

OED PROJECT EVALUATION SERIES

**Terminal Evaluation of the project
'Securing Biodiversity Conservation and
Sustainable Use in China's Dongting
Lake Protected Areas'**

**FAO Project Symbol: GCP/CPR/043/GFF
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Abstract

This publication presents the findings of the terminal evaluation of the project '*Securing Biodiversity Conservation and Sustainable Use in China's Dongting Lake Protected Areas*' (GCP/CPR/043/GFF) implemented in China's Hunan Province. The main audience and intended users of this evaluation are FAO Country Office and FAO Headquarters; Global Environment Facility (GEF); Government of China; Hunan Provincial Government; executing partners and participating institutions; and China's other provinces with important wetlands.

Main findings are as follows: (i) Relevance – the project was well-aligned with GEF and FAO strategic priorities, and relevant to national, regional and global priorities while relevance to beneficiary needs had gaps; (ii) Effectiveness – most project outputs were delivered as planned across all five components and laid a strong foundation for biodiversity conservation, while long-term impact depends on scaling-up the model and managing sustainability risks; (iii) Efficiency – executing and implementing agencies maintained a satisfactory working relationship, however some inefficiencies were noted; (iv) Sustainability – overall prospects are satisfactory given the strong focus on institutions, coordination and capacity-building; however, important risks require further consideration; (v) Stakeholder engagement – all key stakeholders (civil society, public and private sector, and local communities) were involved in project implementation, and strong engagement contributed to ownership of conservation efforts; (vi) Financial management – co-financing was mobilized significantly beyond initial commitments and all partners disbursed most amounts initially committed; and (vii) Cross-cutting issues – there was limited focus on gender and equity dimensions, and social impacts of cleaning operations and remediation actions were overlooked.

The conclusions highlighted (i) overall relevance of project design, while substantial adjustments were required; (ii) contribution to biodiversity conservation and strengthening of institutions and networks, as well as political commitment, while a strong sustainability plan managing existing risks could reinforce sustainability prospects further; (iii) limited documentation of social impact, notwithstanding its importance vis-à-vis the overall project and activities; and (iv) executing and implementing agencies adequately discharged their roles under OPIM implementation, while certain delays contributed to inefficiencies.

The recommendations are the following: (i) the sustainability plan requires finalization, addressing potential risks to long-term impact (FAO and FDHP); (ii) social impact of biodiversity conservation efforts should be fully considered and systematically recorded (FDHP and FAO); (iii) future project designs should be updated with operational partners to address any contextual changes, and gender and knowledge management based on FAO and GEF guidelines should be emphasized (FAO); and (iv) provisions for safeguarding the roles and responsibilities of GEF should be developed (FAO).

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Acronyms and abbreviations

AMNRs:	Administrative Measures for Nature Reserves
BH:	Budget Holder
CTA:	Chief Technical Advisor
DLCC:	Dongting Lake Conservation Committee
DLW:	Dongting Lake Wetlands
DWE:	Dongting Lake Wetlands Ecosystem
DWEMP:	Dongting Lake Wetlands Ecosystem Management Plan
FAO:	Food and Agriculture Organisation of the United Nations
FDHP:	Forestry Department of Hunan Province
FGD:	Focus Group Discussion
FLO:	Funding Liaison Officer
GEF:	Global Environment Facility
IIMS:	Integrated Information Management System
IUCN:	International Union for Conservation of Nature
LTO:	Lead Technical Officer
M&E:	Monitoring and Evaluation
MTE:	Mid-Term Evaluation
NR:	Nature Reserve
NRMBs:	Nature Reserve Management Bureau
NRMP:	Nature Reserve Management Plan
OED:	FAO Office of Evaluation
OPIM:	Operational Partners' Implementation Modality
PIR:	Project Information Review
PMSGJM:	Provincial Multi-Sectoral Governments Joint Meeting
PPR:	Project Progress Review
PSC:	Project Steering Committee
ToC:	Theory of Change
ToR:	Terms of Reference
WPRHP:	Wetlands Protection Regulation of Hunan Province

Executive Summary

Introduction

1. This report presents the findings of the terminal evaluation (TE) of the project '*Securing Biodiversity Conservation and Sustainable Use in China's Dongting Lake Protected Areas*' (GCP/CPR/043/GFF) implemented in Hunan Province of the Peoples' Republic of China. This evaluation is carried out as a mandatory requirement of the Global Environment Facility (GEF). It is also demanded by the Food and Agriculture Organization of the United Nations (FAO) for its project monitoring and reporting purposes. This evaluation was also conducted for both accountability and learning purposes of the project's executing partners, the national government, FAO, GEF and other participating institutions.
2. The main audience and intended users of this evaluation are the FAO Representation in China and the project team at FAO headquarters; GEF; the Government of China; the Provincial Government of Hunan Province; the project executing partners and other participating institutions; China's other provinces with important wetlands; and others who could use the evaluation findings and conclusions for future planning.
3. This evaluation covers all aspects of the project and its implementation period from December 2014 to November 2021 (while the extension period to March 2022 is not covered by the evaluation). The objectives of this the TE are to: (1) assess the delivery of results of the project; (2) review the process followed for achieving the project results; (3) assess the project based on the GEF evaluation criteria covering relevance, effectiveness, efficiency and sustainability of project outcomes including the factors affecting the performance and delivery of project results and the cross-cutting dimensions; and (4) document the lessons learned, draw conclusions, and generate recommendations for the improvement of future projects.
4. This evaluation was undertaken by an Evaluation Team (ET) composed of a national and an international consultant. Following a desk review of project documents and preparation of a inception report containing the reconstructed theory of change and a detailed evaluation framework. Information and evidence were collected partly through online semi-structured key informant interviews (KIIs) and, partly through, in-person KIIs and focus group discussions (FGDs) that took place as part of the field mission undertaken by the national consultant. The questionnaires were developed for each category of key informants to generate data and evidence relating to the achievement of project outcomes including the evidence of the impact and sustainability. Altogether 82 key informants contributed to information generation, of which 55 were stakeholders from various categories and 27 were project beneficiaries consulted through six FGDs.

Main findings

5. The main findings, listed by evaluation question, are the following:

Evaluation question 1.1. To what extent was the project design relevant to adapting to local contexts and tailor approaches for specific vulnerable groups?

Finding 1. The project was fully relevant to the conservation priorities of China and Hunan Province.

Finding 2. The project was well aligned with the GEF and FAO's strategic priorities.

Evaluation question 1.2. Was the project design appropriate for delivering the expected outcomes?

Finding 3. With the time lag in project design and implementation, the initial design of the project did not take into account the policy landscape in a forward-looking manner at the beginning of implementation. However, the design of the project was adequate in content and the implementation adapted to the changes in the external context. The results framework could have been better organized for greater clarity on the impact pathways.

Finding 4. Capacity building and knowledge management needs were adequately addressed only after being pointed out in the Mid-Term Evaluation (MTE) report. Further, the evaluation team did not find any evidence of a prior capacity or training needs assessment.

Finding 5. The use of OPIM allowed for strong project ownership and buy in of key stakeholders. However, with the OPIM modality only having been set up recently at the start of the project, the project design gave limited consideration to specific features related to the engagement of Operational Partners and delegation of project implementation, essential for smooth implementation through the mechanism.

Evaluation question 2.1. To what extent did the project achieve its objectives (and were there any unintended results)?

Finding 6. Despite initial shortcomings the project succeeded in strengthening the institutional and policy framework to protect the Dongting Lake (DL) area. Even though the support provided was based on evidence generated through relevant studies and assessments, it did not sufficiently take into account the impact of the revised policies on people's lives and livelihoods.

Finding 7. The project strengthened the network of NRs by promoting an integrated multi-sectoral ecosystem-wide planning and management approach, and by enhancing the technical capacities of its staff and promoting information sharing across the NRs.

Finding 8. The project was able to identify and pilot key biodiversity-friendly production practices. However, only a limited number of households were targeted as a proportion of total households that were affected by the policy changes and regulations. Further, only 21 percent of the households initially targeted by the project were involved in the project activities, and no evidence was found of plans for future scaling-up of such practices.

Finding 9. Through the project's awareness raising activities a substantial number of stakeholders were reached out to. However, owing to the limitations on field data collection, the ET was unable to assess the results of the project's awareness raising efforts.

Evaluation question 2.2. What were the key factors contributing to the achievement or non-achievement of results?

Finding 10. A key factor that contributed to the achievement of results was the enabling policy environment in the country. Even though the project had been designed before the shift in the government's policy, it was able to make good use of the enabling policy environment by making modifications to the project's results framework.

Finding 11. Regular project monitoring helped to overcome issues of high staff turnover. While the project fostered learning and improved implementation of project activities, the use of M&E for knowledge development was found to be slow. Nonetheless, the project fulfilled its M&E commitments to maintain its focus on project outputs and outcomes.

Evaluation question 2.3. To what extent may the progress towards long-term impact be attributed to the project? Are there any barriers or other risks that may prevent future progress towards long-term impact?

Finding 12. The project, through its work on supporting institutions and policies related to the conservation of the biodiversity in DWE, laid a strong foundation for future work. It piloted co-management models and reinforced coordination conservation networks; however, the achievement of long-term impact would largely depend on how far these co-management models are adopted and scaled up.

Finding 13. The GEF contribution was key in mobilizing additional resources for biodiversity conservation and in drawing attention of a range of stakeholders, including provincial departments, universities and research centres, to the importance of conservation efforts.

Evaluation question 3.1. To what extent was the project implemented in an efficient and cost-effective manner?

Finding 14. Based on the set-up of the Project Management Office (PMO) and the implementation processes, the project was implemented in a cost-effective manner. However, the project faced severe delays in meeting deadlines, mostly for understandable reasons. High staff turnover, impact of the COVID-19 pandemic and administrative delays in fund disbursements throughout the project implementation were some of the key issues affecting project efficiency, as noted by the ER.

Finding 15. The project has strong complementarities with other GEF projects implemented in the country, as well as with FAO work implemented in the region, and there is evidence of cross-project learning.

Finding 16. The institutional set-up of the project including OPIM contributed to strengthening the executing agency's institutional and technical capacities and creating project ownership.

Finding 17. The executing and implementing agencies discharged their roles and responsibilities to the extent required.

Evaluation question 4.1. What is the likelihood that the project results will continue to be useful or will remain even after the end of the project?

Finding 18. Enhanced knowledge and awareness among local population, strengthened staff capacities of FDHP, Nature Reserve Management Bureaus (NRMBs), relevant local governments and sector departments, together with an enabling political environment with conservation-friendly production practices and income opportunities, are highly likely to support the sustainability of project results. However, a few risks to sustainability remain, linked to the need for a more cohesive management of protected areas, and to awareness levels and community engagement.

Finding 19. The sustainability of project results will also depend on the maintenance of institutionalized project results and continued strengthening of institutional and technical capacities.

Evaluation question 5.1. Were other actors, such as other public sector institutions, civil society, indigenous populations or the private sector involved in project design or implementation, and what was the effect on the project results?

Finding 20. All key stakeholders including civil society, the public and private sector, and local communities, were involved in project implementation. The high levels of engagement have also contributed to greater ownership of conservation efforts.

Evaluation question. To what extent was the expected co-financing mobilized, and was the GEF grant well-managed?

Finding 21. Overall, the project mobilized co-financing significantly beyond the initial commitment, with all partners disbursing most of the amounts initially committed. However, the management of the GEF grant could have been improved.

Evaluation question 6.1. To what extent were gender considerations taken into account in designing and implementing the project?

Finding 22. Even though the project's reporting on sex-disaggregated data improved and more training activities on gender sensitization were organized for staff upon recruitment of the gender specialist, there was limited evidence of overall inclusion of gender equity and mainstreaming, as well as of other vulnerable groups in project activities, this was mainly owing to the absence of detailed analyses relating to gender and vulnerable groups, as well as subsequent systematic and targeted engagement.

Evaluation question 6.3. To what extent were environmental and social concerns taken into consideration in the design and implementation of the project?

Finding 23. The project design and implementation overlooked the documentation and reporting of the social impact of cleaning operations and remediation actions undertaken in DLW, as well as the measures taken to mitigate and manage those impacts.

Conclusions and recommendations

6. The conclusions are the following:

Conclusion 1: The project is fully relevant to national conservation priorities and well aligned with FAO and GEF strategic priorities. It proved to be even more relevant in the course of its implementation as the national development policy shifted towards the achievement of an 'ecological civilization'.

Conclusion 2: Even though the project design was relevant and adequate in content, it required substantial adjustments based on prevailing ground realities. Further, the project plan lacked specific aspects of capacity development, knowledge management and gender.

Conclusion 3: The project played a catalytic role in contributing considerably to biodiversity conservation in DWE. It strengthened relevant institutional and policy frameworks, and the network of NRs. The project identified and piloted key biodiversity-conservation-friendly production practices in a limited way. Further, the work completed in strengthening institutions and networks, as well as the political commitment towards conservation efforts, contribute to sustainability, and a strong sustainability plan managing existing risks can reinforce it.

Conclusion 4: The project was unable to fully account for the impact of revised policy and regulations as well as the cleaning actions on communities within the area. There is evidence of ongoing investments outside the scope of the project, however, there is limited documentation of the social impact. Notwithstanding that the absence of a social impact assessment was consistent with the project design, the ET considered it to be an important component of the overall project and the activities implemented since the MTE.

Conclusion 5: Albeit a pre-OPIM project, the decision to implement it under OPIM was an experiential learning opportunity for the GEF agency and the Operational Partner. While both the executing and implementing agencies adequately discharged their respective roles, the project faced a few delays that contributed to inefficiencies.

7. The recommendations are the following:

Recommendation 1. FAO and FDHP: The sustainability plan under development should be finalized, addressing potential risks and accomplishing outstanding tasks to consolidate the achieved results for long-term impact.

Recommendation 2. FDHP and FAO: The social impact of biodiversity conservation efforts should be fully considered and systematically recorded.

Recommendation 3. FAO: Design of future projects should be updated with the operational partner to reflect any recent changes in the context prior to implementation. Further, adequate emphasis should be put on aspects of gender and knowledge management based on FAO and GEF guidelines, as well as any required needs assessments. Further, the project's results framework should be simplified to the extent possible and the project outcomes succinctly defined.

Recommendation 4. FAO: Provisions for safeguarding the roles and responsibilities of the GEF agency should be developed, and adequate mechanisms should exist to reinforce them.

GEF Rating Table

GEF criteria/sub-criteria	Rating ¹	Summary comments ²
A. STRATEGIC RELEVANCE		
A1. Overall strategic relevance	S	
A1.1. Alignment with GEF and FAO strategic priorities	HS	The project was very well aligned with the GEF 5 Biodiversity Results Framework and the FAO Strategic Framework.
A1.2. Relevance to national, regional and global priorities and beneficiary needs	MS	It was highly relevant and closely aligned with national policies and global priorities. However, the relevance for beneficiary needs was found to have some limitations. Also discussed further in Section 3.6.3.
A1.3. Complementarity with existing interventions	S	Fairly complemented on-going interventions by the national government on conserving biodiversity, as well as other GEF projects in the country.
B. EFFECTIVENESS		
B1. Overall assessment of project results	S	
B1.1 Delivery of project outputs	S	The project successfully delivered most of its outputs as planned.
B1.2 Progress towards outcomes ³ and project objectives		
- Component 1	S	The set-up of the Lake Chief System and the IIMS contributed effectively to the strengthening of institutional capacities.
- Component 2	MS	There has been substantial work completed under this component, however the targeted households for the co-management models were not met.
- Component 3	S	Cross-sector collaboration was found to be an important strength of the project. However, participation of some sectors could have been improved.
- Component 4	S	Even though the ET was unable to fully assess component 4 due to the travel restrictions. The partial assessment based on project progress reports and discussions with stakeholders indicates satisfactory progress.
- Component 5	S	The outputs on M&E were sufficiently met, however the knowledge management and the impact of the policies and regulations on relevant populations could have been improved.
- Overall rating of progress towards achieving objectives/ outcomes	S	Overall, results were found to be satisfactory.

¹ See rating scheme at the end of the document.

² Include reference to the relevant sections in the report.

³ Assessment and ratings by individual outcomes may be undertaken if there is added value.

B1.3 Likelihood of impact	MS	The project has laid a strong foundation for biodiversity conservation, however, long term impact would depend on scaling-up the model and managing risks to sustainability.
C. EFFICIENCY		
C1. Efficiency ⁴	MS	Even though the executing and implementing agencies learned their lessons and managed to maintain a relatively satisfactory working relationship in course of project implementation, there was overall room for improvement with a few inefficiencies being noted.
D. SUSTAINABILITY OF PROJECT OUTCOMES		
D1. Overall likelihood of risks to sustainability	L	The overall likelihood of risks to sustainability is low given the strong focus of the project on institutions, coordination, and capacity building, however, there are still some important risks that need to be considered to ensure sustainability.
D1.1. Financial risks	L	Presently, a sustainable financing mechanism has been put in place, however, with the establishment of a DL National Park what changes will occur in the institutional framework and arrangements for the governance of DWE area and how that will affect the existing financing mechanism will be the determinant of financial sustainability.
D1.2. Socio-political risks	ML	The project's achieved results have been founded on the policy and institutional strengthening further supported through the political commitment to making a move towards achieving ecological civilization. However, the project has only partially engaged with the people living in and around the DWE area through the piloting of NR co-management models. This poses some socio-political risk to sustainability in case the socio-economic wellbeing of the area is threatened in pursuit of sustaining the project's achieved results.
D1.3. Institutional and governance risks	L	Presently, there is no institutional and governance related risk and these aspects are likely to get further strengthened with declaration of a national park.
D1.4. Environmental risks	L	There is no environmental risk.
D2. Catalysis and replication	S	As observed with other similar projects in the region.
E. FACTORS AFFECTING PERFORMANCE		
E1. Project design and readiness ⁵	MU	The project design should have considered the various measures likely to be undertaken for reclaiming the DWE area including cleaning operations and their impact on the socio-economic wellbeing of the population living in the area. However, the evaluation team also notes that the project was not initially designed for the OPIM modality.
E2. Quality of project implementation	S	
E2.1 Quality of project implementation by FAO (BH, LTO, PTF, etc.)	S	Technical assistance and support was provided as planned and as per the request of the Operational Partner well in time

⁴ Includes cost efficiency and timeliness.

⁵ This refers to factors affecting the project's ability to start as expected, such as the presence of sufficient capacity among executing partners at project launch.

