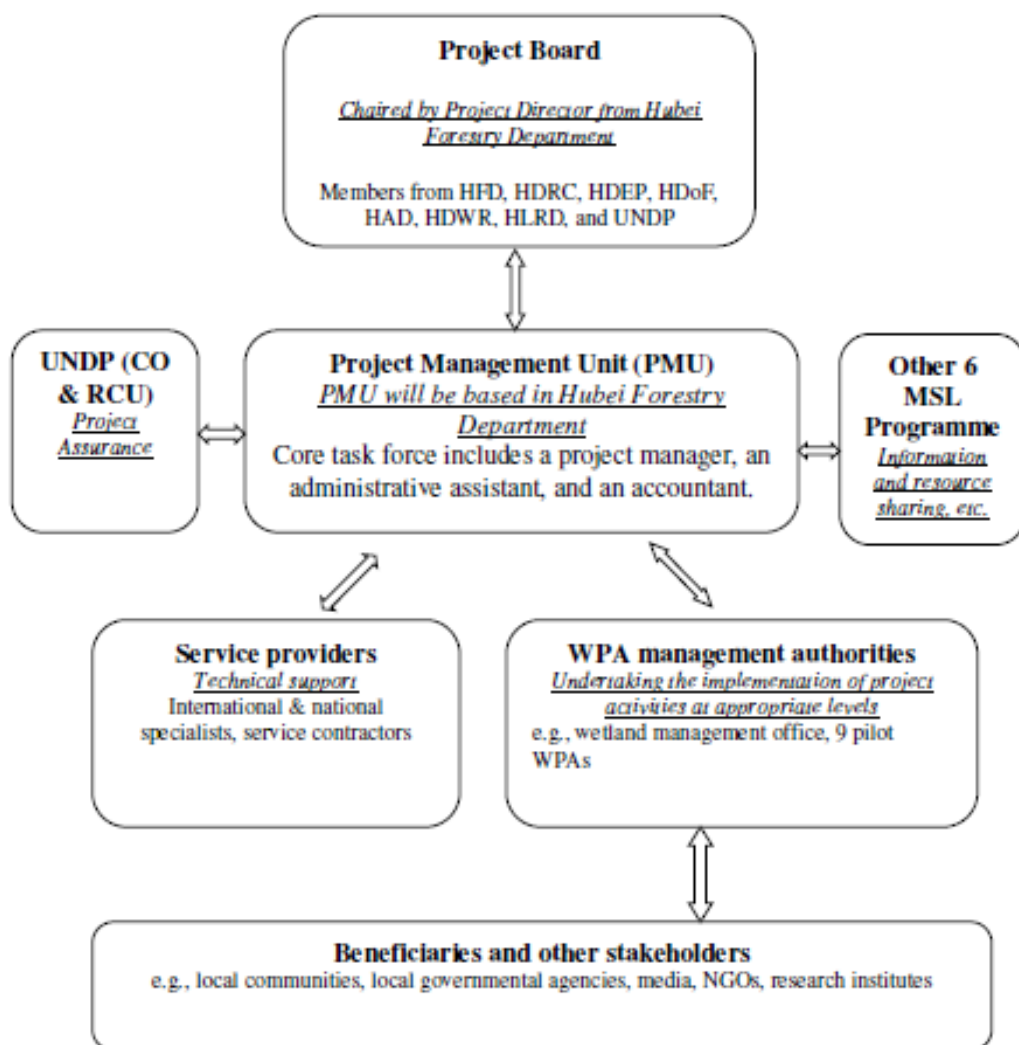


Figure 2: Project Organisation

The project was mainly implemented by PMO, which is based in Hubei Forestry Department. The PMO has two major responsibilities. One is to work closely with the PSC and coordinate with different PSC members to make sure wetland conservation is mainstreamed into different government sectors on the provincial level. Another responsibility is to oversee project implementation and to provide quality assurance for service providers. Different WPA management authorities, through PMO, interact with service providers to make sure the management plans, business plans generated by the service providers can best suit their requirements.

The project implementation strategy is primarily focused on the working relationships between WPA management authorities and the service providers. All the management plans and business plans were prepared by contractors and approved and officially issued by Forestry Department of Hubei Province. While these groups worked together in developing the outputs and in promoting their application, the contracting of 18 separate work packages with external ‘service providers’ (Table 3) presents a question (in the view of the International Consultant) about the efficiency of coordinating and administering so many technical partners.

Table 3: Service providers for Hubei GEF wetlands project

Project name and funding	Service providers	Outputs
1. Formulating wetland protection strategies in Hubei Province, and carrying out related activities US \$ 26,000 GEF funding	Hubei Forestry Research Institute, Prof. Shi Yuhu	Implementation Plan for Wetland Protection and Restoration System in Hubei Province Basic Research and Interpretation on the Contents of Implementation Plan for Wetland Protection and Restoration System
2. Development of Wetland Biodiversity Monitoring Platform and Database System in Hubei US \$ 51,562.50 GEF funding	Chinanet Zhengtong (Beijing) Technology Co. Ltd, Duan Yuanzheng	Wetland Biodiversity Monitoring Platform and Database System in Hubei Province
3. Analysis and revision of relevant regulations on wetland protection in Hubei Province US \$ 15,000 GEF funding	Hubei Ecological Engineering Vocational and Technical College, Associate Prof. Qian Qing	Gap analyzing of wetland laws and policies in Hubei and the discussion of framework of Hubei Wetland Conservation Regulation
4. Formulating wetland conservation for Honghu Basin, and implementing related activities US \$ 26,000 GEF funding	Wuhan Weiterun Institute of Ecological Environment, Prof. Ge Jiwen	Wetland Conservation Action Plan of Sihu Drainage Basin (Jingzhou Municipality)
5. Improving water quality, controlling pollution and carrying out related activities US \$ 40,000 GEF funding	Hubei Honghu Lake National nature reserve, Zhu Junhua Technical support from Prof. Li Enhua in Institute of Surveying and Geophysics, CAS	Pollution Control and Water Quality Improvement Program of Honghu Lake
6. Development a System on Mobile Patrolling and Law Enforcement Monitoring and Management in Honghu Lake NNR US \$ 46,875 GEF funding US \$ 15,625 govt funding	Chinanet Zhengtong (Beijing) Technology Co. LTD, Du Heqing	System on mobile patrolling and law enforcement monitoring and management in Honghu Lake NNR
7. Formulating the Integrated Training Program of Hubei Provincial GEF Wetland Project US \$ 6,000	Yu Guangzhi	Integrated Training Plan for Hubei GEF Wetland Project

8. Formulating the management plan for Honghu Lake NNR, and carrying out related activities US \$ 50,000	Hubei Honghu Lake National Nature Reserve, Zhu Junhua Technical support from Prof. Zhang Mingxiang in Beijing Forestry University	Management Plan for Honghu lake national nature reserve in Hubei Province
9. Formulating the management plan for Longgan Lake NNR, and carrying out related activities US \$ 50,000	Hubei Longgan Lake National Nature Reserve, Ye Guoqing Technical support from Prof. Zhang Mingxiang in Beijing Forestry University	Management Plan for Longgan Lake National Nature Reserve in Hubei Province
10. Formulating management plan for the Yangtze river Tian'ezhou Dolphin NNR, and carrying out related activities US \$ 15,625 GEF funding	Beijing Green Alliance Natural Science Research Institute Co. Ltd, Prof. Zhang Mingxiang	Management Plan for the Yangtze river Tian'ezhou Dolphin National Nature Reserve in Hubei Province
11. Formulating business plan for Honghu Lake NNR, and carrying out related activities US \$ 50,000 GEF funding	Beijing Forestry University, Doc. Wang Hui	Business Plan for Honghu lake national nature reserve in Hubei Province
12. Formulating business plan of the Yangtze River Tian'ezhou Dolphin NNR, and carrying out related activities US \$ 50,000 GEF funding	Beijing Forestry University, Doc. Wang Hui	Business Plan for the Yangtze river Tian'ezhou Dolphin national nature reserve in Hubei Province
13. Formulating business plan of Longgan Lake NNR, and carrying out related activities US \$ 15,625 GEF funding	Hubei Ecological Engineering Vocational and Technical College, Prof. Pu Ping	Business Plan for Longgan lake national nature reserve in Hubei Province
14. Comprehensive investigation and ecological value assessment of Chenhu provincial wetland nature reserve in Hubei US \$ 54,687.5 GEF funding	Wuhan Yimaijing Biotechnology co. LTD, Prof. Liu Shengxiang	Study on biodiversity and ecological value evaluation for Chenhu Ramsar site
15. Ecological value assessment of Hubei Chenhu Provincial Wetland Nature Reserve US \$ 28,109.4 GEF funding	Institute of Surveying and Geophysics, CAS, Prof. Wang Xuelei	Evaluation of ecosystem function value for Longgan lake NNR in Hubei province
16. Formulating monitoring plan for 8 project sites, and carrying out related activities US \$ 100,000 GEF funding	Lanxue Ecological Environment Evaluation Institute, Prof. Liu shengxiang	Monitoring manual for wetland nature reserve in Hubei province
17. EHI (EHI Investigation, and training US \$ 40,000 GEF funding	Institute of Surveying and Geophysics, CAS, Prof. Li Enhua	Ecosystem Health Index (EHI) Terminal Value Investigation Report
18. METT Investigation, and training US \$ 6,500 GEF funding	Institute of Surveying and Geophysics, CAS, Prof. Li Enhua	Management Effectiveness Tracking Tool (METT) Terminal Value Investigation Report

Note: excludes Government Co financing of 127.3 Million RMB (approx. USD \$ 19.9M) for physical work done in items 4, 5, 8, 9, 10, 11, 12, 13, 16

Midway through the project, and *Expert Technical Group* of the GEF Wetlands Project in Hubei Province was established. They were requested to “summarize the project achievements and promote the application of some good practices, excellent experiences and new technologies to the provincial wetlands protection.” The April 2017 PSC meeting also recommended employing a communications expert, which they subsequently recruited.

3.1.3 Stakeholder participation

The provincial scope of the project and the emphasis on community outreach and education has assisted stakeholder’s participation. The new arrangements for inter-agency coordination and engaging local government have been a key focus for this participation. The broadening of PSC and consultative committee membership served to promote greater participation. The project design emphasized the importance of engaging local communities in wetland conservation. The TE interviewees gave the example of community consultations that led to development of an alternative route near Tian’ezhou reserve for the community to access the main highway rather than going through the reserve.

The TE discussion indicated that community involvement has been a challenge to change conventional government control, and co-management aspirations through the river/lake chiefs system, a work in progress. Communication limits between PAs for exchanges of experience and advice may have also been a constraint to participation.

3.1.4 Replication approach

The approach to replication was based on each of the project’s three components being designed to generate replicable models for wetland management. Component One provincial activities were expected to increase the scale and scope of success awareness facilitating replication. Component Two focused on a replicable model for basin level management, with an initial focus upon the Hubei watershed and on building capacities within key government agencies to achieve similar outputs for other watersheds. Component Three aimed at a new way of strategically planning and managing wetland protected areas to be used to build capacity across the system and to create a cohort of protected area managers representing all eight target protected areas.⁵

⁵ Project Document, 2014, p.35.

The replication approach of this project primarily relies on the top-down government administration of the province. By directly issuing a number of project outputs, such as "Wetland Conservation and Restoration Implementation Plan" and "Management Guidelines on Wetland Parks of Hubei Province", by the provincial government, the project achievements on wetland conservation are expected to be quickly copied by basins and PAs that were not included in the project. In addition, the project established the provincial consultative group on wetland conservation, which is a permanent cooperation mechanism on provincial wetland conservation. As the consultative group involves key government sectors such as Forestry Department, Environmental Protection Department, Agriculture Department, Development and Reform Department, Finance Department, and other relevant government sectors, they can effectively spread the project achievements across sector boundaries and replicate to other industrial sectors. On the basin level, a similar replication approach was adopted as the provincial level. In terms of public awareness, the project worked with Education Department to officially produce a textbook on Honghu conservation, which is now being used by all 5th grade primary schools in the city. The project hopes the students can have a multiplier effect by influencing their families.

The organisation of the project into provincial, basin and local levels helps to ensure awareness and learning have a potential wide reach. Replication that leverages the proven best practices from the demonstration projects needs a systematic and targeted approach. There has been an effort to engage staff from outside of the demonstration sites in training activities and to start the management planning process elsewhere. It was reported that besides the 8 project sites, many WPA in Hubei were invited into the training system of the project.⁶ Management plans have commenced at Longgan Lake NNR, Yangtze River Tian'ezhou Dolphin NNR, and Chenhu Provincial Wetland Nature Reserve. The Project Steering committee also encouraged the GEF Wetlands Project Steering Committee and the members of the Provincial Wetland Protection Advisory Group to conduct investigation and training at the GEF project sites in other provinces.⁷

The mechanisms for scaling-up remain to be defined and pursued in the final stages of the project. The Final Report however stated that "lessons learned during the process of

⁶ PMO, Project Final Report, July 2018, p. 87.

⁷ PMO, Project Steering Committee Meeting Minutes, April 19, 2017

implementing the Hubei initiative will be distributed nationally through the SFA Wetland PA Programme established as part of the CBPF”.

3.1.5 Cost-effectiveness

The leveraging of huge co-financing (**Annex 7**) suggests cost-effective use of GEF funds based on the assumption that such national financing would not have occurred without GEF. The project document stated that “the relatively small investment is targeted to catalyze a substantial course change.” Paramount was the desire to build the regulatory, management and financial capacity required for China to independently maintain effective conservation efforts. This catalytic effect and sustainability measures make the GEF investment highly cost-effective, assuming that GEF involvement is a limiting factor in the results achieved.

Cost effectiveness was also enhanced by the government implementation procedures. In the view of the National Consultant, the implementation of the proposed projects is guaranteed as the management plans have set out clear projects timing, budgets and implementing bodies (**Annex 9**). In addition, in order to make sure the projects are carried out in an efficient and timely manner, the plans contain safeguard measures, such as integrating wetland conservation into government agendas and establishing a working mechanism summarized as "government lead, sectors cooperate, private sectors participate", to integrate wetland conservation indicators and completion of projects into government program KPI evaluation processes. All to ensure that commitments made and actions proposed are firmly implemented and controls are in place to monitor and ensure success.

Aspects of project delivery efficiency are discussed in section 3.3.6.

3.1.6 UNDP comparative advantage

The strengths of UNDP as the GEF implementing agency are based on the long history of UN support to the Government of China on sustainable development issues, the UNDP international experience with capacity development programs, and the agency’s ability to access international expertise on wetland and biodiversity conservation. UNDP has had a long history of supporting protected area systems worldwide.⁸ UNDP has been operating in China for over 37 years, and engaged in GEF projects since 1991, including assistance with the 1994

⁸http://www.undp.org/content/dam/undp/library/Environment%20and%20Energy/biodiversity/PA_21Century.pdf

Biodiversity Conservation Action Plan and the 2005 China Biodiversity Partnership Framework.⁹ UNDP China had previously implemented the *China Wetland Biodiversity Conservation and Sustainable Use Project*.¹⁰

3.1.7 Linkages between project and other interventions in the sector

The project is aligned with the China Biodiversity Partnership and Framework for Action (CBPF), China's primary investment strategy for biodiversity conservation through GEF and other partners. The main linkages are to other UNDP program activities in the China Biodiversity Partnership Framework-Mainstream of Life) programme (CBPF-MSL) involving six UNDP and one FAO wetland conservation projects. Exchange of information and experience is presumed to have occurred as per the Project Organisation (Figure 2). No documents were available on the level of experience-sharing but one international symposium was held in December 2017 to review achievements to date.¹¹

WWF are involved in the Yangtze Eco-regional Action Program and the Central and Lower Yangtze and Yangtze Estuary Conservation Strategy and Honghu Lake restoration. The Hubei PMO also worked closely with the Hubei Wildlife Conservation Association to organize educational and scientific events. As leading GEF agency for the MSL Programme, UNDP plays key roles to coordinate SFA, FAO wetland project, and other related provinces involved in wetland conservation.

3.1.8 Analysis of Results Framework

The results framework provides a coherent structure aimed at increasing the capacity at Provincial, water basin and PA levels to identify and alleviate threats to wetland conservation. The outputs are effectively aligned with the outcomes with a focus on institutional development, conservation strategies and policy and planning frameworks. This is a clear and effective design to address the issues from a comprehensive approach at different levels. More elaboration of the expected end results and targets would have been useful, especially on the provincial and basin strategies and the related capacities needed to implement them. This was a central observation in this TE – such strategies need to be based on a good understanding of hydrological and ecological processes that drive wetland processes and frame management

⁹ UNDP in China: Years to Remember, 1979-Now, UNDP, 2017.

¹⁰ http://www.cn.undp.org/content/china/en/home/library/environment_energy/mainstreaming-wetlands-biodiversity-conservation-.html

¹¹ <http://www.cn.undp.org/content/china/en/home/presscenter/articles/2017/12/06/international-symposium-on-wetland-protected-area-systems-.html>

objectives. This is especially the case for wetlands in an active state of ecological succession. Suggestions for improving the quality of the strategies and plans are offered in Section 3.3.3.

Key assumptions and risks in the Results Framework

The key assumptions that stakeholder and government support for improving wetland conservation will remain steadfast in light of development pressures have been validated. This support has been bolstered by Central government policies on 'eco-development' and wetland protection.

The replication assumption that contracting service providers to produce a number of project outputs, such as "Wetland Conservation and Restoration Implementation Plan" and "Management Guidelines on Wetland Parks of Hubei Province", that can then be readily copied by other basins and PAs in the province may be questionable.

The key risks in the project design relate to government coordination and support from development sectors, financing to assist wetland conservation, and external environmental risks from invasive species and climate change. These have not so far, hampered implementation of the project. The large number of projects proposed for wetland conservation and enhancement (Annex 8 and 9) nevertheless will need to be carefully coordinated under a well-defined common strategy for the basin and wetland.

The indicators for measuring progress are mostly quantitative rating indicators. The quality and use of these are discussed under M&E in Section 3.2.5 below.

3.2 Project Implementation

3.2.1 Executing agencies and implementation modalities

The project was mainly implemented by PMO, which was based in Hubei Forestry Department. The PMO has two major responsibilities. One was to work closely with the PSC and coordinate with different PSC members to make sure wetland conservation is mainstreamed into different government sectors on the provincial level. Another responsibility was to oversee project implementation and to provide quality assurance for service providers. Different WPA management authorities, through PMO, interact with service providers to make sure the management plans, business plans generated by the service providers can best suit their requirements.

Hubei Forestry Department has been heavily involved and greatly dedicated to the execution of the project. The project manager, who is also the deputy director of Hubei Wildlife Conservation Center (component office of Hubei Forestry Department, where the PMO office is based), works on this project full-time. His duty is to oversee the project implementation and provide quality assurance. The project manager works closely with project CTA to provide technical guidance and framework to service providers and makes sure the outputs can meet project requirements. All the outputs from the service providers such as management plans and business plans are all required to submit to PMO, who later submit to PSC, for preliminary checking, then submitted to Hubei Forestry Department for approval before they can be officially issued. This approach was strictly followed by all service providers and all of the outputs were approved and issued by Hubei Forestry Department.

The project implementation approach has depended heavily on many contractors (service providers) to deliver various technical outputs (Table 3) with necessary support on a part-time basis by the CTA(s) and guidance from the Project Management Office and the Project Steering Committee. This contrasts with other approaches where CTAs play a more full-time role and technical contractors usually have a more limited scope of work to provide specific activities. The typical GEF project delivery model strives for hands-on involvement of the executing agency, direct management guidance and supervision, and more experiential learning-by-doing within the organisation. The MTR report alluded to issues of coordination of the service providers, but the concerns may more broadly relate to the overall design of the project capacity development strategy.

There were some limitations in the ability of one CTA to serve six projects as noted at mid-term.¹² This led to appointment of new CTAs but these may not have been enough to provide full detailed peer review of outputs produced by the service providers. One CTA expert in the first half of the project covered this and 5 other projects, and two CTAs in the second half covered three projects each.

¹² The UNDP response to the MTR Recommendation #9: "... the expert panel established by the project has done much excellent work but is not fully qualified for the technical consulting work required for the project. So we will re-establish the expert panel, inviting well-known and influential experts", Responses to Mid Term Review, 2017

No major issues were identified with regard to contracting modalities from the perspective of the participating agencies or UNDP.

3.2.2 Coordination and operational issues

The Project Steering Committee (PSC) acts as the final decision maker and coordinator of the project. It was formed with representatives from various organizations carrying certain voting weight. The departments include Forestry Department, Development and Reform Commission, Environmental Protection Department, Finance Department, Agriculture Department, Water Resources Department, Natural Resources Department, demonstration PAs as well as UNDP.

The PSC met on five occasions, each year beginning in June 2014. The project document specified the role of PSC to include (i) overseeing project implementation; (ii) approving annual project work plans and budgets that are proposed by the Project Manager (PM), for submission to UNDP; (iii) approving any major changes in project plans or programs; (iv) providing technical input and advice; (v) approving major project deliverables; (vi) ensuring commitment of resources to support project implementation; (vii) arbitrating any conflicts within the project and/or negotiating solutions between the project and any parties beyond the scope of the project; (viii) ensuring coordination amongst member agencies, and (ix) overall project evaluation.

