Terminal Evaluation Report

UNDP-GEF project: CBPF-MSL: Strengthening the Management Effectiveness of the Protected Area Landscape in Altai Mountains and Wetlands

GEF Project ID: 4653 UNDP Project ID: 4596

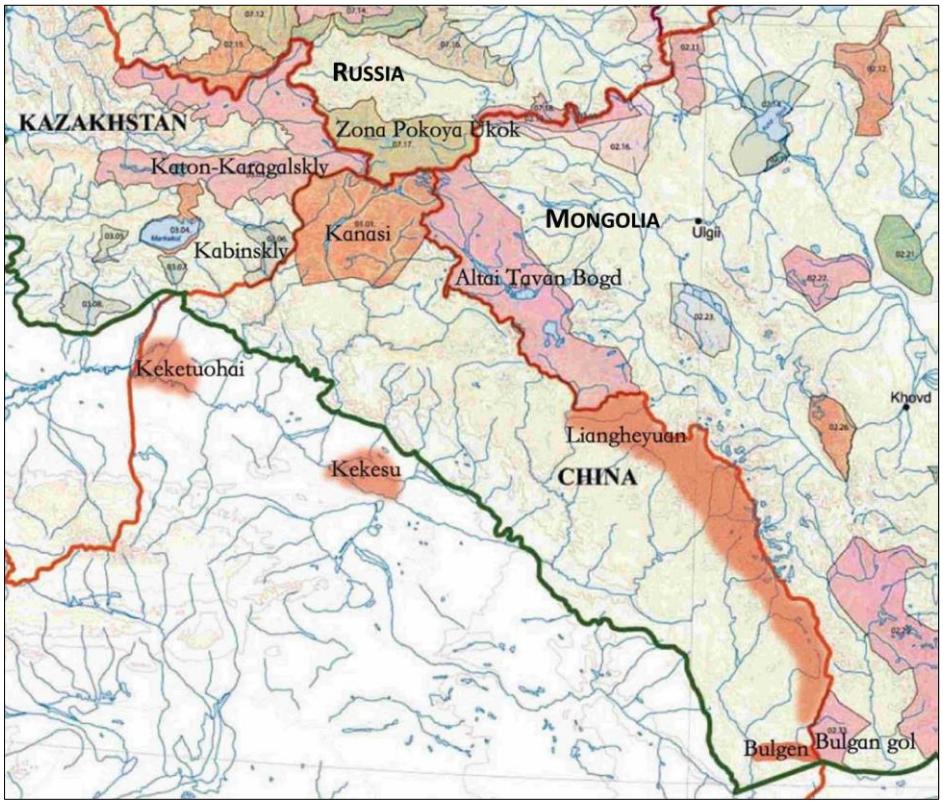
Country: China

Region: Asia and the Pacific

Focal Areas (GEF-5): Biodiversity

GEF Agency: United Nations Development Programme (UNDP)

Executing Agency: Xinjiang Forestry Department



Nature reserves in the Altai Mountains region

Date	Version	
30 April 2019	0	Rough draft
10 May 2019	1	First draft
07 June 2019	2	Draft final
20 June 2019	3	Final

Opening Page

PROJECT DETAILS:

Project Name:	CBPF-MSL: Strengthening the Management Effectiveness of the Protected Area Landscape in Altai Mountains and Wetlands	
Project ID:	GEF Project ID: 4653	UNDP PIMS ID: 4596
Country:	China	
Region:	Asia and the Pacific	
Focal Area:	Biodiversity	
Funding Source:	GEF Trust Fund	
GEF Focal Area Objectives:	GEF5: BD-1, Outcome 1.1; BD-1, Outcome 1.2	
Implementing Agency:	United Nations Development Programme	
Implementation Modality:	National Implementation Modality (NIM)	
Executing Agency:	Xinjiang Forestry Department	
Sub-level responsible parties:	Altai Mountains Forestry Bureau Liangheyuan Provincial Nature Reserve Management Bureau	

FINANCIALS:

Project Preparation Grant:	USD 70,000
GEF Project Grant:	USD 3,544,679
Cofinancing Total:	USD 22,000,000
GEF Agency Fees:	USD 319,021
Total Cost:	USD 25,614,679

PROJECT TIMELINE:

Received by GEF:	08 September 2011
Preparation Grant Approved:	08 December 2011
Concept Approved:	01 February 2012
Project Approved for Implementation:	24 September 2013
State Date:	27 February 2014
Project Closed (planned):	26 February 2019

TERMINAL EVALUATION DETAILS:

TE Timeframe:	March-April 2019
Reporting Language:	English
TE Team:	James Lenoci, Team Leader Liu Shuo, National Consultant

The TE team would like to acknowledge the feedback provided by the interviewed stakeholders, including the National Project Director, Project Coordinator, Project Manager, the project management team, the UNDP country office Environment and Energy Program Manager, the UNDP country office staff, the UNDP RTA, local partners and beneficiaries, and other governmental and non-governmental stakeholders.

Table of Contents

List of Tables:

List of Figures:

Executive Summary

The project, which was approved under the GEF-5 replenishment cycle, and was implemented through a national implementation modality with the Xinjiang Department of Forestry as the executing agency, supported by the UNDP as the GEF implementing agency. Basic project information and finances are summarized below in **Table 1**.

***Table 1**: Project summary table*

Project Title:	CBPF-MSL: Strengthening the Management Effectiveness of the Protected Area Landscape in Altai Mountains and Wetlands		**at endorsement**	**at completion***
			(USD million)	**(USD million)**
GEF Project ID:	4653	**GEF financing, PPG grant:**	70,000	70,000
UNDP Project ID:	4596	**GEF financing, project grant:**	3,544,679	3,047,595
Country:	China	**IA own:**	1,000,000	100,000
Region:	Asia and the Pacific	**Government:**	21,000,000	26,785,215
Focal Areas (GEF-5):	Biodiversity (BD)	**Other:**	0	0
Focal Area Objective:	BD Objective 1: Improve Sustainability of Protected Area Systems; Outcomes 1.1 and 1.2	**Total co-financing:**	22,000,000	26,885,215
		Total Project Cost:	**25,614,679**	**30,002,810**
Executing Agency:	Xinjiang Forestry Department	**Prodoc Signature (date project began):**		24 Jan 2014
Other Partners Involved:	Liangheyuan NR Management Bureau, Altai Mountains Forestry Bureau	**(Operational) Closing Date:**	Proposed:	Actual:
			26 Feb 2019	26 Feb 2019

Note: Total expenditures based upon figures through 31 March 2019.