E2.1 Project oversight (PSC, project working group, etc.)	S	Monitoring and supervision missions were carried out as planned and required and necessary supports were provided on timely basis
E3. Quality of project execution For DEX projects: Project Management Unit/BH; For OPIM projects: Executing Agency	MS	Even though the executing agency discharged its roles adequately, the project faced a few delays and inefficiencies that could have been prevented. These are also summarised in conclusion 5.
E4. Financial management and co-financing	S	Co-financing exceeds the expectations, however, the management of GEF grant could have been improved.
E5. Project partnerships and stakeholder engagement	S	A range of key stakeholders were involved at multiple levels.
E6. Communication, knowledge management and knowledge products	MS	There was enough room for further improvement in knowledge management.
E7. Overall quality of M&E	S	
E7.1 M&E design	S	Meets expectation.
E7.2 M&E plan implementation (including financial and human resources)	S	There was room for further improvement in reporting and overall monitoring along the project implementation.
E8. Overall assessment of factors affecting performance	MS	
F. CROSS-CUTTING CONCERNS		
F1. Gender and other equity dimensions	MS	Despite the project efforts to gender sensitized approach to implementing project activities, overall a limited focus on gender and equity dimensions was found.
F2. Human rights issues/Indigenous Peoples	UA	Given the limitations with field data collection.
F2. Environmental and social safeguards	MU	The project design and implementation overlooked the documentation and reporting of the social impact of cleaning operations and remediation actions undertaken. The project was exempt from an Environmental Assessment and the rating here is focused on social safeguards.
Overall project rating		
	S	

1. Introduction

1.1 Purpose of the evaluation

8. This report presents the findings of the terminal evaluation (TE) of the project '*Securing Biodiversity Conservation and Sustainable Use in China's Dongting Lake Protected Areas*' (GCP//CPR//043//GFF) implemented in Hunan Province of the Peoples' Republic of China. This evaluation is carried out as a mandatory requirement of the Global Environment Facility (GEF). It is also demanded by the Food and Agriculture Organization (FAO) for its project monitoring and reporting purposes. This evaluation has been conducted for both accountability and learning purposes of the project executing partners, national government, FAO, GEF and other participating institutions.
9. An important purpose of this TE is to document the lessons which could potentially guide future actions of all participating entities and serve as an input to improving the formulation and implementation of future projects that may use similar approaches.

1.2 Intended users

10. As specified in the evaluation Terms of Reference (ToR), the main audience and intended users of this evaluation are: (1) the FAO Country Office in China and the project team at FAO Headquarters who will use the evaluation findings and lessons to finalize the project, plan for sustainability of results achieved, and make improvements in design, preparation and implementation of similar projects in future; (2) the GEF, who could use the findings to inform strategic investment decisions in case of similar projects in future; (3) the Government of China, the Provincial Government of Hunan Province, the project executing partners and other participating institutions who will use the lessons learned to further plan and execute the activities to sustain the project's achieved results and replicate the project approaches for wetlands restoration and aquatic biodiversity conservation elsewhere in the province and in China; (4) China's other provinces for example, Jiangsu, Anhui and Hubei which have many important wetlands, and others who could use the evaluation findings and conclusions for future planning.

1.3 Scope and objectives of the evaluation

11. This evaluation covers all aspects of the project and its implementation period (from December 2014 to November 2021)⁶. Special attention was given to the assessment and analysis of the efforts made to achieve the project's intended results after its Mid-Term Evaluation (MTE) in July 2019.
12. The objectives of this the TE are to: (1) assess the delivery of results of the project as specified in the project document and their value to the identified stakeholders at different levels;

⁶ In November 2021 the project was extended for another four months up to March 2022. The extension period is not covered by the evaluation.

(2) review the process followed for achieving the project results taking into consideration the pre-conditions, linkages and/or partnerships and other arrangements in place (including the FAO Operational Partners Implementation Modality (OPIM)) that have contributed to – or hindered the implementation of project activities; (3) assess the project based on the GEF evaluation criteria covering relevance, effectiveness, efficiency and sustainability of project outcomes including the factors affecting the performance and delivery of project results and the cross-cutting dimensions; and (4) document the lessons learned, draw conclusions, and generate recommendations for the improvement of future projects;

13. In the context of its objectives, this evaluation is guided by the key evaluation questions listed in Table 1.

Table 1: Key Evaluation Questions

<p>1) Relevance (rating required)</p>	<p>1.1 Were the project outcomes relevant to the sub-national, national and global efforts aimed at biodiversity conservation?</p> <p>1.2 Was the project design appropriate for delivering the expected outcomes?</p> <p style="padding-left: 40px;">1.2.1 Have there been any corrective actions taken to improve the project design, especially for the NR capacity building and knowledge management activities?</p> <p style="padding-left: 40px;">1.2.2 Have specific features related to the OPIM project component been taken into consideration during project preparation and design (e.g., operational procedures and capacity of the Operational Partner(s), etc.)</p>
<p>2) Effectiveness (rating required)</p>	<p>2.1 To what extent has the project achieved its objectives (listed below), and were there any unintended results?</p> <p>(i) strengthen the existing institutional and policy framework;</p> <p>(ii) promote an integrated, ecosystem-wide planning and management approach;</p> <p>(iii) strengthen the existing network of wetland nature reserves;</p> <p>(iv) identify and demonstrate sustainable co-management models of DWE biodiversity and biodiversity friendly production practices to reduce human activity pressure on the Wetlands; and</p> <p>(v) increase institutional capacity and public awareness and support for wetlands conservation.</p>

	<p>2.2 What have been the key factors that have contributed to the achievement or non-achievement of results?</p> <p>2.2.1 To what extent did FAO and FDHP effectively discharge their role and responsibilities related to the design and implementation of the project?</p> <p>2.2.2 How has coordination and collaboration between key stakeholders (including FAO and FDHP) contributed to project results?</p> <p>2.2.3 How has the information from the M&E system been used to make timely decisions and foster learning during project implementation?</p> <p>2.3 To what extent may the progress towards long-term impact be attributed to the project? Are there any barriers or other risks that may prevent future progress towards long-term impact?</p>
<p>3) Efficiency, project implementation and execution (rating required)</p>	<p>3.1 To what extent has the project been implemented in an efficient and cost-effective manner?</p> <p>3.1.1 Were there any complementarities or duplication with other activities in the region?</p> <p>3.1.2 How has FAO's existing technical expertise been utilized in the design and implementation of the project?</p> <p>3.2 In what ways did the institutional set-up of the project, including the OPIM modality, contribute to efficiency?</p>
<p>4) Sustainability (rating required)</p>	<p>4.1 What is the likelihood that the project results will continue to be useful or will remain even after the end of the project?</p> <p>4.1.1 To what extent did the OPIM modality contribute to ensure ownership and sustainability of the project results?</p> <p>Did the delegation of project result implementation to the Operational Partner(s) contribute to strengthened capacities of regional, subregional and/or national entities?</p> <p>What was the value added of the involvement of the Operational Partner?</p> <p>4.1.2 To what extent are the knowledge management and learning activities likely to support the sustainability of project results?</p> <p>4.2 What are the key risks which may affect the sustainability of the project results?</p>

<p>5) Stakeholder Engagement</p>	<p>5.1 Were other actors, such as other public sector institutions, civil society, indigenous population or private sector involved in project design or implementation, and what was the effect on the project results?</p>
<p>6) Cross-cutting Dimensions</p>	<p>Gender</p> <p>6.1 To what extent were gender considerations taken into account in designing and implementing the project?</p> <p>6.1.1. Were there any corrective actions undertaken based on the recommendations of the MTE on gender mainstreaming?</p> <p>6.1.2 To what extent have men and women been affected differently by changes to natural resource use and decision making as a result of GEF outcomes?</p> <p>GEF additionality</p> <p>6.2 To what extent can the results of the project be attributed to the GEF contribution?</p> <p>Environmental and social safeguards</p> <p>6.3 To what extent were environmental and social concerns taken into consideration in the design and implementation of the project?</p> <p>6.3.1 Were there any corrective actions undertaken based on the recommendations of the MTE on integrating social and environmental safeguards?</p>

1.4 Methodology

14. This evaluation adhered to the UNEG Norms and Standards⁷ and followed the OED Manual⁸, and the GEF TE requirements. It followed an interactive and transparent approach in the process of consultation with all internal and external stakeholders. Special attention was given to triangulation and validation of the information and evidence collected.
15. This evaluation was undertaken by a team composed of a national and an international consultant. As a preparatory work, all project related documents with regards to its design, approval and implementation were reviewed which included the project document, project progress reports (PPRs), project implementation reports (and the) and the MTE report. A

⁷ Available at: <http://www.unevaluation.org/document/detail/1914>.

⁸ Available at: <http://www.fao.org/3/ca4821en/ca4821en.pdf>

detailed inception report was prepared that included a draft of the reconstructed theory of change (ToC) and a detailed evaluation framework with evaluation questions and sub-questions. It also included an elaborated methodology in line with the evaluation ToR comprising an evaluation strategy to enable information generation under the existing pandemic situation.

16. Information and evidence were collected partly through online semi-structured key informant interviews (KIIs) and, partly through, in-person KIIs and focus group discussions (FGDs). The in-person KIIs and FGDs took place as part of the field mission undertaken by the national consultant which was conducted with due consideration to the prevailing COVID-19 protocols. The categories of key informants included key staff and consultants from the Project Management Office (PMO), representative members of the project steering committee (PSC) and from the Forestry Department of Hunan Province (FDHP), the four Nature Reserve Management Bureaus (NRMBs) and their staff, the local governments, beneficiary institutions, civil society and voluntary groups, academicians, and researchers from universities. It also included the identified professionals from the FAO China office – the budget holder and the project task manager, the lead technical officer (LTO) and key member of the project task force (PTF) and the funding liaison officer in GEF Coordination Unit at FAO Headquarters.
17. The questionnaires were developed for each category of key informants to generate data and evidence relating to the achievement of project outcomes including the evidence of the impact and sustainability. The impact and sustainability of project's achieved results as per the ToC constructed for the purpose of this final evaluation required that (a) DLCC is legally institutionalized and mandated for ensuring inter-sectoral coordination and action in DWE, (b) the institutional and technical capacity strengthening is institutionalized and remains sustainable to meet the future capacity needs of resource managers and users, (c) farmers and fishers communities have sustained benefit from conservation friendly production practices promoted by the project, and (d) the ecological status of DWE is increasingly improved ensuring sustained supply of goods and services. The elements of these four impact pathways were included in the questionnaire for each category of key informants and were followed in the analyses of the evidence.
18. Altogether 82 key informants contributed to information generation, of which 55 were stakeholders from various categories and 27 were project beneficiaries consulted through six FGDs (more details available in Appendix 4). Through the field mission, all four Nature Reserves of the Dongting Lake Wetlands (DLW) were covered (East, West, South and Hengling Lake). For each of the Nature Reserves, FGD's were organized with project's direct beneficiaries based on their participation in the co-management models.

1.5 Limitations

19. This evaluation was conducted at a time when countries all over the globe were struggling with the COVID-19 outbreak, and many countries including China had imposed restrictions on travel. Many regulatory measures were imposed even on domestic travel between cities, districts and provinces within China. The field mission to the project area by the team leader

was not possible. So, the evaluation had to be largely based on a remote approach to collecting and validating data and evidence, as well as the valuable inputs received from a field visit and interviews conducted by the evaluation team member based in China.

20. In November 2021 the project was extended for another four months up to March 2022. The extension period is not covered by the evaluation; however, this should not be an important limitation since most of the key activities were implemented prior to November.

1.6 Structure of the report

21. The report is structured around six sections. Following this introduction section, section 2 provides the context and background of the project including the reconstructed theory of change. Section 3 reviews and analyses the findings on each as per the evaluative criteria (relevance, effectiveness, efficiency, and sustainability) in the ToR including stakeholder engagement and cross-cutting themes of gender, GEF additionality, social and environmental safeguards. It also provides an assessment of the project's monitoring and evaluation. Section 4 presents the conclusion and recommendations. Lastly section 5 documents the lessons learned.
22. The report is accompanied by the evaluation ToR as Annex 1.

2. Background and context of the project⁹

23. The Dongting Wetlands Ecosystem (DWE) is China's second largest freshwater lake with a core lake area of 2,625 km² that expands to around 20,000 km² in the flooding season. It is an important staging, wintering and feeding ground for around 120 species of birds that are included in the China-Japan and China-Australia bilateral agreements on migratory bird conservation. The DWE is also home to the remaining 15 percent population of the rare and endangered Yangtze Finless Porpoise (*Neophocaena phocaenoides*) and a wide range of native and globally important fish species and amphibians including 48 nationally protected species and 34 species of globally endangered waterfowls in the IUCN Red List. The DWE was classified by the World Wildlife Fund as one of the 200 global key eco-zones.
24. Nearly 20 percent of Hunan's total population depend on DWE for their livelihoods and socio-economic activities. An assessment carried out in 2007 valued the per year USD 4 billion equivalent of ecosystem services provided by DWE. One-third of the total farm production of Hunan province comes from the area of the Dongting Lake Wetlands (DLW). The fishing communities of eight distant counties depend on DLW. Additionally, the sectors, for example, tourism, commercial transport, and sand mining also thrive on its ecosystem services.
25. DWE comprises of four Nature Reserves (NRs) covering 4,320 km² of its key areas. East, West and South Dongting Lake NRs are already declared as Ramsar Sites¹⁰ located in Yueyang, Changde and Yiyang Municipalities respectively. The fourth, Hengling Lake NR is located in Xiangyin county. Twenty-six different public sector institutions administer the DWE area, the key management authorities however, are the Forestry Department of Hunan Province (FDHP), the four Nature Reserve Management Bureaus (NRMBs), the Fisheries Administration Bureau, the Reed Management Authority, the Land Resources Department and the Environment Protection Department.
26. The key threats facing DWE are (1) pollution from point and non-point sources, (2) over-fishing and unsustainable fishing practices, (3) river traffic and sand mining affecting wildlife and degrading habitats, (4) on-going mono-culture practice of poplar and reed farming and other land conversion activities fragmenting the habitat and (5) distortion and changes in hydrological cycle caused by hydro-power dams.
27. This project was designed to address key barriers to biodiversity conservation embedded in the (1) lack of functional coordination between sectors, non-existent medium to long term planning and no implementation of a management strategy; 2) no holistic monitoring and sharing of data on the DWE biodiversity, ecosystem health and services and links to socio-economic conditions; (3) incomplete legal status of NRs at local level and limited status at national level constraining allocation of resources and improvement in management status and effectiveness; (4) lack of capacities in NRs to strengthen

⁹ Based on information from the project documents and the MTE.

¹⁰ Ramsar site is a wetland site designated to be of international importance. More information [here](#).

management given the inadequate staffing, lack of required equipment, resources, facilities and authority; (5) limited experiences with co-management models and no systematic provisions for scaling-up; (6) no coordinated strategies for the conservation of flagship species at network level; (7) weak mainstreaming of biodiversity and ecosystem services conservation in sectors; and (8) inadequate conservation awareness raising efforts at local and provincial level.

Table 2: Basic project information

<ul style="list-style-type: none"> • GEF Project ID Number: 4356 • Recipient country: China • Implementing Agency: FAO • Executing Agency: Forestry Department of Hunan Province • GEF Focal Area: Biodiversity • GEF Strategic Objective: BD – 1.1, BD – 2.2 • Approval Date: 06 June, 2014 • Date of project start: 18 December, 2014 • Initial end date: 31 December, 2019 • Expected end date: 31 March 2022 • Date of Mid-Term Evaluation: July, 2019

Table 3: Overview of GEF Allocation and Co-financers

Funding Sources	Amount in USD
FAO	200,000
Forestry Department of Hunan Province (FDHP)	2,900,000
National Wetland Conservation Program (2011-2015) (through FDHP)	1,500,000
Wetland Conservation Subsidy Program (through FDHP)	1,000,000
National Nature Reserve Development Program (through FDHP)	2,000,000
Total Co-financing	7,600,000
Total GEF allocation	2,950,000
Total Project Budget	10,550,000

Source: Project Document

28. The overall aim of the project was ‘to secure conservation of globally important biodiversity in the Dongting Lake through the strengthening of existing management efforts and the promotion of the wetland’s long-term sustainable development’. The development objective was ‘to recover fish stocks and promote sustainable fish farming and rice production, while supporting livelihoods and income generation for local fisheries and farming communities’. Specifically, the project strived to (1) strengthen existing institutional and policy framework; (2) promote an integrated, ecosystem-wide planning and management approach; (3) strengthen the existing network of wetland nature reserves; (4) demonstrate sustainable co-management models for DWE and biodiversity friendly production practices to reduce human activity pressure on wetlands; and (5) increase institutional capacity and public awareness and support for wetland conservation. Project's activities were structured around 21 outputs grouped into nine outcomes under the following five technical components:

- 1) *Component 1: Strengthening of institutional capacities for integrated monitoring and management of biodiversity in DWE.*
 - 2) *Component 2: Strengthening of management effectiveness of DWE NRs network.*
 - 3) *Component 3: Mainstreaming of biodiversity conservation in key sectors in DWE.*
 - 4) *Component 4: Environmental education and awareness.*
 - 5) *Component 5: Project M&E and information dissemination.*
29. The project was implemented at the provincial level. FAO as the GEF implementing agency was responsible for supervision, and provision of technical guidance during the implementation of the project. The FDHP a government agency part of the Hunan Provincial Government was the lead government counterpart and the executing agency with overall responsibility for the project including coordination and collaboration between the four NR administrative bureaus, relevant provincial and local government bureaus, local communities, and other relevant non-government stakeholders, for example, research institutes, academia and private sector companies associated with DWE. FDHP led the implementation of components 1, 3 and 5, and it was assisted by its four NRMBs to implement components 2 and 4. Additionally, the relevant local and provincial government departments, academia, research institutes, NGOs and private sector companies linked to the DWE were other key stakeholders of the project.
30. A Mid-Term Evaluation conducted in 2019¹¹ noted that (1) the project design lacked sufficient attention to NR's capacity building and knowledge management; (2) excellent collaboration exists among the PMO and the executing and implementing agency; (3) the project met its biodiversity conservation outcomes mainly through a top-down policy process; (4) the four biodiversity friendly practices are not being documented and communicated as it should have been done; (5) the project has sufficiently been undertaking work planning and reporting according to the expectations of the project agreement.