The project has also established consultative groups on the provincial, basin and PAs levels. The consultative groups encourage and promote wider participation of stakeholders from all levels in wetland related decision-making. The consultative groups include representatives from development sectors such as water resources and tourism, and they facilitate the design, formulation and implementation of the wetland conservation plans, which brought in more openness and inclusion of project implementation. On the PA levels, actions are taken to involve more WPA users into the decision making process.

The national consultant believes the operation of the project is effective. As stated in the Audit Report prepared by Mazars Certified Public Accountants, “the implementing partner is Forestry Department of Hubei Province. The project internal control system was effective in providing useful and timely information for the project management and was generally effective in

protecting the assets and resources of the project”.¹³ The comments from auditors for this project are significantly better than the other projects (national consultant comment).

The PMO placed great emphasis on coordination and cooperation with other government sectors. The deputy director of the project board, director of Hubei Wildlife Center, was fully engaged in this job. He has worked closely with the provincial government and other government sectors such as environmental protection department, water resources department, development and reform commission, finance department and others. Coordination for this project is very effective as comprehensive plans such as "Wetland conservation and restoration implementation plan" were officially issued by the provincial government as collectively agreed upon by all government sectors and other plans such as the management plans and business plans for individual PAs were all approved and issued by respective management authorities. The many proposed projects identified in a general way in these management plans have huge implications for future investments by government.

3.2.3 Management by the UNDP Country and Regional Offices

UNDP had responsibility for (i) providing financial and audit services to the project; (ii) overseeing financial expenditures against project budgets approved by PSC; (iii) appointment of independent financial auditors and evaluators; and (iv) ensuring that all activities including staff and equipment procurement and financial services are carried out in strict compliance with UNDP/GEF procedures. The UNDP country office in China has acted as implementing agency for several GEF-financed biodiversity projects, and has a wealth of global experience to draw from.

UNDP performance was examined in terms of (a) responses to the MTR, (b) quality assurance on technical work, (c) procurement and administrative/financial processes, and (d) reporting effectiveness and timeliness. Overall, the project participants interviewed by the TE consultants were satisfied with their collaboration with UNDP and the GEF/UNDP procedures, although some found the reporting requirements complicated and onerous. The UNDP Technical Advisor commented in PIR reporting that there are excellent relationships between the PMU, the Hubei Forestry Department and UNDP China that are underpinning effective implementation.

UNDP management has provided timely support to the executing agency and project team. They have been highly appreciated by PMO especially for their assistance in quality assurance,

¹³ Audit Report of Mazars Certified Accountants

risk management, financial management and annual reporting. In addition, procurement of consultants and financial support was also provided by UNDP country office to the PMO.

Training and guidance were provided to project staff on the GEF/UNDP administrative processes. No major comments were made by the auditors about management of the project. With respect to gender mainstreaming, it was suggested in the comments on the Draft TE Report that more strategic support would be advisable from UNDP, to assist the PMO in integrating gender and minority development objectives into the implementation.

The \$700,000 cash contribution to the project from UNDP, (Project Document, page 50) has not been included in budget and expenditure reporting due to lack of data. This is clearly a grant from UNDP resources¹⁴ and it is therefore shown as a completed grant on Table 5 although details of this contribution to the project are vague. Expenditures of \$350,000 were reported at mid-term and presumably the \$700,000 has been delivered by project completion through the Coca-Cola Foundation donation for water management activities in China.

The Safeguards Screening determined that “the project would not result in substantial involuntary resettlement”. Resettlement by government, separate from the project, has been essential to save Honghu Lake and the government has provided substantial replacement housing and compensation for lost assets as well as alternative employment efforts.

3.2.4 Adaptive Management

The context for project implementation has changed in recent years due to the major commitment of the Central government to provide support for wetlands conservation including \$47 M of government co-financing for this project. The increased environmental policy development that has occurred in China in recent years has helped to provide the necessary high-level support for the project.

Responses to the MTR report were extensive. A coordinating role was added to the Hubei Provincial Wetland Conservation Consultative Group to broaden their responsibilities. The

¹⁴ According to the MTR report, “The UNDP co-financing is from Thematic Resources Assigned from the Core (TRAC) funds that have been contributed to a public-private partnership programme on water governance involving the Ministry of Water Resources, the Ministry of Commerce, the Ministry of Environmental Protection, and Coca-Cola Greater China.”, Mid Term Synthesis Report, 2016, p.20.

oversight function by a technical panel was also enhanced to respond to concerns in the MTR report.¹⁵The five-member panel, which includes a member from WWF, has met three times to review progress on the technical components. Improvements were also made to reporting to respond to the MTR comment about “systemic shortcomings in reporting formats for quarterly and annual progress reports” and difficulty in reviewing actual versus planned progress. One unresolved issue was the inability of UNDP to convince the PSC that they should meet twice a year, as recommended in the MTR report.

A brief review of PIR reports found that suggestions to expand the PSC membership to include representatives from more project sites, and to increase the number of PSC meetings were not acted on, but suggestions for recruitment of monitoring and communication staff were addressed.

3.2.5 Financing and co-financing

The PMO was in charge of financial management for the project in conjunction with UNDP rules, training and supervision. UNDP allocated funding to Hubei Finance Department according to the quarterly workplan. The PMO submitted quarterly workplans and financial tables to UNDP. PMO then applied for the required funds from Finance Department with proper documentation. After the funds are transferred to PMO account, it distributed the funding to respective PAs according to workplan. At the end of each quarter, the PA submits the expenditure report to PMO and workplan for next quarter.

Table 4 shows the expenditure rate for the four years between 2014-2018, averaging 83% (ranging from 68-92 % annually). Outcome 1 (establishing provincial level capacity) has been particularly underspent relative to budgets, spending only 73% of the planned budget. The total expenditures to July 31, 2018 were \$2,231,879, comprising 84% of the total \$2.65 M from the GEF grant.

¹⁵ For example, the MTR report stated: “Honghu Management Plan has several weaknesses, such as lack of a clear framework whereby actions and their respective projects are linked to the operational objectives and, in turn, to the threats and limiting factors. It also lacks a framework to monitor implementation of the plan.”, Xue Dayuan and James Lenoci, Midterm Review Synthesis Report, CBPF – Main Streams of Life (MSL): Wetland PA System Strengthening for Biodiversity Conservation, Dec 30, 2016, p. 20

The auditors found that “the project internal control system was generally effective in providing useful and timely information for the project management and was generally effective in protecting the assets and resources of the project.”

Annex 7 provides a breakdown of the co-financing sources and how the financing was utilized, mostly for physical works, restoration projects and some operational and compensation costs. In the project document, Hubei Government committed to provide 17,458,634 USD of co-financing (including cash 10,868,000 USD, in-kind 6,590,634 USD). Annex 7 records a much higher total contribution from government of \$47.74 M in the eight project reserves. The major expenditures from government co-financing have been at Honghu Lake (\$16.04 M) and at Tian’ezhou reserves (\$8.31 M).

The co-financing from UNDP is estimated at \$700,000 based on a grant that was provided to the Main Streams of Life Programme through the *UNDP-CICETE-Coca Cola Partnership for Water Governance Programme*. This private sector funding has provided annual grants of 0.8 to 1.0 M USD per year for various water management projects in the country. The specific contribution to this project from this funding appears to be the WWF assistance in recovery of dolphin populations in Tian’ezhou Lake but no other details were available. How much of the \$700,000 Coca-Cola grant has actually been spent related to the Hubei Wetlands project is unknown. This grant could also be considered under the ‘Other’ category rather than as UNDP cash contribution as shown on Table 4.

3.2.6 Monitoring plan at entry and in implementation

The M&E plan was developed using the standard template for GEF-financed projects. The indicative budget for the M&E plan was USD 125,000, excluding PMO and UNDP staff time and travel expenses. This sum is approximately 5% of the USD 2.65 M GEF grant, which is reasonable. In addition to the USD 45,000 for MTR and TE, the project budgeted USD 20,000 for field visits to projects sites as routine monitoring process. However, the project document did not provide for an M&E officer.

The major M&E activities for the project included inception workshop, two-year project work plan, quarterly/annually project reports (QPR, APR), Project Implementation Report (PIR), routine monitoring by field visits, mid-term review, terminal evaluation and knowledge sharing.

The performance ratings in the annual PIR reports and the MTR and TE are similar - 'Satisfactory'.

The MTR report stated that “most of the weaknesses in the M&E systems relate to the design of the Results Framework and to UNDP's quarterly and annual progress reporting formats.”¹⁶ The “number of hectares to achieve ecosystem functionality” under the Objective was not quite the same as number hectares under PA status. The project did not have a designated monitoring officer during the early years of the project, but that was corrected following the MTR, along with improvements in the reporting system. The project issued quarterly and annual reports in a timely manner as required by UNDP/GEF.

The role of the monitoring officer has been to track the indicators and to prepare the reporting. It is useful to consider in future projects that this role include spot-checking of implementation completion and quality, and trouble-shooting liaison with field level participants and beneficiaries (especially to improve the links with external service providers).

Indicators quality and use

The indicators in the project document place a high dependence on general indices (METT, EHI). The rating systems are mandatory under UNDP/GEF projects so these comments relate to project design aspects.

The quantitative indices have distinct limitations as measures of progress towards outcomes (end results). EHI ratings improved by an average 61% (22-87% range amongst PAs); METT scores increased on average by 67% (35-104% range).¹⁷ Table 2 in *UNDP-GEF: Strengthening the Management Effectiveness of the Wetland PAS in Hubei Province* shows growth in EHI values in the eight nature reserves with six of them in the 60-87% range. What is the main explanation for the reported 87% improvement in the ecosystems of Tian'ezhou Lake in the past five years? How has this affected the population of resident dolphin? Does WWF China agree with this conclusion? The point here is that these numbers must be complemented by some site verification before they are used as the sole basis for determining results: context is important in evaluating specific projects.

¹⁶Xue Dayuan and James Lenoci, Midterm Review Synthesis Report, CBPF – Main Streams of Life (MSL): Wetland PA System Strengthening for Biodiversity Conservation, Dec 30, 2016, p. 20

¹⁷PMO, Project Final Report, July 2018, p. 61.

The concerns about specific qualifiers on data accuracy, reliability and potential for project activity bias (temporary effects of a project), some of which emerge from site interviews, are often not captured by such high-level indicators. Ratings that simply record or reflect completion of project outputs (e.g., valuation study, management plans, business plans, etc.) may give a misleading measure of outcomes.

The project has tried to improve the indicator parameters and performance data in the project design, and to enhance the monitoring information. The implication from the TE mission discussions and review is that indicators of ecosystem health and management capacity need to provide enough qualifiers on the data to reflect the complexity of actual conditions and risks on the ground.

The indicators in the project document depend heavily on general indices (METT, EHI, Financial Scorecard) to measure progress towards outcomes (end results). Numbers dominate the progress monitoring (see **Annex 6**). The quantitative measures have distinct limitations. Some indicators simply record completion of outputs (e.g., valuation study, management plans, etc.). There is no baseline or performance data on number of trainees meeting competency standards; it's not clear what particular sector plans are expected to incorporate conservation measures. The result of these limitations is a very approximate set of measures to gauge progress on the three outcomes.

Many of the quantitative indicators provide only course, generalized rating of results; they are adequate for comparing PA management levels but are unable to capture changes in specific capabilities between moderate and high ratings or the particular details of actual scope of capabilities. E.g., high Capacity Scorecard ratings are tempered by the adjoining 'evaluative comments' column in the tables that highlight weaknesses. Secondly, many of the indicators reflect outputs generated by contractors rather than PA staff capacity to use such outputs to achieve the expected outcomes.

It is suggested that the METT system can be improved by ensuring that it is supplemented by inclusion of monitoring information on:

- Basic capacity requirements needed to meet an adequate level of management ('service delivery standards') at the particular network and/or site level.

Table 4: Hubei Project Budget and Expenditures (\$'000) 2013 – 2018

Outcomes	2014-15		%	2015-16		%	2016-17		%	2017-18		%	Planned 2018-19	
	Budget	Expend		Budget	Expend		Budget	Expend		Budget	Expend		2018 budget	2019 budget
Outcome 1	116,190	78,383	67	147,608	109,468	74	132,880	88,362	66	120,790	100,121	83	123,920	5,500
Outcome 2	77,490	66,804	86	158,210	165,869	105	124,110	105,832	85	98,495	82,007	83	63,700	21,878
Outcome 3	85,240	44,257	52	480,470	443,589	92	385,660	381,539	99	369,190	306,753	83	334,392	7,030
Project Mgt	25,187	17,033	68	23,940	29,471	123	25,940	32,150	124	26,940	16,271	60	25,440	5,000
Total and % expended	304,107	206,478	68	810,228	748,397	92	668,530	607,884	91	615,415	505,152	82	547,452	39,408

Source: Project Management Office; (% = expenditure rate relative to budget).

Table 5: Project Co-financing

Co-financing (type/source)	UNDP own financing (mill. US\$)		Government (mill. US\$)		Partner Agency (mill. US\$)		Total (mill. US\$)	
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual
Grants	0.7*	0.7*	10.868	47.445	-	-	11.568	48.145
Loans/Concessions	-	-	-	-	-	-	--	-
• In-kind support	unknown	unknown	6.591+	0.289+	-	-	6.591	0.289+
• Other	-	-	-	-	-	-	--	-
Totals	0.7	0.7	17.454	47.734	-	-	18.159	48.434

* The UNDP grant was later covered by the grant from Coca Cola Foundation to the Main Streams of Life Programme. The grant at the national level has varied annually between 0.8-1.0 M USD. There is no precise record of the co-financing provided to the project. The total cash co-financing therefore is in the range of \$47.445 – \$48.145 M USD, depending on how this external grant is viewed.

+ The estimate of Planned in-kind contribution by government is from the Project Document; the Actual is from the PMO Office.

- Baseline conditions that exist at beginning relative to the capacity requirements (see the statements under 'Evaluative Comments in the METT rating table of the ProDoc).
- Progress and gaps in management capacity at the particular network and/or site level; extent to which capacity requirements above have been fulfilled.

It is suggested that the EHI system can be improved by providing a narrative that explains and justifies the rating following ground-truthing with local PA staff.

3.3 Project Results

3.3.1 Effectiveness: Project objective

Annex 6 summarizes the targets and achievements per the project logframe. The project has effectively achieved and exceeded the targets.

Table 6 below shows the current status of the protected areas. The size of the eight major wetland PAs increased 22% over the baseline 158,000 ha recorded in the Project Document (p. 12).¹⁸ Total number of staff increased from 258 to 264, and the annual budget increased from \$13 M to 16.8 M.¹⁹ If these numbers are accurate, PA staff have not increased commensurate with the growth of PA area and budgets.

Table 6: Protected Area Ratings and Budgets

Name	Designation	Protected Area(ha)	Staff (person)	METT score (2018)	Annual budget (2018)
Honghu	National Nature Reserve; WWF 200; RAMSAR wetland	41,412	104	76	8,487,000
Longganhu	National Nature Reserve; WWF200	22,322	33	79	5,900,000
Shishou Milu	National Nature Reserve; WWF 200	1,567	26	82	300,000+
Tian'ezhou Dolphin	National Nature Reserve; WWF 200	15,250	23	78	230,000
Xinluoduan Dolphin	National Nature Reserve; WWF 200	41,387	19	78	230,000
Danjiangkou	Provincial Nature Reserve; WWF 200	38,631	12	39.13	110,000
Chenhu	Provincial Nature	11,579	13	65	1,015,000

¹⁸ Similar figure at the provincial level: Wetland area was estimated at 1,445,000 ha (p.2) and the project added 319,594 ha of protected wetland (p.16), an increase of 22.1%. Final Project Report.

¹⁹The project document (p. 12) Table 7 shows 'operational budget' for the 8 reserves totalled \$7.7 M but also states that total budget allocated was \$13 million annually (operational + other costs).

	Reserve				
Wanghu	Provincial Nature Reserve	20,495	34	77	515,000
Total		192,643	264		16,787,000

Source: METT report

Among the 8 demonstration sites, the maximum METT score was observed in Shishou Milu PA with a Terminal Evaluation (TE) value of 82. The minimum METT score was observed in Danjiangkou PA with a TE value of 47. The average increase in METT score for all the 8 demonstration sites was 67.23%, which has exceeded the project target. The Project Final Report notes that “Honghu Nature Reserve has carried out various engineering projects to promote wetland conservation and restoration, and the METT score has increased by 61.7% over the course of the project.”²⁰

The quantitative ratings of ecosystem health, PA management effectiveness and budget allocations for wetland management reflect significant improvement in overall wetland management.

3.3.2 Effectiveness: Outcome 1 - Provincial Level Capacity

Annex 6 summarizes the main achievements, which include a long list of studies and proposed programs to advance wetland conservation. The direct involvement of the provincial authorities has helped to drive the significant progress. It was highlighted that the support of high level decision makers in the Hubei government made it possible to coordinate the many agencies.²¹

Table 7 summarizes the "percentage of annual financing allocated by the Government of China to cover the cost of implementing WPA wetlands conservation strategy in Hubei Province". The total budget has increased 124% from \$7.4 M to \$16.56 M. Only Xinluoduan and Danjiangkou have not seen increased budgets.

Table 7: Annual financing of 8 demonstration PAs by Government of China (USD)

Name	Baseline value	Project Target	TE value	Status
Honghu	2,500,000	/	8,487,000	Achieved
Chenhu	800,000	/	1,015,000	Achieved
Wanghu	31,680	/	515,000	Achieved
Longganhu	3,387,842	/	5,900,000	Achieved

²⁰Just prior to the project, changes had already commenced; 11,000 people were relocated, leaving about 4,000 people still residing in the PA at the start of the project; p. 12, ProDoc.

²¹PMO, Final Project Report, July 2018, p.87

Shishou Milu	242,000	/	300,000+	Achieved
Tian'ezhou Dolphin	140,000	/	230,000	Achieved
Xinluoduan Dolphin	290,400	/	230,000	Not Achieved
Danjiangkou	305,000	/	110,000	Not Achieved
Total	7,391,922		16,557,000	Achieved

Source: METT data

The numbers for "total hectares of wetlands protected in Hubei Province managed to achieve ecosystem functionality showing marked reduction in threats of degradation of wetlands and over-exploitation" are estimated to have increased by 13% over baseline status to 282,246 ha in newly established, upgraded and expanded PAs. The total area of wetland under protection increased by 315,294 ha during the project.²²

Relevant provincial and departmental plans prepared and approved included:

- *Implementation plan of wetland conservation and restoration in Hubei Province*
- *Implementation plan of the wetland conservation and restoration engineering works in the 13th five year period*
- *13th five year plan of forestry development of Hubei Province*
- *Water Pollution Prevention Work Plan of Hubei Province*

The Outcome 1 result of "provincial policy and planning framework adopted and funded by relevant provincial authorities mandating that all natural resource uses support maintenance and improvement of WPA ecosystem integrity" included:

- *Management Guidelines of Wetland Parks in Hubei Province*
- *Management Guidelines on Ecological Redline of Hubei Province*
- *Implementation of Comprehensive River and Lake Chief System*
- *Notice on Complete Fishing Ban in Protected Areas in the Yangtze River Basin*
- *Notice on Sand Mining Ban in River Channels of Hubei Province*
- *Suggestions on Establishing and Improving Eco-Compensation Mechanism of Hubei Province*

In addition to the above, the project made major contributions to determining the Ecological Protection Red Line for Hubei (released July 2018) encompassing some 22% of the province and including six sensitive ecological areas.

Two significant institutional changes have been to establish a provincial consultative group with official terms of reference approved by relevant provincial authorities,

²²Hubei Provincial GEF Wetland PMO, UNDP-GEF: Strengthening the Management Effectiveness of the Wetland Protected Area System in Hubei Province, 2018, p. 12

and an expert panel for the GEF project. The TE interviews indicated that consultations and participation of relevant departments focused on those responsible for reserves, and that there was less routine working relationships with Dept. of Water Resources, except on special projects (e.g. Liangzi Lake removal of embankments and East Lake-Shahe connecting canal).

The Project Final Report identified three shortcomings: the need for more multi-sector cooperation and an increased number of model wetlands contributing to the provincial database (p. 28), and the need for increased management connections amongst nature reserves (p. 36).

The project conducted field visits and interviews to analyze the training needs of PA staff in the province. Based on this assessment, the project formulated " Training plan for GEF wetland project of Hubei Province". The plan included the following: project background, training objective, training targets, capacity assessment of training target, needs assessment of training targets, training materials for provincial, basin, PA and PMO staff, timeframe and budgeting of training, maintenance, update and sharing of training materials.