Project Description:

This project was designed to strengthen Xinjiang Uygur Autonomous Region's (XUAR's) systemic, institutional and operational capacity at the provincial level and in the Altai Mountains and Wetland Landscape (AMWL) to ensure better integration and mainstreaming of the PA system in sectoral development priorities, in order to avoid conflicts of interest and to ensure the PA system's long-term financial sustainability; to effectively plan, resource and manage an enhanced PA system including *inter alia* a PA system expansion, improved operational procedures for regular environmental monitoring and threats reduction, and increased environmental awareness; to develop provincial PA regulations and sector 'best practice' guidelines; to support and expand (to establish more widely) and administer environmental stewardship programs in traditional rangelands, wetlands and community forests based on lessons learned in initial trials with PA co-management to be developed in the project; and to respond effectively to the needs and aspirations of, and to meaningfully involve, different stakeholder groups in the on-going planning and operations of the enhanced PA System. These measures were envisaged to improve the overall management effectiveness of the PA system in Altai Prefecture and in XUAR as a whole, with lessons learned applicable more broadly across China especially in other provincial wetland PA sub-systems.

The project objective was to strengthen the management effectiveness of PAs to respond to existing and emerging threats to the globally significant biodiversity and essential ecosystem services in the AMWL. The GEF alternative addressed the identified main barriers hindering effective management of the wetland PA sub-system in the AMWL, including (i) insufficient systemic and institutional capacity at provincial level to plan and manage the PA system; (ii) a disconnect between management of PA systems and development and sectoral planning processes; and (iii) limited nature reserve capacities for planning and operations and limited local participation in PA management. The project consisted of three mutually supportive components. The first component focused at strengthening the enabling environment the XUAR level, the second component promoted a landscape approach for conservation planning and environmental management, and the third component demonstrated participatory management arrangements in one of the important PA's in the AMWL region, the Liangheyuan nature reserve.

Terminal Evaluation Purpose and Methodology:

This terminal evaluation was conducted to provide conclusions and recommendations about the relevance, efficiency, effectiveness, sustainability, and impact of the project. The evaluation also aimed to identify lessons from the Project for future similar undertakings, and to propose recommendations for ensuring the sustainability of the results. The evaluation was an evidence-based assessment and relied on feedback from persons who have been involved in the design, implementation, and supervision of the project, review of available documents and records, and findings made during field visits.

Global Environmental Benefits generated:

The project has generated the following global environmental benefits:

- Number of new protected areas: 5 (Ulungur River, Jeminay Alpine, Tokumut, Keketuohai and Habahe Akqi national wetland parks)
- New coverage of unprotected ecosystems: 222,699 ha
- Management effectiveness exceeded or met targets for 5 PA's covering a cumulative area of 1,035,645 ha
- Increased government financing for operation of the five monitored nature reserves in the AMWL PA system from CNY 8.5 million (approx. USD 1.3 million) at project baseline in 2012 to CNY 12 million (approx. USD 1.8 million) by 2017, and strengthened financial sustainability of the AMWL PA system as measured by improvements in the GEF-5 Financial Scorecard

Summary of Conclusions:

The project has made substantive achievements with respect to facilitating expansion of the AMWL PA system, including establishment of five new national level wetland parks and 198,504 ha of additional ecosystem coverage included in the reinstated Kalamaili Mountains nature reserve. Apart from the PA system expansion, the 30,667-ha Altay Kekesu Wetlands nature reserve and the 5,000-ha Buergen Beaver nature reserve were upgraded from provincial to national level during the implementation phase of the project.

Expanded coverage of unprotected ecosystems, improved management effectiveness and strengthened financial sustainability contribute towards improved protection of globally significant biodiversity, among the four key biodiversity areas (KBAs) within the AMWL region, including Burqin River and Kanas Lake (CN091), Altai forest steppe (CN092), Ulungur Hu and Jili Hu (Fu Hai) (CN093) and Buergen River Valley (CN100).

Threats to AMWL biodiversity and ecosystems have been significantly reduced through implementation of a number of measures, including revoking mining rights for 78 sites in the Liangheyuan NR; extending the seasonal fishing ban and introducing a new, year-round fishing ban for natural rivers in the Altai Prefecture; introducing alternative livelihood ventures for herder households; expanding the government community ranger program, which included 620 such rangers in the Altai Prefecture in 2018; improved enforcement of over-grazing and other unauthorized activities in core zones of nature reserves and other sensitive areas; decrease in the number of livestock in the vulnerable Sandaohaizi wetland from 40,000 sheep-equivalent in 2012 (baseline) to 11,763 sheep-equivalent in 2018; and increased knowledge and awareness of the value of wetland resources.

An estimated 450 direct beneficiaries, primarily from Kazakh minority herder households, were involved on the project, benefitting through participation and training in community co-management of the Liangheyuan NR and development of alternative livelihoods, aimed diversifying household income as threats associated with over-grazing are reduced.

The likelihood that project results will be sustained are significantly enhanced through the strengthened enabling environment, including the approved wetland conservation and rehabilitation implementation plan for XUAR (2016); mainstreaming of wetland issues into sectoral 13th 5-year plans, including the forestry and grasslands, environmental, water, agricultural, poverty alleviation and tourism sectors; increased institutional capacities; and inclusive PA governance through participation of local communities. Governmental financing for environmental management has steadily increased in recent years, including a CNY 6.4 billion (approx. USD 950 million) integrated environmental program under implementation (2018-2021) in the Altai Prefecture. Financial sustainability is also enhanced as a result of the township government's planned investment in constructing a workshop for the women's group producing black soap.