2.1 Theory of Change

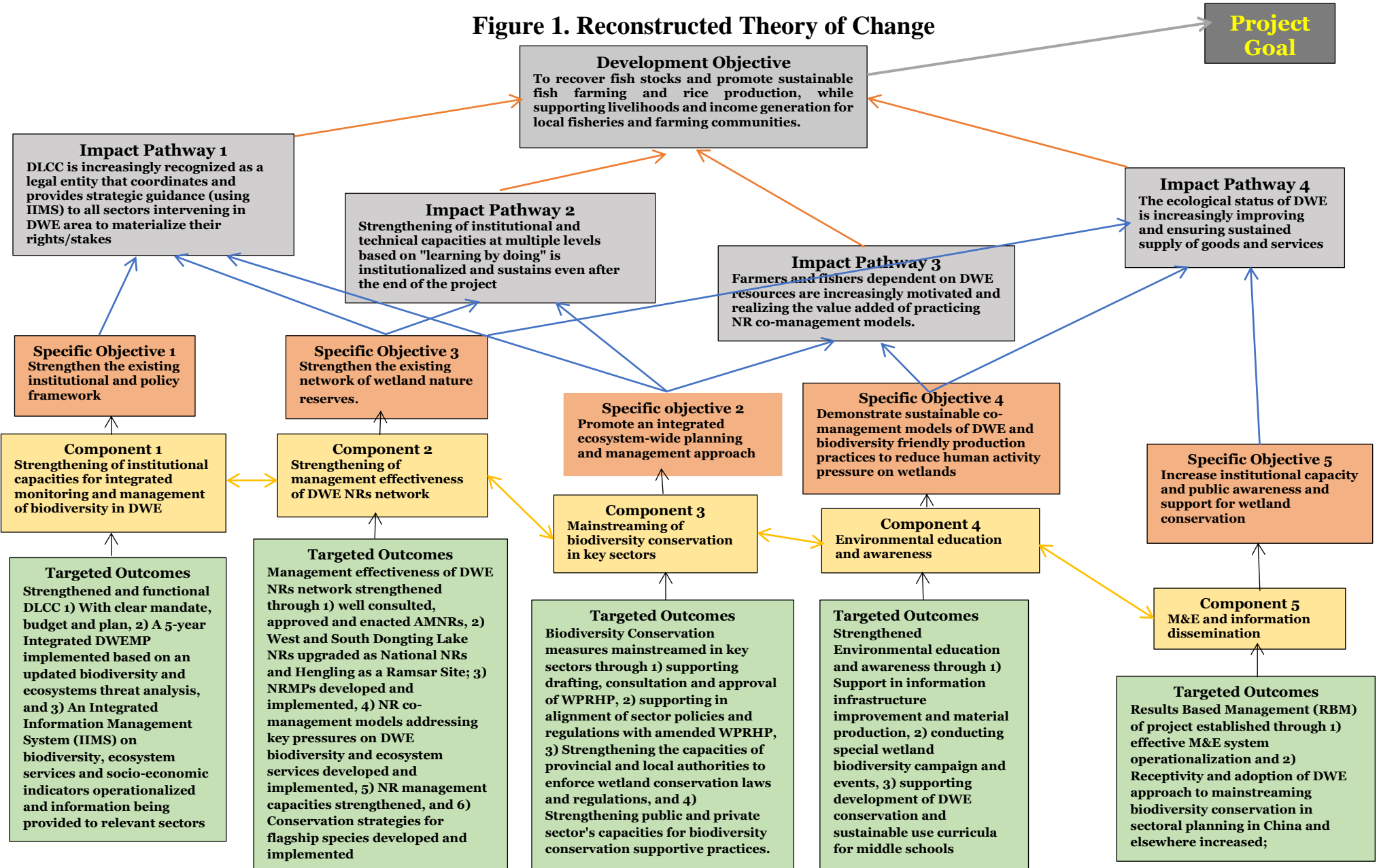
31. A Theory of Change (ToC) was constructed for the purpose of this evaluation based on project's intended impacts implicit in its logical framework. The nine project outcomes and their 21 outputs were rephrased and put together under their respective components as 'targeted outcomes' for the ease of understanding in the ToC. The ToC helped in clarifying the scope of the project and was used to analyse the evidence and in framing the evaluation findings.
32. As shown in the flow chart below the four impact pathways were identified implying that the activities undertaken under each targeted outcome to achieve the results under a particular component contributes to achieving a specific objective and also complements in achieving other objectives. The synergetic impact of the achievements of all five specific objectives finally would transform into the achievement of the development objective which further contributes in achieving the project's goal.

¹¹ See MTE Report, July, 2019 for more details.

33. The four impact pathways have been phrased keeping in mind the project development objective and overall goal. These impact pathways are also in line with the government's priorities mentioned in the China Biodiversity Partnership Framework (CBPF, 2007-2017), and National Wetland Project plan for Wetlands Conservation (2002-2030) and also the GEF and FAO strategic programme objectives. They are:
- 1) Impact Pathway 1: *The DLCC¹² is increasingly recognized as a legal entity that coordinates and provides strategic guidance (using IIMS) to all relevant sectors intervening in the DWE area to materialize their rights/stakes.*
 - 2) Impact Pathway 2: *Strengthening of institutional and technical capacities at multiple levels based on 'learning by doing' is institutionalized and sustained even after the end of the project.*
 - 3) Impact Pathway 3: *Farmers and fishers dependent on DWE resources are increasingly motivated and realize the value added of practicing the NR co-management models.*
 - 4) Impact Pathway 4: *The ecological status of DWE is increasingly improving, ensuring sustained supply of ecosystem goods and services.*

¹² The DLCC was replaced by a Provincial Multi-Sectoral Government Joint Meeting (PMSGJM) in PY1 which again got replaced (after the government's policy decision to move towards achieving "ecological civilization") by the "Lake Chief System" at multiple level of governance for wetland protection.

Figure 1. Reconstructed Theory of Change



3. Findings

3.1 Relevance

Finding 1. The project was fully relevant to the conservation priorities of China and the Hunan Province.

34. The DLW is identified as a priority area in the Hilly Plain Priority Region out of 35 Priority regions for biodiversity conservation mentioned in the National Biodiversity Strategy and Action Plan (NBSAP, 2011-2030), which aims at conserving the rare and endangered species of river and marine coastal wetlands, for example, wintering red-crowned cranes, Siberian white cranes and many more. This project was designed to provide support on five out of 30 priority actions identified in the NBSAP and is evidenced to have done so. For example, Action 2 on 'improving the legal system of biodiversity conservation and sustainable land use' links to component 3 of the project and Action 4 on 'incorporating biodiversity conservation into relevant sectoral and regional planning and programmes' links to components 1, 2 and 3 of the project.
35. Further, China's 12th National Five-Year Plan (2011-2015) underscores 'reinforcement of biodiversity conservation, strengthening monitoring in NRs and improving their management and protection'. Accordingly, a National Wetland Conservation Project (2002-2030) is being implemented aiming at effectively conserving 783 wetland reserves, of which 80 are of international importance. The project further gained its relevance after 2015 with China's increased strategic focus on achieving an ecological civilization – a move towards achieving development objectives by 'promoting harmony between man and nature' as evidenced in regulations and policies. For example, the 10-year ban on fishing in Yangtze River waters and its linkage to DLW.
36. As designed, this project also has meaningfully contributed to achieving three out of five priority themes identified under China Biodiversity Partnership and Framework for Action (CBPF, 2007-2017). They are (i) improving biodiversity governance (Theme 1); (ii) mainstreaming biodiversity into socio-economic sectors and plans and investment decision-making (Theme 2); and (iii) investing effectively in reducing biodiversity loss in protected areas (Theme 3).

Finding 2. The project was well aligned with the GEF and FAO's strategic priorities.

37. The project fully embraces the objective 1 outcome 1.1 of the GEF 5 Biodiversity Results Framework which aims at 'improving the management effectiveness of existing and new Protected Areas'. Most of the project outcomes contribute to achieving this GEF objective. The project also contributes to achieving the GEF 5 objective 2 outcome 2.1 'Measures to conserve and sustainably use biodiversity incorporated in policy and regulatory frameworks' through (i) the strengthening of inter-sectoral coordination mechanisms and (ii) mainstreaming of biodiversity conservation in interconnected sectors through capacity strengthening, knowledge and awareness raising and changes to policies and regulations.

38. The project also fits well with FAO strategic objective 2 which aims to 'increase and improve provision of goods and services from agriculture, forestry and fisheries in a sustainable manner'. In particular, it directly contributed to output 2.1.2 on strengthening of capacities of institutions to promote the adoption of more integrated and cross-sectoral practices that sustainably increase productivity and production, address climate change and environmental degradation, and output 2.2.2 on improving capacities of government and stakeholders' to facilitate cross-sectorial policy dialogue to develop more integrated strategies and programmes for sustainable agriculture, forestry and fisheries, address climate change and environmental degradation. The project also contributes to FAO China program framework Outcome 1.1 which highlights 'diversification of agricultural production system within the framework of inter-sectoral approach, viable governance and evidence-based decision making'.

Finding 3. With the time lag in project design and implementation, the initial design of the project did not take into account the policy landscape in a forward-looking manner at the beginning of implementation. However, the design of the project was adequate in content and the implementation adapted to the changes in the external context. The results framework could have been better organized for greater clarity on the impact pathways.

39. All key elements crucial for securing biodiversity conservation and sustainable use including a focus on strengthening policies and regulations, institutional capacity building, sustainability of financing, awareness raising, and the use of technology and innovation in conservation-friendly resource use have been adequately included in the project design. The project also has a key focus on development through a green economy.
40. The project was found to be adaptive in nature and adjusted to sudden changes. In course of project implementation, the executing agency found it necessary to further strengthen project's inter-sectoral coordination mechanism at multiple levels and accordingly made changes to the project's output 1.1.1 on the coordination mechanism. Similarly, the adjustment of boundaries of NRs, the proclamation of Administrative Measures for Nature Reserves (AMNRs) and a networked approach to monitoring and management was found inadequate to strengthen the management and monitoring of the four NRs for law enforcement and promotion of sustainable use of natural resources. The sustainable financing for management of the four NRs also needed to be further strengthened. So, output 2.1.2 originally aimed at upgrading the two provincial NRs to national NRs and declaration of Hengling NR as a Ramsar site was refined to declare a DL National Park integrating all four NRs. Accordingly, the project adapted to this decision and the output 2.1.2 was adjusted. Further, some of the activities initially designed were modified during implementation to take into account existing regulations and policies. For example, organic fish farming was changed to eco-tourism and Vitex planting with the 2020 fishing ban and with the closure of the paper mills, the project piloted the cultivation of edible fungi using the remaining reeds. Similarly, specific components such as trainings of provincial and local government officers were adjusted to the COVID-19 situation.
41. With regards the project's results framework, many outcomes and their respective performance indicators were found to not be clearly organized. The evaluation team noted

that (i) the outcome 2.1 was a mix of an outcome and an indicator, (ii) outcome 2.2a could have been justified better as one other output under outcome 2.1a., (iii) outcomes 3.1a and 3.1b are clearly the performance indicators and the outputs 3.1.1, 3.1.2, 3.1.3 and 3.1.4 under them could have been justified under two relatively clearly defined outcomes such as (a) technical support provided for amendment and execution of WPRHP to facilitate an integrated approach to biodiversity conservation and ecosystem restoration; (2) development of practical skills for enforcement of conservation and sustainable use regulations and capacities for adopting conservation measures in relevant economic sectors.

Finding 4. Capacity building and knowledge management needs were adequately addressed only after being pointed out in the MTE report. Further, the evaluation team did not find any evidence of a prior capacity or training needs assessment.

42. In its initial years, the project could not give due attention to planning and implementation of capacity building initiatives as the focus was more on the field activities. It also did not have human resources for taking care of the knowledge management. Once pointed out in the MTE in 2019, the project management office (PMO) hired a specialist on knowledge management and initiated the implementation of relevant activities. Since then, the project has improved its capturing of information generated throughout the project. The PMO intensified the effort in human capacity building in the later period of the project implementation, which was effective but still hindered by the Covid-19 pandemic.
43. Capacity or training needs assessment of all potential beneficiaries of capacity building is considered a very first step in planning, designing, and implementing any capacity building activity. In this case however, no evidence of any such assessments was found. Training, workshops, seminars and field visits to cross learning and demonstration on specific themes were organized based on the annual training plan of the FDHP. However, there was limited evidence found on whether the capacity needs of specific beneficiary groups were adequately addressed and that their performance has improved through the trainings and workshops.

Finding 5. The use of OPIM allowed for strong project ownership and buy in of key stakeholders. However, with the OPIM modality only been set-up recently at the start of the project, the project design gave limited consideration to specific features related to the engagement of OPs and delegation of project implementation, essential for smooth implementation through the mechanism.

44. The project document identified the FDHP as the lead government counterpart and the executing agency with overall responsibility for the project including its five components and for ensuring coordination and collaboration with other provincial and local governments bureaus, local communities. Given that the nature of the project activities linked to the strengthening of the institutional frameworks and mainstreaming biodiversity into key sectors, it required drafting and/or refinement of policies and regulations which fall in the government agency's domain. The execution modality with FDHP as the executing agency was found very relevant for such project activities.
45. However, in terms of the project design, it was designed before the OPIM guidelines were finalized and in its initial stages there was limited clarity on the details of the modality. FAO,

as the GEF Agency also did not seem to have clear picture of any specific features that were required to be taken into consideration prior to approving this project under OPIM. As one of the very first projects to be implemented under OPIM, the focus was on implementing by 'learning by doing'.

Rating of relevance.

Alignment with GEF and FAO strategic priorities: Highly satisfactory. The project was very well aligned with the GEF 5 Biodiversity Results Framework and the FAO Strategic Framework.

Relevance to national, regional and global priorities and beneficiary needs: Moderately satisfactory. It was highly relevant and closely aligned with national policies and global priorities. However, the relevance for beneficiary needs was found to have some limitations. Also discussed further in Section 3.6.3.

Complementarity with existing interventions: Satisfactory. Fairly complemented on-going interventions by the national government on conserving biodiversity, as well as other GEF projects in the country.

Overall strategic relevance: Satisfactory.

3.2 Effectiveness

Finding 6. With initial shortcomings the project was successfully able to strengthen the institutional and policy framework to protect the DL area. Even though the support provided was based on evidence generated through relevant studies and assessment, it did not sufficiently take into account the impact of the revised policies on people's lives and livelihoods. (relates to project's achievement of outputs 1.1.1, 2.1.1, 3.1.1, 3.1.2 and outcome 3.1a.)

46. The project supported and complemented ongoing initiatives undertaken by the national government for protecting the DWE and its biodiversity. The data analysed by the evaluation team indicated that the project enhanced the coordination between the four NRs and implementation of policies through the lake chief system. Overall the system was found to be functional and effective in protecting the DWE and its biodiversity.
47. At the outset of the project, the already existing but almost dormant Dongting Lake Conservation Committee (DLCC) was re-activated by the project to coordinate the implementation of the DWEMP. It was located in the PMO and was provided with staff and annual operational budget to work towards institutionalizing an integrated approach to the protection of DWE as per the objectives of the project. Given that the DLCC was not being able to pro-actively take actions towards materializing its mandate, it was replaced by a more powerful entity 'the Provincial level Multi-Stakeholder Government Joint Meeting' (PMSGJM). Evidence of any concrete actions taken by the PMSGJM as per the project's objective was not found. In 2018, the PMSGJM was again replaced by the 'Lake Chief System' through a provincial government decision in pursuance of the central government's 'One Lake One Policy'. The Lake

Chief System was institutionalized from the provincial to local level of governance, and it was mandated to eliminate all legal and institutional barriers to taking action-oriented measures for the protection of lakes throughout the province with special focus on DLW. The cleaning operations and remediation actions were planned and effectively implemented in DLW in coordination of the Provincial Government of Hunan throughout these on-going institutional reforms in order to eliminate all threats on DWE.

48. The project did lose time¹³ from its set-up in 2014 in switching from the DLCC to PMSGM and to the Lake Chief System in 2018, however, it was eventually able to finalize the DWEMP and address the key biodiversity threats. Further, the last two mechanisms had greater political buy-in, which was a key factor in achieving results. For example the PMSJGM and the lake chief systems were led by the provincial governor with wider coverage and a stronger coordination ability. These were closely aligned with the 19th National Congress that promoted the construction of an ecological civilization. Through the Lake Chief System, three municipal and one county governments resolved the boundary issues of their respective NRs and drafted, finalized and enacted the Administrative Measures for Nature Reserves (AMNR) decrees for effective management of the NRs in their respective jurisdictions.
49. The project simultaneously also worked on strengthening relevant legislation for the protection of the DWE and on their enactment. For example, the Wetland Protection Regulation of Hunan Province (WPRHP) was reviewed, amended, updated, and finalized to eliminate overlapping use rights and conflicting jurisdictions of relevant sectors over DWE. It ensured that the relevant sectors and beneficiaries of DWE resources abide by the rules set for its sustainable use and be accountable for the conservation of biodiversity therein. However, based on the imminent introduction of the broader Wetlands Protection Law of the People's Republic of China at the national level the WPRHP was not progressed.
50. Further, the enactment of DL Protection Regulation, 2021, along with the refinement of relevant policies and regulations on management and use of wetland resources, helped in eliminating the overlapping use rights and conflicting jurisdiction of sectors. All sectors having stake on DWE resources were made legally responsible and accountable for DWE protection and biodiversity conservation. Altogether 22 different policies and regulations having any implication on wetlands protection were amended during the project implementation. The work done through the project was very much in sync with ongoing efforts of the government under the 'One Lake One Policy' that promulgated protection regulations across the four NRs. This is also reflected in the GEF tracking tool score on biodiversity conservation integration in policies and regulation which was at 17 in 2013 reached 31 in 2018, and as of July 2021 (last year of the project) reached at 35 as per the assessment conducted by the PMO.
51. The project's contribution to strengthening policies and regulations was also supported by strong evidence generated by the project based on relevant studies and assessments. These included reports on (1) the biodiversity baseline, (2) threat analysis, (3) impact analysis of development and utilization policy on biodiversity and wetland ecosystem service function assessment and (4) the habitat quality assessment of key species in the Dongting Lake were

¹³ Further discussed under the section on Efficiency.

prepared. These were reviewed and approved by the technical working group¹⁴. For example, the project engaged the Institute of Hydrobiology of the Chinese Academy of Sciences to research on the importance of sand mining in the DL as a factor for endangering the survival of the finless porpoises. The study re-confirmed the need to stop sand mining in the Dongting lake area. There were a few issues noted regarding the timing of the preparation of different reports, however, these did not affect the overall outcome.

52. However, even though the policy support was provided through a participatory approach, the impact on the lives and livelihoods of people through these policies was not monitored. No evidence was found in the data collected by the evaluation team. For example, the reduction in incomes of the fishing community and related livelihoods. There was some effort made by the project team in proposing co-management models for more sustainable livelihoods as discussed under Finding 8.