More than 220 people have been trained in WPA management, according to the TE interviews, and 39 'trainings' of various sorts involving 1151 participants have been recorded.²³ Trainings were delivered according to a training plan. Among them, 37 were women, counting for 17% of the trainees. The trainings covered a number of wetland conservation fields, including wetland knowledge, biodiversity monitoring, biodiversity conservation, GPS application and data analysis, acquisition of biodiversity image and processing, wetland management and co-management, identification of wetland birds and field practice, formulation of wetland conservation plans, monitoring of wetlands and database technology.

The interviews with WPA staff indicated that basic training had been provided and more advanced training was needed, along with increased cooperation on compiling data from different agencies, filling information gaps on international flyways, resolving land use issues in the experimental zone, and more attention to protecting riverine habitats, etc.

²³PMO, Final Project Report, July 2018, Table 11, p.80.

The training materials were compiled to produce "Wetland ecosystem management training textbook of Hubei Province". The major content includes integrated management of wetland ecosystems, wetland bird monitoring and management, wetland birds identification, wetland mammals monitoring, wetlands amphibian monitoring, wetland fish monitoring and management, wetland vegetation monitoring and management, conservation and application of Ramsar sites, co-management and photography of WPA.

3.3.3 Effectiveness: Outcome 2 - Basin Level Capacity

Annex 6 summarizes the main achievements. The main focus has been "to complete, adopt and finance a model intra-basin wetlands conservation strategy" for Sihou Basin as the water-basin for Honghu Lake. The "Wetland Conservation Action Plan of Sihou Drainage Basin" was prepared in early 2018 and subsequently approved by Honghu Drainage Basin Co-management Committee. The plan is a collective effort from Jingzhou municipal government, Honghu National Nature Reserve Management Agency, Jingzhou development and reform commission, Jingzhou environmental protection agency, Jingzhou public security agency, Jingzhou transportation agency, Jingzhou tourism authority, Jingzhou finance department, Jingzhou water resources department, Jingzhou natural resources department, Jingzhou forestry department, and etc.

Annex 7 describes the proposed goals, actions and projects for Sihou Basin. This strategic framework provides a scoping of the basin-wide actions needed to conserve and restore the wetlands. The estimated cost is 1.65 Billion RMB (\$ 258 M USD), which is guaranteed by the Jingzhou Finance Department.²⁴ The specific details on *how* these goals, actions and projects will be implemented remain to be developed during the implementation phase. Several suggestions for management planning were made in the technical report on Sihou Basin management plan.²⁵

²⁴ When Finance Department collectively approve a government document, it means it agrees to provide financial support. Audit Department of the government and Disciplinary Commission of the CPC will monitor their support. Disciplinary actions will be taken against the government if they fail to deliver what's in the issued document.

²⁵China University of Geosciences (Wuhan), *Wetland Conservation Action Plan of Sihou Drainage Basin (Jingzhou Municipality)*, 2018: "(1) It needs to work out a systematic framework before the project starts, and well coordinate relevant authorities concerned; (2) The project team should specially designate personnel to set up corresponding databases, so as to reduce unnecessary and complicated work;(3) It needs to clearly understand the scope, purpose and goals of research project before the project starts.(4) It needs to organize experts to conduct pre-project communication meetings to clarify project requirements before the project team launches the project."

The project also established the intra-basin wetlands conservation consultative group with official terms of reference approved by relevant provincial and eight county authorities. The “*Honghu basin wetland conservation management committee*” was established in December of 2014 by Jingzhou municipal government, which consists of a number of government sectors from different administrative areas in the basin. As the major barrier for wetland conservation on the basin level is the lack of coordination between different government sectors and among different administrative areas within the basin, the establishment of this group effectively reduced the difficulty on wetland conservation issues and has the potential to greatly improved the effectiveness of wetland management on the basin level.

Significant work has been done in the basin to reduce the pollution level and restore its ecological functions. Major works done includes closing up and relocation of heavily polluting industries, blockage of wastewater discharge outlets, construction of wastewater treatment facilities, relocation and upscaling of livestock raising farms, closing up the lake for fishing resources restoration, seeding of selected species in the lake, replanting vegetation as well as water hyacinth removal. Water quality data were presented in the Final Project Report indicating an improvement from national Group IV to Group IV-III water quality objectives (whether the parameters and datasets are sufficient to measure water quality trends is a separate question). Large-scale removal of fishing nets has no doubt caused additional nutrients to be released from the shallow lake bottom, which is contributing to the reported increased growth of aquatic plants, including water hyacinth.

Socio-economic improvements to livelihoods (fishermen resettled on land provided with housing, livelihood transformation and living security) have less data available. Initially there were 1634 households 5762 fishermen living on Honghu Lake. The project target is to provide 25% of the fishermen with livelihood security. By the end of the project, 1462 apartments were provided to the resettled fishermen, living subsidies of 9.7 million RMB were provided, 19 technical trainings were delivered and 2639 fishermen were recommended to employment.²⁶ However, the trainings on employment mainly focused on technical aspects even though the courses were designed according to the fishermen’s education levels and capabilities by the Human Resources Department, but the major problem for resettled fishermen, most of whom are in their 40s and above, is their low adaptability to a completely new

²⁶PMO, Project Final Report, July, 2018

lifestyle on the shore. Impact of the training on employment of displaced fishermen is not known.

The project has set up the planning framework and process for basin management. But this needs to be strengthened by:

- a) Well-defined watershed management strategies that outline the preferred hydrological and water balance scenario for major wetlands and their watersheds. Most wetland management programs begin with an analysis of the hydrological dynamics that establish the wetland characteristics. The International Consultant found that interviewees were unable to describe the overall water management strategy for the Sihui basin within the long list of objectives and actions or the connectivity scheme with other wetlands and Yangtze River.
- b) Watershed and reserve management plans that provide sufficient details on objectives and *how* the wetland will be managed within the drainage system *in a manner that is consistent with maintaining certain physical parameters [specify] and specific ecosystem or habitat characteristics [specify] through the following implementation strategies [specify]*. For example, if “improving conditions for stork species is a wetland objective, *how* should lake levels and habitats be managed or enhanced to achieve this objective. This level of detail is missing in the current plans.

3.3.4 Effectiveness: Outcome 3 - PA Administration Capacity

Annex 6 summarizes the main achievements under Outcome 3, including significant increases in the capacity scorecard for institutional strengthening rising to 66-82% in the main departments responsible for PA management. The management plans for three PAs were prepared and training completed. Key features of the plans included botanical biodiversity investigation and water quality monitoring of Honghu, ecological valuation of Longganhu, and water level management among Tian’ezhou Nature Reserve, Milu Nature Reserve and surrounding community. New plans are under development at three other PAs.

The business plans for Honghu nature reserve, Longganhu nature reserve and Tian'ezhou nature reserve were formulated as appendices of the management plans. The development of business plans was expected to result in a 25% increase in

annual government financing for three demonstration WPAs - Honghu Nature Reserve, Longganhu Nature Reserve and Tian'ezhou Dolphin Nature Reserve. The initial annual government budget for these 3 PAs was \$3.9 M USD; the Project Final Report (p. 32) states that these PAs now receive \$32 M USD from government and private sectors.²⁷ This is a 720 % increase.

Annex 9 describes the timeframe, budgets and implementation bodies of the management plans for 3 demonstration PAs. Some of the projects are already being implemented.

Honghu Lake is a key site of the wetlands of Hubei. It was reported that 7.37 Billion RMB (>\$1 Billion USD) has been spent in recent years removing 187,000 mu (12,467 ha) of fishing nets and over 6000 people living inside the lake and other interventions to save the lake from complete obliteration. The project formulated a "Master plan for Honghu National Nature Reserve (2016-2025)". The plan was peer reviewed by the expert panel and submitted to the State Forestry Authority (now the State Forestry and Grassland Authority) for approval. It also developed the Honghu Lake Management Plan with 19 Actions and a series of 64 projects with a budget of 1.07 M RMB (167.2 M USD) as outlined in Annex 9. The project has also set up a monitoring and patrolling database for the Honghu basin. User manual was developed and respective trainings of the database were conducted; the database has been officially accepted.

Most of the reserve management plans follow a similar pattern - presenting long-term and operational objectives, actions and projects for achieving the actions. This framework provides a general scoping of proposed management activities. However, the overall hydrological system management strategies are not easily reflected in these documents. For example, the water management regime for Tian'ezhou Wetland²⁸, a key concern for balancing the complicated set of management objectives, is not included in the proposed 12 actions and 31 projects of the wetland management plan.²⁹ In Honghu Lake Management Plan there is no documented hydrological management strategy, something that is important to answering critical

²⁷Other larger sources of funding have been provided for infrastructure and other investments; e.g., in 2017 the Central government Forestry and Reform Commission) contributed 146 M RMB (\$22.8 M) and the provincial government 50 M RMB (\$7.8 M).

²⁸Study on the Water Level Management in Tian'ezhou Wetland in Hubei Province: Problems and Suggestions, 2018, Wang Hui, Beijing Forestry University

²⁹ Management Plan for Yangtze River Tian'ezhou Dolphin NNR

questions within the vaguely defined management objectives (e.g., what is the optimum ecological balance for the lake?). The management plans are preliminary and further assessments are needed.³⁰

The International Consultant observes that many of the Hubei wetlands are former river channels that are in a process of natural succession. Wetland management plans should clearly define the end state that they are expecting from intervention/no intervention. E.g., the increasing aquatic plant growth that has accelerated in Honghu Lake may not be desirable in the long run even if it is currently popular. There is also insufficient consideration of the role that Hubei wetlands play in flood management under climate change scenarios, and the overall approach to enhanced connectivity with Yangtze flows has yet to be outlined. Limited assessment of hydrological impacts and issues has been completed. The hydrological dynamics and 'room for the river' concepts are not sufficiently recognized in the wetland management strategy.

Solutions to complex water management issues, such as diversifying habitats in a restored Honghu Lake, controlling lake levels at Tian'ezhou, re-introduction of captive-bred dolphin, carrying capacity for Shishou Milu deer, managing flows in Sihou basin, etc., require a full understanding of how the hydrological system operates in the watershed and the water balance implications and options for long term management, including potential connections to adjacent wetlands. The management strategies need further discussion, as suggested in the *Sihu Drainage Basin* plan. A useful study and agreement have been completed on the appropriate water levels in Tien'ezhou Lake for multiple uses.

The project formulated monitoring plans for 8 demonstration sites, which determined the monitoring targets and methodology. Trainings were provided to PA staff. In order to facilitate the implementation of the plans, the project purchased monitoring equipment for the demonstration sites such as drones for Shishou Milu NNR, sauna radar for Xinluoduan nature reserve, telescope and digital cameras for Longganhu Lake, Wanghu Lake and Chenhu Lake, patrolling ships for Honghu and Tian'ezhou nature reserves, water quality analyzer for Danjiangkou nature reserve.

³⁰ The MTR report also noted: "Honghu Management Plan has several weaknesses, such as lack of a clear framework whereby actions and their respective projects are linked to the operational objectives and, in turn, to the threats and limiting factors. It also lacks a framework to monitor implementation of the plan." page 20.

3.3.6 Project Efficiency

The project outputs have been implemented in a generally efficient manner, with some delays faced in the early stages and more rapid completion of activities following the MTR. No significant operational inefficiencies were noted during the TE discussions. The multi-departmental coordination challenges are significant for wetlands and the PA staff capacity to utilize some of the many outputs may be questionable, all of which bear upon the efficiency of the implementation strategies. There is a reluctance to review the efficacy of the current project delivery model especially in regard to the predominant role of service providers.

To increase project efficiencies, full-time project staff persons were housed within the Hubei Forestry Department to make certain that the Department was “well positioned to absorb lessons learned and carry forward and expand the coverage of project outcomes and outputs.”³¹ WPAs are administered by different departments and many of the project outputs have been delivered by external institutes and consultancies (service providers). The capacity of the Forestry Department to effectively coordinate wetland management initiatives with other departments and river/lake chiefs will take time to develop with experience. In many GEF projects, there are questions about the approach to which the knowledge, skills and advice from advisors and consultants can be effectively transferred to the staff at nature reserves who have the primary duty to enhance wetland management.

3.3.7 Mainstreaming and gender equity

The integration of UNDP poverty reduction and good governance priorities into the project has occurred in the job creation (Honghu Lake) and business planning activities, and in the development of coordination mechanisms between agencies and with the communities. The provincial, water basin and nature reserve level institutional developments have facilitated governance reform on a small scale. Community engagement has been encouraged in the wetland management processes. The project design did not require a strong emphasis on alternative livelihoods for displaced fishermen.

One of the objectives under Outcome 3 was to increase women’s participation by 25%. While some increased involvement of women has occurred, the gender equity improvements were not a major priority in the project design and progress has been

³¹Project Document, 2014, p. 32

very modest. Membership in individual PA consultation committees however has been 28-53% participation of women.³² It was noted that 21% of the participants in project trainings/meetings were women.³³ This year the Project Steering Committee also encouraged full consideration be given to gender equality in personnel changes for new members of the PSC and Hubei Provincial Wetland Protection Advisory Group.³⁴

3.3.9 Sustainability of project results

In terms of sustaining policy and institutional results, the project has firmly established the legal and governance framework for conservation and restoration, which guarantees the continuation of wetland conservation in the province. In the view of the International consultant, the form of co-management and scope for community participation is still being developed and has yet to be finalized. The National consultant feels that the project annual meetings with over 100 participants including representatives of villagers, fishermen and other community members, is satisfactory co-management.

In terms of environmental sustainability, there are some risks in that some of the wetlands are in a dynamic process of wetland succession toward semi-wetland or terrestrial status. There is limited understanding of hydrological processes that drive the wetland ecosystem characteristics and some uncertainties about the optimum management strategies to achieve vaguely-defined wetland objectives.

In terms of institutional sustainability, the policy and the legal and governance framework will ensure ongoing conservation and restoration activities with the government and legal commitment. With regard to co-management and community participation, the National Consultant notes that annual meetings are held with over 100 participants including representatives of villagers, fishermen and other community members, and considers this adequate though it can be further improved with higher efficiency.

In terms of sustaining the progress in monitoring and management systems, the project has developed the demonstration models and related capacities for replication at provincial wetland sites, and these have a high potential for

³²PMO, Final Project Report, July 2018, p. 62

³³PMO, Final Project Report, July 2018, Table 11, p.80.

³⁴PMO, Project Steering Committee Minutes of 5th Meeting, April 16, 2018.

sustainability if PA authorities and staff can continue with the program after project closure and with adequate staff and resources.

Financial sustainability has a high potential given the increases in PA budgets that have occurred in the past few years, provided they are available for management and operational purposes. Business plans at each wetland reserve will help to attract the necessary financial support.

3.3.9 Catalytic effects and impacts

The project has clearly stimulated and laid a foundation for further progress on wetland conservation in Hubei. Awareness about wetlands and momentum for further progress is apparent. The awareness-raising and legal and institutional changes have accelerated the expansion of wetland protected areas and the monitoring and patrolling functions. The demonstration sites can serve to guide replication at other sites if the proven tools can be effectively transferred. Longer term impacts on environmental quality and biodiversity are underway with the removal of fishing nets and settlements and the reduction in pollution sources and nutrient loading from surrounding land uses.

4. Rating of Project Performance

The criteria for rating GEF projects are provided in the UNDP/GEF evaluation guidelines. **Table 8** provides a summary explanation of the reasons for the ratings.

Table 8: Hubei Wetlands Project Rating

Rating Criteria (UNDP/GEF TE)	Rate	Reasons for rating
1. Monitoring and Evaluation		
M&E design at entry	MS	No M&E officer duties and assigned responsibilities. There are also moderate shortcomings in the sole dependence on quantitative, generalized rating systems on environmental health and management effectiveness that do not sufficiently measure particular management issues, risks and constraints at nature reserves. These are mandatory GEF monitoring tools. Lack of explanation of the factors affecting monitoring scores and capacity development outcomes can create over-simplified conclusions.
M&E Plan Implementation	S	The project effectively implemented the M&E plan and provided regular monitoring of baseline, mid-term and final status of the project indicators and targets. However, gaps or

		weakness noted by project participants on training, resources, communications and other issues are not reflected in the quantitative monitoring system data.
Overall quality of M&E	S	The results framework M&E strategy was adequate, although it focused mostly on quantitative measures to the exclusion of qualitative measures; no recognition of data reliability issues, environmental risks and uncertainties in the management strategies. Capacity development results may be over-stated based on TE discussions. Quarterly and annual reporting however complied with UNDP/GEF requirements.
2. IA& EA Execution		
Quality of UNDP Implementation	S	UNDP provided regular oversight of progress and adaptive management responses with the necessary follow-up action to adjust the activity program as needed for adaptive management. No significant operational issues identified. This rating is consistent with UNDP and project staff PIR ratings.
Quality of Execution - Executing Agency	S	The Hubei Forestry Dept. effectively coordinated government departments and local government although more inputs from Dept. of Water Resources would have been preferable. The PMO diligently organized workplans, administered contracts and implemented the activity program at provincial, basin, and wetland sites. Technical quality assurance of wetland plans limit the rating to Satisfactory. This rating is consistent with UNDP and project staff PIR ratings.
Overall quality of Implementation / Execution	S	There was a reasonable level of effectiveness and responsiveness to issues that arose. The implementation has generally met expectations in the project document and GEF project management requirements, with some reservations about the level of technical oversight needed for complex wetland systems. This rating is consistent with the UNDP and project staff PIR ratings.
3. Assessment of Outcomes		
Relevance	R	The project has directly assisted and been aligned with government policy and commitment to wetland conservation.
Effectiveness	S	The targets have been met or exceeded. The provincial framework has been firmly established; basin wide planning and coordinating committees have been created; wetland demonstration sites have provided models intended for replication. Uptake of project outputs by PA staff through short term training may not sufficient in some cases outside of the demonstration sites. Further-capacity development and effectiveness of the management plans to assist PA authorities in achieving well-defined conservation and restoration objectives and implementation strategies remains to be seen at this stage. The rating is consistent with UNDP and project staff PIR ratings.
Efficiency	S	Most of the work has been completed on time and to a generally sufficient standard as per the project results framework. WPAs are administered by different departments

		and many of the project outputs have been delivered by external institutes and consultancies (service providers), the full use and uptake of which by PA staff may be uncertain in the view of the international consultant due to the short-term capacity development and staff recruitment plan.
Overall Project Outcome Rating	S	Substantive results have been generated in expanded WPAs, improved frameworks for regulation and conservation along with new coordination and consultation arrangements and enhanced biodiversity monitoring and patrolling. Targets have been over-achieved but management strategies need some further clarification and ecological risks at Honghu Lake may not be fully recognized. This rating is consistent with UNDP and project staff PIR ratings.
4. Sustainability		
Financial resources:	L	Increased budgets for wetland conservation and PA management operations have been committed by government.
Socio-political:	L	Increased policy and public support for wetland expansion and management and support for reducing human use and development of the wetlands should assist sustainability.
Institutional framework and governance:	L	New coordination and consultation mechanisms have been introduced, along with intra-basin management strategies and committees, and increased capacities with PA authorities.
Environmental:	L	Improved water quality and biodiversity abundance is appearing in wetland surveys. But there also remain risks in long term management of water use conflicts and environmental quality that are not yet fully recognized and addressed (considered by project staff as outside the mandate of the project). Wetland management strategies are not well articulated and understood by stakeholders despite many important studies. This rating assumes that ecosystem risks are recognized and can be effectively managed.
Overall likelihood of sustainability:	L	The momentum generated by the project and the ongoing government commitment to wetland conservation indicates a high likelihood of sustainability of the project results provided funding is assured and assists capacity development.

Additional Notes:

- Quality of Execution - Executing Agency

National Consultant: rates HS for executing agency for the following reasons. The provincial government is heavily involved and committed to the project execution with direct contributions from various government sectors. Forestry Department, as the technical execution, has provided consistent and constructive guidance to the project, chairing the PSC and supporting implementation as needed. The PMO staff is highly qualified. The project director, the deputy director of the PMO has extensive work experience with Hubei government, and he has provided consistent and strong

leadership as well as coordination to support the project implementation on daily basis. The project manager, who is one of the most recognized biodiversity expert (Rank II on national level) in the province was hired on project inception and remained on board since that time. He has chaired various number of biodiversity projects in the province. Project operational staff is always very responsive to both UNDP and consultants in providing requested documents with very high quality. The project CTA, Mr. Xue Dayuan, is a leading scientist and pioneer in China working on ecosystem services. He was highly appreciated by the PMO for providing highly professional and practical advice. Comments from auditor’s report show much better internal control than other projects. The project outputs significantly achieved its objectives with high quality.

• **Assessment of Outcomes – Effectiveness**

National consultant rates *HS* for outcome effectiveness for the following reasons. The major barriers identified in project design- lack of coordination between sectors, uniform wetland conservation strategy and low management capacity have all been effectively removed by the project outcome. The establishment of provincial consultative group on wetland directly by provincial government instead of these sectors along resulted in a much higher commitment of the entire province on wetland conservation. Directive from provincial government is the most effective means under Chinese system to ensure the effectiveness of project outcome. The plans generated by the project have clear timing, budget and implementing bodies, and some of these projects are already being implemented, which shows high effectiveness of the project outcome.