The zero-interest loans disbursed to 10 applicants as part of the community development fund implemented on the project were well received by local communities. The approx. USD 30,000 fund could continue to leverage progress on alternative livelihood ventures; however, fund management arrangements have not been sorted out at project closure Interviewed AMFB officials indicated that the Liangheyuan NR Management Bureau will continue to manage the fund, but it is unclear if this function fits under their mandate or whether an external fund management entity would be better suited for this task.

Strengthened cross-sectoral and inter-sectoral stakeholder engagement also enhances project sustainability. The project design and implementation arrangements facilitated stakeholder engagement across three administrative levels, with provincial (XUAR) stakeholders involved in Component 1, Altai Prefecture stakeholders engaged in Component 2 and Liangheyuan NR stakeholders participating in activities under Component 3.

With respect to environmental stress reduction, the project has facilitated several advances, including expansion of 222,699 ha to the AMWL PA system; enhanced connectivity through strengthened transboundary collaboration (two

memoranda of cooperation signed with Mongolian counterparts); reduced livestock numbers in the sensitive Sandaohazi wetland; reduced threats to grassland resources through introduction and development of alternative livelihoods; revocation of mining rights for 78 sites within the Liangheyuan NR; and reduced threats to aquatic species through extension of the seasonal fishing ban and introduction of a new, year-round fishing ban in the Altai region.

Environmental status changes take time, but there has been notable progress on some fronts. Ecosystem health, as measured by the Ecosystem Health Index (EHI), increased at the Liangheyuan, Kekesu Wetlands and Buergen Beaver nature reserves; populations of beaver families remained stable in the Liangeheyuan NR and within the Ulungur River basin at sites outside of protected areas; infrared cameras deployed at the Liangheyuan NR have captured images of snow leopard and other threatened species; and 809 ha of degraded lands at abandoned mining sites were reclaimed, providing replicable demonstrations that can be upscaled across the AMWL region.

The project supported development a comprehensive information management system (big data) for protected areas throughout XUAR. At the time of the TE mission in April 2019, baseline data for 20 protected areas had been uploaded. The system is robust, with real-time data captured from stations at PA's, early warning functions that strengthen the resilience and environmental protection of the communities and ecosystems within and near the PA system and advanced learning capabilities are under development

The sum of materialized governmental cofinancing exceeded the amount confirmed at project entry. There were investments mobilized that were not accounted as cofinancing, including acquisition of 600 infrared cameras for the Liangheyuan NR after observing the positive results of the 80 units purchased with GEF funds, and CNY 300,000 (approx. USD 45,000) of government financing for the information management system (big data), on top of the CNY 160,000 (approx. USD 24,000) funding from the GEF grant. Cofinancing contributions from other partners were realized, e.g., from foundations in support of community development activities

Country ownership was generally good on the project; however, there were a number of changes in the positions of national project director, project coordinator and project manager. Project efficiency was adversely affected by the unstable management arrangements, as evident in the inconsistent financial delivery rates throughout the implementation phase. Performance improved after the midterm, as a result of adjustments to the implementation arrangements, with stronger leadership and commitment of a new National Project Director and dedicated Project Director, as well as a change in the Chief Technical Advisor.

There were shortcomings in terms of monitoring and evaluation, including inconsistencies in M&E tools such as the METT and financial sustainability scorecard; unclear reporting on PA operational expenditures; unclear reporting of threat reductions, including livestock numbers; not adjusting indicator species for wildlife monitoring and incomplete reporting in project progress reports, etc.

Evaluation Ratings:

Evaluation ratings are summarized below in **Table 2**.

***Table 2**: Evaluation ratings*

Criteria	Rating	Comments
1. Monitoring and Evaluation (M&E)		
M&E Design	Satisfactory	The M&E budget allocation of USD 177,000 or 6.2% of the GEF grant was proportionally adequate. Indicators in the project results framework were described; however, some baseline conditions were not sufficiently vetted, including the METT scores and wildlife monitoring. The project steering committee provided a proactive platform for M&E feedback. And, management responses to the midterm review recommendations were implemented satisfactorily. Progress reports, including project implementation reviews (PIRs) were well written and internal ratings were realistic. There were some shortcomings with respect to results-based management, including inconsistent monitoring and lack of understanding of the GEF tracking tools.
M&E Implementation	Moderately Satisfactory	
2. Implementing Agency (IA) and Lead Implementing Partner (Executing Agency - EA) Execution		
Quality of Implementation (UNDP as GEF Agency)	Satisfactory	Drawing from long-standing resident operations in China and strong institutional capacity in leading biodiversity conservation projects and programs globally, UNDP as the GEF implementation agency, provided proactive support throughout the project cycle, from conceptualization to project development and throughout implementation. UNDP was included on the project steering committee and the country office supported the project with strategic guidance, procurement services and financial administration. Grant cofinancing from UNDP did not materialize, as TRAC funding has been discontinued in China as part of global UN reform. In-kind cofinancing associated with the UNDP-CICETE-Coca Cola Partnership on Water Governance; however, the reported contribution of USD 1 million seems high for this project.