Finding 7. The project strengthened the network of Nature Reserves by promoting an integrated multi-sectoral ecosystem-wide planning and management approach, and by enhancing the technical capacities of its staff and promoting information sharing across the NRs (related to outputs 1.1.2, 1.1.3, 1.1.4 and 2.1.3; Outputs 1.13, 1.1.4, updated 2.1.2, 2.1.4, 2.2.2, 3.1.4 and Outcome 4.1)

53. Key prerequisites for strengthening the network of NRs include well equipped institutional infrastructure and capacity, well trained human resources, an integrated and harmonized approach to NR management, monitoring, law enforcement, and working with local stakeholders with timely information sharing and joint activities. Most of these pre-requisites have been fulfilled by the project.
54. During the course of the project, an integrated information management system (IIMS) for DWE was developed and a mechanism for regular data generation and updating of IIMS was established. In addition, relevant FDHP and NRMB staff members were trained for updating the database. The IIMS is going to be integrated into the provincial government's nature reserve information system. Through the system monitoring data, resource data and ecosystem health data of the four reserves could be analyzed together or individually by the reserves. It is also being integrated with the provincial protected area information system and has become an important part of the five-year plan for wetland protection in Hunan Province. However, the capacities of the nature reserves is assessing and analyzing data varies.
55. Further, a five-year DWE integrated management plan (DWEMP) was reviewed, finalized, and is being implemented. The 14th five-year plan of the Hunan Province has already adopted the DWEMP for funding its implementation. All NRs have their NRMPs being implemented and are complementing the implementation of the integrated DWEMP. A sustainable financing mechanism for NRMPs (annual budget allocation from FDHP and local NR administrative bureaus) is already in place to ensure their sustained planning and implementation cycle. The

¹⁴ The technical working group included representatives from Hunan Agriculture University, Institute of Geography, and Institute of Subtropical Agriculture of China Academy of Sciences (CAS), Southeast Forestry University, and WWF Changsha Field Office.

monitoring and management of all NRs is being undertaken within the framework of a networked approach.

56. The project has also played a good role in cross sectoral coordination among forestry, ecological environment, agriculture, rural and fishery departments, and at the provincial level through trainings and similar activities. The regulations on the protection of DL promoted by the project clearly define the responsibilities of different departments in planning, ecological restoration, and green development to avoid overlap.
57. Further, the technical capacities and practical skills of more than 100 staff of four NRs have been strengthened on various aspects of biodiversity monitoring and management, protection, law enforcement, for working with local communities and facilitating co-management activities. All NRs have now been equipped with state-of-the-art equipment and technologies, such as the monitoring through drones and the IIMS, that enable the NR staff take informed and timely actions for effective protection and management activities. A mechanism for timely information sharing among the four NRs is functional and institutionalized. The four NRs have demonstrated their joint efforts in the implementation of the action plan for the conservation and recovery of flagship species which has shown desired results and proved to be a motivating factor for all NR staff.
58. On the institutional capacity front, with technical support and assistance from the project one county and three municipalities governing their respective DLNRs, i) resolved their boundary conflicts creating overlapping jurisdictions, ii) revised, updated and enacted their AMNR decrees to strengthen conservation efforts, iii) actively engaged in preparing and implementing the NRMPs and increased the annual budget allocation for implementation, and iv) legally instituted their commitment to sustain the annual budget allocation. The county and municipalities enhanced their institutional capacity and contributed in raising public awareness by engaging in these activities.
59. In course of the implementation of the project, the FDHP and four NRMBs were also able to strengthen their institutional capacities to plan, manage and monitor the actions aimed at biodiversity conservation. The knowledge and skills of working with the communities and engaging them in conservation while safeguarding and fostering their economic interest was internalized at the institutional level in these government organizations. Moreover, the technical assistance provided by the project was instrumental in mainstreaming biodiversity conservation into the policies and legislations of all relevant sectors.
60. Even though the project has provided significant support to strengthen the NR network and strengthen its capacities, the four NRs are managed by different municipal government agencies and their capacities vary. For example, the South Dongting Lake NR, the infrastructure is still weak and there is scope for improvement in capacities noted through the KIIs. However, the four NRs are planned to be designated as the DL National Park for which the project has provided technical assistance and support to meet all basic requirements. This could further enhance the NR network and help further in strengthening their capacities.

Finding 8. The project was able to identify and pilot key biodiversity-friendly production practices. However, only a limited number of households were targeted as a proportion of total

households that were affected by the policy changes and regulations. Further, only 21 percent of the households initially targeted by the project were involved in the project activities and no evidence has been found of plans for future scaling-up of such practices. (related to Outcome 2.2b)

61. Apart from the awareness raising activities, the main involvement of the communities around the Dongting Lake area was through the NR co-management models. The project aimed to pilot four key co-management models to support biodiversity-friendly production practices. These included rice-fish co-cultivation, reed and poplar management, organic fish-farming and rights-based fisheries, and eco-tourism. It took the project significant time to design the NR co-management models and prepare for piloting them, primarily as these models needed to be tailored to suit to the specific conservation needs as well as the income generating possibilities of each NR. The studies and investigation undertaken for this purpose resulted in the viability of one model per NR and the implementation of those four models started only in the fourth year of the project (2019). The East Dongting Lake NR implemented the rice-fish co-cultivation model with the local government and the Agricultural Cooperation Association, the West Dongting Lake NR the eco-tourism model, the Hengling Lake NR the Vitex planting, and the South Dongting Lake NR implemented the reed mushroom planting model. Through the four models, the project piloted eco-friendly alternative livelihoods for farmers, fishers and poplar and reed operators in the communities around the reserve.
62. As of July 2021, the project was able to engage 268 households in the pilot of four co-management models which is only 21% of the total targeted households (1,290). The basis of having a target of 1,290 households for the pilot is not clear and neither clear is why only 21% of those 1,290 were engaged. During the project, owing to legal constraints of the fishing ban the rights-based fisheries co-management model could not be materialized. It was originally planned to engage 500 households. Further, since the alternative livelihood activities started only in 2019, farmers and fishermen were only to harvest for 2020. There are opportunities for scaling up such models, but concrete details have not yet been done or seen in the project sustainability plan that is currently being finalized.
63. Overall, based on the information gathered by the evaluation team¹⁵, the pilots have run smoothly. These were tailored to the characteristics of different nature reserves. Vitex planting and processing in Hengling lake area and edible fungi planting with reed in South Dongting lake area were also added. The edible fungi cultivation had found a way to use the reeds planted that were earlier used for papermaking and were stopped since the paper mills were polluting the lake. The project has helped in using the reeds as a resource and become another local income increasing channel. Similarly, the rice and fish co-cultivations helps famers in dealing with the existing fishing ban. On eco-tourism, the project has developed manuals for tourists and tourism practitioners and has supported the Ecotourism association. Communities in the West Dongting NR have been very supportive of eco-tourism. Apart from the FGDs conducted with selected participants of the co-management models, the following instances detailed in Boxes 3 and 4 were captured through PMO documents.

¹⁵ Unfortunately, given the COVID-19 related travel restrictions, the evaluation team was only able to set up a limited number of FGDs with selected participants of the pilots.

Box 3: Reported instance of benefits from the ecotourism model

Ecological Restaurant: An employment generating successful enterprise

In 2017, a restaurant owner in the West DLNR was selected by the GEF project as a demonstration unit household of eco-tourism model for catering services in the West Dongting Lake NR. She received various eco-tourism related training from the support of the project and enhanced the quality and standard of her restaurant by providing special dishes, quality assurance, dining place decoration and many associated services within the context of an ecological way of living.

Her restaurant now appears in West DL Eco-tourism guide book and it has become a publicity window for wetland biodiversity conservation. She has earned both name and money due to her involvement in the project promoted eco-tourism business and now she owns a second restaurant. Her net earnings per month is approximately Yuan 60,000 after the salaries paid to her 32 employees including 26 women. The Peoples' government of Jiangjiazui has recognized her as a role model for promoting local economy through eco-tourism.

Source: PMO

Box 4: Reported instance of benefits from the rice-fish co-cultivation model

Birds friendly Rice-fish co-cultivation – gaining recognition as an eco-friendly income generator

Close to the East Dongting Lake NR in Xincun village has been living a group of 26 households dependent on traditional rice cultivation in 284 mu of farmland and earning 1000 Yuan per mu while also polluting the lake water with the use of pesticides and fertilizers. With GEF project support and technical assistance, this village is now able to raise its per capita income by over 1,600 Yuan by adopting rice-fish co-cultivation. In the words of a group member engaged in rice-fish co-cultivation, *"I could never earn more than 20,000 Yuan a year in my 20 mu of rice field when I was farming only rice. But when I started farming rice with soft-shelled turtles, rice with cray-fish and rice with shrimp, my income has been rising dramatically. I estimate that my income will reach at least 150,000 Yuan in next three years. We do not need to use pesticides and chemical fertilizers to have a good harvest of rice anymore."*

The rice-fish co-cultivation model has now crossed the boundaries of Xincun village and is increasingly getting replicated in Matang subdistrict and Caisanghu town of Junshan district and is being sought after farming practice around the lake areas.

Source: PMO

64. A PMO commissioned survey also confirms these observations. Through the survey households involved in the pilot as well as those near the pilot sites but not part of it were interviewed. The survey documented changes in income of those involved in the four NR co-management models and concluded that there was 92.8% increase of income from rice-fish co-cultivation, 152.1% increase from eco-tourism, 106.9% increase from ecological fishery and Vitex planting and 97.6% increase from reed-based mushroom farming. Farmers engaged in rice-fish co-cultivation validated that there has been an additional income of around USD 310 to 470 per mu¹⁶ from fish apart from the harvest of rice while there was significant reduction in the use of chemical fertilizers and insecticides as compared to their traditional rice cultivation practice. The evaluation team was only able to partially validate the results of the survey given the limitations with field travel and data collection.
65. However, there are a few risks that were noted by the evaluation team and have not been fully taken into account. For example, concerns were raised during interviews that with the increase in bird population, the farmers' income from rice-fish co-cultivation is highly likely to decrease in future as the birds feed on both rice and fish. So far, the farmers have had one or at the most two harvests and there is no empirical evidence related to the impact of increased bird population on rice-fish co-cultivation. There are also linked financial risks for the sustainability and scale-up of such models. For example, the eco-tourism model still requires substantial investment in infrastructure and marketing. Similarly, the ditch excavation for rice and fish co-

¹⁶ A mu is a Chinese unit of land measurement which is equivalent to 666.5 square meters.

cultivation requires an initial investment of around USD 3500 per hectare. Hence it is little too early to draw any conclusion about the success of these models.

66. The implementation of these models has also varied in terms of technical and policy support or investment from the NRs. For example, the East Dongting has invested around USD 63,000 in the rice-fish interplanting model for the improvement of farmland infrastructure, the South Dongting has organized experts to train the community people in the production of reed-based mushroom and provided enterprises with reed-based mushroom sticks or base materials for a few vulnerable households.

Finding 9. Through the project's awareness raising activities a substantial number of stakeholders were reached out. However, with the limitations on field data collection, the ET was unable to assess the results of the project's awareness raising efforts.

67. On the public awareness front, the project accomplished most physical targets set in the awareness related outputs. The engagement of the project with a wide range of stakeholders, beneficiaries and service providing institutions was instrumental in raising their awareness on conservation while they were engaged in different capacities for the achievement of project results. This was observed through the interviews conducted by the evaluation team and an analysis of the project progress reports and activities. The PMO and the four NRs prepared a range of advocacy and awareness raising materials, including brochures, billboards, publicity exhibition halls, education facilities, and teaching materials.
68. The project also organized various events, such as on the International Wetland Day, Biodiversity Day and a Dongting Lake bird-watching Festival. Furthermore, school teachers and students have also participated in the preparation of training materials such as the '800 Mile Dongting Lake, my home'. The textbook provides details on how to pay attention to and protect the Dongting Lake. Overall, a large proportion of students from schools and universities were engaged in the awareness raising activities. President Xi Jinping's visit to East Dongting Lake during the project implementation period also bolstered the awareness raising efforts. Even though the need to further increase stakeholder awareness was noted through the interviews, a fairly promising level of participation in awareness raising events and promising results of the four demonstrated NR co-management models indicate that the project has contributed to enhancing the public awareness on conservation and environment.

Finding 10. A key factor that has contributed to the achievement of results has been an enabling policy environment in the project country. Even though the project was designed before the shift in the government's policy, it has been able to make good use of the enabling policy environment by making modifications to the project's results framework as discussed under Finding 3.

69. The change from the DLCC to eventually the 'Lake Chief System', also enhanced political buy-in, commitment and accountability. As mentioned under Finding 6 with the provincial governor as the lead, it was possible to eliminate conflicting claims and jurisdiction over the natural resources across the NRs. It also ensured that an integrated multi-stakeholder and multi-sectoral approach to conservation and sustainable use on natural resources is institutionalized by involving government sectors responsible for land (and sand mining), water resources,

forestry and agriculture, fisheries, sewage, environment and pollution and other water quality relevant agencies.

70. The overall shift in the government's development policy towards achieving an ecological civilization, and the promotion of a green economy has supported the project activities and increased public awareness on environmental concerns. This led the Provincial Government of Hunan Province to assume a pro-active role and provide all necessary support to the FDHP in the implementation of the project. Furthermore, outside the direct scope of the project, the government has also set up significant compensation packages for those that are affected by the regulations set up to protect the DWE. These have overlapped with households linked to the project activities.

Finding 11. Regular project monitoring has helped overcome issues of high staff turnover as discussed under Section 3.3. The project has fostered learning and improved implementation of project activities, but the use of M&E for knowledge development was found to be slow. The project, however, has fulfilled its M&E commitments to maintain its focus on project outputs and outcomes.

71. Given the implementation structure of the project, monitoring of its activities was done at multiple levels. This included project oversight by FAO as well as FDHP, as well as the M&E plan implemented by the PMO. Regular monitoring was found to be key in overcoming issues of high staff turnover and continuity of activities as discussed under Finding 13.
72. The detailed and budgeted M&E plan provided in the project document was implemented by the PMO. The PMO team was involved in supervising the activities and keeping track of the periodic progress. Monthly and quarterly meetings of the staff of executing and co-executing partners, sector agencies and the service providing individuals/institutions were organized by the PMO to review the progress and challenges. The biannual PPRs and annual PIRs including the financial statements were regularly submitted by the PMO as planned. The PMO also organized monthly and quarterly progress review meetings of all relevant service providers to discuss the divergence and shortfalls in activities implementation based on regular supervision and monitoring outcomes. It is evident that the information obtained from regular monitoring and supervision was useful in making timely decisions.
73. The relevant officials from FAO including the Project Task Manager (PTM), the BH and the LTO also had periodic supervision missions and participation in project organized progress review and planning workshops and PSC meetings on a regular basis. This allowed for timely support and intervene from the PTM and the LTO. Apart from monitoring and supervision, PTM also provide training to strengthen PMO's capacity such as project and financial management, audit and spot checks, communication etc. Key events have been supported by FAO to increase the visibility and impact of the project. The LTO provided significant support in piloting of the NR co-management models in the field. Based on the findings of an audit report, PMO improved its financial management during the course of the project.
74. Simultaneously, the project also includes activities that monitor the effect of regulations and activities promoted by the project. For example, the Hunan Provincial Forestry Academy was entrusted to monitor the ecological restoration effect after poplar removal. Similarly, another

study was supported by the project on the effect of preventing sand mining on the population of the finless porpoise. However, the documentation of learning and knowledge emerging out of monitoring, was not given due attention during the initial years of the project. It received due attention only after the MTE, which pointed out the shortfall in documentation aspects of learning and knowledge management. After the MTE, the project made some good progress in documenting learning and disseminating knowledge.

Finding 12. The project, through its work on supporting institutions and policies related to the conservation of the biodiversity in the DWE, has laid a strong foundation for future work. It has piloted co-management models and reinforced coordination conservation networks; however, the achievement of long-term impact would largely depend on how far these co-management models are adopted and scaled up.

75. This GEF project was able to demonstrate that the dual objective of conservation and sustainable livelihoods coupled with green economy promotion is achievable through innovative approaches to conservation-friendly resource use and development. It meaningfully supported and assisted in the policy and institutional strengthening and in leveraging the co-financing for achieving the project results. The project has further contributed to securing inter-sectoral coordination and institutionalized an integrated approach to achieving conservation goals. It has mobilized universities and research networks to actively participate in conservation efforts. For example, the researchers interviewed for the evaluation have since their participation on the project have liaised with the provincial government of Hunan to present their previous research on the subject.
76. The project with its policy work and institutional support does not seem to have any barriers or other risks which might prevent future progress towards long-term impact. Moreover, presently, many GEF supported biodiversity conservation projects linking ecosystem with human wellbeing are being implemented in China which are likely to have complementing impact on the achievement of this project, such as the Poyang Lake project in Jiangxi province and another project in Jilin provinces. However, for the models piloted through the project to achieve a long-term impact need to be implemented at scale and be made self-sustainable (with reference to Finding 10).
77. Overall, the evaluation team has noted strong improvements in the populations of the endangered finless porpoises and other species in the DWE being monitored by the project. These are important achievements and the strong conservation foundation provided by the project has contributed to such achievements. At the same time, it is important to note the policy shifts and interests of the national government that have bolstered conservation efforts.

Finding 13. The GEF contribution was key in mobilizing additional resources for biodiversity conservation and in drawing attention of a range of stakeholders including provincial departments, universities and research centres to the importance of conservation efforts.

78. Through a focus on multisectoral instruments such as the integrated DWEMP and the IIMS, the contribution enabled to make biodiversity conservation a common agenda of all relevant sectors and their policies. Seven ministries including National Development and Reform commission, Ministry of Water Resources and Ministry of Ecology and Environment issued plan

for ecological conservation of Yangtze river economic belt to contribute to biodiversity conservation.

79. Even though the GEF funding was a relatively small proportion of total funds, it promoted important concepts and technology. For instance, approaches to ecological fisheries to support conservation and making changes in development activities of the economic sectors to create a win-win situation for both economy and environment. It also helped in further mobilizing investments by the government and its departments. It has driven relevant provincial departments to invest around USD 150 million in the ecological management of the Dongting Lake.

Rating of effectiveness.

Delivery of project outputs: Satisfactory. The project successfully delivered most of its outputs as planned.

It is noted that the piloting of co-management models started only after the MTR because the priority of the project was to eliminate all threats to biodiversity and ecosystem of DLW which materialized on the ground only in and after 2018.

Progress towards component 1: Satisfactory. The setup of the Lake Chief System and the IIMS contributed effectively to the strengthening of institutional capacities.

Progress towards component 2: Moderately satisfactory. There has been substantial work completed under this component, however the targeted households for the co-management models were not met.

Progress towards component 3: Satisfactory. Cross-sector collaboration was found to be an important strength of the project. However, participation of some sectors could have been improved.

Progress towards component 4: Satisfactory. Even though the ET was unable to fully assess component 4 due to the travel restrictions. The partial assessment based on project progress reports and discussions with stakeholders indicates satisfactory progress.

Progress towards component 5: Satisfactory. The outputs on M&E were sufficiently met, however the knowledge management and the impact of the policies and regulations on relevant populations could have been improved.

Overall rating of progress towards achieving objectives/outcomes: Satisfactory

Likelihood of impact: Moderately satisfactory. The project has laid a strong foundation for biodiversity conservation; however, long term impact would depend on scaling-up the model and managing risks to sustainability.

Overall assessment of project results: Satisfactory.

3.3 Efficiency

Finding 14. Based on the set-up of the PMO and the implementation processes, the project was implemented in a cost-effective manner. However, the project faced severe delays in meeting the deadlines, mostly for understandable reasons. High staff turnover, impact of Covid-19 pandemic and administrative delays with disbursement of funds throughout the project implementation, were some of the key issues noted by the evaluation team that affected project's efficiency.