Rating categories as per the UNDP/GEF Evaluation guidelines:

<p><i>Outcomes, Effectiveness, Efficiency, M&E, I&E Execution:</i></p> <p>Highly Satisfactory (HS): no shortcomings Satisfactory (S): minor shortcomings Moderately Satisfactory (MS): moderate shortcomings Moderately Unsatisfactory (MU): significant shortcomings Unsatisfactory (U): major problems Highly Unsatisfactory (HU): severe problems</p>	<p><i>Sustainability ratings:</i></p> <p>Likely (L): negligible risks to sustainability Moderately Likely (ML): moderate risks Moderately Unlikely (MU): significant risks Unlikely (U): severe risks</p> <p><i>Relevance ratings:</i> Relevant (R) Not relevant (NR)</p>
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5. Lessons Learned

5.1 GEF Project Design and Implementation

- International projects in China provide not just funding, but more importantly, leveraging effects that generate increased awareness and financial contributions from Chinese partners and a greater profile and recognition than would normally occur with national projects. The Chinese co-financing tends to focus on staff, infrastructure and restoration costs rather than jointly funding the GEF capacity development activities (see **Annex 7**).

- The metrics for measuring PA management effectiveness (METT, etc.) at the PA level need more precision and ability to capture the specific capacity constraints identified by PA staff. The state of capacity at each reserve requires a more customized assessment of the management performance challenges.
- Despite training activities within some of the contracted components, the capacity building aspect to transfer skills and outputs from service providers into the PA authority partners is, in the view of the International Consultant, less certain when all the major technical work is out-sourced to consultants.
- Wetland management plans should provide clear direction on managing the hydrological regime to serve particular conservation and other objectives. Many plans provide standardized goals and objectives, followed by a list of proposed projects but without specific strategies on how the hydrology and related ecosystems are to be managed to achieve certain optimum or desired ecosystem recovery conditions. The linkages between issues/threats and management strategy, as noted in the MTR, needs to be explicit in the project 'theory of change' and WPA management plans.
- Replication and scale-up processes needed to be better-defined in the project document. The design expectation was that demonstration projects would automatically inspire other PA improvements. Good dialogue and customized pathways are needed for the spread of proven methods and best practices.

5.2 Hubei Wetlands Conservation

- Cultural misperceptions can affect wetland management preferences. The growth of water lilies on Honghu Lake and other waterbodies is not inherently an indication of a 'healthy ecosystem'. The long-term Honghu vision needs to clearly define the biodiversity and other objectives, taking into consideration water balance calculations, lake turnover, sedimentation rates, nutrient levels and aquatic plant expansion (especially invasive macrophytes).
- The hydrological dynamics and ecological succession processes in natural wetland transition need appropriate consideration in the management program. Many of the Hubei wetlands are former Yangtze River channels or backwaters that are naturally evolving towards marshes and bogs. Their role in joint flood

management and achieving specified biodiversity conservation objectives should be clearly identified in preliminary hydrological and limnological assessments in advance of management plan implementation. This also suggests a lead role for water resource engineers in Dept. of Water Resources in such assessments to promote synergies between wetland conservation and flood management, and connectivity between rivers and wetlands.

- The project has sought out ad hoc opportunities to enhance connectivity, but it is difficult to find a clear strategy for enhanced wetland-river interactions and conservation and flood management coordination. Action 3 of Tian’ezhou Management Plan is to “recover the connectivity between the former river channels and the Yangtze River, Restore wetlands”. Understanding the sub-basin hydrology and backchannel flood attenuation is essential for this action.
- The co-existence of conservation and education/tourism is a significant challenge in Hubei wetlands that requires site-specific assessment of opportunities to assist public and community engagement while protecting core areas. Flexibility and creativity are needed in carefully managed visitor use for benefits that support conservation. The current legal system is restrictive and not easily open to visitor use proposals. Innovative models of how to develop appropriate visitor experiences await to be developed.

6. Conclusions and Recommendations

6.1 Conclusions

1. The project has substantially achieved most of the expected results. It has been greatly appreciated by PA authorities for its effect on leveraging co-financing from various government sources, timely capacity building in line with central government policy commitments on wetlands, and for providing exposure to international experience. **Annex 6** presents achievements and comments.
2. The project reports indicate significant improvement in management effectiveness, ecosystem health and water quality. Bird and other species counts (short-term) have also been increasing, presumably linked to increased protected area conservation. An extensive series of studies have been completed and

others are underway. Many outputs (plans, guidelines, regulations) were issued by provincial governments rather than only departments, which assists implementation potential.

3. The project is noteworthy for the large government co-financing of \$47.7 M (Annex 7) to complement the small \$2.65 M GEF funding. The international profile and expertise associated with GEF/UNDP involvement helped to leverage government support. There is a general pattern to the financing: very high government contributions for staff and infrastructure, use of GEF funds for mostly capacity development; and stakeholder concerns about funding to manage the expanded PAs alongside statements such as \$32 M in new funding³⁵ from government for three demonstration PAs. The value addition of GEF funding is usually argued in terms of bringing in international expertise and practice rather than supplementing the huge government co-financing.
4. The recent central and provincial government policies and directives for increased wetland protected areas and conservation have provided the timely, necessary support and attention that ensures inter-agency and community cooperation with the project. Restoration of wetland functions requires major interventions that are only possible with high level government commitment. It was emphasized that for plans officially approved and issued by government or government sectors, the finance department is required to provide budgets to implement the plans.
5. The project has resulted in over 319,000 ha of wetland protection, developed management plans and studies and established the institutional and co-management processes within a very short period of time. This major WPA expansion and the financing commitments of government have significantly exceeded project targets. WPA staffing (2% increase³⁶) however has not grown commensurate with increased protected area. Technical studies have been completed on key basin and PA management issues related to water quality, species distribution, habitat availability, and lake regulation, but there are also important decisions to be made on the management strategies that will require further, in-depth assessment.

³⁵Hubei GEF Wetland project Office, Project Final Report, July 2018, p.55.

³⁶ Source: Project Document and Table 5 of this report. Financing for WPAs have increased significantly (see Table 6) but not for staff recruitment.

6. The management improvements in recent years (removing fishing nets, etc.) present both opportunities and risks that warrant further consideration during the final six months of the project. The TE discussions identified some key issues affecting the Hubei wetland conservation and restoration program:
 - i) Capacity of WPA authorities to carry on with implementation of the outputs produced by the many service providers (not an issue for National Consultant);
 - ii) Sufficient input on hydrological and sedimentation processes that drive ecological conditions and related connectivity to Yangtze River;
 - iii) Wetland management strategies that can provide sufficient direction on long term ecosystem outcomes at each WPA, and the plan to enhance connectivity;
 - iv) Determination of acceptable tourism and visitor management within WPAs and a possible role for displaced fishermen and community engagement; and
 - v) Community consultation processes that need to evolve beyond annual meetings of provincial and national representatives.

7. There has been good coordination between Forestry Department and other government departments (EPA, agriculture, development and reform commission, finance, and water resources), and active involvement of the provincial government. But coordination of wetland management duties across the different authorities responsible for WPAs still needs to be strengthened. Biodiversity conservation projects need to be systematically integrated with water resources planning and flood management strategies.

8. Resettlement of the Honghu fishing community has involved provision of housing for over 6000 people, compensation for boats and gear, and assistance in job creation (E.g., manufacturing jobs, reserve patrolling). The target for livelihood security for displaced fishermen may have been difficult to achieve. Local people, who have spent their life on the lake, prefer tourism jobs related to the nature reserves as it is a more familiar working environment for them.

9. The co-management structure has evolved from small consultative mechanisms run by PA authorities to large committees under the leadership of River and Lake Chiefs (usually the local mayor) who chair annual meetings which include the relevant government agencies and village representatives involving up to 100 participants. This structure may need to be further refined to promote further public involvement.

10. The effectiveness of the project implementation strategy - delivering outputs through many contracted service providers and part-time CTA oversight, was a point of disagreement between the international and national TE consultants. In the view of the International Consultant, this approach contrasts with other projects where technical advisers and a full-time project CTA are appointed and embedded in the implementing agency to produce outputs directly within the organisation rather than indirectly through extensive out-sourcing. He suggests that alternative approaches be reviewed for future GEF projects (more internal management of technical work by PA managers and staff and on-the-job training and direct supervision by senior project advisors). The National Consultant suggests that the current strategy is the only suitable approach in China.

6.2 Recommendations

Recommendation 1: The Hubei GEF Wetland Project Office should undertake and distribute a 'state of the wetland' report for Honghu Lake that identifies the limnological and ecological status of the lake and assesses the effectiveness and impact of the conservation programme.

Rationale: The ecosystem monitoring programme that has been developed by the project, along with studies undertaken by contractors should be able to usefully present the results of their inventory and monitoring data collection and analyses compiled in a report that summarizes the biophysical status of the lake. The *Management Plan for Honghu Lake* is two years into implementation with project support. Reliable data, drawn from recent limnological and biological surveys, would greatly assist public awareness about the recovering conditions of the lake and the threats which may still exist to the important wetland values of the lake.

Recommendation 2: The Honghu Drainage Basin Wetland Committee should undertake an independent technical review of the *Wetland Action Plan of Sihou Drainage Basin*, to ensure the feasibility of hydrological system improvements and to propose an implementation program.

Rationale: The Sihou drainage basin is important because of the six nature reserves within its boundaries, including Honghu Lake, and because it now has the first basin

management committee in Hubei Province. This is intended as a model for other basins. There are complex issues and risks associated with the land use and hydrological changes and management interventions. Hydrological modelling of the complete system has not been undertaken. The limnological, hydrological and biological impacts of proposed strategies need to be further reviewed because of the high stakes involved in difficult trade-offs between objectives. In order to ensure feasibility and confidence in the next steps for implementation of the Action Plan, a brief technical review is needed by national or international water management engineers to further define and certify the hydrological scheme for multiple objectives (including flood management) and the subsequent tasks to be undertaken by the basin committee.

Recommendation 3: The Hubei GEF Wetland Project Office should develop and implement a rigorous monitoring and evaluation plan for the *Implementation Program of Wetland Conservation and Restoration System in Hubei*.

Rationale:

The “Hubei Wetland Conservation and Restoration System Implementation Program” has been formally adopted as reported in the Final Project Report (no document available). The project has developed an impressive set of high level and operational level plans and strategies, including “Nine Action Programs for Great Conservation of Yangtze River, Hubei Section”. Ecological environment protection plan of Yangtze River Economic Belt, Hubei Section, Ecological environment protection plan of Han River Economic Belt - Hubei Section (2014-2025), Regulation of Conservation of Ecological Red Line in Hubei, Opinions to strengthen the fishery ecological civilization by Hubei Fishery Bureau, Fully Implement Lake and River Chiefs System in Hubei Province, and the Overall Program of Rehabilitation of Farmlands, Rivers, Lakes, and Grasslands (2016-2030). A consolidated framework is needed for reliable monitoring and evaluation on progress and results reported to the Consultative Council on these initiatives.

Recommendation 4: The Hubei GEF Wetland Project Office should review and clarify roles, responsibilities and protocols for biodiversity and water quality monitoring in the Shishou, and Tian’ezhou protected areas with the aim of enhancing technical cooperation between the Provincial agencies and the local township for a coordinated monitoring framework.

Rationale: The PAs have management issues that overlap and yet three different departments are responsible for these reserves. To improve effectiveness and efficiency in the monitoring functions, and in anticipation of future amalgamation of these reserves, greater collaboration on the technical, information gathering and data collection activities of the adjacent reserves should be encouraged under one coordinated monitoring system.

Recommendation 5: The Hubei GEF Wetland Project Office should establish a process, in conjunction with river/lake chiefs, for an annual socio-economic survey and report on the status of households displaced from the wetland nature reserves, housing and employment conditions, and any remaining resettlement issues (conducted and financed by government).

Rationale: There is no systematic post-resettlement data and only anecdotal information on how the households have adjusted to eviction. The government has made a major investment in removing development from wetlands; monitoring the results would assist resettlement and community involvement programs. A representative sample questionnaire of households should determine the effectiveness of compensation and job re-training programs, and lessons learned.

Recommendation 6: The Hubei GEF Wetland Project Office should prepare a list of Biodiversity Research Priorities (themes and projects) in conjunction with PA management issues as a basis for future collaboration with universities (national and international).

Rationale: Nature reserves provide a means to advance knowledge about biodiversity and conservation/restoration issues and methods. Considerable information has been compiled by the project and the technical institutes should now be in a position to advise on research questions and opportunities to better understand the biodiversity resources and the options and impacts of conservation and management activities. A long-term partnership between research institutes and PAs of the province should be encouraged. The province has over 70 universities and research institutes. The academia in the province and PA staff should actively seek out opportunities for cooperation with or without government intervention so that the research can be better channeled to the PA authorities and staff.

Recommendation 7: The Hubei GEF Wetland Project Office should prepare a proposal for a bird watching guide service on Honghu Lake through retraining of displaced local fishermen, and wildlife viewing opportunities on the reserve boundaries.

Rationale: Any tourism use on Honghu Lake is controversial but careful consideration could be given to a limited and regulated guiding service that minimizes disturbances in the core zone and yet offers positive opportunities for local residents to become involved in assisting management of the reserve, promoting public education and potentially collecting wildlife observation data under guidance from PA staff. A carefully design wildlife viewing program for the nature reserve could serve to demonstrate the viability of such an option for other reserves consistent with protection of conservation values.

Recommendation 8: The Hubei GEF Wetland Project Office should initiate a workshop on provincial wetland management planning processes and capacity building experiences in conjunction with the Yangtze River Conservation Network.

Rationale: The wetland planning, management and governance experience introduced by the project should be shared with other projects. Further discussion of the issues and results from the demonstration sites, and the implications for management planning in other wetland PAs would help to further develop the planning process. Exchanges with other provinces could assist in raising the profile of these wetlands and help to demonstrate the usefulness of the conservation network in disseminating best practices.

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Annex 1: Terms of Reference

INTRODUCTION

In accordance with UNDP and GEF M&E policies and procedures, all full and medium-sized UNDP support GEF financed projects are required to undergo a terminal evaluation upon completion of implementation. These terms of reference (TOR) sets out the expectations for a *Terminal Evaluation (TE) of the two sister projects under the same CBPF-MSL (China Biodiversity Partnership Framework-Mainstream of Life) programme, they are: Project 1 (DXAL Project, PIMS 4824), Strengthening the management effectiveness of the protected area network in the Daxing'anling Landscape; Project 2 (Hubei Project, PIMS 4823), Strengthening the management effectiveness of the wetland protected area system in Hubei Province.*

The essentials of the project to be evaluated are as follows:

Project Summary Table

Please find the detailed summary tables for 2 project in attachment

Objective and Scope

The project was designed to:

Project 1: The project goal is to conserve the globally significant biodiversity of the Daxing'anling Landscape, as a key asset for sustainable development. The project objective is to strengthen the management effectiveness of protected areas to respond to threats to the globally significant biodiversity in the Daxing'anling Landscape of Heilongjiang Province and Inner Mongolia Autonomous Region.

Three outcomes including:

Outcome 1: Development planning frameworks for the Daxing'anling Landscape provide the enabling environment for expanding the forest and wetland PA network and mainstreaming biodiversity as an asset for sustainable development

Outcome 2: The management effectiveness of the PA network across the Daxing'anling landscape is greatly strengthened

Outcome 3: Effective PA management is demonstrated in the Duobuku'er NNR and the Genheyuan NWP

Hubei Project 2: The project objective is to strengthen the management effectiveness of the wetland protected area system of Hubei province in response to existing and emerging threats to the globally significant biodiversity and essential ecosystem services.

The objective will be achieved through three outcomes:

Outcome 1: Establishment of Provincial level capacity to identify and alleviate wetlands conservation threats;

Outcome 2: Establishment of water-basin level capacity to identify and alleviate wetlands conservation threats;

Outcome 3: Establishment of protected area administration capacity to identify and alleviate wetlands conservation threats.

The sum of these three outcomes will be an institutional and policy safety net for WPA's that incorporates and coordinates conservation across all three management tiers: basin, province, and protected area.

The TE will be conducted according to the guidance, rules and procedures established by UNDP and GEF as reflected in the UNDP Evaluation Guidance for GEF Financed Projects.

The objectives of the evaluation are to assess the achievement of project results, and to draw lessons that can both improve the sustainability of benefits from this project, and aid in the overall enhancement of UNDP programming.

Evaluation approach and method

An overall approach and method^[1] for conducting project terminal evaluations of UNDP supported GEF financed projects has developed over time. The evaluator is expected to frame the evaluation effort using the criteria of **relevance, effectiveness, efficiency, sustainability, and impact**, as defined and explained in the UNDP Guidance for Conducting Terminal Evaluations of UNDP-supported, GEF-financed Projects. A set of questions covering each of these criteria have been drafted and are included with this TOR (*fill in [Annex C](#)*) The evaluator is expected to amend, complete and submit this matrix as part of an evaluation inception report, and shall include it as an annex to the final report.

The evaluation must provide evidence-based information that is credible, reliable and useful. The evaluator is expected to follow a participatory and consultative approach ensuring close engagement with government counterparts, in particular the GEF operational focal point, UNDP Country Office, project team, UNDP GEF Technical Adviser based in the region and key stakeholders. The evaluator is expected to conduct a field mission to *China*, including the following project sites *including Hubei, Inner Mongolia and Heilongjiang Provinces*. Interviews will be held with the following organizations and individuals at a minimum: (*UNDP, SFA, Forestry Authorities in Hubei, Inner Mongolia and Heilongjiang Provinces*).

The evaluator will review all relevant sources of information, such as the project document, project reports – including Annual APR/PIR, project budget revisions, midterm review, progress reports, GEF focal area tracking tools, project files, national strategic and legal documents, and any other materials that the evaluator considers useful for this evidence-based assessment. A list of documents that the project team will provide to the evaluator for review is included in [Annex B](#) of this Terms of Reference.

Evaluation Criteria & Ratings

An assessment of project performance will be carried out, based against expectations set out in the Project Logical Framework/Results Framework (see [Annex A](#)), which provides performance and impact indicators for project implementation along with their corresponding means of verification. The evaluation will at a minimum cover the criteria of: **relevance, effectiveness, efficiency, sustainability and impact**. Ratings must be provided on the following performance criteria (find the Evaluation Ratings Table in attachment). The completed table must be included in the evaluation executive summary. The obligatory rating scales are included in [Annex D](#).

Project finance / cofinance

The Evaluation will assess the key financial aspects of the project, including the extent of co-financing planned and realized. Project cost and funding data will be required, including annual expenditures. Variances between planned and actual expenditures will need to be assessed and explained. Results from recent financial audits, as available, should be taken into consideration. The evaluator(s) will receive assistance from the Country Office (CO) and Project Team to obtain financial data in order to complete the co-financing table (find in attachment), which will be included in the terminal evaluation report.

Mainstreaming

UNDP supported GEF financed projects are key components in UNDP country programming, as well as regional and global programmes. The evaluation will assess the extent to which the project was successfully mainstreamed with other UNDP priorities, including poverty alleviation, improved governance, the prevention and recovery from natural disasters, and gender.

Impact

The evaluators will assess the extent to which the project is achieving impacts or progressing towards the achievement of impacts. Key findings that should be brought out in the evaluations include whether the project has demonstrated: a) verifiable improvements in ecological status, b) verifiable reductions in stress on ecological systems, and/or c) demonstrated progress towards these impact achievements.^[2]

Conclusions, recommendations & lessons

The evaluation report must include a chapter providing a set of **conclusions, recommendations and lessons**.

Implementation arrangements

The principal responsibility for managing this evaluation resides with the UNDP CO in (*include Country name*). The UNDP CO will contract the evaluators and ensure the timely provision of per diems and travel arrangements within the country for the evaluation team. The Project Team will be responsible for liaising with the Evaluators team to set up stakeholder interviews, arrange field visits, coordinate with the

Government etc.

Evaluation timeframe

The total duration of the evaluation will be 55 days according to the following plan:

Activity-Timing-Completion Date

Preparation-6 days-July 15, 2018

Evaluation Mission-22 days-August 10, 2018

Draft Evaluation Report-22 days-Sep 5, 2018

Final Report-6 days- Sep 20, 2018

Evaluation deliverables

The evaluation team is expected to deliver the following, please find in the attachment.

*When submitting the final evaluation report, the evaluator is required also to provide an 'audit trail', detailing how all received comments have (and have not) been addressed in the final evaluation report.

Team Composition

The evaluation team will be composed of *1 international and 1 national evaluators*. The consultants shall have prior experience in evaluating similar projects. Experience with GEF financed projects is an advantage. The *international evaluator will be designated as the team leader and will be responsible for finalizing the report*. The evaluators selected should not have participated in the project preparation and/or implementation and should not have conflict of interest with project related activities.