Criteria	Rating	Comments	
Quality Execution (XFD as Executing Agency)	Moderately Satisfactory	The XFD was the designated executing agency, and the Altai Mountains Forestry Bureau (AMFB) and the Liangheyuan NR Management Bureau were sub-level responsible parties, reporting directly to the XFD. The project management office (PMO) was moved from the Liangheyuan Management Bureau to the AMFB in 2017, in response to one of the MTR recommendations. The chief technical advisor (CTA) as also changed after the MTR. These changes did help improve the overall performance of project execution. Frequent changes in the positions of project director, project coordinator and project manager adversely affected project efficiency, which diminished the overall quality of project execution.	
3. Assessment of Outcomes			
Overall Quality of Project Outcomes	Satisfactory	The project has managed to satisfactorily achieve the intended project outcomes. ...	
Relevance	Highly Satisfactory	The project was approved under the GEF-5 replenishment cycle and was closely aligned to the GEF-5 Biodiversity Strategy, specifically Objective 1, "*Improve Sustainability of Protected Area Systems*", Outcome 1.1, "*Improved management effectiveness of existing and new protected areas"* and Outcome 1.2, *"Increased revenue for protected area systems to meet total expenditures required for management."* The project design addresses the key barriers identified as hindering implementation the long-term solution of protecting wetland and mountain ecosystems in the AMWL region. The project objective is consistent with the strategic directions outlined in the National Biodiversity Conservation Strategy and Action Plan (NBCSAP), which define the Altai Mountains as one of the 25 "key ecological function zones" and one of the 35 "priority conservation areas" in the country. The project is also relevant with respect to the ongoing focus on increasing conservation of wetland resources in China; wetland conservation is one of the priority actions included in the XUAR biodiversity strategy and action plan; and wetland conservation (1.83% weight) has been included as one of the green development indicators (GDI), an updated performance evaluation system for the public sector introduced in 2016. The focus on the Altai-Sayan Ecoregion is consistent with GEF-financed initiatives over the past decade in the region, including in Mongolia, Kazakhstan and Russia.	
Effectiveness	Satisfactory	Outcome 1: The protection of wetland ecosystems with PA planning and management is enhanced in XUAR through systemic, legal and institutional capacity strengthening	Satisfactory
		Outcome 2: The biodiversity of AMWL is effectively conserved with a strengthened PA network and enhanced operational budget through adoption of a landscape approach to conservation planning and environmental management	Satisfactory
		Outcome 3: The adoption and development of a 'community co-management' approach to conservation in Liangheyuan NR demonstrates improved management effectiveness for a wetland PA in the Altai Mountains and Wetland Landscape	Moderately Satisfactory
Efficiency	Moderately Satisfactory	GEF funding addressed the key barriers highlighted in the project design, and the intended outcomes were largely achieved within the allocated budget and timeframes. Moreover, governmental cofinancing exceeded amounts confirmed at project entry. Project management costs were maintained <5% of the GEF grant, partly as a result of contributions by seconded governmental agency staff, supporting the project management and coordination functions. Financial delivery was inconsistent throughout the implementation phase, with approximately 40% of the GEF grant spent in 2018 and 2019. Several activities were uncompleted at the operational closure date of 26 February 2019. Cofinancing contributions were not actively tracked, including investments mobilized during project implementation and inputs from partners not identified at the project development phase.	
4. Sustainability (likelihood that benefits will continue to be delivered after project closure)			
Overall	Moderately Likely	The expansion of the PA system in the AMWL region increases the likelihood that biodiversity and ecosystem services in these landscapes will be protected against threats. The increases in management effectiveness, increased participation of local ethnic minority communities in co-management and strengthened alternative livelihood ventures further enhances the likelihood that results achieved under the project will be sustained.	

Criteria	Rating	Comments
Financial dimension	Likely	The enabling environment for wetlands conservation and rehabilitation has also been strengthened through mainstreaming wetland issues into sectoral 13th 5-year plans, updated PA management plans and strengthened institutional capacities. Materialized governmental cofinancing exceeded the confirmed amounts at project entry, and government financing for PA management and environmental improvements continue to steadily increase, including public welfare forest program, key ecological function zone compensation and community ranger program. Moreover, a CNY 6.4 billion (approx. USD 950 million) integrated environmental program is under implementation (2018-2021) in the Altai Prefecture. A few factors diminish the prospects that project results will be sustained, including the unclear legal framework for PA collaborative management modalities; the co-management committees established under the project have not been formalized; the high turnover of staff in government agencies reduces the retention of institutional capacity; there are constraints facing the eco-tourism market, including security concerns, quality of service and infrastructure; there continues to be a risk, albeit low, for illegal and unauthorized activities in sensitive ecological areas; capacity limitations of community groups preclude expansion of alternative livelihood ventures; there are long-term uncertainties regarding the potential impacts of climate change; and the project has not developed a sustainability strategy and action plan.
Socioeconomic dimension	Moderately Likely	
Institutional Framework and Governance dimension	Likely	
Environmental dimension	Likely	
5. Overall Project Results	**Satisfactory**	Global environmental benefits generated include 222,699 ha of new coverage of unprotected wetland ecosystems. The project has strengthened the enabling environment and demonstrated best practice for biodiversity conservation and sustainable land management in the AMWL region.

Recommendations:

The TE recommendations are summarized below in **Table 3**.

***Table 3**: Recommendations table*

No.	Recommendation	Responsible Entities	Timeframe
Corrective actions for the design, implementation, monitoring and evaluation of the project			
1.	**Prepare a sustainability strategy and action plan**. A sustainability strategy and action plan should be developed to guide enabling stakeholders in ensuring project results are sustained after GEF funding ceases. The strategy and action plan should be based on the project theory of change, e.g., focusing on the assumptions and impact drivers for achieving long-term impacts. The plan should outline the actions requiring follow-up after project closure, assigning roles and responsibilities and identifying timeframes.	**PIO**, PMO	Before project closure
2.	**Reassess PA management effectiveness of the target PA's**. The baseline and terminal METT assessments should be redone, to provide a more realistic indication of improvements achieved with respect to PA management effectiveness.	**PMO**, UNDP	Before project closure
3.	**Ensure supervision and reporting functions are in place until all contracted activities are completed**. With operational closure occurring on 26 February 2019, it is important that there are appropriate supervisory and reporting functions in place for project activities that are not yet completed.	**PIO,** PMO, UNDP	Before project closure
4.	**Prepare a technical guidance document for reclamation of abandoned mining sites in the Altai Mountains and Wetlands Landscape.** The experiences and lessons learned should be distilled into a practical technical guidance document on reclamation of abandoned mining sites in the AMWL region.	**AMFB**, PMO, PIO	Before project closure
5.	**Identify a fund management entity for the community development fund and conclude an agreement before project closure**. Renegotiate the agreement with the FFSA on the continuation (or conclusion) of the Eco-Damu microcredit scheme. If the parties agree to continue the scheme beyond the second phase of loan disbursements, then it would be important, for example, to ensure the contributed GEF funds remain earmarked for biodiversity conservation or restoration of degraded lands, preference should be given to women and other vulnerable groups.	**AMFB**, LNRMB, PMO, UNDP	Before project closure
Actions to follow up or reinforce initial benefits from the project			
6.	**Formalize the co-management committees**. The co-management agreements should be signed by three parties, including representatives of the local communities. And, community-based organizations (or equivalent) should be established that would	LNRMB, local governments, local communities	Within 1 year