80. The PMO was largely staffed with professionals from within the FDHP on part-time basis. This was a cost-effective approach to project implementation, although not ideal to achieving the desired level of efficiency, since the project required substantial time and attention from the PMO. It affected the stability and capability of the team as was evident from the high staff turn-over within the PMO, and specially of the project director, financial manager and CTA in this case. Additionally, with the high turnover the project team could not sustain the knowledge and experience of the operational procedures and reporting requirements of the GEF agency. The staff at the PMO, in most cases, needed to be oriented and prepared to fulfil the GEF requirements every time there was a change of staff. Further, the submitted PPRs and PIRs required repeated corrections and resubmissions prior to getting finalized. However, during such changes, the FDHP and the NRMBs proactively supported the PMO. The PSC and FAO responsible officers also provided regular strategic support and guidance to the PMO, which eventually helped it discharge its management and coordination functions to an acceptable level.
81. At the same time, the composition of the team was kept to a minimum which was in some cases not the most efficient. For example, the PMO initially did not have a gender and a knowledge management expert in the team. They were hired after the MTE pointed out the shortfalls in the project implementation in their absence. Based on the outputs reviewed by the evaluation team, such expertise was found to be important for the project. Another related issue noted by the evaluation team, was the limited knowledge in PMO team about the GEF agency's procedural requirements including documentation and reporting, as well as financial management. Based on the recommendations of a 2019 audit, the financial management was however improved.
82. Besides staffing, a key issue related to project efficiency was the delay in the project start date and in implementing project activities. The project was officially started in December 2014 and was scheduled to be completed in December 2019. It was delayed in its initial years, during the inception phase (between April 2015 and November 2016). The time was spent in establishing the organizational setup, clarifying the execution modality, and waiting for the GEF funds to begin the project activities on the ground. According to the project inception report¹⁷ the registered actual start date of project was May 2016 - the date of the first GEF fund allocation. PPRs and PIRs revealed that most of the project outputs were delivered well after their deadlines due to various reasons. The revised end date of the project was November 2021, which has been recently extended to March 2022. Hence, this five-year project could be

¹⁷ Project Inception Report November, 2016.

said to have completed in more than seven years from its official start date. Even though the recent delays were found to be understandable given the COVID-19 situation and the flooding in the DLW, the initial delays and ones associated with the disbursement of GEF funds were less clear. The initial delays with a fast-changing national policy landscape did affect the relevance of the initially designed project, and it required significant readjustment of project activities and realignment to provincial objectives.

Finding 15. The project has strong complementarities with other GEF projects being implemented in the country and FAO work being implemented in the region, and there is evidence of cross project learning.

83. Within the broader concept of biodiversity conservation and sustainable use, FAO as the GEF agency is also involved in implementing Poyang Lake GEF project in Jiangxi province and GEF project in Jilin province of China. The DWE GEF project established complementarity with the other two GEF projects. Accordingly, some sharing and cross-learning activities were held with the Poyang GEF project during its implementation. The project is also complementing other conservation initiatives by the government in the four river basins of Hunan province. For example, the provincial government of Hunan has been implementing a plan for improvement of the ecological environment under the 'One Lake and Four Rivers' (2018-2020) policy which includes river remediation and cleaning, remediation and management of watercourses and key areas, and capacity building for flood control and disaster relief. The project has complemented with FAO's work in mainstreaming biodiversity conservation and shared its progress and lessons in a FAO regional dialogue mainstreaming biodiversity in Asia-Pacific. The project also significantly benefited from existing technical expertise of FAO in course of its implementation. For example, the LTO extensively provided his expertise services in course of designing and piloting the rice-fish co-cultivation and ecological fishery models of NR co-management.

Finding 16. The institutional set-up of the project including OPIM contributed in strengthening the executing agency's institutional and technical capacities and creating project ownership.

84. OPIM was extremely useful especially in enabling the FDHP and NRMBs build their institutional and technical capacities for biodiversity conservation and management and monitoring of the status and health of aquatic ecosystem through trainings and other capacity building efforts. It made the FDHP, NRMBs and local governments take the ownership of the project and deliver the project results, making them responsible and accountable for the project. This driving force was further strengthened with the strategic shift of the National Policy towards achieving ecological civilization that prompted the provincial government of Hunan Province to come forward to support and supervise the project implementation and make wetland protection and biodiversity conservation a common agenda for all government departments.
85. In course of the implementation of this project, the co-financing from the national government reached to almost 20 times of the GEF grant, which was significantly more than the amount initially mentioned in the project documents. The total local and national government budget for the four NRs reached to USD 17.61 million by the end of 2020. It was also learned that the government has been developing a sustainability plan to replicate the successful project outcomes (further detailed in the Sustainability section). It indicates that the OPIM to a larger

extent was instrumental in strengthening the sustainability and enhancing the impact of the project.

86. As noted in Finding 5, the project was the first GEF project implemented through OPIM modality in China and the project was not designed for OPIM modality in the project development.

Finding 17. The executing and implementing agencies discharged their roles and responsibilities to the extent required.

87. As the GEF implementing agency, FAO discharged its role fairly effectively through periodic supervision missions, providing technical inputs, and participating in the Project Steering Committee (PSC) meetings and progress review workshops. Apart from monitoring and supervision, FAO also provide training to strengthen PMO's capacity such as project and financial management, audit and spot checks, communication etc. Key events have been supported by FAO to increase the visibility and impact of the project. The Lead Technical Officer (LTO) frequently visited project sites and provided substantial technical backstopping to this project. FDHP, as the executing agency had a separate project management office (PMO) staffed with professionals on secondment to work on part-time basis for project implementation. As discussed under Finding 16 and also highlighted in the MTE, this was not ideal as the work demanded staff on a full-time basis and enough facilities to work with a high level of motivation throughout the life of the project. Consequently, there has been a high staff turnover in the PMO, especially at the project director and CTA level, which affected project implementation at crucial stages. FDHP and the NRs, however, did their best to support the PMO during such difficult staffing situations.
88. Further, the PSC and the Technical Working Group were established to support the PMO with strategic and technical guidance. As mentioned earlier, such mechanisms also helped overcome issues of high staff turn-over, maintaining an acceptable level of coordination and collaboration with the executing/co-executing and implementing agencies and with all other stakeholders, including local communities and service providers.
89. In the initial years of the project implementation, there were a few issues as highlighted in the MTE between the executing and implementing agencies relating specially to the procurement and financial requirements. However, these were resolved with timely changes and improvements. There were six amendments in the execution agreement over the project period but the executing and the implementing agencies maintained a fairly good working relationship.

Rating of efficiency.

Efficiency: Moderately satisfactory. Even though the executing and implementing agencies learned their lessons and managed to maintain a relatively satisfactory working relationship in course of project implementation, there was room for improvement with a few inefficiencies being noted.

3.4 Sustainability

Finding 18. Enhanced knowledge and awareness among local population, strengthened staff capacity of FDHP, NRMBs, relevant local governments and sector departments and an enabling political environment with conservation friendly production practices and income opportunities, together, are highly likely to support the sustainability of project results. However, there exist a few risks to sustainability linked to the need for a more cohesive management of the protected areas, and awareness levels and community engagement.

90. Project's achieved results are well founded on political commitment, robust policy backing and an enabling institutional arrangement. The high level of commitment is visible in the levels of co-financing and the policy shifts. Ecosystem restoration, biodiversity conservation and sustainable use of biological resources is now well established in existing multiple level governance mechanisms as observed in the (i) lake and river chief systems contributing to inter-sectoral coordination for aquatic ecosystem protection, (ii) improved regulations with emphasis on green development and 'compensation for foregone income and employment opportunities resulting from conservation initiatives'. The lake chief system also allows for active participation of volunteers from local to provincial level to support NRMBs, which with public awareness raising activities further enhances sustainability of protection efforts.
91. The continuity of project's achieved results is also ensured through sustainable financing mechanism instituted at multiple levels of governance. The governments at local, provincial, and central levels have now legal commitments to allocate annual budget for the implementation of NRMPs, integrated DWEMP and operationalization of IIMS. In addition, the strengthening of institutional capacities through project activities also ensures similar continuity. The project executing and co-executing partners, the FDHP and four NRMBs, and selected staff of the local and provincial government departments gained new knowledge and expertise regarding biodiversity conservation, monitoring and management including working with the communities for conservation friendly production practices.
92. There are still a few risks to sustainability of results noted by the evaluation team. Firstly, currently the protected areas are managed by different administrative regions. Issues related to jurisdictions and boundaries have been resolved through systems such as the lake chief system and the coordination between them is functional, however, there is still room for more integrated management. Most probably the use of tools such as the IIMS and the declaration of the DL National Park could help in this regard. Secondly, communities have been engaged in the pilots only in a limited way, to generate more sustainable levels of awareness co-management models and awareness raising activities would need to be scaled up. Some of the co-management models also require a substantial initial investment, for example the rice fish co-cultivation requires funds for ditch excavation. Even though there are indications of future government/stakeholder investment and compensation mechanisms, the evaluation team has not yet seen any concrete examples of such.

Finding 19. The sustainability of the project results will also rely on the maintenance of institutionalized project results and continued strengthening of institutional and technical capacities.

93. The declaration of the DL National Park is in the process and is likely by or after 2022. With the declaration of DL National Park, any alteration in (i) established existing governance arrangements, (ii) the administrative authority of local governments and (iii) any eventually occurring impact on the alternative livelihoods models' promotion and replication are likely to have a bearing on the project's achieved results which will need to be reconciled and adjusted. Any divergence in institutional arrangements and mechanisms that have enabled the project in achieving its conservation and sustainable use objectives will need to be safeguarded appropriately.
94. At this stage the IIMS is in the process of getting institutionalized. The policy and legal arrangements will have to be further reviewed and strengthened in order to ensure that it has sustainable financing and trained people to give continuity to regular information generation and updating of the system, periodic review and revision of the integrated DWE MP and its continued implementation. The future DL National Park authority will need to synchronize the national park management plan accordingly and contribute/compliment the continued planning and implementation of the integrated DWEMP.
95. As mentioned in the constructed ToC, two out of its four impact pathways are well established, these include, (i) *the inter-sectoral coordination for DWE protection has been strengthened and well-institutionalized* and (ii) *the ecological status of the DWE has increasingly been improving*. Regarding the remaining two impact pathways, the project has strengthened the technical capacities of NRMBS, relevant local and sectoral government staff for assisting in wetland protection, however, the likeliness of whether the capacity strengthening will be continued in the future as well is not evident at the time of this evaluation. Similarly, the environmental knowledge and awareness of all relevant stakeholders and beneficiaries has been significantly increased in course of project implementation. However, this needs to be continued in the future as well and it is not evident how this is going to continue after the end of the project.

Rating of sustainability.

Financial risks: Sustainability is likely. Presently, a sustainable financing mechanism has been put in place, however, with the establishment of a DL National Park what changes will occur in the institutional framework and arrangements for the governance of DWE area and how that will affect the existing financing mechanism will be the determinant of financial sustainability.

Socio-political risks: Sustainability is moderately likely. The project's achieved results have been founded on the policy and institutional strengthening further supported through the political commitment to making a move towards achieving ecological civilization. However, the project has only partially engaged with the people living in and around the DWE area through the piloting of NR co-management models. This poses some social risk to sustainability in case the socio-economic wellbeing of the area is threatened in pursuit of sustaining the project's achieved results.

Institutional and governance risks: Sustainability is likely. Presently, there is no institutional and governance related risk and these aspects are likely to get further strengthened with declaration of a national park.

Environmental risks: Sustainability is likely. There is no environmental risk.

Catalysis and replication: Satisfactory. As observed with other similar projects in the region, such as the Poyang Lake project in Jiangxi province.

Overall likelihood of risks to sustainability: Sustainability is moderately likely. The overall likelihood of risks to sustainability is low given the strong focus of the project on institutions, coordination, and capacity building, however, there are still important risks that need to be considered to ensure sustainability.

3.5 Stakeholder engagement

Finding 20. All key stakeholders including civil society, public and private sector, and local communities were involved in project implementation. The high levels of engagement have also contributed to greater ownership of conservation efforts.

96. All stakeholders identified in the project document were extensively engaged in various stages of the project implementation. The township and county governments engaged in sorting out the issues and challenges that emerged in course of planning and implementing field activities. The representatives of economic and private sector entities having stake in DLW, academia and research institutions and the NRMBs attended in the meetings and discussion forums organized by the project. At the NR level, the support and cooperation of East DL Ecological Protection Association and East DL Finless Porpoise Protection Association, and in West DL NR, the West DL Local Volunteers' Association and the Anti Electric Fishing Alliance were well recognized. The support and cooperation of all relevant stakeholders including the local communities contributed well in the achievement of project results.
97. For the co-management models, farmers and enterprises cultivating these areas were motivated, and a tripartite agreement was negotiated and agreed between East DLNR, enterprises, farmer's group, and China Academy of Sciences (CAS) to pilot the rice-fish co-cultivation. Further, in all four NRs the approach was the same that engaged relevant stakeholders.

3.6 Financial management and mobilizing of expected co-financing

Finding 21. Overall, the project mobilized co-financing significantly beyond the initial commitment, with all partners disbursing most of the amounts initially committed. However, the management of the GEF grant could have been improved.

98. The co-financing amount materialized as of June 2020 was around seven times the amount committed. This was largely based on provincial and national level contributions from the Government of China, mainly through FDHPs National Wetland Conservation Programme. The additional funds were used for activities that were beyond the project's initial scope. The funding change also represents the shift in national priorities and the interest in the project and its activities. Table 4 presents an overview of the initial commitments and the co-financing amounts materialized.

99. Even though the co-financing figures exceeded expectations, the management of the GEF grant could have been improved. The management issues were mainly related to the limited understanding of the administrative processes.

Table 4: Overview of project co-financiers

	Initial amount (USD)	Materialized by June 2020 (USD)	Type of co-financing
FAO	200,000	160,000	In-kind
FDHP, Nature Reserve Management Bureaus, and local governments	2,900,000	3,849,756	Cash
National Wetland Conservation Programme (2011 - 2015) through FDHP	1,500,000	44,000,851	Cash
Wetland Conservation Subsidy Programme through FDHP	1,000,000	4,580,590	Cash
National Nature Reserve Development Programme through FDHP	2,000,000	45,020	Cash
Total co-financing	7,600,000	52,854,335	

Source: Project Implementation Report 2020; project team

Rating of factors affecting performance.

The key findings that the ratings relate to are mentioned in brackets. Separate section in the report for each rating were not included in the report to avoid repetition.

Project design and readiness: Moderately unsatisfactory. The project design should have considered the various measures likely to be undertaken for reclaiming the DWE area including cleaning operations and their impact on the socio-economic wellbeing of the population living in the area (Findings 1, 2, 3, 4, 5).

Quality of project implementation by FAO: Satisfactory. Technical and project management assistance and support was provided as planned and as per the request of the Operational Partner well in time (Findings 14, 16, 17).

Quality of project oversight: Satisfactory. Monitoring and supervision missions were carried out as planned and required and necessary supports were provided on timely basis (Findings 14, 16, 17).

Overall quality of project implementation: Satisfactory

Quality of project execution: Moderately satisfactory. There was plenty of scope for further improvement in the quality of project execution (Findings 14, 16, 17).

Financial management and co-financing: Satisfactory. Co-financing exceeds the expectation. Management of GEF grant could have been improved (Finding 21).

Project partnerships and stakeholder engagement: Satisfactory. A range of key stakeholders were involved at multiple levels (Finding 20).

Communication, knowledge management and knowledge products: Moderately satisfactory. There was enough room for further improvement in knowledge management (Finding 4).

M&E design: Satisfactory. Meets expectation (Finding 11).

M&E plan implementation: Moderately satisfactory. M&E findings could have been better used for learning documentation (Finding 11).

Overall quality of M&E: Moderately satisfactory.

Overall assessment of factors affecting performance: Moderately satisfactory.

3.7 Cross-cutting dimensions

3.7.1 Gender and other equity dimensions

Finding 22. Even though the project's reporting on sex disaggregated data improved and more trainings on gender sensitization were organised for staff with the recruitment of the gender specialist, there was limited evidence of overall inclusion of gender equity and mainstreaming, as well as of other vulnerable groups in project activities. Mainly owing to the absence of detailed gender analyses and of vulnerable groups, and subsequent systematic and targeted engagement.

100. Rural women's lead role in the maintenance of diverse livelihoods initiatives is well recognized in the project document and their inclusion in the NR co-management models is also emphasized. During the implementation of the project, the project personnel have paid attention to the participation of women and vulnerable groups. In the four co-management models, participation of women and from across income groups was emphasised. For example, during the planting of reed-based mushroom in South Dongting reserve, special attention was paid to the participation of vulnerable families. The project provided material for planting edible mushrooms. However, limited details were available on planning and how it was actually done.

101. Although the stakeholders interviewed felt that the project positively contributed to the gender equity and mainstreaming, the evaluation team did not find any prior analysis conducted to understand better the context with regards to gender and how the intervention would affect vulnerable groups. This was partly because there was no gender expertise available prior to being highlighted as a weakness in the MTE and the subsequent appointment of a gender specialist. This was also found to be a weakness of the initial design that did not require a gender mainstreaming plan or a preliminary analysis.

102. Overall, the co-management models piloted were more conducive to women and vulnerable groups than the work available before. For example, before the fishing ban and the closure of paper mills, fishery and reed harvesting were mainly done by men. Now the reed-based

mushroom cultivation and tourism created job opportunities for all. However, it is not clear to the extent such activities were a source of income and empowerment for women.

103. The MTE noted lack of documentation and reporting on the gender aspects in the pilot site activities. Responding to the MTE's recommendation, the project hired a gender and knowledge management expert in the PMO and gender related elements discussed in paragraph 87 were highlighted in the project implementation and reporting system. The PMO recruited a gender specialist to provide gender equality training to NR staff and gender disaggregated participation in meeting and training workshops was captured. As of July 2021, 365 male and 327 female from 268 households were engaged in NR co-management models of alternative livelihoods. However, it was still not able to fully consider the effect of its activities on the workload of women. Additionally, no details of other vulnerable groups being engaged in project activities were found.

3.7.2 Social and environmental safeguards

Finding 23. The project design and implementation overlooked the documentation and reporting of the social impact of cleaning operations and remediation actions undertaken in DLW and the measures taken to mitigate and manage those impacts.