The Team members must present the following qualifications:

[1] For additional information on methods, see the [Handbook on Planning, Monitoring and Evaluating for Development Results](#), Chapter 7, pg. 163

[2] A useful tool for gauging progress to impact is the Review of Outcomes to Impacts (ROtI) method developed by the GEF Evaluation Office: [ROTI Handbook 2009](#)

Annex 2: Evaluation Criteria

Criteria	Evaluation Questions	Indicators	Data Sources
<p>Relevance The acceptance, suitability and practicality of the project concept and implementation strategy and the extent of alignment with national policies frameworks, local needs and UNDP country programming.</p>	<p>To what extent were the projects aligned with local, provincial and national development priorities and policies?</p> <p>Given the experience, is the project concept and approach still accepted as relevant and achievable and in-line with country priorities?</p> <p>To what extent is the project integrated with country/partner institutions and programmes ('mainstreaming')?</p> <p>Was the Project Strategy the most effective route towards planned results?</p> <p>To what extent do the underlying assumptions remain valid?</p>	<p>Stakeholder views of the project concept and approach</p> <p>Changes in priorities that may have affect relevance of the project</p> <p>Extent of partners involvement and ownership including integration into ongoing programmes</p> <p>Evidence of validity of key assumptions associated with project results</p>	<p>Review of alignment with government programmes and institutions</p> <p>Interview data on relevance of the project</p> <p>Interview data on the quality of the project design</p>
<p>Effectiveness The achievement and timeliness of the targeted outcomes and outputs per the Project Document and Annual Workplans, including cross-cutting results related to development, gender and environmental sustainability.</p>	<p>What quantitative and qualitative achievements have occurred in terms of output/outcome targets?</p> <p>To what extent has biodiversity conservation been integrated into national/local development systems?</p> <p>How has PA and conservation management capacity changed as a result of the project? Examples?</p> <p>Have ecosystem service studies and PA business plans led to improved PA management? Examples?</p> <p>What contributions to cross cutting gender and environmental sustainability objectives can be observed?</p> <p>What specific gaps, if any, remain to be addressed in Outcomes 1, 2 and 3?</p>	<p>Reported progress per the ProDoc Indicators</p> <p>Evidence of commitments to integration into future development</p> <p>Capacity scorecard ratings, organizational changes and post-training assessments</p> <p>Studies and business plans completed and adopted</p> <p>Disaggregated gender data on project activities and beneficiaries</p> <p>Unfinished activities in annual workplans</p>	<p>Compilation of data on reported results of project interventions including PIRs</p> <p>Review of development plans and PA changes</p> <p>Interviews with project participants</p> <p>Field observation on quality of measures implemented</p>
<p>Efficiency The clarity and effectiveness of work planning and implementation duties and reporting relationships, coordination and communication between</p>	<p>Implementing arrangements: How effective are the working relationships and coordination and communication between partners and contractors?</p> <p>Work planning: Is the annual work plan preparation participatory?</p> <p>Finance/cofinancing: Has project financing and budgeting occurred as planned?</p>	<p>Understanding of roles/responsibilities</p> <p>Participant satisfaction</p> <p>Stakeholder participation in AWP preparation</p> <p>Expenditures in relation to annual budgets</p> <p>Co-financing and in-kind</p>	<p>Analysis of implementation modalities</p> <p>Assessment of AWP processes</p> <p>Review of expenditures and co-financing contributions and financial audit</p>

<p>implementing organisations and levels, project management structure effectiveness and responsiveness ('adaptive management'), efficiency of the administration and quality/timeliness of the monitoring and reporting systems.</p>	<p>Project efficiency/cost effectiveness: Has the project been generally efficient and cost effective in relation to results?</p> <p>Project management: Have the project management bodies and partners been effectively engaged in guiding the project and adapting to project implementation issues?</p> <p>Monitoring and reporting: The reliability and usability of the project Indicators for monitoring and reporting against baseline conditions, the quality of the monitoring plan/reports, and the effectiveness of the monitoring system and data quality.</p>	<p>contributions provided</p> <p>Efficiency of disbursements and financial management</p> <p>Outputs achieved relative to costs; value for money</p> <p>Proportion of costs for project management</p> <p>Pro-active meetings/actions of management bodies</p> <p>Use of project indicators in progress reports</p> <p>Monitoring of cross-cutting issues in progress reports</p>	<p>reports</p> <p>Analysis of any delays</p> <p>Analysis of project events and milestones and working relationships between stakeholders</p> <p>Progress reports</p>
<p>Sustainability The conditions necessary for project-related benefits and results being sustained after the project is completed and any risks affecting project implementation and replication potential.</p>	<p>Sustainability planning: To what extent does the project explicitly consider sustainability expectations and a project exit strategy?</p> <p>Institutional sustainability: What institutional development measures have enhanced sustainability?</p> <p>Policy sustainability: What policy development measures have enhanced sustainability?</p> <p>Financial sustainability: What financial commitment or business case developments will enhance sustainability?</p> <p>Risk identification: Have the critical risks been sufficiently addressed?</p> <p>Replication potential: Are the necessary conditions in place to support learning and adoption of project strategies?</p>	<p>Sustainability strategies in the project design and delivery</p> <p>Extent of capacity development within targeted organisations</p> <p>Changes in policy to sustain project results</p> <p>Financial means to sustain and replicate project results</p> <p>Validity and importance of the risks identified in the ProDoc/ ATLAS Risk Management Module</p> <p>Observed replication activity that supports sustainability</p>	<p>Assessment of institutional capacity development and stakeholder commitment</p> <p>Sustainability analysis from interview data</p> <p>Risk analysis using ProDoc and ATLAS</p> <p>Scan of replication activity in project jurisdictions</p>
<p>Impact The effects of the project on long term biodiversity conservation and the capacity of government and local communities to facilitate conservation and PA management.</p>	<p>Are there indications that the project has contributed to, or enabled widespread progress toward long term improvements in biodiversity conservation?</p> <p>Is there specific evidence of changes in development processes and trends toward systemic changes in institutions and approaches to protected areas?</p>	<p>Number and area of PAs</p> <p>Trends in selected species of concern</p> <p>Increased institutional capacity to address conservation and PA management</p> <p>Transfer of knowledge and experience to other areas and provinces.</p>	<p>Data on PAs and species at risk</p> <p>Data on capacity rating of relevant organisations</p> <p>Interviews with project stakeholders</p>

Annex 3: Interview Guide

Project Formulation

1. Did you observe any problems or gaps in the project design or approach that affected project implementation?
2. Was there adequate participation of stakeholders and beneficiaries in the project formulation? (How were you involved?)
3. Has the project strategy – to provide technical support, capacity development and advocacy for protected areas, been effective? What were the strengths and weaknesses of this approach?

Project Implementation

4. How effective and efficient was the Project Structure in facilitating project coordination, communications and implementation at national, provincial and local levels? Would you have changed anything in hindsight?
5. Has annual work planning and budgeting been effective? Have actual disbursements been in line with annual budgets, work plans and schedules (discuss Fin. Tables)? Were there any delays in administrative processes?
6. Have the project management bodies been sufficiently active in guiding and responding to issues? (examples?) Are any MTR responses incomplete?
7. Have the project monitoring indicators been effective and feasible for reporting on progress? Do METT, EH, CAP indices provide reliable measures of change?
8. What have been the major challenges or issues in implementing the project? Are there lessons for design of future projects?
9. What are the project expenditures by outcome/output components? How has the large cash co-financing been used?

Project Results

10. What aspects of the project have been most successful, and which least successful? Which specific measures have proven the potential for replication?
11. Can you explain *the key factors* that have contributed toward the project results – either positive or negative?
12. What has been the most apparent change in PA management capacity that you have seen from the project? What gaps remain in capacity development?
13. What is the most important learning or skill, if any, that you have acquired from the project trainings or demonstrations? Post-training data?

14. From your experience, what are the best practices and key lessons that can be highlighted at the project sites?
15. Are there any expected results that have not been completely achieved or are not fully satisfactory?

Sustainability

16. Do you think that the similar activities and support for expanding and improving PAs will be continued after the project closes? Why? Why not?
17. Are there any exit strategies for the project? What actions could be considered to enhance sustainability?

Impact

18. Should any further changes in government policy or regulations be considered to assist the expansion of protected areas and landscape biodiversity conservation?
19. Are there any examples of alternative livelihoods that have succeeded in conjunction with conservation that could provide models for replication? What jobs and revenues have developed?
20. If the project was undertaken again, what if anything, should be done differently?

Annex 4: Itinerary and List of Interviews

日期 Date	活动 Activity	参加人员 Participants	地点 Location
July 9-22, 2017	内业审查和中期评估启动报告 Desk review and inception report preparation of Terminal Evaluation	终期评估专家 TE consultants	家中 At home
1 Aug 2018	上午 8:30-11:00 8:30-11:00 AM 湖北省 GEF 湿地项目终期评估启动会 Inception workshop at Hubei GEF PMO	项目首席技术顾问、省林业厅领导、省林业厅湿地中心和省 GEF 湿地项目办领导和工作人员 Project CTA、representatives from Forestry Department、Provincial Wetland Center、PMO	省林业厅 Forestry Department
	上午 11:00-12:00 11:00-12:00 AM 访谈项目执行机构（湖北省林业厅湿地中心） Interview with executing agency (EA) of the project (Forestry Department and Provincial Wetland Center)	省林业厅领导、湿地中心主任王少明 Ms. Hong Shi, Forestry Department; Mr. Wang Shaoming, Provincial Wetland Center	省林业厅 Forestry Department
	下午 14:00-15:00 14:00-15:00 PM 访谈项目执行机构（省林业厅保护处、计资处） Interview with executing agency (EA) of the project (office of natural resources conservation, office of finance, Forestry Department)	省林业厅保护处副处长雷文涛、计资处副处长羿运富 Mr. Lei Wentao, office of natural resources conservation; Mr. Yi Yunfu, office of finance	省林业厅 Forestry Department
	下午 15:00-16:30 15:00-16:30 PM 访谈利益相关者（省野生动植物保护协会办公室、WWF） Interview with stakeholders (Wild animals and plants conservation association, WWF)	省野生动植物保护协会办公室主任陈芬、WWF 程琳 Ms. Chen Fen, Wild animals and plants conservation association; Ms. Cheng Lin, WWF	省林业厅 Forestry Department
	下午 16:30-17:30 16:30-17:30 PM 访谈省 GEF 湿地项目办工作人员（项目办、项目经理） Interview with GEF PMO	项目办常务副主任郑联合、项目经理朱兆泉 Mr. Zheng Lianhe, Mr. Zhu Zhaoquan, PMO	省林业厅 Forestry Department
2 Aug	上午 8:30-10:30	项目办财务主管王荣军、省级协	PMO

2018	8:30-10:30 AM 访谈省 GEF 湿地项目办工作人员（项目财务主管、省级协调人员） Interview with GEF PMO (finances and coordination)	调研员蒲云海、王雯熙 Mr. Wang Rongjun, Mr. Pu Yunhai, Ms. Wang Wenxi	
	上午 10:30-12:00 10:30-12:00 AM 访谈省 GEF 湿地项目指导委员会成员和相关部门官员（省财政厅、省发改委、省环保厅、省农业厅、省水利厅） Interview with PSC (Finance Department, Development and Reform Commission, Environmental Protection Department, Agriculture Department, Water Resources Department)	省财政厅副处长明新伟、省发改委副处长王荆州、省环保厅王建平、省农业厅樊丹、省水利厅朱志龙 Mr. Ming Xinwei, Finance Department; Mr. Wang Jingzhou, Development and Reform Commission; Mr. Wang Jianping, Environmental Protection Agency; Ms. Fan Dan, Agriculture Department; Mr. Zhu Zhilong, Water Resources Department	PMO
	下午 14:30-17:30 14:30-17:30 PM 访谈省 GEF 湿地项目保护区和项目服务合同承包商 Interview with 8 demonstration sites and subcontractors.	8 个项目示范区及中科院水生所、北京林业大学、中科院测地所、中国地质大学、武汉市伊美净科技发展有限公司等 Representatives from 8 demonstration sites ,Institute of hydrobiology, Institute of Geodesy and Gephysics, Chinese Academy of Science, Beijing Forestry University, China University of Geosciences, Wuhan Yimeijing Technologies, Ltd, and etc.	PMO
3 Aug 2018	下午 14:30-16:10 14:30-16:10 PM 访谈洪湖国家级自然保护区 GEF 湿地项目实施情况 Interview with Honghu National Nature Reserve Management Office	洪湖国家级自然保护区工作人员 Representatives from Honghu National Nature Reserve Management Office	洪湖国家级自然保护区管理局 Honghu National Nature Reserve Management Office
	下午 16:10-17:30 16:10-17:30 PM 访谈利益相关方（洪湖市第一小学）老师代表 Interview with stakeholders (NO.1 Primary School of Honghu)	洪湖市第一小学校长张峰、副校长王成、副书记武晓红等 Mr. Zhang Feng, Mr. Wang Cheng, Ms. Wu Xiaohong, Ms. Xia Min, NO.1 Primacy School	洪湖市第一小学 NO. 1 Primacy School of Honghu
4 Aug 2018	上午 8:30-10:00 8:30-10:00 AM 实地考察洪湖国家级自然保护区 Field visit to Honghu National Nature Reserve		洪湖国家级自然保护区 Honghu National Nature Reserve

	上午 10:00-12:00 10:00-12:00 AM 访谈社区群众 Interview with local communities	当地社区群众和拆违上岸渔民 Representatives of resettled fishermen	洪湖国家级自然保护区管理局 Honghu National Nature Reserve Management Office
5 Aug 2018	上午 6:30-8:00 6:30-8:00 AM 实地考察石首麋鹿国家级自然保护区 Field visit to Shishou Milu National Nature Reserve		石首麋鹿国家级自然保护区 Shishou Milu National Nature Reserve
	上午 9:00-10:00 9:00-10:00 AM 访谈石首麋鹿国家级自然保护区领导和员工代表 Interview with Shishou Milu National Nature Reserve Management Office	石首麋鹿国家级自然保护区工作人员 Representatives from Shishou Milu National Nature Reserve Management Office	石首麋鹿国家级自然保护区管理局 Shishou Milu National Nature Reserve Management Office
	上午 10:00-10:30 10:00-10:30 AM 访谈石首麋鹿国家级自然保护区社区群众 Interview with local communities of Shishou Milu National Nature Reserve	社区群众 Representatives from local communities	石首麋鹿国家级自然保护区管理局 Shishou Milu National Nature Reserve Management Office
	上午 11:00-12:00 11:00-12:00 AM 访谈长江天鹅洲白鱔豚国家级自然保护区 Interview with Tian'ezhou Dolphin National Nature Reserve Management Office	长江天鹅洲白鱔豚国家级自然保护区工作人员 Representatives from Tian'ezhou Dolphin National Nature Reserve	天鹅洲保护区管理局 Tian'ezhou National Nature Reserve Management Office
	下午 14:00-14:30 14:00-14:30 PM 访谈科研合作单位中科院水生生物研究所专家郝玉江 Interview with subcontractor, Mr. Hao Yujiang, Institute of hydrobiology, Chinese Academy of Sciences	郝玉江 Mr. Hao Yujiang, Institute of hydrobiology, Chinese Academy of Science	天鹅洲保护区管理局 Tian'ezhou National Nature Reserve Management Office
	下午 14:30-15:30 14:30-15:30 PM 实地考察长江天鹅洲白鱔豚国家级自然保护区 Field visit to Tian'ezhou Dolphin National Nature Reserve		天鹅洲白鱔豚国家级自然保护区 Tian'ezhou Dolphin National Nature Reserve
	6 Aug 2018	上午 9:00-11:30 9:00-11:30 AM	省林业厅、省湿地中心、省 GEF 项目办工作人员

	终期评估反馈座谈会 TE wrap-up meeting	Representatives from Forestry Department、wetland center、GEF PMO	Department
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List of persons interviewed

姓名 Name	性别 Gender	单位 Organization	职务 Position
LisaFarroway	F	UNDP Regional Office	Regional Technical Adviser
洪石 Hong Shi	女 F	湖北省林业厅 Forestry Department of Hubei Province	副厅长 Deputy Chief
薛达元 Xue Dayuan	男 M	中央民族大学 (CTA) Minzu University of China	教授 Professor
王少明 Wang Shaoming	男 M	湖北省林业厅 Forestry Department of Hubei Province	主任 Director
羿运富 Yi Yunfu	男 M	湖北省林业厅 Forestry Department	副处长 Vice Director
雷文涛 Lei Wentao	男 M	湖北省林业厅 Forestry Department	副处长 Vice Director
李富久 Li Fujiu	男 M	湖北省林业厅 Forestry Department	副主任 Vice Director
郑联合 Zheng Lianhe	男 M	湖北省野生动植物保护总站 Hubei Wildlife Conservation Center	站长 Director
朱兆泉 Zhu Zhaoquan	男 M	湖北省 GEF 湿地项目管理办公室 Hubei GEF PMO	项目经理 Project Manager
蒲云海 Pu Yunhai	男 M	湖北省 GEF 湿地项目管理办公室 Hubei GEF PMO	省级协调员 Provincial Coordinator
王雯熙 Wang Wenxi	女 F	湖北省 GEF 湿地项目管理办公室 Hubei GEF PMO	项目助理 Project Assistant
陈芬 Chen Fen	女 F	湖北省野生动植物保护协会 Hubei Wildlife Conservation Association	办公室主任 Manager
王莉 Wang Li	女 F	湖北省野生动植物保护总站 Hubei Wildlife Conservation Center	工程师 Engineer
梅浩 Mei Hao	男 M	湖北省野生动植物保护总站 Hubei Wildlife Conservation Center	工程师 Engineer
王荣军 Wang Rongjun	女 F	湖北省 GEF 湿地项目管理办公室 Hubei GEF PMO	财务主管 Financial Manager

程琳 Cheng Lin	女 F	世界自然基金会 (WWF) WWF	项目经理 Project Manager
汪潇 Wang Xiao	女 F	中国地质大学 (武汉) China Geoscience University (Wuhan)	教师 Professor
周英豪 Zhou Yinghao	男 M	湖北省野生动植物保护总站 Hubei Wildlife Conservation Center	科长 Staff
李扬 Li Yang	男 M	湖北省环保厅 (省环科院) Environmental Protection Department	工程师 Engineer
王荆州 Wang Jingzhou	男 M	湖北省发改委 Development and Reform Commission	处长 Director
明新伟 Ming Xinwei	男 M	湖北省财政厅 Financial Department	副处长 Vice Director
朱志龙 Zhu Zhilong	男 M	湖北省水文局 Water Resources Department	教授级高工 Professor
陈淑芳 Chen Shufang	女 F	网湖湿地自然保护区 Wanghu Wetland PA	党委书记 CPC Party Secretary
郑和松 Zheng Hesong	男 M	网湖湿地自然保护区 Wanghu Wetland PA	站长 Manager
余向京 Yu Xiangjing	女 F	丹江口库区湿地保护区 Danjiangkou Wetland PA	助理工程师 Assistant Engineer
成先红 Cheng Xianhong	男 M	长江天鹅洲白鱃豚保护区 Tian'ezhou Dolphin PA	科长 Staff
郭立鹤 Guo Lihe	男 M	长江新螺段白鱃豚保护区 Xinluoduan Dolphin PA	主任 Staff
潘胜东 Pan Shengdong	男 M	龙感湖自然保护区管理局 Longganhu Nature Reserve	副科长 Staff
张玉铭 Zhang Yuming	男 M	石首麋鹿保护区管理处 Shishou Milu Nature Reserve	工程师 Engineer
胡峰 Hu Feng	男 M	沉湖湿地自然保护区 Chenhu Wetland PA	Engineer
厉恩华 Li Enhua	男 M	中科院测地所 Institute of Geodesy and Geophysics, CAS	研究员 Researcher
郝玉江 Hao Yujiang	男 M	中科院水生所 Institute of Hydrobiology, CAS	副研究员 Researcher
史玉虎 Shi Yuhu	男 M	湖北省林业科学研究院 Hubei Academy of Forestry	研究员 Researcher
徐维忠 Xu Weizhong	男 M	龙感湖保护区 Longganhu Nature Reserve	工程师 Engineer
蒲萍 Pu Ping	女 F	湖北生态工程职业技术学院 Hubei Ecology Polytechnic College	教授 Professor