No.	Recommendation	Responsible Entities	Timeframe
	formally represent the interests of the local people on the co-management committees and also have the ability to raise funds on their own.		
7.	**Apply the METT tool in assessing management effectiveness of wetland parks.** Wetland parks and other nature parks are increasingly important part of PA systems in China. On this project, METT and EHI assessments were carried out at nature reserves but not wetland parks. It would be advisable to apply the METT tool to wetland parks within the AMWL region, to identify gaps in management and assist the management administrations in prioritizing resource allocations.	**XFD,** AMFB, AFB	Within 1 year
8.	**Further advance transboundary collaboration.** Achieving effective and sustainable transboundary collaborative arrangements will require involvement of higher level governmental stakeholders and proactive regional engagement. As a first step, it would be advisable to increase the participation of XUAR stakeholder among regional platforms, such as the Global Snow Leopard and Ecosystem Protection Program (GSLEP).	XFD, AMFB, AFB, NGOs	Within 1 year
Proposals for future directions underlining main objectives			
9.	**Enhance the community develop fund through provision of an integrated package of services**. Consider an integrated package of services rather than just disbursing zero-interest loans; for example, offering insurance, enterprise development (such as management training, marketing support) and welfare related services (e.g., gender awareness training).	AMFB, LNRMB	Within the next 1-2 years
10.	**Consider a complementary project focusing on cross-cutting approaches, such as ecosystem-based adaptation or integrated water resources management**. The strengthened enabling conditions associated with biodiversity conservation and sustainable land management provide solid foundational capacity for implementing ecosystem-based adaptation interventions and integrated water resource management in the AMWL region.	XFD, AMFB, AFB	Within the next 1-2 years

A few examples of good practices and lessons learned on the project are presented below.

Good Practices:

Project design fostered broad stakeholder engagement across three administrative levels. Designing activities that required stakeholder involvement at the provincial (XUAR), landscape (AMWL) and site level (Liangheyuan NR) was good practice in fostering improved cross-sectoral and inter-sectoral collaboration. Setting up project leading groups at the provincial and landscape level further enhanced stakeholder engagement on the project.

Facilitating inclusive PA governance through community co-management arrangements. Community co-management is widely recognized as the most sensible approach to reduce threats to biodiversity and ecosystems, but there had been limited implementation of these modalities in XUAR. The project provided scale-able and replicable demonstrations of community co-management that enabling stakeholders can build upon.

Demonstrating innovative technical approaches to reclaiming abandoned mining sites. Reclamation of abandoned mining sites is not cheap, particularly for illegal sites where there is no mining entity that is legally obliged to finance the work. There are unique challenges in the AMWL region, e.g., due to remoteness and limited supply of topsoil. In collaboration with ongoing governmental programs, the project contributed to implementation of reclamation demonstrations that involved innovative approaches, e.g., utilizing available resources, such as using livestock manure in preparing a fertilizer slurry that was spread onto the reclaimed surfaces.

Forward-thinking approach taken in the design and development of the information management system (big data). The information management system (big data) developed for the XUAR PA system is comprehensive and forward-thinking, e.g., capturing real-time monitoring data and integrating advanced learning functions, that will eventually support PA managers with respect to early warning and biodiversity monitoring.

Inclusive stakeholder involvement in promoting alternative livelihood ventures. The project facilitated broad and inclusive stakeholder involvement, including the NR management bureau, local government, local communities, NGOs and foundations, in promoting alternative livelihood ventures.

Community development fund provided accessible and learning opportunities to local communities. The disbursement of zero-interest loans to local applicants under community development fund (approx. USD 30,000 in

total) demonstrated how local entrepreneurs can advance alternative livelihood ventures with relatively modest inputs and how effective such microcredit programs are at facilitating information transfer.

Production of practical knowledge products. The project did a good job documenting producing several informative knowledge products, designed to appeal to a wide-range of stakeholders, ranging from middle school students to expert conservation professionals.

Lessons Learned:

Insufficient validation of the project strategy at project inception. The project inception is an important phase of the project, particularly for validating the project strategy, including clarification of what is expected with respect to policy reform, the project results framework, tracking tools, budget allocation, etc.

Inconsistencies in application of M&E tools, including the METT, capacity development scorecard and financial sustainability scorecard. The quality control review of the M&E tools, including the METT should consider other assessments made in China and globally; if certain questions are not relevant to the project then the maximum possible score should be adjusted accordingly; project teams should be encouraged to allow room for improvement, i.e., avoid scoring baselines too high; the process should be participatory, including PA management staff, field technicians, local government officials, local community members, NGO representatives and expert professionals; teams should be informed of the difference between management plans and business plans; etc.

Co-management committees were not formalized. The local community members did not sign the co-management agreements. The agreements were signed by the NR management bureau and the local governments. It would be advisable to also establish community-based organizations (or equivalent) that would represent the local communities in the committees and have the ability to raise funds on their own.

Lack of a communications and knowledge management strategy. There were a number of activities on the project that were focused on communications and knowledge management, but there was a lack of a strategic approach. It would have been advisable to have developed communications and knowledge management strategy and action plan.

Gender mainstreaming and inclusion of ethnic minorities not sufficiently integrated into the project design. Risks associated with gender equality and inclusion of ethnic minorities were identified in the social and environmental screening process at the project development phase, but detailed analyses were not made and these aspects were not fully integrated into the project design.