104. Little over 140,000 people live in the surrounding areas of the DWE. In course of the cleaning operations and remediation actions in DLW, significantly large tracts of poplar and reed plantation areas were cleared to reclaim the lake and wetland waters, sand mining and fish culture activities for example, pen and cage aquaculture were completely stopped, many poplars and reed-based paper industries were displaced, and people dependent on those industries lost their jobs and business. Moreover, with the fishing ban in public waters of Yangtze River and DLW in 2020, a significant population of the fishing communities in project area and surrounding areas lost their means of livelihoods. Even though not all changes in policies and regulations were directly linked to the bans, the project did contribute to strengthening of the institutional capacities to implement the regulations, and the finalization of the WPRHP. The type, extent and intensity of the impact of cleaning operations and remediation actions taken within the project boundaries on the prevailing labour market, industries and on the local economy was not documented in the PPRs and PIRs of the project.
105. The provincial government and relevant sector departments did undertake initiatives to manage and mitigate the negative social impacts of the remediation actions and cleaning operations. During the field visits and consultations, the ET learned that 472 dikes were removed at a cost of around USD 78 million. For the compensation and safeguards of fishermen affected due to fishing ban in Yangtze River and along the DWE, the Agriculture and Rural Affairs Department invested around USD 612 million, which included compensation against fishing boats and nets, pension insurance, medical insurance, housing security for low-income families. Approximately 26,000 people have registered till 2020 for basic living standard guarantee. There exist at least six different policy instruments¹⁸ that protect and support the fishermen and others with forgone livelihoods and income opportunities due to

¹⁸ Relevant policy measures of fishermen ashore and poplar retreat in the Dongting Lake region – a note provided by PMO.

fishing ban in Yangtze River and its link with the DWE including the removal of poplar and reed plantations. However, it was not clear from the PPRs and PIRs what percentage of local population solely dependent on DLW for their basic livelihood needs suffered due to cleaning operations, remediation actions and fishing ban and whether all of them were fully covered through the mitigation measures and safeguarded adequately.

106. This project was exempted from an Environmental Assessment since it aimed at enhancing the environmental amenities and conserving globally threatened unique biodiversity. The project design did not have any separate plan for dealing with environmental issues that potentially could emerge in course of project implementation.

Ratings on cross-cutting issues.

Gender and other equity dimensions: Moderately satisfactory. Despite the project efforts to gender sensitized approach to implementing project activities, overall, a limited focus on gender and equity dimensions was found.

Human rights issues/Indigenous: Unable to assess. Given the limitations with field data collection.

Environmental and social safeguards: Moderately unsatisfactory. The project design and implementation overlooked the documentation and reporting of the social impact of cleaning operations and remediation actions undertaken. The project was exempt from an Environmental Assessment and the rating here is focused on social safeguards.

4. Conclusions and recommendations

4.1 Conclusions

Conclusion 1: The project is fully relevant to national conservation priorities and well aligned with FAO and GEF strategic priorities. It proved to be even more relevant in the course of its implementation as the national development policy shifted towards the achievement of an 'ecological civilization'.

Conclusion 2: Even though the project design was relevant and adequate in content, it required substantial adjustments based on prevailing ground realities. Further, the project plan lacked specific aspects of capacity development, knowledge management and gender.

107. The design of the project began in 2010 in congruence with the then existing conservation priorities of the government. It took almost six years to begin the project and during its implementation, between these years, the policy and operational environment of project area have had some changes. The project design seemed to not be fully reviewed in light of the existing policy and operational environment prior to the launching of the project. It would have been helpful to readjust the project components, outcomes and outputs and simplify the project's results framework.

108. Furthermore, the planning for the project, did not sufficiently highlight the importance of a gender and capacity needs assessment, as well as knowledge management. These were included in the project, after being pointed out in the MTE in a limited way.

Conclusion 3: The project played a catalytic role in considerably contributing to biodiversity conservation in the DWE. It strengthened relevant institutional and policy frameworks, and the network of NRs. The project identified and piloted key biodiversity conservation friendly production practices in a limited way. Further, the work completed in strengthening institutions and networks, as well as the political commitment towards conservation efforts contributes to sustainability, and a strong sustainability plan managing existing risks can reinforce it.

109. The project supported the policy makers to review existing legal and institutional arrangements to draft new legal and institutional instruments that embrace principles of conservation and sustainable use. This was further supported and strengthened by the national governments policy inclination towards achievement of ecological civilization. The pilots of the NR co-management models and the framework of the Lake Chief System helped in making biodiversity conservation a common agenda of all relevant stakeholders.

110. The project was founded on the policy, regulations and institutional strengthening and they were mostly successfully achieved. Even though the project developed and piloted key co-management models, overall, it lagged behind in integrating biodiversity conservation to the development of innovative green economy. The work on developing NR co-management models started fairly late and the project could not accommodate even the targeted 1290 households. This evaluation concludes that much more could have been achieved in case the project had given due attention to this aspect from early in its implementation.

Conclusion 4: The project was unable to fully account for the impact of revised policy and regulations as well as the cleaning actions on communities within the area. There is evidence of ongoing investments outside the scope of the project, however, there is limited information available documenting the social impact. Even though the absence of a social impact assessment was consistent with the project design, the evaluation team considered it to be an important component of the overall project and activities implemented since the MTE.

Conclusion 5: Although a pre-OPIM project, the decision to implement it under OPIM was an experiential learning opportunity for the GEF agency and the Operational Partner. Even though both the executing and implementing agencies adequately discharged their respective roles, the project faced a few delays that contributed to inefficiencies.

111. The decision to have this project executed under OPIM by the relevant provincial government department was justified as per the project design in which the FDHP was identified as the lead project executing agency. It is further justified given the project strived to achieve the biodiversity and ecosystem conservation objectives through the strengthening of policy, regulations and institutional arrangements that are primarily the government's domain, and a project could at the most play an assisting and facilitating role. During the course of the project the OPIM mechanism helped in strengthening capacities of the executing agency, as well as enhanced the ownership of the project, substantially increasing the proportion of co-funding.

112. Further, both the executing and implementing agencies have discharged their role to the required extent. However, there were a few issues noted with the compatibility or familiarity of the executing agency with the project management, procurement, records keeping and reporting norms and procedures. Consequently, the executing and implementing partners faced several management issues that were gradually resolved, especially through the capacity building. Both agencies had a 'learning by doing' approach to OPIM which would be useful for future OPIM related decision-making. The ET also noted issues of high staff turnover within the PMO and delays related to the move from the DLCC to the PMSGJM and eventually to the 'Lake Chief System' that directly affected project efficiency. The implementing agency constantly interacted and monitored the project execution, but had limited practical measures to intervene in such situations. The risk-based management principles outlined in MS701/OPIM also emphasized audit and spot check scrutiny, which is reported causing unnecessary work for the PMO who are spending a significant amount of their work time working on information gathering and reporting.

4.2 Recommendations

Recommendation 1. FAO and FDHP: The sustainability plan being developed should be finalized addressing potential risks and accomplishing outstanding tasks to consolidate the achieved results for long-term impact.

113. There are some important outstanding tasks to be accomplished in years to come to consolidate project's achieved results and ensure their long-term impact. These include (i) establishment of the DL National Park integrating four NRs and clarifying its linkage with the Lake Chief System, (ii) ensuring the institutionalization of IIMS including its regular updating

and use by government and non-government entities and access by the public, (iii) ownership, governance and continuity of the DWEMP preparation and implementation including its integration with the upcoming management plan of the DL National Park, (iv) institutionalization of the periodic capacity strengthening of key players engaged in DWE protection and conservation including relevant staff of the DL National Park, local government, relevant provincial department and volunteers of the lake chief system (v) the evaluation, refinement and scale-up of the co-management models. This evaluation notes that a sustainability plan for consolidation of achieved results and replication of good practices was initiated and remains in the process of making. FAO should continue to assist the executing agency to finalize this plan and consider including the points raised in this paragraph.

114. It is recommended that the FDHP should finalize the sustainability plan with FAO, completing all remaining tasks and consolidating the results achieved by the project and implement it in coordination with relevant stakeholders.

Recommendation 2. FDHP and FAO: The social impact of biodiversity conservation efforts should be fully considered and systematically recorded.

Recommendation 3. FAO: Design of future projects should be updated with the operational partner to reflect any recent changes in the context prior to implementation. Further, adequate emphasis should be put on aspects of gender and knowledge management based on FAO and GEF guidelines, as well as any required needs assessments. Further, the project's results framework should be simplified to a possible extent and the project outcomes succinctly defined.

Recommendation 4. FAO: Provisions for safeguarding the roles and responsibilities of the GEF agency should be developed, and adequate mechanisms should exist to reinforce them.

115. The experience from the implementation of this project under OPIM reveals that (i) the PMO constituted by the OP may or may not be accountable to the GEF agency and its procedural, financial and reporting requirements, (ii) OPs may and may not consider consulting with or taking concurrence from GEF agency prior to getting the project outputs readjusted/refined through the PSC decisions in case if a basic minimum obligation of a potential OP is not defined and agreed prior to delegating a GEF project implementation under OPIM. Likewise, the roles and responsibilities of the GEF agency especially of the FAO country office including its workload would need to be considered in the recommended operational framework/guidelines for GEF projects under OPIM.
116. When a project is implemented through OPIM, substantial training should be organized for the appointed project Director, Chief Technical Officer, PMO staff and key project consultants on GEF implementation, M&E and reporting.

5. Lessons learned

Lesson 1: Project design appraisal and planning - Revisiting the project design and adjusting as per the recipient country's policy development trend and ground realities of the project area prior to launching of GEF project is likely to add value in case there is long gap between approval and actual implementation of the project (Finding 3).

Lesson 2: Local community participation - Assessment and analysis of likely adverse impacts of conservation measures and planning and execution of corrective measures to mitigate such adverse impacts is key to success for the sustainability of the achieved conservation outcomes (Finding 23).

Lesson 3: Innovation/ science/ research and development - The biodiversity friendly innovative resource use practices and green income incentives creation is as crucial as policy, legal and institutional innovations for the success of projects aiming at biodiversity conservation and ecosystem restoration (Finding 8).

Lesson 4: Political/ institutional challenges - The external political environment is extremely important and can help in enhancing project results and reinforcing common objectives. At the same time, in the development of project, it is important to note project outcomes/outputs beyond the control of the OP, particularly those related to high level legal/legislative process (Finding 1).

Lesson 5: Communications and outreach - It is a good practice to promote the exchange and visit among PMOs at FAO GEF portfolio level. PMO of GEF043 visited the project sites of GEF052 Poyang project and of GEF048 Jilin project and exchanged ideas on project management, wetland conservation, co-management, raising public awareness (Finding 15).

Appendix 1. GEF Evaluation Criteria Rating Table

GEF criteria/sub-criteria	Rating ¹⁹	Summary comments ²⁰
A. STRATEGIC RELEVANCE		
A1. Overall strategic relevance	S	
A1.1. Alignment with GEF and FAO strategic priorities	HS	The project was very well aligned with the GEF 5 Biodiversity Results Framework and the FAO Strategic Framework.
A1.2. Relevance to national, regional and global priorities and beneficiary needs	MS	It was highly relevant and closely aligned with national policies and global priorities. However, the relevance for beneficiary needs was found to have some limitations. Also discussed further in Section 3.6.3.
A1.3. Complementarity with existing interventions	S	Fairly complemented on-going interventions by the national government on conserving biodiversity, as well as other GEF projects in the country.
B. EFFECTIVENESS		
B1. Overall assessment of project results	S	
B1.1 Delivery of project outputs	S	The project successfully delivered most of its outputs as planned.
B1.2 Progress towards outcomes ²¹ and project objectives		
- Component 1	S	The set-up of the Lake Chief System and the IIMS contributed effectively to the strengthening of institutional capacities.
- Component 2	MS	There has been substantial work completed under this component, however the targeted households for the co-management models were not met.
- Component 3	S	Cross-sector collaboration was found to be an important strength of the project. However, participation of some sectors could have been improved.
- Component 4	S	Even though the ET was unable to fully assess component 4 due to the travel restrictions. The partial assessment based on project progress reports and discussions with stakeholders indicates satisfactory progress.
- Component 5	S	The outputs on M&E were sufficiently met, however the knowledge management and the impact of the policies and regulations on relevant populations could have been improved.
- Overall rating of progress towards achieving objectives/ outcomes	S	Overall, results were found to be satisfactory.

¹⁹ See rating scheme at the end of the document.

²⁰ Include reference to the relevant sections in the report.

²¹ Assessment and ratings by individual outcomes may be undertaken if there is added value.

B1.3 Likelihood of impact	MS	The project has laid a strong foundation for biodiversity conservation, however, long term impact would depend on scaling-up the model and managing risks to sustainability.
C. EFFICIENCY		
C1. Efficiency ²²	MS	Even though the executing and implementing agencies learned their lessons and managed to maintain a relatively satisfactory working relationship in course of project implementation, there was overall room for improvement with a few inefficiencies being noted.
D. SUSTAINABILITY OF PROJECT OUTCOMES		
D1. Overall likelihood of risks to sustainability	L	The overall likelihood of risks to sustainability is low given the strong focus of the project on institutions, coordination, and capacity building, however, there are still some important risks that need to be considered to ensure sustainability.
D1.1. Financial risks	L	Presently, a sustainable financing mechanism has been put in place, however, with the establishment of a DL National Park what changes will occur in the institutional framework and arrangements for the governance of DWE area and how that will affect the existing financing mechanism will be the determinant of financial sustainability.
D1.2. Socio-political risks	ML	The project's achieved results have been founded on the policy and institutional strengthening further supported through the political commitment to making a move towards achieving ecological civilization. However, the project has only partially engaged with the people living in and around the DWE area through the piloting of NR co-management models. This poses some socio-political risk to sustainability in case the socio-economic wellbeing of the area is threatened in pursuit of sustaining the project's achieved results.
D1.3. Institutional and governance risks	L	Presently, there is no institutional and governance related risk and these aspects are likely to get further strengthened with declaration of a national park.
D1.4. Environmental risks	L	There is no environmental risk.
D2. Catalysis and replication	S	As observed with other similar projects in the region.
E. FACTORS AFFECTING PERFORMANCE		
E1. Project design and readiness ²³	MU	The project design should have considered the various measures likely to be undertaken for reclaiming the DWE area including cleaning operations and their impact on the socio-economic wellbeing of the population living in the area. However, the evaluation team also notes that the project was not initially designed for the OPIM modality.
E2. Quality of project implementation	S	
E2.1 Quality of project implementation by FAO (BH, LTO, PTF, etc.)	S	Technical assistance and support was provided as planned and as per the request of the Operational Partner well in time

²² Includes cost efficiency and timeliness.

²³ This refers to factors affecting the project's ability to start as expected, such as the presence of sufficient capacity among executing partners at project launch.

E2.1 Project oversight (PSC, project working group, etc.)	S	Monitoring and supervision missions were carried out as planned and required and necessary supports were provided on timely basis
E3. Quality of project execution For DEX projects: Project Management Unit/BH; For OPIM projects: Executing Agency	MS	Even though the executing agency discharged its roles adequately, the project faced a few delays and inefficiencies that could have been prevented. These are also summarised in conclusion 5.
E4. Financial management and co-financing	S	Co-financing exceeds the expectation. Management of GEF grant can be improved.
E5. Project partnerships and stakeholder engagement	S	A range of key stakeholders were involved at multiple levels.
E6. Communication, knowledge management and knowledge products	MS	There was enough room for further improvement in knowledge management.
E7. Overall quality of M&E	S	
E7.1 M&E design	S	Meets expectation.
E7.2 M&E plan implementation (including financial and human resources)	S	There was room for further improvement in reporting and overall monitoring along the project implementation.
E8. Overall assessment of factors affecting performance	MS	
F. CROSS-CUTTING CONCERNS		
F1. Gender and other equity dimensions	MS	Despite the project efforts to gender sensitized approach to implementing project activities, overall a limited focus on gender and equity dimensions was found.
F2. Human rights issues/Indigenous Peoples	UA	Given the limitations with field data collection.
F2. Environmental and social safeguards	MU	The project design and implementation overlooked the documentation and reporting of the social impact of cleaning operations and remediation actions undertaken. The project was exempt from an Environmental Assessment and the rating here is focused on social safeguards.
Overall project rating	S	

Appendix 2- Rating Scheme²⁴

PROJECT RESULTS AND OUTCOMES

Project outcomes are rated based on the extent to which project objectives were achieved. A six-point rating scale is used to assess overall outcomes:

Rating	Description
Highly Satisfactory (HS)	"Level of outcomes achieved clearly exceeds expectations and/or there were no short comings."
Satisfactory (S)	"Level of outcomes achieved was as expected and/or there were no or minor short comings."
Moderately Satisfactory (MS)	"Level of outcomes achieved more or less as expected and/or there were moderate short comings."
Moderately Unsatisfactory (MU)	"Level of outcomes achieved somewhat lower than expected and/or there were significant shortcomings."
Unsatisfactory (U)	"Level of outcomes achieved substantially lower than expected and/or there were major short comings."
Highly Unsatisfactory (HU)	"Only a negligible level of outcomes achieved and/or there were severe short comings."
Unable to Assess (UA)	The available information does not allow an assessment of the level of outcome achievements.

During project implementation, the results framework of some projects may have been modified. In cases where modifications in the project impact, outcomes and outputs have not scaled down their overall scope, the evaluator should assess outcome achievements based on the revised results framework. In instances where the scope of the project objectives and outcomes has been scaled down, the magnitude of and necessity for downscaling is taken into account and despite achievement of results as per the revised results framework, where appropriate, a lower outcome effectiveness rating may be given.

PROJECT IMPLEMENTATION AND EXECUTION

Quality of implementation and of execution will be rated separately. Quality of implementation pertains to the role and responsibilities discharged by the GEF Agencies that have direct access to GEF resources. Quality of Execution pertains to the roles and responsibilities discharged by the country or regional counterparts that received GEF funds from the GEF Agencies and executed the funded activities on ground. The performance will be rated on a six-point scale:

Rating	Description
Highly Satisfactory (HS)	There were no shortcomings and quality of implementation or execution exceeded expectations.
Satisfactory (S)	There were no or minor shortcomings and quality of implementation or execution meets expectations.
Moderately Satisfactory (MS)	There were some shortcomings and quality of implementation or execution more or less meets expectations.

²⁴ See instructions provided in Annex 2: Rating Scales in the "Guidelines for GEF Agencies in Conducting Terminal Evaluations for Full-sized Project", April 2017.