葛继稳 Ge Jiwen	男 M	中国地质大学（武汉） China Geoscience University (Wuhan)	教授 Professor
苗文杰 Miao Wenjie	男 M	武汉市伊美净科技发展有限公司 Wuhan Yimeijing Technologies, LTD	工程师 Engineer
赵冬冬 Zhao Dongdong	男 M	武汉市伊美净科技发展有限公司 Wuhan Yimeijing Technologies, LTD	工程师 Engineer
刘胜祥 Liu Shengxiang	男 M	华中师范大学 Huazhong Normal University	教授 Professor
雷正玉 Lei Zhengyu	女 F	湖北生态工程职业技术学院 Hubei Ecology Polytechnic College	教授 Professor
王会 Wang Hui	男 M	北京林业大学 Beijing Forestry University	讲师 Lecturer
江南 Jiang Nan	男 M	湖北省野生动植物保护总站 Hubei Wildlife Conservation Center	工程师 Engineer
肖利 Xiao Li	女 F	湖北省野生动植物保护总站 Hubei Wildlife Conservation Center	工程师 Engineer
张军莲 Zhang Junlian	女 F	湖北省野生动植物保护总站 Hubei Wildlife Conservation Center	工程师 Engineer
肖宇 Xiao Yu	男 M	湖北省野生动植物保护总站 Hubei Wildlife Conservation Center	Staff
刘瑛 Liu Ying	女 F	湖北省野生动植物保护总站 Hubei Wildlife Conservation Center	工程师 Engineer
郝涛 Hao Tao	男 M	湖北省野生动植物保护总站 Hubei Wildlife Conservation Center	高工 Senior Engineer
乔茂盛 Qiao Maosheng	男 M	湖北洪湖国家级自然保护区管理局 Honghu National Nature Reserve	Staff
晏爱红 Yan Aihong	女 F	湖北洪湖国家级自然保护区管理局 Honghu National Nature Reserve	staff
邓兆林 Deng Zhaolin	男 M	湖北洪湖国家级自然保护区管理局 Honghu National Nature Reserve	科长 Staff
温峰 Wen Feng	男 M	湖北洪湖国家级自然保护区管理局 Honghu National Nature Reserve	主任 Director
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Annex 5: List of Documents Reviewed

Document	Language Eng/Chi
General	
Project Identification Form (PIF)	Eng/Chi
Request for CEO Endorsement/Approval	Eng
Project Document, signed version	Eng
United Nations Development Assistance Framework for the People's Republic of China (UNDAF China)2016-2020	Eng
Project TE Inception Report	Eng
Project MTR Report	Eng
Financial Expenditures broken down by outcome	Chi
Financial Audits Reports	Eng/Chi
Co-Financing Letters in ProDoc	Eng
Co-Financing realized (amount, source, activity, date)	Chi
Maps of Wetland PAs in Hubei Province	Chi
Project Implementation Report (PIR)	Eng
Two-Year Work-Plan (TYWP)	Eng
Quarterly Report (QR)	Eng
List of service providers for Hubei GEF project	Eng/Chi
Project Self-Assessment Report	Eng/Chi
Tracking Tools	
Terminal evaluation report on METT of Hubei GEF Project Sites	Eng
Terminal evaluation report on EHI of Hubei GEF Project Sites	Eng
Financial Sustainability Scorecard	Eng
Capacity Development Scorecard	Eng
Outcome 1: Establishment of Provincial Level Capacity to Identify and Alleviate Wetland Conservation Threats	
Management Guidelines of Wetland Parks in Hubei Province	Chi
Implementation Plan of Wetland Conservation and Restoration in Hubei Province	Chi
Implementation plan of the wetland conservation and restoration engineering works in the 13th five year period	Chi
13th five year plan of forestry development of Hubei Province	Chi
Management Guidelines on Ecological Redline of Hubei Province	Chi
Implementation of comprehensive river and lake chief systems	Chi
Water Pollution Prevention Work Plan of Hubei Province	Chi
Suggestions on Establishing and Improving Eco-Compensation Mechanism of Hubei Province	Chi
Notice on complete fishing ban in protected areas in the Yangtze River Basin	Chi
Notice on sand mining ban in river channels of Hubei Province	Chi
Establishment of Provincial Consultative Group of Wetland Conservation	Chi
Basic study and interpretation of implementation program of Wetland Conservation and Restoration System in Hubei	Chi
Implementation Program of Wetland Conservation and Restoration System in Hubei	Chi
Provincial Database System of Wetland Biodiversity Monitoring	Chi
Gap Analysis of Wetland Laws and Policies in Hubei Province and the Discussion of legal framework on Wetland Conservation in Hubei Province	Chi
Guidelines on wetland monitoring of Hubei Province	Chi
Training Plan for Hubei GEF Project	Chi
Training Textbook for Hubei GEF Project	Chi

Outcome 2: Establishment of water-basin level capacity to identify and alleviate wetlands conservation threats	
Establishment of Honghu Watershed Management Council	Chi
Terms of reference of Honghu Watershed Management Council	Chi
Establishment of Patrolling, Enforcement and Monitoring System of Honghu	Chi
Wetland Conservation Action Plan of Sihou Drainage Basin	Chi
Program for Water Quality Improvement and Pollution Control in Honghu	Chi
Report on fish-net removal and fishermen resettlement in Honghu Lake	Chi
Master Plan of Honghu National Nature Reserve (2016-2025)	Chi
Outcome 3: Management effectiveness at selected WPAs in Hubei Province strengthened	
Co-management agreement of Honghu WPA	Chi
Co-management agreement of Longganhu WPA	Chi
Co-management agreement of Shishou Milu WPA	Chi
Co-management agreement of Tian'ezhou Dolphine WPA	Chi
Suggestions on Eco-compensation measures of farmland conversion to wetland in the Swan Oxbow	Chi
Suggestion on Water-level Control in the Swan Oxbow	Chi
Management Plan of Honghu WPA	Chi
Management Plan of Longganhu WPA	Chi
Management Plan of Tian'ezhou WPA	Chi
Business Plan of Honghu WPA	Chi
Business Plan of Longganhu WPA	Chi
Business Plan of Tian'ezhou WPA	Chi
Report on fish-net removal and fishermen resettlement in Honghu Lake	Chi
Capacity assessment report of Chenhu WPA	Chi
Capacity assessment report of Longganhu WPA	Chi
Internal Management	
Management guidelines on Hubei GEF Project	Chi
Communication and publicity strategy of Hubei GEF Project	Chi

Note: English abstracts were available for some of the documents.

The technical reports with English summaries reviewed by the international consultant included:

- Executive Summary of Honghu's Management Plan
- Executive Summary of Longganhu's Management Plan
- Executive Summary of Tian'ezhou's Management Plan
- Wetland Conservation Action Plan of Sihou Drainage Basin (Jingzhou Municipality)
- Study on the Water Level Management in Tianezhou Wetland in Hubei Province: Problems and Suggestions
- Study on the Rural Households' WTA to Converting Bottomland Farmland back into Wetlands in Tianezhou Wetland in Hubei Province
- UNDP-GEF: Strengthening the Management Effectiveness of the Wetland Protected Area System in Hubei Province

Annex 6: Summary of Hubei Project Achievements

Project Results and Indicators	Target level at end of project	Summary of reported achievements in progress reports as of July 2018	Terminal Evaluation Comments
Objective: Strengthen the management effectiveness of the wetland protected area system of Hubei province in response to existing and emerging threats to the globally significant biodiversity and essential ecosystem services.			
Average Ecosystem Health Index for eight WPAs improves by at least 20%	Average Ecosystem Health Index: Honghu: 0.453 Chenhu: 0.529 Wanghu: 0.502 Longganhu: 0.508 Shishou Milu: 0.589 Tianezhou Dolphin: .423 Xinluo Dolphin: 0.460 Danjiangkou: 0.493 Habitat Assess: 0.632 Species Assess: 0.587 Environ. Risk:0.611	Average Ecosystem Health Index: 0.771 Honghu: 0.775 (from xxx at project start) Chenhu: 0.647 (from xxx) Wanghu: 0.833 (from xxx) Longganhu: 0.795 Shishou Milu: 0.853 Tianezhou Dolphin: 0.791 Xinluo Dolphin: 0.832 Danjiangkou: 0.643 Habitat Assessment: 0.758 Species Assessment: 0.792 Environmental Risk: 0.764	<i>The EHI improvements have been impressive and well above the targets for all of the PAs. The enhanced scores have been primarily related to increased regulation, monitoring and patrolling measures and capacity, the direct actions to remove and reduce human disturbances to the wetlands and the development of new coordination and co-management mechanisms. These scores need to be ground truthed to get an accurate picture of ecosystem health.</i>
METT score for eight target wetlands protected areas increases by at least 30% on average and individually	Average METT score: 58 Individual PAs: Tian'ezhou NNR: 54 Shishou NNR: 69 Xinluoduan NNR: 60 Longganhu NNR: 65 Honghu NNR: 61 Danjiangkou PNR: 30 Wanghu PNR: 61 Chenhu PNR: 62	Average METT score: 73 Individual PAs: Tianezhou Dolphin NNR: 78 Shishou Milu NNR: 82 Xinluo Dolphin NNR: 78 Longganhu NNR: 79 Honghu NNR: 76 Danjiangkou PNR: 47 Wanghu PNR: 77 Chenhu PNR: 65	<i>The METT scores for the demonstration PAs have been significantly increased. These ratings provide a rough indication of management status and reflect the project's progress on capacity development. But they also need to be read with caution and context about the management challenges that remain.</i>

Percentage of annual financing allocated by the Government of China to cover the cost of implementing WPA wetlands conservation strategy in Hubei province	100%	The Hubei Wetlands Conservation and Restoration Implementation Program outlines a series of general programmes regarding wetland conservation and restoration. Financing is not included in the strategy. The Implementation Program can be regarded as a project library, the relevant agencies will apply for funding to implement specific projects under the Program. Meanwhile, annual financing is increased and satisfied. Local, provincial and national financing for wetland conservation has increased each year. Co-financing amount confirmed with CEO endorsement (\$18,158,634) has been achieved, amounting to \$47,734,218.75 by 30th June 2018. (?)	<i>The project document states that the total operational budget for the 8 main wetland PAs was \$7.7 M (p.12), rising to over \$16 M in 2018. In this project, GEF has been the source of funding for capacity development and technical assistance while government funding has gone to infrastructure development (see Annex 7).</i>
Total hectares of wetlands protected in Hubei Province managed to achieve ecosystem functionality showing marked reduction in threats of degradation of wetlands and over-exploitation	Total hectares protected and benefitting from ecosystem-based management: 250,000 ha	Total hectares protected and benefitting from ecosystem-based management: 319,594.196ha. - 100 National or provincial wetland parks were established or passed acceptance since 2014. - 7 NNR and 3 PNR were established since 2014. Some WPAs have removed fishing nets or turned farmland into wetland. Wanghu WPA was promoted as a Ramsar Site.	<i>The target has been greatly exceeded by about 70,000 ha through the creation and expansion of 124 PAs in total. This is a major highlight of the project results.</i>
Outcome 1: Establishment of Provincial level capacity to identify and alleviate wetlands conservation threats			
Provincial Wetlands Conservation Strategy mandating inter-agency support for WPA conservation is approved by relevant provincial authorities and operational to reduce threats to WPA biodiversity conservation from production sectors (fisheries, agriculture, tourism)	Provincial Wetlands Conservation Strategy adopted by provincial government with adequate financial support allocated; At least 2 Provincial sector plans (Fisheries, Agriculture) are guided by Wetlands Conservation Strategy and integrate biodiversity conservation measures including clear safeguards in sector	Hubei Wetlands Conservation and Restoration System Implementation Program and many plans or actions related to wetland conservation have been formulated by different sectors and issued by Hubei Provincial Government. E.g.: Nine Action Programs for Great Conservation of Yangtze River, Hubei Section. Ecological environment protection plan of Yangtze River Economic Belt, Hubei Section. Ecological environment protection plan of Han River Economic Belt, Hubei Section (2014-2025). Regulation of Conservation of Ecological Red Line in Hubei. Opinions to strengthen the fishery ecological civilization by Hubei Fishery Bureau. Fully Implement Lake and River Chiefs System in Hubei Province. The Overall Program of Rehabilitation of Farmlands, Rivers, Lakes, and Grasslands (2016-2030). Water Pollution Prevention and Control Action Plan of Hubei.	<i>The provincial strategy has been definitively established by eliminating fisheries within national nature reserves, regulating other land uses, setting out the ecological red line, pollution reduction measures, and multiple action plans and programs for wetland and biodiversity conservation and consultative management.</i> <i>Progress and prospects for achievement of results under the various plans and action programs need to be tracked and regularly</i>

	practices	<p>Notice on Forbidding Fishing in Aquatic Protected Area of Yangtze River of Hubei Section.</p> <p>Notice on Strengthening Forbidding sand excavation in Riverway.</p> <p>Biodiversity Conservation Strategy and Action Plans of Hubei (2014-2030).</p>	<i>monitored for results.</i>
Improvement of provincial policy and planning framework adopted and funded by relevant provincial authorities mandating that all natural resource use supports maintenance and improvement of WPA ecosystem integrity	Revised provincial policy and planning framework: 1	<p>Hubei Wetland Park Regulation has been approved and executed.</p> <p>Regulation of Longganhu National Nature Reserve has been approved and implemented.</p> <p>Gap Analysis and Legislative Proposals of Laws and Regulations System on Wetland Protection in Hubei Province have been finalized, and the framework of Hubei Wetland Conservation Regulation has been proposed.</p> <p>The Hubei Wetland Conservation and Utilization Plan 2016-2030 focuses on eco-civilization within the Yangtze River Economic Belt by improving the wetland management system and maintaining its ecological and water security.</p> <p>The 13th Five-Year Plan of different department, eg., Wetland Conservation and Restoration of Hubei, Forestry Development of Hubei, Water Resource Development of Hubei, Environment Protection of Hubei, Land Resource of Hubei, etc.</p> <p>The identification standard of important wetland and general wetland in Hubei was formulated and submitted to Hubei Bureau of Quality Supervision.</p> <p>The construction standard of provincial wetland park in Hubei was drafted.</p>	<p><i>A key output has been the Hubei Wetland Conservation and Utilization Plan 2016-2030, and the updated regulatory structure for wetlands management.</i></p> <p><i>The provincial policy and planning framework have been comprehensively developed with direct support from the central government.</i></p>
Provincial wetlands conservation consultative group established with official terms of reference approved by relevant provincial authorities	Provincial WPA conservation consultative group formally recognized by provincial government with official TORs:1	<p>Provincial Wetlands Conservation Consultative Group was officially established in 2015, including representatives from different departments. TOR for this group has been developed and approved by provincial government.</p> <p>The Group's meeting was held annually, during the second meeting in 2017, the draft Hubei Wetlands Conservation and Restoration Implementation Program was discussed and recommendations were raised by group members from different departments.</p>	<i>The consultative group is focussed on coordination of sector agencies and alignment with national directives/ Stakeholders are looking for additional advice on how to improve community consultations.</i>
Outcome 2: Establishment of water-basin level capacity to identify and alleviate wetlands conservation threats			
Model intra-basin wetlands conservation strategy completed and adopted by relevant provincial and county authorities	Model intra-basin wetlands conservation strategy adopted and financed by provincial government and eight Honghu basin counties with achievement of	<p>Wetland Conservation Action Plan of Sihou Drainage Basin (Jingzhou Municipality) has been reviewed by provincial consultative group and Honghu Watershed Management Council. Different sectors will be asked for comments for acceptance.</p> <p>The strategy has concluded the wetland resource and management status of Sihou Drainage, raised the issues occurred and listed action plan and priority</p>	<i>The Sihou Drainage Basin (Jingzhou Municipality) encompasses six PAs, managed by different agencies. The technical studies to date provide initial scoping for management decisions. But the complexity of trade-offs between</i>

	conservation objectives and standards monitored and reported annually:1	projects. It set a precedent in Hubei of wetland conservation in basin level. Some activities listed in the strategy have already been carried out in accordance with the strategy	<i>competing water management objectives may warrant more detailed water balance modelling including assessment of adjacent wetland connectivity.</i>
Intra-basin wetlands conservation consultative group established with official terms of reference approved by relevant provincial and eight county authorities	Representative intra-basin wetlands conservation consultative group operational with provincial level funding support for the committee's operation and holding relative activities and guided by Honghu basin-level conservation strategy and accompanying TORs: 1	<p>Intra-basin Conservation Consultative Group (Honghu Watershed Management Council) was established in 2014 by Jingzhou Government, and TOR developed and approved by the government.</p> <p>Sectors of Jingzhou Municipality and its subordinate Honghu City and Jianli County, as well as many townships and villages were involved. Trainings were delivered to give best practice of wetland conservation and mainstreaming. Some key deliverables of GEF project were reviewed.</p> <p>Some plans in the basin level have been issued, such as Environment Management Plan of Sihu Drainage Basin; Water Pollution Prevention and Control Action Plan of Jingzhou; action plan of strengthening the fishery ecological environment and resource conservation, etc.</p>	<i>The Intra-basin consultative group has been superseded by the Lake and River Chief system, a more formal structure for discussions with provincial and local government and village representatives. This is a new mechanism that is still evolving.</i>
Achievement of water resources quality and quantity standards for target WPAs as detailed in intra-basin wetlands conservation strategy	Chlorophyll-a (ug/L): 27.624 Total Nitrogen (mg/L): 0.9214 Total Phosphorus (mg/L): 0.06776 Transparency (m): 0.85 Water Quality: Group IV~III	<p>Chlorophyll-a (ug/L): 13.584 Total Nitrogen (mg/L): 0.9021 Total Phosphorus (mg/L): 0.0603 Transparency (m): 0.957 Water Quality: 3.1 (Group IV~III)</p> <p>According to our monitoring results, the water quality in middle lake was much better than shores (where sluices located). However water quality of Honghu is improving with the strengthened management and public awareness.</p> <p>Water Pollution Prevention and Control Action Plan of Hubei was issued by government in 2016, this specified the responsibility of each sector, which may help improve water quality of Honghu.</p>	<i>Given the removal of human uses and the reduction in pollution inputs, improved water quality (no DO?) is beginning to be reflected in sampling data. There are significant biophysical changes taking place as a result of physical and flow improvements, although uncertainties and risks exist related to the expansion of macrophytes and the elimination of fishing pressure which may stimulate ecosystem change.</i>
Socio-economic improvements to livelihoods (fishermen resettled on land provided with housing,	25% of the fishermen (408 households amounting to 1440 fishermen) provided	The implementation of GEF project helped the Council (Jingzhou government) determined to remove the fishing net in the lake and resettle the fishermen. On the basis of "an apartment, a job, a guarantee", all the fishermen in the lake were resettled on land. Policies that benefit fishermen were made: each	<i>Displaced fishermen interviewed (10) indicated general satisfaction with the new housing conditions. Fishermen are requesting more</i>

livelihood transformation and living security)	livelihood security	household was assisted to build or buy an apartment, with some amount of allowance supported by government; fishermen aging from 18-60 with labor capacity and working intention can be provided a job; fishermen older than 60 will be subsidized with basic living expenses. 1559 boats were purchased by government, 1462 apartments were provided, living subsidies of 9.7 million were provided, 19 series of technical trainings were delivered, 2639 person were recommended employment.	<i>secure, permanent jobs with the nature reserve. Information on the current status of the displaced community is limited.</i>
Outcome 3: Establishment of protected area administration capacity to identify and alleviate wetlands conservation threats			
UNDP Capacity scorecard for Hubei's WPAs improves by 20%	Capacity Score: HFD: 68.4% HEPD: 66% HAD: 78%	Capacity Score for Forestry, Environmental Protection and Agriculture depts: HFD: 81% (from 57 % baseline) HEPD: 82% (from 55 %) HAD: 80% (from 65 %) The capacity score of three sectors have greatly improved compared with the baseline. Plans developed, consultative groups established and training programmes delivered. The sectors have held series of activities to improve their capacity.	<i>The Capacity Scorecard for Hubei provides elaboration of these impressive achievements. No gaps or weaknesses in capacity were identified in the scorecard report.</i>
Total number of target protected areas with updated management plans mandating achievement of conservation objectives for globally significant species	Target WPAs with updated management plans designed to conserve ecosystem functions and globally significant species: 3 WPAs that commence management planning process: 3	Management plans of Hubei Honghu Nature Reserve, Hubei Longganhu Nature Reserve, and Hubei Tian'ezhou Dolphin Nature Reserve were formulated, and relative actions listed in the plan are being carried out, including: botanical biodiversity investigation and water quality monitoring of Honghu, ecological valuation of Longganhu, and water level management among Tianezhou NNR, Milu NNR and surrounding community. Shishou Milu NNR has developed their management plan with co-financing. Trainings of formulating management plan have been delivered, and Chenhu, Wanghu and Dajiuwu WPA is commencing the planning.	<i>These management plans are important achievements, yet specific strategies and scenarios for healthy ecosystems are sometimes unclear. E.g., how much expansion of aquatic plants is acceptable in Honghu Lake consistent with water quality and species enhancement objectives?</i>
Business plans result in 25% increase in annual government financing for three WPAs with improved business	Annual government budget for three target WPA's: US\$ 4.875 million which would close financing gap (current \$ 1.35 m) for WPAs by 72 percent	Business plan of Hubei Honghu Nature Reserve, Business plan of Hubei Longganhu Nature Reserve, and Business plan of Hubei Tian'ezhou Dolphin Nature Reserve were formulated. Guideline for business planning were formulated. Training on business planning was provided to all 8 sites. Economic valuation of Chenhu and Longganhu are carrying out. \$32 million of fund from both government and other organization have been allocated to the 3 WPAs.	<i>Budgets for the 3 PAs reportedly rose from \$3.9 M to \$32 M, although no details were available (operational budgets for all PAs totalled \$16 M). Was this increase due to business plans produced by the project?</i>
Percentage of women	Provincial WPA	Provincial WPA Conservation Consultative Group (Output 1.1): The members	<i>Participation by women has not</i>

<p>participating as voting members of key WPA consultative forums</p>	<p>Conservation Consultative Group (Output 1.1): 25% Intra-Basin Consultation Commission (Output 2.1): 25% Individual (4) WPA Consultation Commissions (Output 3.2): 25%</p>	<p>were fixed to the relevant departments of wetland protection and management in Hubei province only. No specific personnel were appointed, only specific positions in Intra-Basin Consultation Commission (Output 2.1): 5% (1/20) are women Individual (4) WPA Consultation Commissions (established in 2015) (Output 3.2): Longganhu: 25% Tian'ezhou: 53% Shishou: 31% Honghu: a dynamic Director of Lake mechanism, female are involved in activities Since the different functions and division of responsibilities, more males are involved in wetland conservation, especially the decision-makers. PMO tried to involve more women in project activities. During the project period, 39 meetings/trainings were held, and 21% of the participants were female.</p>	<p><i>been a priority in the project design or implementation, although some efforts were made in the final year to encourage more involvement of women.</i></p>
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ANNEX 7: Hubei Wetlands Project Co-financing Sources, Locations and Uses

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount (10,000 RMB)	Amount (USD)	Location	Description
Outcome 1	National funding	Cash	1316	2,056,250.00	Honghu	For construction and improvement of infrastructures, including boundary markers and billboard building, rescue and breeding research centre building, video monitoring tower building, patrol ship and car purchasing, staff trainings, etc.
Outcome 1	National funding	Cash	983	1,535,937.50	Shishou Milu	For construction and restoration of artificial grassland and wetland vegetation, muddy zone, etc.
Outcome 1	National funding	Cash	1300	2,031,250.00	Honghu	For restoration of aquatic plant and fish resource, patrolling and monitoring, etc.
Outcome 1	National funding	Cash	500	781,250.00	Chenhu	For reverting cultivated land to wetland, construction of ecology early-warning and monitoring system, wetland restoration, management and patrolling, promotion and education, etc.
Outcome 1	National funding	Cash	372.7	582,343.75	Chenhu	For reverting cultivated land to wetland, drone monitoring system.
Outcome 1	National funding	Cash	600	937,500.00	Wanghu	For video monitoring system and patrolling road construction, aquatic plant restoration, education equipment procurement
Outcome 3	National funding	Cash	1500	2,343,750.00	Longganhu	For reverting cultivated land to wetland, the area is about 2900 mu (193 ha).
Outcome 1	National funding	Cash	1400	2,187,500.00	Longganhu	For restoration of river band vegetation and aquatic vegetation, treatment of domestic sewage and village environment, construction of breeding and conservation center, etc.