Limited tracking of cofinancing and coordinating with cofinancing partners. Materialized government cofinancing exceeded the confirmed sum at project entry; however, there were only two sources indicated: operational cofinancing and parallel financing associated with the public welfare (natural) forest program. The project was not regularly tracking cofinancing contributions, including mobilized investments and contributions from other partners, such as foundations, that were not confirmed at project entry. The lack of tracking project cofinancing implies that the project was not actively pursuing potential synergies with cofinancing partners.

Risks associated with possible pollution (including mercury) at abandoned mining sites were not vetted at the project preparation phase. Risks associated with pollution at abandoned mining sites was not addressed as part of the social and environmental screening process. Considering that mining related threats in the AMWL were attributed to illegal mining activities, there are potential risks associated with possible unsafe use of mercury and other chemicals.

Involvement with tourism operators and the business sector did not materialize as planned. The stakeholder involvement plan in the project document included reference to the Kanas management committee which oversees the Kanas Scenic Area, a popular tourist destination, and the Fuyun Keketuohai Forest Park - Keketuohai Tourism Company, a public-private partnership. Eco-tourism is a significant focus of the XUAR and Altai Prefecture governments in their economic development plans and the emerging threats posed by increasing numbers of tourists.

It is better to use national currency, CNY for monetary-based targets instead of USD. For monetary-based targets, such as PA operational expenditures and household income, it is better to use the currency that the expenditures and incomes are denominated in. It is useful to indicate inflation rates in monitoring reports.

Abbreviations and Acronyms

Exchange Rate, CNY:USD: **6.12491** (27 Feb 2014, at project start); **6.6942** (26 February 2019, at project closure)

AFB	Altai Forestry Bureau
AMFB	Altai Mountains Forestry Bureau
AMNFPPA	Altai Mountains Natural Forest Protection Project Area
AMWL	Altai Mountains and Wetlands Landscape
APR	Annual Project/Progress Report
AWP	Annual Work Plan
BD	Biodiversity (GEF focal area)
CBD	Convention on Biological Diversity
CO	Country Office (UNDP)
CNY	Chinese Yuan
CPAP	Country Programme Action Plan
CPD	Country Programme Document
EHI	Ecosystem Health Index
GEF	Global Environment Facility
LNRMB	Liangheyuan Nature Reserve Management Bureau
M&E	Monitoring and Evaluation
METT	Management Effectiveness Tracking Tool
MOU	Memorandum of Understanding
MTR	Midterm Review
NBCSAP	National Biodiversity Conservation Strategy and Action Plan
NIM	National Implementation Modality
NGO	Non-Governmental organization
NR	Nature Reserve
PA	Protected Area
PIR	Project Implementation Review
PMO	Project Management Office
PPG	Project Preparation Grant
PSC	Project Steering Committee
QPR	Quarterly Progress Report
RTA	Regional Technical Advisor
SFA	State Forestry Administration
SDG	Sustainable Development Goal
TE	Terminal Evaluation
UNDP	United Nations Development Programme
UNEG	United Nations Evaluation Group
USD	United States Dollar
XUAR	Xinjiang Uygur Autonomous Region

1 Introduction

1.1 Purpose of Evaluation

The objectives of the terminal evaluation (TE) are to independently assess the achievement of project results and to draw lessons that can both improve the sustainability of benefits from this project and aid in the overall enhancement of UNDP programming. The purposes of evaluations of UNDP supported, GEF financed projects also include the following:

- ✓ To promote accountability and transparency;
- ✓ To contribute to the overall assessment of results in achieving GEF strategic objectives aimed at global environmental benefit; and
- ✓ To gauge the extent of project convergence with other UN and UNDP priorities, including harmonization with other UN Development Assistance Framework (UNDAF) and UNDP Country Programme Action Plan (CPAP).

1.2 Evaluation Scope and Methodology

The overall approach and methodology of the TE follows the guidelines outlined in the following guidance documents:

- Guidelines for GEF Agencies in Conducting Terminal Evaluation for Full-sized Projects, Approved by the GEF IEO Director on 11th of April 2017
- UNDP Guidance for Conducting Terminal Evaluations of UNDP-supported, GEF-financed Projects, 2012

The TE was an evidence-based assessment, relying on feedback from persons who have been involved in the design, implementation, and supervision of the project, and review of available documents and findings made during field visits.

The evaluation included following activities:

- ✓ The TE mission was completed over the period 01-07 April 2019. The mission itinerary is compiled in **Annex 1**.
- ✓ As a data collection and analysis guidance tool, the evaluation matrix included as **Annex 2** was used to guide the evaluation. Evidence gathered during the evaluation was cross-checked between as many sources as practicable, to validate the findings.
- ✓ A desk review was made of available reports and other documents, listed in **Annex 3**.
- ✓ The TE team interviewed key project stakeholders, including the project manager, representatives from participating government agencies, contracted experts, local beneficiaries, as well as program manager of the UNDP country office (CO) and the UNDP Regional Technical Advisor; a list of interviewed people is included in **Annex 4.**
- ✓ The project results framework was used as an evaluation tool, in assessing attainment of the project objective and outcomes against indicators (see **Annex 5**).
- ✓ The TE team reviewed information regarding cofinancing realized throughout the duration of the project; the filled in cofinancing table is compiled in **Annex 6**.

The project was approved under the GEF-5 replenishment cycle. Tracking tools under Objective 1 of the GEF-5 Biodiversity Strategy were assessed at CEO endorsement (baseline), midterm, and project closure (terminal evaluation).

Evidence gathered during the fact-finding phase of the evaluation was cross-checked between as many sources as practicable, to validate the findings.

1.3 Structure of the Evaluation Report

The TE report starts out with a description of the project, indicating the duration, main stakeholders, and the immediate and development objectives. The findings of the evaluation are broken down into the following five sections:

- Assessment of Project Design
- Assessment of Project Results
- Assessment of Monitoring & Evaluation Systems
- Assessment of Implementation and Execution
- Other Assessments

The assessment of project design focuses on how clear and practicable the project's objectives and components were formulated, and whether project outcomes were designed according to SMART criteria:

- **S: Specific**: Outcomes must use change language, describing a specific future condition;
- **M: Measurable**: Results, whether quantitative or qualitative, must have measurable indicators, making it possible to assess whether they were achieved or not;
- **A: Achievable**: Results must be within the capacity of the partners to achieve;
- **R: Relevant**: Results musts make contributions to selected priorities of the national development framework;
- **T: Time-bound**: Results are never open-ended. There should be an expected date of accomplishment.