Rating	Description
Moderately Unsatisfactory (MU)	<i>There were significant shortcomings and quality of implementation or execution somewhat lower than expected.</i>
Unsatisfactory (U)	<i>There were major shortcomings and quality of implementation substantially lower than expected.</i>
Highly Unsatisfactory (HU)	<i>There were severe shortcomings in quality of implementation or execution.</i>
Unable to Assess (UA)	<i>The available information does not allow an assessment of the quality of implementation or execution.</i>

MONITORING AND EVALUATION

117. Quality of project M&E will be assessed in terms of:

- Design
- Implementation

SUSTAINABILITY

The sustainability will be assessed taking into account the risks related to financial, socio-political, institutional, and environmental sustainability of project outcomes. The evaluator may also take other risks into account that may affect sustainability. The overall sustainability will be assessed using a four-point scale:

Rating	Description
Likely (L)	<i>There is little or no risk to sustainability.</i>
Moderately Likely (ML)	<i>There are moderate risks to sustainability.</i>
Moderately Unlikely (MU)	<i>There are significant risks to sustainability.</i>
Unlikely (U)	<i>There are severe risks to sustainability.</i>
Unable to Assess (UA)	<i>Unable to assess the expected incidence and magnitude of risks to sustainability.</i>

Appendix 3: Result matrix showing achievements and Evaluation Team's comments

Component 1: Strengthening of Institutional capacities for Integrated Monitoring and Management of Biodiversity in DWE					
Outcomes/Outputs	Baseline	End-of Project Target	Achievement by the Mid-term	Achievement by the end of project	ET's Comment
<p>Outcome 1.1: DLCC is fulfilling its function coordinating the implementation of the DWEMP and at least two key biodiversity threats addressed (sand mining threatening porpoises, poplar plantations, and/or un-sustainable fisheries) by the end of project</p>	<p>No issues addressed by DLCC</p>	<p>A functional DLCC with operational budget, staff, working procedure and five-year work plan in implementation ;</p> <p>At least two biodiversity threats addressed;</p>	<p>From Project Year (PY1), PMSGM executed blue water actions; By PY2, pollution from cultivation, industry, illegal fishing, and sand mining were completely stopped including garbage cleaning in lake areas and removal of 5,300 ha of poplar plantation in core areas of NRs; 45% of outcome achieved as per the MTE;</p>	<p>The Lake and the river Chief Regime, institutionalized at the highest level of provincial government is now the inter-sector coordinating entity for DWE conservation. It is effectively functional for inducing eco-civilization in the province;</p> <p>Over 21,093 ha of poplars was removed including 5,700 ha in core areas of NRs;</p> <p>Inside the DL Waters, sand mining, illegal fishing and fish culture activities with adverse environmental impact e.g., pen and cage aquaculture are completely stopped;</p> <p>A 10-year fishing ban in the Yangtze River system including DL area is imposed effective from Jan. 2020;</p> <p>DWEMP finalized and in the process of review prior to getting approved and implemented;</p>	<p>Further strengthened approach to ensuring coordinated approach to conservation; Satisfactory</p>
<p>OP 1.1.1: DLCC strengthened by the end of the project with: i) a functioning secretariat in FDHP (two half-time staffs, office equipment and operations budget); ii) agreed operations procedures; iii) agreed five-year work plan; iii) at least one meeting per year held;</p> <p>OP 1.1.2 Updated detailed biodiversity baseline and threat analysis by the end of PY1 including three technical reports on: a) DWE biodiversity and ecosystem services value and status; b) impacts on biodiversity from different sectors and response options; and c) options and priorities for land and water use plans valuating biodiversity;</p> <p>OP 1.1.3 Integrated DWE MP incorporating valuation of biodiversity approved by DLCC by PY3 and under</p>	<p>In 2007, the DLCC was created, chairman and members were appointed, however, it remained inactive due to lack of budget, procedures and work plan.</p> <p>separate studies exist; findings not integrated into management planning. No study on the valuation of DWE ecosystem services which needs to be updated.</p> <p>A framework master plan exists but lacks detailed actions and implementation capacity among relevant agencies at different levels. Stakeholders also lack mechanisms to participate in DWE management planning</p>	<p>A fully functional DLCC with staff and budget, working procedure and a five-year work plan;</p> <p>Three draft reports prepared within 9 months of the project implementation and consulted with focus groups (at least three meetings per report) from relevant sectors prior to finalization by the end of PY1.</p> <p>Integrated DWE MP drafted and finalized through a consultative process led by PMSGM by the end</p>	<p>PMSGJM in lieu of DLCC got established and operationalized in PMO; Budget and staffing provided by FDHP through co-financing; Its working procedure and 5-year work planning initiated.</p> <p>Biodiversity baseline updated; Threat Analysis accomplished; Technical reports: 1) DWE biodiversity and ecosystem services value and status, 2) impacts on biodiversity from different sectors and response options; and 3) options and priorities for land and water use plans valuating biodiversity under preparation;</p>	<p>The lake and river chief system are functional. Its Provincial level meeting held on May 26/2021 reviewed the good practices and lessons learned in 2020 and allocated annual tasks for 2021.</p> <p>The technical reports published and released</p> <p>The Integrated DWEMP got reviewed and approved in June,2021 and is under implementation.</p>	<p>The reason behind shift from DLCC to PMSGJM to Lake Chief System to achieve intersectoral protection mechanism though not clear but evident.</p>

Outcomes/Outputs	Baseline	End-of Project Target	Achievement by the Mid-term	Achievement by the end of Project	Evaluation Team's Comment
Output 2.1.2: West Dongting Lake NR and South Dongting Lake NR are upgraded from provincial NRs to National NRs and Hengling NR to Ramsar site by the end of PY3 (facilitating increased national government budget allocation).	West DL NR has presented documentation (master plan, biodiversity baseline survey) and application to SFA. South DL NR and Hengling NR are planning to start the documentation and application procedure in 2013. Both NRs need updating of their biodiversity baseline	By the end of PY3, the State Council approves the upgrading of South DL NR; and recommends the Ramsar Secretariate to designate Hengling Lake NR as a Ramsar site.	Biodiversity baseline for South DLNR and West DLNR accomplished. Application for upgrading of Hengling DLNR to Ramsar site readied but not in NFGA priority agenda,	The DL National Park designation got approved as priority by Forestry and Grassland Administration of Hunan Province. The upgrading of South DLNR to a national NR was dropped and it is to be aligned with progress of DL National Park under consideration (as per the decision of 3 rd . PSC in Aug. 2019). All formal procedures for the designation of Hengling NR to a Ramsar Site accomplished and awaiting approval from NFGA.	Change in output noted – was the GEF agency consulted?
Output 2.1.3: Four five-years NR management plans (NRMP) updated for 2013-2018 and at least 20 NR staff trained in NR planning and management strengthening the DWE NR network	The four DL NRs have 15-years master plans but they are outdated and do not provide concrete priorities, activities and work planning for a short and medium-term period (five years) such as much needed zoning and use regulation and co-management mechanisms	By the end of PY2, four NRMPs formulated through consultative process and approved; The NRMPs are implemented, monitored and their workplans improved based on learning and experience in each subsequent year.	Updated NRMPs of East and West DLNR awaiting local governments approval; NRMP of Hengling NR readied and in waiting to adjust per upcoming legal/institutional reforms; Work on progress on NRMP of South DLNR by a taskforce,	All 4 NRMPs updated, approved by the Division of PAs/FDHP and being implemented as targeted.	Satisfactory
Output 2.1.4: Capacities for NR management strengthened through: a) training of 100 NR staff in BD monitoring and conservation measures, eco-tourism in NRs, law enforcement and co-management mechanism, and public communication and awareness raising; and b) up-grating of infrastructure, patrol and monitoring equipment in three DL NRs (West, South and Hengling)	Staff trained mostly in bird monitoring and protection during the UNDP/GEF project, but there has been changes in staff and capacities need to be broadened to other species and issues important for NR management. Only East DL NR is adequately equipped for monitoring and provision of services to visitors including a training center and 4 management stations	By PY 1, patrolling and monitoring equipment procured and identified infrastructures developed; 80 Staff trained @20 per year from PY2 to PY5;	>100 staff trained as targeted, Infrastructure of each NR got greatly improved including watch tower, animal rescue center, education center etc. An ecological monitoring station, a Milu rescue center and field offices etc. got constructed;	NR management capacity of staff accomplished as targeted by 2019; In 2020, West DL NR carried out a training on comprehensive wetland law enforcement for 45 persons and Hengling NR carried out ship driving skills training for 10 persons; By 2020, the conservation infrastructure and patrolling and monitoring equipment in three DLNRs (West, South and Hengling) as targeted was accomplished.	capacity needs assessment lacking.
Outcomes/Outputs	Baseline	End-of Project Target	Achievement by the Mid-term	Achievement by the end of Project	Evaluation Team's Comment
Outcome 2.2.a: Improved biodiversity and endangered species indicators by the end of the project in DWE: (i) increase in total bird visitation by 10% in the four DL NRs; (ii) finless porpoise population maintained; (iii) lesser white-fronted goose population maintained; (iv) black stork population maintained; (v) 5% increase in Pere David deer population; (vi) Whistling Swan population maintained; (vii) increase from 2 to 5% appearance of Silver Fish in monitoring caches (ecosystem health indicator)	(i) Total migratory bird visitation 104,000-130,000 (2008-2012); (ii) Finless porpoise: 100-150 in DWE (2011), ca. 800 total population; (iii) Lesser white-fronted goose (Anser erythropus): 18,000 in DWE (mostly in East DL NR) which is 50% of total global population; (iv) Black stork (ciconia nigra): 23 in DWE (Dec. 2011), 24,000-34,000 East Asia population; (v) Pere David's Deer (Elaphurus Davidianus): 25 in DWE (Jan 2012), 3000 global population; (vi) Whistling Swan (Cygnus columbianus): 800-1,000 in DWE (Nov.-Dec 2011),	(i) Total migratory bird visitation 114,400-143,000; (ii) Finless porpoise: 100-150; (iii) Lesser white-fronted goose (Anser erythropus): 18,000; (iv) Black stork (ciconia nigra): 23; (v) Pere David's Deer (Elaphurus Davidianus): 26-27; (vi) Whistling Swan (Cygnus columbianus): 800-1,000; (vii) Silver fish: 5% appearance rate in monitoring catches	BD Tracking Tool results of 2017-2018 showed sharp rise in species population and diversity as follows: i) total wintering birds 226352 (53 species); ii) The synchronized investigation of finless Porpoise in central Yangtze main river and Dongting, Poyang Lake showed the total number of porpoise in Dongting Lake increased to 100, (more than the data of 2013-2014); iii) lesser white-fronted goose population: 3726; (iv) black stork: 85; (v) Milu (Pere David deer: 182; Whistling Swan: 5155;	Flagship species simultaneous monitoring in all four NRs conducted in 2020/21 revealed further increase in population as follows: <ul style="list-style-type: none"> • Wintering birds: 288,157; • Lesser white-fronted goose: 3493; • Whistle Swans: 6542. • Finless porpoise: 130 in 2020; • Black storks: 106 (West DL in 2020); • Pere David's Deer: 209 (in 2020); • 5% appearance rate of silver fish in monitoring catches in field survey in 2018 (Monitoring not possible after the ban on fishing) 	Satisfactory

	86,000 global population; (vii) Silver fish (near endangered in IUCN Red List): 2% appearance rate in monitoring catches in DWE (2011)				
Outcome 2.2.b: Improved income indicators for households (of which 60% are represented by women as the main participant and beneficiary) involved in co-management demonstration models: (i) 320 farming households have increased their income with at least 30% in East DL NR from bird-friendly rice production; (ii) 400 households involved in organic fish farming and 500 households involved in rights based fisheries co-management to support the restoration of fisheries resources have increased their income with at least 100% in Hengling NR experimental zone; (iii) 70 households have increased their income with at least 100% in West DL NR from eco-tourism operations and bird habitat conservation	2.2.b (i) income baseline to be established in PY1	By PY3, (i) 20 farming households involved with 30% increase in income; (ii) 400 households involved (200 in organic fish farming and 200 in rights-based fisheries co-management) with 100% increase in income; (iii) 70 households incorporated and their income increased with 100% By PY5, (i) 320 farming households involved with 30% increase in income; (ii) 900 households involved (400 in organic fish farming and 500 in rights-based fisheries co-management) with 100% increase in income; (iii) 70 households incorporated and their income increased with 100%	NR Co-management was yet to be implemented.	In East DL, with recognition of both the farmers and the local township authority, the bird friendly rice-fish farming practiced by 26 households in 284 mu of farmland is estimated to increase the income per unit of land by over 50% including significant reduction in use of pesticides; In West DL, eco-tourism with nature experience got acceptance and a local expanded his homestay business from one to four however with negligible income till to-date due to COVID-19; In South DL, the nearby community households engaged in reed-based mushroom cultivation are expected to have income as per the project's target but it is yet to be assessed and verified. Ecological fish farming with <i>Fructus viticis</i> planting practiced by 100% of local farmers is generating an estimated increase of 500 Yuan/year/person subject to assessment while income from <i>Fructus</i> is negligible;	Only 268 households out of targeted 1290 engaged in four NR co-management models
Output 2.2.1: Four demonstration models for NR co-management implemented: a) agriculture integrated management model restoring paddy harvested fields as winter bird feeding ground on 700 ha involving 320 households in East DL NR; b) reed and poplar management model in South DL NR; c) organic fish farming (involving 400 households) and ecosystem and rights-based fisheries co-management (involving 500 households) models to support the restoration of fisheries resources and maintain the porpoise population in 1,800 ha in Hengling NR experimental zone; d) eco-tourism and bird habitat conservation model conserving 60 ha of bird	a) 700 ha converted to vegetable production in winter season reducing migratory birds feeding area in NR experimental zone. Preliminary economic, social and biodiversity feasibility study has been conducted. Framework of agreement has been discussed among partners. b) 10,000 ha of monoculture of poplar and reed in NR core zone are fragmenting habitats. 10 years compensation contracts with poplar enterprises for cutting trees and not planting new trees runs out in 2014. c) 200 households involved in Illegal fishing in Hengling NR and experimental zone resulting in fish stocks under high pressure as evidenced by the silver fish ecosystem health	By the end of PY5, Farmers trained, four pilot NR Co-management models implemented, outcomes monitored, solution options and incentives provided, assessments undertaken and lessons documented for replication,	Preliminary and preparatory works for piloting NR Co-management in all four NRs undertaken including delineation and clearing of areas to be allocated for piloting of specific NR Co-management models, feasibility studies for different co-management models, impact assessment, awareness raising and community consultations through workshops; Economic feasibility analysis, partnership arrangements including identification of specific service providing institutions and drafting of agreements for engagement of relevant	As per the survey carried out by PMO to assess the change in income level of those engaged in different NR Co-management models promoted by the project: In East DLNR, income from bird friendly rice-fish integrated farming as per a random survey of 26 out of 225 households is found to increase by 92% against the 2014 baseline income; In South DLNR, 20 households surveyed out of 60 (of which 10 are relatively poor) practicing reed based mushroom farming have increased their annual income by almost 100% against the 2014 baseline income; In West DLNR, 37 HH engaged in ecotourism and 70 fishermen supported for ecotourism - based income were found to have raised their income by 150%; In Hengling NR, out of 162 HH (of which 92 engaged in fructus viticis cultivation and 30 in ecological fishery), 40 HH	

habitat and 70 additional households involved in eco-tourism operations in West DL NR.	indicator (2% appearance rate in monitoring catches in Hengling NR) and the decreasing population of porpoises (20-30 individuals left in Hengling lake which might be difficult to monitor but it feeds on 4 carp species as an important food source which can be monitored, baseline to be established in PY1). d) Illegal fishing activities by 70 fishing vessels are disturbing the birds in the West DL NR core area. Good opportunities for eco-tourism and birds biodiversity comanagement because of high concentration of birds and diversified habitat which could reduce the pressure from illegal fishing and bring local economic benefits from birds biodiversity conservation. A pilot experience exists from Banbian Lake involving local population in bird conservation.		communities and service provider agencies in specific co-management models, Activities under progress for piloting of NR Co-management	surveyed were found to have raised their income by 106%; Findings of the survey indicate that NR Co-management models piloted so far are efficient in conservation friendly employment and income generation to a desired level and are likely to get replicated in case adequate capacity, material and technical support is availed to target population.	
Output 2.2.2: Conservation of five flagship biodiversity species (finless porpoise, lesser white-fronted goose, black stork, Pere David's Deer, Whistle Swan) in a common effort among all NRs through: a) development and implementation of conservation action plan; b) restoration of 6,000 ha of habitat; c) systematic monitoring of population or proxy indicators for population size supported by a GIS data base	No specific action plans for flagship species have been established. CAS (Institute of aquatic biology) has a monitoring program on finless porpoise and ex-situ conservation has started but no results yet. UNDP/GEF project (GEF ID: 623) established population monitoring system for East DL (which did not include habitat), but no monitoring system exist for at NR network and DWE ecosystem level.	By PY1, i) Five species conservation action plans developed, ii) Collaboration established with conservation plans for the selected species for other geographical areas they migrate to and iii) Systematic population monitoring system expanded to all NRs; From PY 2, Priority conservation actions implemented including threat mitigation and habitat restoration and improvement through periodic monitoring;	By PY1, Conservation action plan for 5 flagship species (with established collaboration with the conservation plans of the areas where they migrate to) was developed with support from GEF consultants; Species monitoring system expanded from East DLNR to all DLNRs; Expanded monitoring of species status and habitat initiated including priority actions;	The implementation of action plans for the conservation of five flagship species resulted in restoration of 44,600ha of DL wetlands including restoration and development of 60ha of Pere David's deer habitat and tree plantation along 163 km long Yangtze River bank. GIS based monitoring of flagship species in NR networks level has been institutionalized and annual reports being published.	Satisfactory
Component 3: Mainstreaming of Biodiversity Conservation into Key Sectors					
Outcomes/Outputs	Baseline	End-of-Project Target	Achievement by the Mid-term	Achievement by the end of Project	ET's Comment
Outcome 3.1.a: BD O2 tracking tool score on biodiversity conservation integration in policies and regulations increased from 17 to 23 (out of 36 possible) for the sectors influencing on DWE	17	BD O2 tracking tool score increase to 20 in PY 3 and to 23 in PY 5.	Tracking of Biodiversity conservation integration in policies and regulations carried out by PMO in July 2018 provided a score of 31 against 17 in 2011. Achievement is attributed to the conservation	As of July 2021, the BD O2 tracking tool score on biodiversity conservation integration in policies and regulations based on assessment conducted by the PMO is recorded 35 (higher by 12 points compared to target in PY5)	Satisfactory