Outcome 1	National funding	Cash	3000	4,687,500.00	Tian'ezhou	Tian'ezhou NNR. Compensation to Tian'ezhou NNR for regulation of Yangtze River Jingzhou channel.
Outcome 1	National funding	Cash	2000	3,125,000.00	Longganhu	For controlling harmful species, restoring vegetation, controlling pollution, education and promotion, wetland conservation management, ect.
Outcome 2	National funding	Cash	1600	2,500,000.00	Honghu	For removing fishing net in lakes, restoration of aquatic plant, biodiversity monitoring, etc.
Outcome 2	National funding	Cash	2400	3,750,000.00	Honghu	For removing fishing net in lakes, restoration of aquatic plant, biodiversity monitoring, promotion and education centre building, etc.
Outcome 2	National funding	Cash	2000	3,125,000.00	Honghu	For removing barrier in the lake, such as goods left in the lake after fishermen resettled on land.
Outcome 2	National funding	Cash	600	937,500.00	Honghu	For controlling alien invasive species
Outcome 2	National funding	Cash	500	781,250.00	Honghu	For investigation of removing embankment into lake
Outcome 2	National funding	Cash	552	862,500.00	Honghu	For artificial propagation and artificial releasing of fish
Outcome 3	Provincial funding	Cash	280	437,500.00	Xinluoduan	For daily management of WPA, resource dynamic monitoring, popular science propaganda, rescuing and remedy of aquatic wild animals
Outcome 3	Provincial funding	Cash	1300	2,031,250.00	Xinluoduan	For improvement of Chibi to Panjianghe river channel, including scientific research, promotion and education, environment and aquatic organisms monitoring and investigation, patrolling and rescuing equipment procurement, and important habitat restoration and conservation, etc.

Outcome 3	Local funding	Cash	200	312,500.00	Chenhu	For construction and maintenance of patrolling road, construction of shelter belts and promotion and education centre, procurement of education equipment
Outcome 3	Local funding	Cash	944	1,475,000.00	Chenhu	For ecology compensation, compensate those subjects with profit loss due to wetland conservation.
Outcome 3	Provincial funding	Cash	1152	1,800,000.00	Tian'ezhou	For wetland conservation and restoration.
Outcome 3	Provincial funding	Cash	1168	1,825,000.00	Tian'ezhou	For NNR construction and improvement.
Outcome 3	Provincial funding	Cash	28	43,750.00	Shishou Milu	For formulating management plan
Outcome 3	Provincial funding	Cash	150	234,375.00	Shishou Milu	For purchasing equipment of the laboratory, for disease prevention and detection.
Outcome 3	National funding with local funding	Cash	1572	2,456,250.00	Danjiangkou	For wetland conservation and restoration, monitoring, scientific research, promotion and education, etc.
Outcome 3	Local funding	Cash	27.2	42,500.00	Danjiangkou	For monitoring and scientific research
Outcome 3	National funding	Cash	500	781,250.00	Wanghu	For returning farmland into wetland and wetland restoration.
Outcome 3	Local funding	Cash	2000	3,125,000.00	Wanghu	For compensation of ecological rehabilitation and close down of livestock farm
Outcome 3	Local funding	Cash	420	656,250.00	Wanghu	For compensation of fishermen
Outcome 3	Provincial funding	in-kind	185	289,062.50	Xinluoduan	For purchasing one fishery administration boat, and build a 50-ton fishery administration boat
Total Co-financing			30,549.9	47,734,218.75		Note: In project document, Hubei Government was required to provide 17,458,634 USD of co-financing (including cash 10,868,000 USD, in-kind 6,590,634 USD).

Source: Hubei Wetlands PMO

ANNEX 8: Goals and priority actions and projects for Sihu Basin

Table A: Short term and long term goals of Sihu Basin

Short term goal	Long term goal
Stop the declination of wetland area	Establish effective legal and management frameworks for wetland conservation
Establish coordination mechanism between different government sectors	Total area of natural wetlands above 150,000 hectares
Delineate ecological redline in Sihu Basin	Protection rate of natural wetlands reach 100%
Conduct biodiversity and wetland inventory	Natural shoreline preservation rate above 65%
Delineate wetland conservation redline	100% of water function zones meet standard
More than 85% of water function zones meet stands	Finish all due restoration of natural wetlands
Protection rate of natural wetlands above 75%	Endangered and rare species well protected
All nature reserves equipped with necessary facilities	Wastewater treatment facilities constructed and operate well in all urban and rural area

Table B: Conservation fields and priority actions of Sihu Basin

Conservation Fields	Priority Actions	Things to do
Improve the legal and policy framework on wetland conservation	Establish legal and policy framework for wetland conservation	Formulate “Hubei Sihu Drainage Basin Wetland Protection Regulation”
		Formulate “Hubei Honghu National Nature Reserve Regulation”
		Formulate “Management Guidelines of Wetland Utilization in Sihu Drainage Basin (Jingzhou)”
		Formulate “Guidelines on Eco-Compensation of Sihu Drainage Basin”
	Establish coordination Mechanism on wetland conservation	Formulate “Technical Guide on wetland conservation and restoration in Sihu Drainage Basin”
		Establish “Wetland conservation reward and punishment mechanism in the Sihu Drainage Basin”
		Establish “Wetland protection supervision and assessment mechanism in the Sihu Drainage Basin”
Establish integrated enforcement mechanism	Establish integrated enforcement by environmental protection department and public securities department, appoint coordinator, establish information sharing mechanism, establish integrated investigation and enforcement mechanism	
Improve wetland management system	Establish wetland management committee in Sihu Drainage Basin	/
	Set up management stations and management stands	Set up 5 management stations in the basin with each of them supervising 3 management stands
	Establish Wetland PA and wetland parks	Establish another 2 wetland PA before 2020, promote 2 provincial wetland parks to national wetland parks
	Improvethe	/

	integrated wetland management mechanism	
Conduct wetland inventory, assessment, monitoring and management	Conduct wetland inventory	
	Conduct biodiversity investigation	Conduct biodiversity investigation, formulate and publish “biodiversity in Sihü Basin”, establish biodiversity database and information sharing platform before 2020, select key species to monitor.
	Conduct wetland monitoring	Conduct monitoring on wetland birds, assess ecological conditions of national and provincial wetland parks, conduct aquatic life monitoring in the wetlands., establish a monitoring network.
	Conduct rapid assessment of wetland functions	Conduct rapid assessment of wetland functions based on its ecological roles in the basin.
	Delineate wetland conservation redline	/
	Determine wetland management goals	Based on the inventory results, determine wetland management goals for different region. Determine the utilization guidelines of wetland sources.
	Establish research system	Finish infrastructures such as research building, lab instruments, and etc ;Establish 2 research base in 2 different types of wetlands, conduct respective research topics; enhance partnership with universities for staff training
Enhance biodiversity conservation	Improve infrastructure in the PAs	Installation of boundary tablets, patrolling roads, fire extinguishers, monitoring tower, fire proof roads, fire proof vehicles, communication devices
	In-situ conservation of wetland biodiversity	Carry out in-situ biodiversity conservation for endangered and rare species, Honghu, Tian’ezhou and Xinluoduan will be the key sites
	Ex-situ conservation of wetland biodiversity	Carry out ex-situ biodiversity conservation for endangered and rare species whose natural habitats severely damaged, Hewangmiao Dolphin NR will be the key sites
	Special rescue for endangered species	According to the endangered levels of different species, carry out special rescue for selected species, Lipotes vexillifer and yangtze finless porpoise being the primary targets
Strengthening the integrated conservation and management of wetlands	Improve the wastewater treatment facilities	Construction of new wastewater treatment facilities, renovate old sewerage pipelines, increase rain and sewage diversion, waste water treatment rate reach 95% and 85% for urban and rural areas by 2020, all early rainwater and rainwater entering natural water bodies must be treated before discharge
	Water quality improvement in rivers and lakes	Targeting water canals, Honghu Lake, Changhu Lake, prevent pollution from industries and agriculture in the neighbourhood, carry out ecological water supply and bioremediation projects, prevent the negative impacts of water hyacinth, improve water quality in water bodies near the city with integrated method of dredging,

		bioremediation, connection between different water bodies
	Removal of fishing nets in lakes and river channels	Remove all fishing nets in Honghu Lake, Changhu Lake as well as other medium to large reservoirs. Carry out ecological aquaculture
	Carry out wetland restoration projects	Carry out wetland restoration projects by converting occupied lakes/swamps/marshes back to wetland based on proper analysis and assessment
	Prevention and treatment of invasive species	/
Sustainable utilization of wetland resources	Strengthening the protection of fishing resources	Targeting the “4 major fish”, protect the habitats and oviposition field, establish non fishing zone/period around the key habitats at reproducing and juvenile growing period
	Develop natural multiplication fishing	Breeding and releasing filter feeding fish, conserving indigenous economic fish stocks. Establish local ecosystems by integration of algae planting and fishing
	Encourage fishermen to take alternative livelihood	Establish eco-compensation standards, integrate various government subsidies to encourage fishermen to take alternative livelihood. Provide housing, education, insurance and other relevant benefits
	Promote standardized fishing	Promote standardized fishing with water purification and waste treatment facilities, prevent the release of pollutants from fishing, increase water reclamation and reuse rate

Table C: Priority projects in Sihu Basin

Project name	Organization	Implementation Time	Budget (RMB)
Establishment of Sihu Wetland Management Committee	Jingzhou municipal government, Jinzhou development and reform commission	2018	2 million
Conduct wetland inventory	Jingzhou finance department, Jinzhou forestry department, Jinzhou environmental protection department, all nature reserves and wetland parks	2018-2019	8 million
Delineate wetland ecological redline	Jingzhou municipal government, Jinzhou environmental protection department, Jinzhou forestry department	2017-2018	2 million
Fishing net removal	Jingzhou municipal government, Jingzhou forestry department, Jingzhou environmental protection department, all nature serves, all wetland parks	2017-2018	90 million
Pilot project of farmland conversion to lake in Bailu Lake	Jingzhou development and reform commission, Jingzhou finance department, Jingzhou environmental protection department, Jingzhou forestry department	2018-2020	500 million
Delimiting all nature reserves and wetland parks	Jingzhou municipal government, Jingzhou natural resources department, Jinzhou forestry department, Jingzhou agriculture department, all nature reserves, all wetland parks	2017-2019	40 million
Installation of monitoring facilities	Jingzhou finance department, Jingzhou forestry department, Jingzhou environmental	2017-2018	3 million

	protection department, all nature reserves, all wetland parks		
Treatment of water hyacinth	Jingzhou municipal government, Jingzhou finance department, Jingzhou forestry department, Jingzhou environmental protection department, Jingzhou water resources department	2017-2019	200 million
Construction of wild life rescue center	Jingzhou municipal government, Jingzhou finance department, Jingzhou agriculture department	2017-2018	8 million
Alternative livelihood for fishermen	Jingzhou municipal government, Jingzhou finance department, Jingzhou agriculture department	2018-2019	800 million
TOTAL			1653 M RMB \$US 359.35 M

Source: Hubei Wetlands PMO

Annex 9: Implementation time, budgets and bodies of projects listed in management plans

Projects listed in Honghu Management Plan

Action/Project	Budget (10k RMB)	Funding Source	Implementation Body	Timeline				
				2016	2017	2018	2019	2020
Total	107036.93							
Action 1 Stop irrational lake using, and reduce the negative impact of human disturbance	12312.00							
Project 1 Remove fences, purse seine and nets from lakes	12312.00	Hubei Provincial Government subsidized 50 million Yuan for labor services and facilities compensation, Civil Affairs Departments at provincial, city and county levels totally allocated 58.84 million Yuan for transitional settlement subsidies, and Hubei Forestry Department won over 15 million Yuan for wetland ecological compensation	Jingzhou City Government, Honghu City Government, Jianli County Government, Management authority of Honghu National Nature Reserve	√				
Action 2 Improve the demarcation and zoning of the nature reserves	216.85							
Project 2 Identify the border of Honghu nature reserve	1.45	Special funds from SFA	Honghu Forestry Bureau, Jianli County Government, Management authority of Honghu NNR, Participating Units, Township (Town) Government, Village Committee, Forestry Station, etc.	√	√			
Project 3 Construct the marking post	135.40	Special funds from SFA	Management authority of Honghu NNR, Neighboring Village Committee	√	√			

Action/Project	Budget (10k RMB)	Funding Source	Implementation Body	Timeline				
				2016	2017	2018	2019	2020
Project 4 Construct the signing boards	80.00	Special funds from SFA	Management authority of Honghu NNR, Neighboring Village Committee		√	√	√	
Action 3 Enhance patrolling system, and strengthen monitoring management	3028.70							
Project 5 Construct the patrolling routes	1904.40	Special funds from SFA	Management authority of Honghu NNR			√	√	√
Project 6 Construct the patrolling marks	209.00	Special funds from SFA	Management authority of Honghu NNR	√	√			
Project 7 Purchase patrolling equipment	306.10	Special funds from SFA	Management authority of Honghu NNR		√	√		
Project 8 Purchase monitoring equipment	104.00	Special funds from SFA	Management authority of Honghu NNR		√	√		
Project 9 Organize the law enforcement team	5.20	Special funds from SFA	Management authority of Honghu NNR, Municipal Public Security Bureau	√	√			
Project 10 Make and implement the patrolling plan	500.00	Special funds from SFA	Management authority of Honghu NNR	√	√	√	√	√
Action 4 Implement wetland restoration projects	73167.68							
Project 11 Fishery resources restoration	275.00	Special funds from SFA	Management authority of Honghu NNR	√	√	√	√	√
Project 12 Wetland vegetation restoration	1522.68	Special funds from SFA	Management authority of Honghu NNR		√	√	√	
Project 13 Return the farmland into wetlands	70600.00	Special funds from SFA	Management authority of Honghu NNR Honghu City Government, Jianli County Government		√	√	√	
Project 14 Repair water conservancy facilities	590.00	Special funds from SFA	Management authority of Honghu NNR, Water sector	√	√	√	√	√

Action/Project	Budget (10k RMB)	Funding Source	Implementation Body	Timeline				
				2016	2017	2018	2019	2020
Project 15 Intercept and control of sewage from catchment	180.00	Special funds from SFA	Management authority of Honghu NNR	√	√	√		
Action 5 Rescue wild animals, monitor plant diseases and insect pests	677.00							
Project 16 Construct wildlife temporary shelter	71.00	Special funds from SFA	Management authority of Honghu NNR			√	√	
Project 17 Construct wild animal disease epidemic prevention station	22.00	Special funds from SFA	Management authority of Honghu NNR		√	√		
Project 18 Construct the plant diseases, insect pests prevention and cure quarantine station	141.00	Special funds from SFA	Management authority of Honghu NNR		√	√		
Project 19 Control and manage invasive species	443.00	Special funds from SFA	Management authority of Honghu NNR	√	√	√	√	√
Action 6 Development of organization structure and management regulations								
Project 20 Establish the reserve management committee			Jingzhou Municipal Party Committee and Government, Hubei Forestry Department, Honghu Municipal Party Committee and Government, Jianli County Party Committee and Government, Management authority of Honghu NNR and other government departments of interest.				√	√
Project 21 Improve the conservation and management system			Management authority of Honghu NNR	√	√			

Action/Project	Budget (10k RMB)	Funding Source	Implementation Body	Timeline				
				2016	2017	2018	2019	2020
Project 22 Make methods to monitor and evaluate the project implement			Provincial Department of Forestry, Jingzhou Forestry Bureau, Management authority of Honghu NNR	√	√			
Project 23 Make annual work plan			Management authority of Honghu NNR	√	√	√	√	√
Action 7 Improve the professional and working competence of the staff	17.00							
Project 24 Carry out staff pre-job training	5.00	External aid	Management authority of Honghu NNR	√	√			
Project 25 Conduct management training	10.00	External aid	Management authority of Honghu NNR	√	√	√	√	√
Project 26 Attend senior management training courses and degree courses	2.00	External aid	External organizations such as GEF Project Office of Hubei Province				√	√
Action 8 Improve the infrastructure and equipment	559.00							
Project 27 Construct conservation and management sites	168.00	Special funds from SFA	Management authority of Honghu NNR		√	√		
Project 28 Construct inspection stations	111.00	Special funds from SFA	Management authority of Honghu NNR		√	√		
Project 29 Wharf reconstruction	280.00	Special funds from SFA	Management authority of Honghu NNR	√	√			
Action 9 Improve scientific and monitoring system	1118.00							
Project 30 Compile scientific and monitoring plan for the reserve	10.00	GEF/ Special funds from SFA	GEF Project Office of Hubei Province, Management authority of Honghu NNR	√				
Project 31 Construct scientific research center	283.00	Special funds from SFA	Management authority of Honghu NNR			√	√	

Action/Project	Budget (10k RMB)	Funding Source	Implementation Body	Timeline				
				2016	2017	2018	2019	2020
Project 32 Construct hydrology and water quality monitoring sites	70.00	Special funds from SFA	Management authority of Honghu NNR, Hubei environmental monitoring center	√	√	√	√	√
Project 33 Construct wild animal disease epidemic prevention station	87.00	Special funds from SFA	Management authority of Honghu NNR		√	√		
Project 34 Construct key animal monitoring sites	90.00	Special funds from SFA	Management authority of Honghu NNR		√	√		
Project 35 Construct plant monitoring sites	58.00	Special funds from SFA	Management authority of Honghu NNR			√	√	
Project 36 Construct human impact monitoring sites	20.00	Special funds from SFA	Management authority of Honghu NNR		√	√		
Project 37 Construction watchtower	500.00	Special funds from SFA	Management authority of Honghu NNR		√	√		
Action 10 Carry out researches on the major conservation objects	80.00							
Project 38 Conduct the wetland resources investigation of the reserve	80.00	Special funds from SFA	Management authority of Honghu NNR	√	√			
Action 11 Carry out researches on special and monitoring studies	600.00							
Project 39 Carry out the research on responses of wetland ecosystem succession to human disturbance in Honghu wetland	300.00	Special funds from SFA	Management authority of Honghu NNR	√	√	√	√	√
Project 40 Carry out the research on the model of community participation in nature reserve management	100.00	Special funds from SFA	Management authority of Honghu NNR	√	√	√		