The project design assessment covers whether capacities of the implementation partners were sufficiently considered when designing the project, and if partnership arrangements were identified and negotiated prior to project approval. An assessment of how assumptions and risks were considered in the development phase is also included.

In GEF terms, project results include direct project outputs, short- to medium-term outcomes, and longer-term impact, including global environmental benefits, replication efforts, and local effects. Project results were evaluated and rated according to effectiveness, relevance, efficiency, sustainability and progress towards impacts. Effectiveness refers to the extent to which the project objective and outcomes have been achieved or how likely it is to be achieved by project closure. The assessment of relevance looks at the extent to which the activity is suited to local and national development priorities and organizational policies, including changes over time. Relevance also considers the extent to which the project is in line with GEF operational programs and strategic priorities under which the project was funded. Efficiency is a measure of the extent to which results have been delivered with the least costly resources possible; also called cost effectiveness or efficacy. The efficiency assessment also examines compliance with respect to the incremental cost concept, i.e., the GEF funds were allocated for activities not supported under baseline conditions, with the goal of generating global environmental benefits.

Assessment of the sustainability addresses the likelihood that project results will be sustained after GEF funding ceases, with respect to financial resources, institutional frameworks and governance, socioeconomic considerations and environmental factors. Progress towards impact is an assessment of the project theory of change, i.e., how project results will lead to long term impact, according to the assumptions made and estimated intermediate states.

The assessment of project monitoring & evaluation systems includes an evaluation of the appropriateness of the M&E plan, as well as a review of how the plan was implemented, e.g., compliance with progress and financial reporting requirements, how were adaptive measures taken in line with M&E findings, and management response to the recommendations from the midterm review.

The quality of project implementation and execution is evaluated and rated. This assessment considers whether there was adequate focus on results, looks at the level of support provided, quality of risk management, and the candor and realism represented in the annual reports.

Other assessments include the need for follow-up, materialization of cofinancing, environmental and social safeguards, gender concerns, and the effectiveness of partnerships and the degree of involvement of stakeholders.

The report concludes with a set of recommendations for reinforcing and following up on initial project benefits and a discussion of good practices and lessons learned which should be considered for development and implementation of other UNDP supported, GEF financed projects.

1.4 Ethics

The evaluation was conducted in accordance with the UNEG Ethical Guidelines for Evaluators, and the TE team has signed the Evaluation Consultant Code of Conduct Agreement form (**Annex 7**).

1.5 Evaluation Ratings

The findings of the evaluation are compared against the targets set forth in the logical results framework and analyzed according to developments that occurred over the course of the project. The effectiveness and efficiency of project outcomes are rated according to the 6-point GEF scale, ranging from Highly Satisfactory (no shortcomings) to Highly Unsatisfactory (severe shortcomings). Monitoring & evaluation and execution of the implementing and executing agencies were also rated according to this scale. Relevance is evaluated to be either relevant or not relevant. Sustainability is rated according to a 4-point scale, ranging from Likely (negligible risks to the likelihood of continued benefits after the project ends) to Unlikely (severe risks that project outcomes will not be sustained). More detailed descriptions of the rating scales are compiled in **Annex 8**.

1.6 Audit Trail

As an "audit trail" of the evaluation process, review comments to the draft report are compiled along with responses from the TE team as an annex separate from the TE report. Relevant modifications to the report are incorporated into the final version of the TE report.

1.7 Limitations

The TE was carried out over the period of March-April 2019; including preparatory activities, field mission, desk review, and completion of the evaluation report, according to the guidelines outlined in the Terms of Reference (**Annex 9**). There were no limitations associated with language. The project deliverables were prepared in English and Chinese, with progress reports and work plans in English. An interpreter supported the international consultant during the TE mission, and the national consultant reviewed documents available only in Chinese. Relevant stakeholders were interviewed according to the breakdown of the project design, i.e., at the autonomous region level for Outcome 1, at the Altai Prefecture level for Outcome 2 and at the local level, specifically the Liangheyuan Nature Reserve (NR) level for Outcome 3. Interviews and field visits were made to the project implementation village, i.e., Jiangbutas Village, Chaganguole Township, Qinghe County. Due to weather conditions, e.g., snow cover, field visits could not be made inside the nature reserve. The project team did share video evidence with the TE team of baseline conditions in the nature reserve and activities carried during project implementation.

2 Project Description and Development Context

2.1 Project start and duration

Key project dates are listed below:

Preparation Grant Approved:	08 December 2011
Project approved for implementation by GEF Secretariat:	24 September 2013
Project start (project document signed by Government of China):	24 January 2014
Project inception workshop:	20 June 2014
Midterm review:	June-September 2016
Terminal evaluation:	March-May 2019
Project completion (operational closure):	26 February 2019

The project preparation grant was approved in December 2011, and the project was approved for implementation by the GEF Secretariat on 24 September 2013, following the project preparation phase. The Government of China and UNDP signed the project document, 27 February 2014, which marks the official start of the project. This project started about 6 months later than the other child projects under the MSL program.

The project inception workshop was held in June 2014. The midterm review was carried out in 2016. The operational closure of the project occurred on 26 February 2019, consistent with the 5-year implementation duration.

2.2 Problems that the project sought to address

Xinjiang Uyghur Autonomous Region (XUAR) covers an area of 1,664,897 km^2, the largest provincial level administrative unit in the People's Republic of China (China). Located in the northwest part of the country, XUAR shares borders with 8 countries, including Mongolia, Russia, Kazakhstan, Kyrgyzstan, Tajikistan, Afghanistan, Pakistan and India.