			supportive amendment of all key economic sector regulations and enforcement of their action plans.		
Outcome 3.1.b: Poplar plantation reduced by 20,000 ha by the end of the project	400,000 ha.	3,80,000 ha by PY5.	6000 ha of poplar plantation in NR core zone was fully cleared.	As of July 2021, 29600 ha of poplars have been removed in four NRs, and 9087 ha of NRs' core areas have been restored (achievement far more than targeted)	Satisfactory
Output 3.1.1: Amendment of Wetland Protection Regulation of Hunan Province (WPRHP) presented to the Provincial People's Congress by PY3 including in particular provisions for: a) integrated management of wetland biodiversity and ecosystems; and b) compensation mechanism for conservation of wetlands biodiversity and ecosystem services	WPRHP proclaimed in 2005 but without clear provisions for unified coordination and effective management of wetlands biodiversity and ecosystems and mechanisms for compensation for biodiversity and ecosystem services conservation. Some consultations have been conducted on wetland conservation as a whole, but none supporting an amendment of the WPRHP	By PY4, the amendment in WPRHP in favor of BD conservation is subjected to rigorous consultation and refinement process at multiple levels and with all relevant stakeholders, the final draft submitted to the People's congress is passed and enacted for execution.	As planned, the amendment in WPRHP was drafted with input from economist and legal experts and through rigorous consultation at multiple levels and final draft submitted to the Provincial People's Congress awaits approval for enactment;	Revised and updated WPRHP comprising provisions for integrated management of wetland biodiversity and ecosystem and compensation mechanism submitted to the legislative committee of the Provincial People's Congress in 2019 for approval and promulgation is suspended until the national integration and optimization of regulations is not accomplished. However, many conservation-supportive legal instruments e. for g. DL protection regulation, 2021, Yangtze river protection law, the Regulations on the Protection of West Dongting Lake as an Internationally Important Wetlands in Changde Municipality, 2020 and many more have been developed and promulgated.	Moderately Satisfactory
Output 3.1.2: At least two sector policies (fisheries, reed and/or poplar plantation) are aligned with WPRHP, the Integrated DWEMP and the four AMNR decrees and NRMPs at local and provincial level by the end of the project	Conflicting regulation between NR master plans and regulations and sector policies and regulations	By PY 3 and 4, the sector policies on fisheries, reed and/or poplar plantation are aligned as per the WPRHP and four AMNR decrees and NRMPs including the relevant conservation regulations	Key sector policies including fisheries, reed and poplar aligned as per WPRHP and four AMNR decrees supportive to the conservation of DLWE and biodiversity therein has been enacted; Joint actions for cleaning up of Dongting Lake have been accomplished;	<i>the Regulations on the Protection of Dongting Lake in Hunan Province</i> , passed by the Provincial People's Congress to be enforced from Sept./2021 is also aligned with key sector policies and four AMNR decrees to be as effective as WPRHP for biodiversity conservation and Wetland ecosystem restoration.	S
Output 3.1.3: Practical skills of 360 provincial and local government officers in enforcement of wetland conservation and sustainable use regulations enhanced	Trainings exist but without specific focus on compliance with wetland regulation	From PY3 to PY5, 360 provincial and local government officers trained in enforcement of sustainable use regulations and wetland conservation law @ 120 officers per year	Practical skills of 110 provincial and local government officials for wetland conservation and sustainable use regulation enforcement was enhanced;	From May 2018 to March 2020, PMO jointly with FDHP organized four training events on topics e.g., NR management and law enforcement, construction and management of NRs (including wetland NRs), skills training on wetland biodiversity conservation and sustainable use including law enforcement participated by 394 NR staff members, local and provincial government officials and other stakeholders West DL NR in July, 2020 organized a 1-day training on administrative law enforcement	TNA was not carried out. Training conducted were based on a training plan developed by FDHP after MTE. Moderately satisfactory

				for 84 participants and a 2-day training on comprehensive law enforcement for 11 participants on May, 2021. Project claimed to have trained 489 government and project officials and other stakeholders after MTE making a total of 599 trained on different aspects over the project implementation period.	
Output 3.1.4: Increased capacity of 40 provincial and local government officials and private sector representatives in development and implementation of biodiversity conservation measures and practices in fishery management, pollution control from paper mills, sand mining and land-use planning for reed and poplar plantations	There is knowledge on technical solutions and biodiversity friendly practices among technical staff but managers lack knowledge on good examples to support their decision-making	Altogether four study visits are planned and executed for 40 local and provincial officials and private sector representatives by @8 to 12 officials per study visit from PY 2 to PY5.	Not achieved but preliminary works on-going to accomplish the output by the end of PY3 (2019).	Two study tours organized by PMO in 2021, one for PSC reps. and NR officials and one for reps. from county, municipality and provincial government participated by +21=28 reps. One study tour planned for 12 participants	Moderately Satisfactory
Component 4: Environmental Education and Awareness					
Outcome/Outputs	Baseline	End-of-Project Target	Achievement by Mid-term	Achievement by the end of Project	ET's comment
Outcome 4.1: Awareness among the local population on DWE biodiversity value, use and wetlands protection regulations increased to 30%.	Less than 10% of the local population knows about wetlands provincial regulation	30% increase in awareness among local population on biodiversity values, use and WPRHP	MTE team estimated a 20% increase in awareness among local population with respect to biodiversity value, use and WPRHP based on the data of NRs of 2018.	As per the questionnaire-based survey conducted by the PMO in July 2021, the level of environmental awareness among the local residents in the four NRs in Dongting Lake area was found to be at 72.48%, which was found to be at only 35.67% in 2020 survey. Key dimensions for environmental awareness comprised i) DWE cognition and use, ii) awareness of wetland protection regulations, and iii) DWE values;	Satisfactory
Output 4.1.1: 50,000 brochures distributed and system of 20 billboard signs set up on: a) flagship species conservation; b) rules and regulations for protection and use of wetlands biodiversity; c) success stories on organic aquaculture, eco-tourism, ecosystem and rights- based management of fisheries, and bird-friendly cultivation plan; and d) NR demarcation	Four brochures; two on East and South DL NR in general, one on some specific water bird species, and one on ecotourism in West DL NR 16 billboard signs in DWE marking core zone and communicating some rules and important habitats	By PY2, 50,000 brochures designed and published, 20 billboards designed and set up	Above 10,000 copies of brochures designed published and distributed; Billboards designed, developed and erected as planned; East DLNR visiting center was updated;	55,000 brochures have been distributed; 40 billboard sign posts have been setup; Additionally, lots of awareness raising materials e.g., posters, pamphlets, calendars, paper cups, handbags and stationaries were produced and distributed by the PMO and the four NR Bureaus;	
Output 4.1.2: Infrastructure and display of visitors and other education centers improved including: a) construction of three visitors and education centers of West, South and Hengling DL NRs; b) improvement of displays in four centers; and c) upgrading of displays in	There are only 2 useful visitors and education centers in 4 NRs; The infrastructure needs improvements to meet the needs.	By PY 2, 1) Existing education center improved in West DL NR 2) Displays upgraded in Qingshan polder organic aquaculture success story exhibition hall	Achieved as planned in case of West and South DLNR; Work in progress in case of Hengling DLNR visitor and education center; East DLNR organized international	West DL NR completed and opened for public its Fish and Birds Museum and Publicity and Exhibition Center; East DLNR established its Wetland Biological Science Museum; A Dongting Lake Museum has also been established;	

Qingshan polder organic aquaculture success story exhibition hall (West DL NR)		(West DL NR) 1) Visitors and education centers Hengling and South DL NRs constructed 2) Displays improved in 4 centers	symposium on DL and bird festival with commendable participation;	The Exhibition Center of the Hengling Lake NR is in the final stage of completion;	
Output 4.1.3: Special campaign and events organized and conducted including: a) 20 summer holiday university volunteers camps in each of the four NRs; and b) 40-60 campaigns on special days such as annual Wetlands day, annual Bird week, bi-annual Bird watching race	The activities are already been done; however, improvements are needed in design, planning and organization of the events	From PY 1 to PY5, every year four camps and 8 to 12 special events organized in project area	East and West DLNRs organized summer camps of two universities; 7 Universities participated in various activities; General Secretary Xi Jinping visited East DLNR; It was followed by the visit of more than 100 delegations comprising above 5000 people from various provinces since the second half of 2018	To date, the four Nature Reserves have held 60 special day activities including "Bird Week", "Wetlands Day", "International Day for Biological Diversity" and "World Environment Day", 8 summer and winter camps for university students, and 3 bird watching festivals, and 1 bird watching contest.	Behind the target on organizing summer camps by NRs.
Output 4.1.4: Curricula on DWE biodiversity conservation and sustainable use included in 20 middle schools in counties and townships around the lake reaching 30,000 students.	No curricula exit	In PY 3, Middle school curricula developed in consultation with the provincial education department; In PY4, Curricula included in 4 schools In PY5, Curricula included in 16 additional schools	As planned the draft curricula and supporting education materials developed; Work in progress on consultation, finalization and piloting in four middle schools.	The text book on DWE Biodiversity Conservation and Sustainable Use for middle schools after refinements based on many consultations with county level education authorities got finalized and published; The text book is expected to be used in teaching over 20,000 students of 44 middle schools from July 2021 and 82 teachers will need to be trained	Output is yet to be fully achieved.

Component 5: Monitoring and Evaluation and Information Dissemination

Outcome/Outputs	Baseline	End-of-project Target	Achievement by Mid-term	Achievement by the end of project	ET's Comments
Outcome 5.1: Project implementation based on results-based management and increased receptivity and adoption of DWE approach to "mainstreaming" biodiversity conservation in sector planning in both China and elsewhere	Project results framework with project output and outcome indicators, targets and baseline	Project outcomes are achieved and showing signs of sustainability	Approximately 40% of the targets by PY 2 and 3 achieved; An international symposium on ecological restoration and green development organized;	Executing partners learned and practiced Results-based management in course of project implementation; Participation and showcasing of the learning on DWE approach to mainstreaming of biodiversity conservation and policy and practice of community-based co-management in the international fora in Myanmar and Thailand; Sustainability plan to be implemented after the end of the project developed, reviewed and finalized	Moderately Satisfactory
Output 5.1.1: Project monitoring system providing six-monthly reports on progress in achieving project outputs and outcomes		10 Six monthly PPRs @2 per year prepared and submitted	Project monitoring procedure and system established; Regular monitoring and bi-annual project progress reporting institutionalized and implemented;	10 PPRs and 5 PIRs submitted indicate in an average achievement of 89% of the project outputs and outcomes;	Satisfactory
Output 5.1.2: Midterm and final evaluation reports	N/A	In PY3, Mid-term Evaluation and in PY5, Final	Mid-term evaluation conducted as planned;	Final Evaluation of the project being conducted;	Satisfactory

		Evaluation of the performance of the project conducted			
Output 5.1.3: Project “best-practices” and “lessons-learned” in relation to co-management models, integrated DWE management experience, mainstreaming of wetlands biodiversity conservation in sectors disseminated via publications, project website and others.	N/A	Project website established, periodic newsletters published, publications on experiences gained, best practices and lessons learned available from PY 3.	Bi-annual Newsletter of the Project comprising progress, achievements and other relevant information is published. Project Website not set up as planned	The <i>Biodiversity Conservation and Sustainable Use in DWE - Protecting Clear Waters</i> and <i>White Paper on DWE Services and Biodiversity</i> published; 10 issues of newsletter were published on the official website of the FAO and 1 pipeline; 25 project newsletters posted on the WeChat official account of DPA and 18 work briefs were released.	Satisfactory

Appendix 4 – List of people interviewed/consulted

S.NO.	Name	Position/Organization	Role in the project	Interview Methods
Project Steering Committee				
1.	Mr. Hu Changqing	Director General of FDHP	Director of the PSC	Individual SSI
2.	Mr. Wang Yuanbao	Head of Fisheries and Fishery Administration Division	Deputy Director of PSC	Individual SSI
3.	Mr. Ma Xuliang	Deputy Director, Yiyang Forestry Bureau	PSC member,	Individual SSI
Project Management Office				
4.	Mr. He Ping	Head/PA Management Division, FDHP	Director of the PMO	Individual SSI
5.	Mr. Tian Shurong	Division Head of Zoology Institute of Hunan Forestry Academy	CTA, PMO	Individual SSI
6.	Mr. Zhang Chen	Professor/Institute of Subtropical Agriculture, Chinese Academy of Sciences	Former CTA/M&E Consultant	Individual SSI
7.	Ms. Fu Lina	PMO of FDHP	Project Manager	Individual SSI
8.	Ms. Dou Ying	PMO of FDHP	Financial Manager	Individual SSI
FAO - The GEF Agency				
9.	Mr. Miao Weimin	FAO HQ Rome	Lead Technical Officer (LTO)	
10.	Ms. Naito Yurie	FAO HQ Rome, GEF coordination Unit	Technical Officer (FLO)	
11.	Ms. Genevieve Braun	FAO HQ Rome, GEF coordination Unit	Program Officer	
12.	Ms. Ydidya Abera	FAO HQ Rome, GEF coordination Unit	Program Officer	
13.	Mr. Yao Chunsheng	FAO Country Office, Beijing	Project Task Manager	
14.	Mr. Carlos Watson	FAO Country Office, Beijing	Country Rep./ Budget Holder	

15.	Mr. Morici Gianmarco	FAO HQ Rome	OPIM team member, PSS	
NRMB Staff involved in Project				
16.	Mr. Tong Zheng	East Dongting Lake National NRMB of Hunan Province	Director	Presentati on / FGD with SSI
17.	Mr. Gao Dali		Deputy Director	
18.	Mr. Zhang Hong		Deputy Director/PMO Director	
19.	Mr. Liu Xiangkui		Division Head of NR	
20.	Mr. Gao Yucheng		Pere David's Deer Specialist,	
21.	Ms. Fu DongLei	Yueyang Municipal Forestry Bureau	Staff	
22.	Mr. Yang Wang	Hengling Lake Provincial NR	Party Secretary	Presentati on / FGD with SSI
23.	Mr. Luo Dingwu		Director	
24.	Mr. Xia Wei		Deputy Director,	
25.	Mr. Zhou Zan		Division Head	
26.	Mr. Feng Xiaoqiong		Staff	
27.	Mr. Ma Xuliang	South Dongting Lake Provincial NRMB, Yiyang Municipality	PSC member,	Presentati on / FGD with SSI
28.	Mr. Cao Xueyou		Director	
29.	Ms. Liu Fen		Deputy Director	
30.	Mr. Wan Xianjun		Deputy Director/PSC Member	
31.	Mr. Wang Long		Division Head	
32.	Mr. Zhu Hongjian		Staff	
33.	Mr. Xie Xianyou	West Dongting Lake National NRMB	Deputy Director	Presentati on / FGD with SSI
34.	Mr. Peng Pingbo		Division Head	
35.	Ms. Li Shuang		Division Head	
36.	Mr. Liu Haibiao		Division Head	
37.	Mr. Xie Zhihui		Staff	

Third Party Consulting Institutions/Individuals				
38.	Mr. Lei Guangchun	Zhonglei Ecological Technology Co., Ltd	Professor/Special adviser	Individual SSI
39.	Mr. Yuan Jun	Planning and Design Institute of National Forestry and Grassland Administration	Expert	Individual SSI
40.	Mr. Peng Song	Beijing Aerospace TITAN Technology Co., Ltd	Information Technology Expert	Individual SSI
41.	Mr. Zhou Xunfang	Central China Forestry & Technology University	Legal Expert	Individual SSI
42.	Mr. Li Deliang	Hunan Forestry Academy	Aquaculture specialist	Individual SSI
43.	Mr. Liu Song	Director/WWF Changsha office	Socio-economic specialist	Individual SSI
44.	Mr. Zhong Yongde	Central China Forestry & Technology University	Ecotourism specialist	Individual SSI
45.	Mr. Wang Ding	Institute of Hydrobiology of CAS	Finless Porpoise Specialist	Individual SSI
46.	Mr. Luo Fen	Central China Forestry & Technology University	Public communication consultant	Individual SSI
47.	Ms. Wang Hua	Hunan Agriculture University	Community co-management Specialist	Individual SSI
48.	Mr. Niu Yandong	Hunan Provincial Forestry Academy	Ecological restoration specialist	Individual SSI
Civil Societies, NGOs and Private Sector				
49.	Mr. Jiang Yong	Changsha Programme Office of World Wildlife Fund-China	Former Director	Individual SSI
50.	Mr. Zhou Youai	Institute of Subtropical Agriculture, Chinese Academy of Sciences	Associate Professor	Individual SSI
51.	Mr. Wang	Hunan Guyucun Eco Fishery Co., Ltd. Operates ecological fishery in Hengling Lake NR	Field manager	Individual SSI
52.	Mr. Zheng Hongyi	Reed-based mushroom cultivation at Hunan Hongyi Selenium-rich	General Manager	Individual SSI

		Biotechnology Co., Ltd. in West Dongting Lake National Nature Reserve.		
FGD with Beneficiary Groups				
53.	Ms. Lan Yumei	Farmers in Rice-Fish Co-cultivation and Bird-friendly Agriculture at Xiongxin Group, Panhu Xincun Village, Matang Office, East Dongting Lake National Nature Reserve.	Farmer	FGD with SSI
54.	Mr. Lan Yongxin		Farmer	
55.	Mr. Yi Aishi		Farmer	
56.	Ms. Deng Xiaonian		Farmer	
57.	Ms. Wen Fang		Farmer	
58.	Mr. Lan Zhihong		Farmer	
59.	Mr. Cai Liansheng		Farmer	
60.	Mr. Lan Qingshi		Party Secretary of Village	
61.	Mr. Zhou Xianliang	Farmers participate in Ecological Fishery and Traditional Crop Cultivation in Qingcaohu Village of Hengling Lake Provincial Nature Reserve.	Farmer	FGD with SSI
62.	Mr. Zhang Xueliang		Farmer	
63.	Ms. Xiao Weixia		Farmer	
64.	Mr. Yao Youguo		Farmer	
65.	Mr. Jiang Jianjun		Farmer	
66.	Mr. Xiao Huangyue		Farmer	
67.	Ms. Tang Fengying	Farmers participate in reed-based mushroom cultivation base in Yanzhi Lake, South Dongting Lake Provincial Nature Reserve.	Village head	FGD with SSI
68.	Ms. He Yuanzhen		Farmer	
69.	Ms. Fu Shuangxi		Farmer	
70.	Mr. Chen Guomin	Farmers participate in development of reed-based mushroom products of Lameizi Food co. Ltd., South Dongting Lake Provincial Nature Reserve.	Farmer	FGD with SSI
71.	Ms. Liu Xiang		Farmer	
72.	Mr. Yang Jiasheng		Farmer	

73.	Ms. Xiong Shaomei	Reed-based mushroom cultivation at Hunan Hongyi Selenium-rich Biotechnology Co., Ltd. in West Dongting Lake National Nature Reserve.	Farmer	FGD with SSI
74.	Ms. Zhou Xia		Farmer	
75.	Ms. Liu Fenglan		Farmer	
76.	Ms. He Zhenmei		Farmer	
77.	Ms. Liu Jinxiu		Farmer	
78.	Mr. Liu Kehuan	Fangzui Village, Yanwanghu – Ecotourism, West Dongting Lake National Nature Reserve.	President of West DL wetland conservation Associate	FGD with SSI
79.	Mr. He Jianguo		President of West DL Tourism Associate	
80.	Mr. Liu Jia'an		Owner of restaurant	
81.	Ms. Wang Wuying		Owner of restaurant	
82.	Mr. Gu Mingsi		Owner of restaurant	

Appendix 5 - List of documents consulted

FAO. 2015. *OED Evaluation Manual*. Office of Evaluation. Rome. (also available at: http://www.fao.org/fileadmin/user_upload/oed/docs/OED_Evaluation_Manual_April_2015_new.pdf).

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Global Environment Facility. 2017. *Guidelines for GEF Agencies in conducting Terminal Evaluation for Full-Size Projects*. (also available at:

<https://www.gefio.org/sites/default/files/ieo/evaluations/files/gef-guidelines-te-fsp-2017.pdf>).

Appendix 6 - List of Annexes

Annex 1. Terms of reference for the evaluation.