Action/Project	Budget (10k RMB)	Funding Source	Implementation Body	Timeline				
				2016	2017	2018	2019	2020
Project 41 Carry out the research on hydrological characteristics change and waterfowl habitat selection research in Honghu wetland	200.00	Special funds from SFA	Management authority of Honghu NNR	√	√	√		
Action 12 Increase public equipment and facilities and make propaganda materials	303.10							
Project 42 Build visitor center	251.50	Special funds from SFA / External aid	Management authority of Honghu NNR		√	√		
Project 43 Make the popular science propaganda column and billboard	16.60	Special funds from SFA	Management authority of Honghu NNR		√	√		
Project 44 Draft materials of public education, related posters and brochures	15.00	External aid	Management authority of Honghu NNR	√	√	√	√	√
Project 45 Make advertising videos	20.00	External aid	Management authority of Honghu NNR				√	√
Action 13 Carry out propaganda and education work	58.00							
Project 46 Purchase professional books	3.00	External aid	Management authority of Honghu NNR	√	√			
Project 47 Organize public education and training for the staffs in the reserve	18.00	External aid	Management authority of Honghu NNR	√	√	√	√	√
Project 48 Organize public education and training for local communities	20.00	External aid	Management authority of Honghu NNR	√	√	√	√	√
Project 49 Organize “Green Summer Camp” for teenagers	12.00	External aid	Management authority of Honghu NNR	√	√	√	√	√

Action/Project	Budget (10k RMB)	Funding Source	Implementation Body	Timeline				
				2016	2017	2018	2019	2020
Project 50 Hold conservation and propaganda activities for ecology and biodiversity of great significance	5.00	External aid	Management authority of Honghu NNR	√	√	√	√	√
Action 14 Establish the co-management office and implement the co-management activities	10.00							
Project 51 Establish the co-management institution			Jingzhou City Government, Jianli County Government, Management authority of Honghu NNR, related township (Town) Government, Village Committee, etc.				√	√
Project 52 Make the co-management plan	5.00	External aid	Management authority of Honghu NNR				√	√
Project 53 Hold the co-management training	5.00	External aid	GEF Project Office of Hubei Province, Management authority of Honghu NNR, Co-management committee				√	√
Action 15 Solve the livelihood and compensation issues of fishermen after going ashore	14428.00							

Action/Project	Budget (10k RMB)	Funding Source	Implementation Body	Timeline				
				2016	2017	2018	2019	2020
Project 54 Resettlement of fishermen	14428.00	Provincial Department of Housing and Urban Rural Development, Provincial Development and Reform Commission, Provincial Agricultural Department and Provincial Department of Land and Resources have arranged total 40.58 million yuan for housing construction; Provincial Government solved the housing fund gap of 35.95 million yuan; Jingzhou City supported 7 million yuan housing funds; Provincial Department of Human Resources and Social Security arranged 7 million yuan for vocational training for the local community; Provincial Department of Forestry have applied for the national wetland ecological benefits compensation funds of 10 million yuan; Honghu City and Jianli County have taken charge of the infrastructure funds of 19 million and 610 thousand yuan.	Jingzhou City Government, Jianli County Government, Management authority of Honghu NNR, related township (Town) Government, Village Committee, etc.	√				
Project 55 Set up fishery co-operatives			Jingzhou City Government, Jianli County Government, Management authority of Honghu NNR, related township (Town) Government, Village Committee, etc.	√	√			
Action 16 Improve the traditional production and life style that may cause pollution threat to the reserve	6.60							
Project 56 Construct waste storage tank in the community	3.60	External aid	Management authority of Honghu NNR, related township (Town) Government, Village Committee, etc.			√	√	

Action/Project	Budget (10k RMB)	Funding Source	Implementation Body	Timeline				
				2016	2017	2018	2019	2020
Project 57 Technical training of energy saving products	3.00	External aid	Management authority of Honghu NNR, related township (Town) Government, Village Committee, etc.	√	√	√	√	√
Action 17 Improve the ecotourism in the reserve	450.00							
Project 58 Draft the management regulations for ecotourism in the reserve			Management authority of Honghu NNR and other government departments of interest.		√	√		
Project 59 Standardize the ecotourism in the reserve			Management authority of Honghu NNR and other government departments of interest.	√	√	√	√	√
Project 60 Build the tourist service center	450.00	Tourism company	Management authority of Honghu NNR, tourism company and other government departments of interest.			√	√	√
Action 18 Implement cooperation and seek for outside's supporting								
Project 61 Implement cooperation for scientific researches			Management authority of Honghu NNR	√	√	√	√	√
Project 62 Strengthen the cooperation with local governments			Management authority of Honghu NNR	√	√	√	√	√
Project 63 Seek for the technical and financial support from international societies			Management authority of Honghu NNR	√	√	√	√	√
Action 19 Monitoring of management plan	5.00							
Project 64 Assess the effectiveness of the management plan and draft the new one	5.00	External aid	Management authority of Honghu NNR					√

Projects listed in Longganhu Management Plan

Action/Project	Budget (10k RMB)	Funding Source	Implementation Body	Timeline				
				2016	2017	2018	2019	2020
Total	3061.8							
Action 1 Improve the demarcation and zoning of the nature reserves	45							
Project 1 Identify the border and construct the marking post and signing boards	45	Special funds of SFA	Management authority of Longganhu NNR	√	√			
Action 2 Enhance the patrolling system	535.2							
Project 2 Construct the patrolling routes	270	Special funds of SFA, External aids	Management authority of Longganhu NNR		√	√		
Project 3 Construct the patrolling wharfs	50	Special funds of SFA	Management authority of Longganhu NNR		√	√		√
Project 4 Construct the protecting fences	66	Special funds of SFA	Management authority of Longganhu NNR	√	√			
Project 5 Make and implement the patrolling plan	125	Special funds of SFA	Management authority of Longganhu NNR	√	√	√	√	√
Project 6 Purchase patrolling equipment	24.2	Special funds of SFA, External aids	Management authority of Longganhu NNR	√	√			
Action 3 Implement wetland restoration projects	1021							
Project 7 Remove fences, purse seine and nets from lakes	665	Special funds of SFA	Management authority of Longganhu NNR	√	√			
Project 8 Return the farmland to wetlands	96	Special funds of SFA	Management authority of Longganhu NNR	√	√	√		
Project 9 Forest vegetation restoration	100	Special funds of SFA	Management authority of Longganhu NNR				√	√
Project 10 Wetland vegetation restoration	100	Special funds of SFA	Management authority of Longganhu NNR			√	√	
Project 11 Maintain the sluice doors	60	Special funds of SFA	Management authority of Longganhu NNR	√	√	√		
Action 4 Rescue and protect wild animals and control pest and invasive species	235							
Project 12 Construct the wildlife rescue center	35	Special funds of	Management authority	√	√			

Action/Project	Budget (10k RMB)	Funding Source	Implementation Body	Timeline				
				2016	2017	2018	2019	2020
		SFA	of Longganhu NNR					
Project 13 Control pest and invasive species	200	Special funds of SFA	Management authority of Longganhu NNR	√	√	√		
Action 5 Construct forest fire control system	70							
Project 14 Build the microwave monitoring tower of forest fire	20	Special funds of SFA	Management authority of Longganhu NNR		√	√		
Project 15 Purchase fire-protection equipment	50	Special funds of SFA	Management authority of Longganhu NNR		√	√		
Action 6 Improve organization structure and management regulations								
Project 16 Improve the protection and management system			Huanggang Municipal Party Committee and Government, Longganhu District Party Committee and Government, Huangmei County Party Committee and Government, Management authority of Longganhu NNR and other government departments of interest.				√	√
Project 17 Establish the public security subbureau of the Longganhu nature reserve			Huanggang City Government, Huanggang Public Security Bureau and Management authority of Longganhu NNR				√	√
Project 18 Establish and improve the post duty system, and formulate the management system of nature reserve			Management authority of Longganhu NNR	√	√			
Project 19 Make methods to monitor and evaluate the project implement			Management authority of Longganhu NNR	√	√			
Project 20 Make annual work plan			Management authority of Longganhu NNR	√	√	√	√	√

Action/Project	Budget (10k RMB)	Funding Source	Implementation Body	Timeline				
				2016	2017	2018	2019	2020
Action 7 Improve the professional and working competence of the staff	7.5							
Project 21 Carry out staff pre-job training	0.5	External aids	Management authority of Longganhu NNR	√	√			
Project 22 Conduct management training	5	External aids	Management authority of Longganhu NNR	√	√	√	√	√
Project 23 Attend senior management training courses and degree courses	2	External aids	External organizations such as GEF Project Office of Hubei Province				√	√
Action 8 Improve the infrastructure and equipment	160							
Project 24 Construct conservation and management sites	80	Special funds of SFA	Management authority of Longganhu NNR	√	√	√		
Project 25 Construct inspection stations	80	Special funds of SFA	Management authority of Longganhu NNR	√	√	√		
Action 9 Improve the scientific research monitoring system of nature reserve	126							
Project 26 Compile scientific and monitoring plan for the reserve	10	GEF, Special funds of SFA	GEF Project Office of Hubei Province , Management authority of Longganhu NNR	√				
Project 27 Construct the monitoring sites	116	Special funds of SFA	Management authority of Longganhu NNR	√	√	√		
Action 10 Carry out researches on the major conservation objects	120							
Project 28 Conduct the wetland resources investigation	40	Special funds of SFA, External aids	Management authority of Longganhu NNR	√	√	√		
Project 29 Carry out the research on the current status and dynamic changes of the Longganhu wetland	40	Special funds of SFA, External aids	Management authority of Longganhu NNR, Universities or other scientific research institutions	√	√	√		
Project 30 Carry out research on white-head crane	20	Special funds of SFA, External	Management authority of Longganhu NNR,	√	√	√		

Action/Project	Budget (10k RMB)	Funding Source	Implementation Body	Timeline				
				2016	2017	2018	2019	2020
		aids	Universities or other scientific research institutions					
Project 31 Carry out research on black stork	20	Special funds of SFA, External aids	Management authority of Longganhu NNR, Universities or other scientific research institutions	√	√	√		
Action 11 Carry out researches on special and monitoring studies	80							
Project 32 Carry out research on bird banding	20	Special funds of SFA, External aids	Management authority of Longganhu NNR, Universities or other scientific research institutions	√	√	√		
Project 33 Carry out research on the ecology of cranes	20	Special funds of SFA, External aids	Management authority of Longganhu NNR, Universities or other scientific research institutions			√	√	√
Project 34 Carry out research on the adjustment of farmland structure on the species composition and quantity	20	Special funds of SFA, External aids	Management authority of Longganhu NNR, Universities or other scientific research institutions			√	√	√
Project 35 Carry out research on wetland restoration and reconstruction techniques	20	Special funds of SFA, External aids	Management authority of Longganhu NNR, Universities or other scientific research institutions			√	√	√
Action 12 Improve the propaganda and education facilities	524.3							
Project 36 Construct and improve the propaganda and education center	400	Special funds of SFA, External aids	Management authority of Longganhu NNR				√	√
Project 37 Make the popular science propaganda column	10	Special funds of	Management authority			√	√	

Action/Project	Budget (10k RMB)	Funding Source	Implementation Body	Timeline				
				2016	2017	2018	2019	2020
and billboard		SFA	of Longganhu NNR					
Project 38 Make sand-tray model of the reserve	60	Special funds of SFA, External aids	Management authority of Longganhu NNR			√		
Project 39 Purchase equipment for propaganda and education work	39.3	Special funds of SFA, External aids	Management authority of Longganhu NNR				√	√
Project 40 Draft the materials of public education and printing the related posters and brochures	15	Special funds of SFA, External aids	Management authority of Longganhu NNR	√	√			
Action 13 Carry out propaganda and education work	22							
Project 41 Organize public education and training for local communities	5	External aids	Management authority of Longganhu NNR	√	√	√	√	√
Project 42 Organize “Green Summer Camp” for teenagers	12	External aids	Management authority of Longganhu NNR	√	√	√	√	√
Project 43 Hold conservation and propaganda activities for ecology and biodiversity of great significance	5	External aids	Management authority of Longganhu NNR	√	√	√	√	√
Action 14 Establish the co-management office and implement the co-management activities	10.8							
Project 44 Establish the co-management institution	0.8	External aids	Management authority of Longganhu NNR			√	√	√
Project 45 Make the co-management plan	5	External aids	Management authority of Longganhu NNR, Co-management committee			√	√	√
Project 46 Hold the co-management training	5	External aids	GEF Project Office of Hubei Province, Management authority of Longganhu NNR, Co-management committee			√	√	√
Action 15 Improve the traditional production and life style that may have negative effects on the reserve	100							

Action/Project	Budget (10k RMB)	Funding Source	Implementation Body	Timeline				
				2016	2017	2018	2019	2020
Project 47 Hold practical technical training in rural areas	30	Special funds of SFA	Management authority of Longganhu NNR, Co-management committee	√	√	√	√	√
Project 48 Develop eco-aquaculture	20	Special funds of SFA	Management authority of Longganhu NNR, Co-management committee				√	√
Project 49 Help construct firewood-saving stoves and marsh gas pools	50	External aids	Management authority of Longganhu NNR, Co-management committee				√	√
Action 16 Improve the ecotourism in the reserve								
Project 50 Draft the management regulations for ecotourism in the reserve			Management authority of Longganhu NNR and other government departments of interest			√		
Project 51 Standardize the ecotourism in the reserve			Management authority of Longganhu NNR and other government departments of interest and Tourism companies			√		
Action 17 Implement the cooperation and seek for outside's supporting								
Project 52 Implement the cooperation for scientific researches			Management authority of Longganhu NNR	√	√	√	√	√
Project 53 Strengthen the cooperation with local governments			Management authority of Longganhu NNR	√	√	√	√	√
Project 54 Apply the Ramsar site with the neighboring Susong County in Anqing City, Anhui province			Management authority of Longganhu NNR		√	√		
Project 55 Seek for the technical and financial support from international societies			Management authority of Longganhu NNR	√	√	√	√	√
Action 18 Monitoring of management plan								
Project 56 Assess the effectiveness of the management plan and drafting the new one	5	External aids	Management authority of Longganhu NNR					√

Projects listed in Tian'ezhou Management Plan

Action/Project	Budget (10k RMB)	Funding Source	Implementation Body	Timeline				
				2017	2018	2019	2020	2021
Total								
Action 1 Survey the natural resources and specify the overall layout	50							
Project 1 Compile scientific investigation report of the nature reserve	20	External aids	Management authority of Tian'ezhou Dolphin NNR	√	√			
Project 2 Compile the master plan of the nature reserve	30	Special funds of MOA	Management authority of Tian'ezhou Dolphin NNR	√				
Action 2 Confirm the land ownership and delimit the boundary								
Project 3 Solve the land ownership issues and delimit the boundary			Shishou City Government, Management authority of Tian'ezhou Dolphin NNR, related departments, Township(town) government, village committee, etc.	√	√	√	√	√
Action 3 Recover the connectivity between the former river channels and the Yangtze River, Restore wetlands	6400							
Project 4 Apply for the water and electricity replenishment project	6000	Special funds of NDRC	Management authority of Tian'ezhou Dolphin NNR	√	√	√	√	√
Project 5 Sewage interception and treatment at junction	30	Special funds of MOA	Management authority of Tian'ezhou Dolphin NNR			√	√	√
Project 6 Restore wetland vegetation	120	Special funds of MOA	Management authority of Tian'ezhou Dolphin NNR	√	√	√		
Project 7 Reproduce fish resources and release them	250	Special funds of MOA	Management authority of Tian'ezhou Dolphin NNR	√	√	√	√	√
Action 4 Enhance patrolling system, and strengthen monitoring management	450							
Project 8 Improve the biodiversity monitoring system	50	Special funds of MOA	Management authority of Tian'ezhou Dolphin NNR	√	√	√	√	√

Action/Project	Budget (10k RMB)	Funding Source	Implementation Body	Timeline				
				2017	2018	2019	2020	2021
Project 9 Establish a remote all-day video surveillance system	400		Management authority of Tian'ezhou Dolphin NNR		√	√		
Action 5 Improve institutions and management system	55							
Project 10 Establish and improve the post duty system, and formulate the management system of nature reserve			Management authority of Tian'ezhou Dolphin NNR	√	√			
Project 11 Develop project monitoring and evaluation methods	5	External aids	Provincial Aquatic Products Bureau, Shishou City Agricultural Bureau, Management authority of Tian'ezhou Dolphin NNR		√			
Project 12 Develop an annual work plan			Management authority of Tian'ezhou Dolphin NNR	√	√	√	√	√
Project 13 Strengthen the training for the working staff in the nature reserve	50	Special funds of MOA	Management authority of Tian'ezhou Dolphin NNR	√	√	√	√	√
Action 6 Improve infrastructure and equipment	225							
Project 14 Construct and improve the artificial reproduction center of the Yangtze finless porpoise	165	Special funds of MOA	Management authority of Tian'ezhou Dolphin NNR	√		√	√	√
Project 15 Construct and improve the science museum	60	External aids	Management authority of Tian'ezhou Dolphin NNR			√	√	√
Action 7 Improve the scientific research monitoring system of nature reserve	920							
Project 16 Carry out cooperation activities with other freshwater dolphin protection institutions	900	Special funds of MOA	Management authority of Tian'ezhou Dolphin NNR	√	√	√	√	√
Project 17 Carry out scientific research activities	20	Special funds of MOA	Management authority of Tian'ezhou Dolphin NNR	√	√	√	√	√
Action 8 Strengthen the protection consciousness of the Yangtze finless porpoise and make it mainstreaming	62.5							
Project 18 Establish a propaganda and education base	30	Special funds of MOA, External aids	Management authority of Tian'ezhou Dolphin NNR			√	√	√

Action/Project	Budget (10k RMB)	Funding Source	Implementation Body	Timeline				
				2017	2018	2019	2020	2021
Project 19 Compile and print publicity and education materials	10	Special funds of MOA	Management authority of Tian'ezhou Dolphin NNR	√	√	√	√	√
Project 20 Make Yangtze finless porpoise protection propaganda film	5	External aids	Management authority of Tian'ezhou Dolphin NNR	√	√			
Project 21 Conduct publicity and education activities to local officials	5	External aids	Management authority of Tian'ezhou Dolphin NNR	√	√	√	√	√
Project 22 Conduct publicity and education activities to the community masses	7.5	External aids	Management authority of Tian'ezhou Dolphin NNR	√	√	√	√	√
Project 23 Educate the local teenagers about ecology and the Yangtze finless porpoise protection	5	External aids	Management authority of Tian'ezhou Dolphin NNR	√	√	√	√	√
Action 9 Establish the co-management institution and implement the co-management activities								
Project 24 Establish the co-management institution			Management authority of Tian'ezhou Dolphin NNR	√	√			
Project 25 Formulate support measures			Management authority of Tian'ezhou Dolphin NNR	√	√			
Action 10 Improve the traditional production and life style that may cause pollution threat to the reserve	920							
Project 26 Rural practical technical training	20	Special funds of MOA	Management authority of Tian'ezhou Dolphin NNR, Co-management committee	√	√	√	√	√
Project 27 Sewage treatment plant construction	900	Local finance	Shishou City Government, the surrounding township government, Management authority of Tian'ezhou Dolphin NNR			√	√	√
Action 11 Develop cooperation and strive for external support								
Project 28 Cooperate with other institutions in scientific research			Management authority of Tian'ezhou Dolphin NNR	√	√	√	√	√
Project 29 Strengthen the reporting work to the local governments, to provide better decision-making information for them			Management authority of Tian'ezhou Dolphin NNR	√	√	√	√	√

Action/Project	Budget (10k RMB)	Funding Source	Implementation Body	Timeline				
				2017	2018	2019	2020	2021
Project 30 Strive for international technical and financial assistance			Management authority of Tian'ezhou Dolphin NNR	√	√	√	√	√
Action 12 Monitoring of management plans	5							
Project 31 Evaluate the effectiveness of the management plan and develop a new management plan	5	External aids	Management authority of Tian'ezhou Dolphin NNR					√

ANNEX 10: EVALUATION CONSULTANT CODE OF CONDUCT AGREEMENT FORM

Evaluators:

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence, and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals, and must balance an evaluation of management functions with this general principle.
4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study imitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

Evaluation Consultant Agreement Form³⁰

Agreement to abide by the Code of Conduct for Evaluation in the UN System

Name of Consultant: Alan Ferguson

Name of Consultancy Organization (where relevant): Regional Consulting Limited

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signed at (*place*) *Vancouver* on July 10, 2018

Signature:



Evaluation Consultant Agreement Form¹

Agreement to abide by the Code of Conduct for Evaluation in the UN System

Name of Consultant: _____ *Sum Chenxi*

Name of Consultancy Organization (where relevant): _____



I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signed at place on date

Signature: _____ *Sum Chenxi*

ANNEX 12: Terminal Evaluation Clearance Form

(to be completed by the Commissioning Unit and UNDP-GEF RTA and included in the final document)

Terminal Evaluation Reviewed and Cleared By: Commissioning Unit	
Name: <u>Ma Chaode</u>	
Signature: 	Date: _____
UNDP-GEF Regional Technical Advisor	
Name: <u>Lisa Farroway</u>	
Signature: 	Date: _____