As outlined in the project document, Altai-Sayan Ecoregion at the northern reaches of XUAR consists of expansive mountainous landscapes, with traditional cultures and livelihoods and globally significant biodiversity. The Chinese portion of this ecoregion is situated in Altai Prefecture and shares international borders with Mongolia, Russia and Kazakhstan. The Altai Mountains are recognized as one of the country's 25 priority Ecological Function Zones (EFZ) with focus on water conservation, and are included as key biodiversity area in China's national biodiversity strategy and action plan (NBSAP), 2015-2030.

The geographic focus of the project is the Altai Mountains and Wetland Landscape (AMWL) includes both the headwaters (i.e., high montane areas including forests, grassland and wetland) and lower watersheds of the Ulungur and Ertix river systems, which flow down from the Altai Mountains through the northern part of the Junggar Basin. The AMWL region thus provides water for nearly all of northern XUAR, and is critical for life across much of the region. A description of the AMWL, in the context of the Altai Mountains Forestry Area and the Altai Prefecture, is presented below in **Table 4**.

***Table 4**: Geographic regions of AMFA, AMWL and Altai Prefecture*[1]

Geographic regions	Area (ha)	Additional notes	Nature Reserves
Altai Mountains Forestry Area (AMFA)	2.74 million ha, nearly 1/4 of Altai Prefecture	Includes the Altai Mountains with the upper reaches (tributaries) and headwaters of Ulungur and Ertix Rivers in the mountains	Two NRs: the Kanas NNR and Liangheyuan NR, with a total area of 900,938 ha, about 33% of AMFA
Altai Mountains and Wetland Landscape (AMWL)	7.33 million ha, 62% of Altai Prefecture	Includes both the Altai Mountains and the Ulungur and Ertix Rivers' watersheds downstream in the lowlands of Altai Prefecture	Six NRs: the Kanas NNR, Liangheyuan NR, Buergen NR, Kekesu Wetland NR, Ertix River Keketuohai NR and Jingtasi NR, with a total area of 1,092,349 ha, about 15% of AMWL
Altai Prefecture	11.77 million ha	Includes the Altai Mountains and all of the prefecture's lowlands including vast desert areas in South of Ulungur River and Ertix River	Seven NRs: the Kanas NNR, Liangheyuan NR, Buergen NR, Kekesu Wetland NR, Ertix River Keketuohai NR, Jingtasi NR and Kalamaili NR, with a total area of 2,438,765 ha, about 20% of Altai Prefecture

Specific threats highlighted in AMWL include the following:

i. Livestock overgrazing and agricultural policies and practices that promote increases in livestock numbers;
ii. Water management practices such as the construction of dams and other irrigation projects that fragment river systems;
iii. Illegal harvest of natural resources and destruction of fragile riparian vegetation;
iv. Mining pollution and other mining damage;
v. Unplanned or inappropriate tourism development;
vi. Construction of new roads that increase access to (disturbance of) ecologically fragile areas; (vii) construction of fences that will hinder wildlife movements; and
vii. Alien invasive species, especially fish;
viii. regional climate change, which may lead to changes in wildlife and ecological distribution patterns.

An extensive system of protected areas (PA) has been established in XUAR including the AMWL region to help protect special habitats and maintain viable wildlife populations in XUAR, and to maintain the ecological integrity of the region. Five of the nature reserves (NR's) in Altai Prefecture specially prioritize the protection of wetlands and their ecological services, or have significant wetlands in their boundaries: the Liangheyuan, Buergen Beaver, Kekesu Wetlands, Kanas, and Ertix River Keketuohai Wetlands NRs (see **Figure 1**).

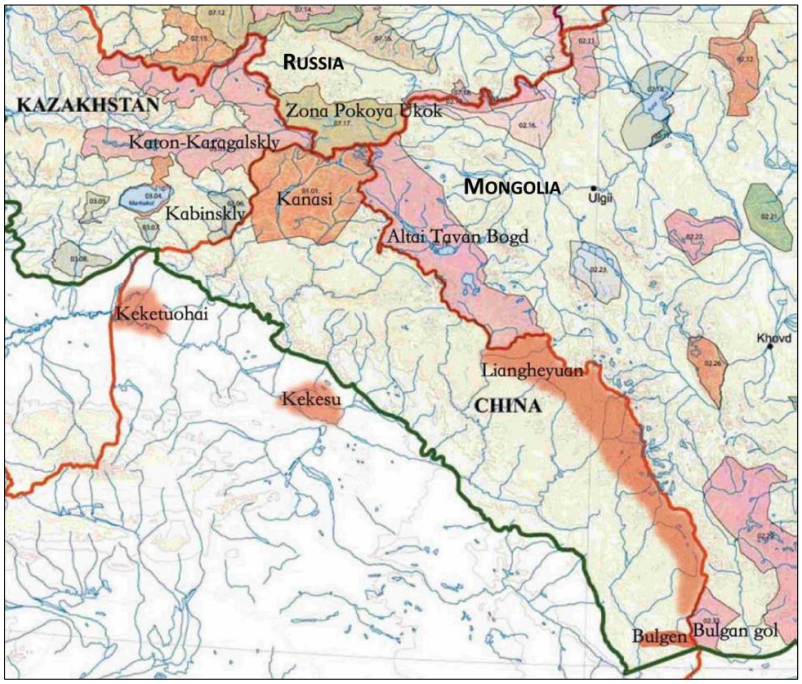


***Figure 1**: Map of nature reserves in the AMWL region*[2]

[1] Source: project document (Table 2)

[2] Source: project document (Figure 8)

The baseline analysis outlined in the project document describes shortcomings in management effectiveness of the PA system, the extent and scope of regional and landscape PA systems, the mainstreaming of environmental concerns across different government sectors and the level of participation and partnership with local communities.

The long-term vision of the project was to promote a safeguarded environment that maintains representative biodiversity and provides important ecological services in XUAR, in particular in AMWL, through ecologically sound and socially responsible mechanisms. The project was designed to address this vision by strengthening the regional and landscape PA system, with special attention given to the wetland sub-system.

Adoption of a landscape mindset for conservation planning and management of PAs and a greater engagement with the public, including local people and communities as well as a broader public at provincial and national levels, were key components of the project, to support the development and strengthening of a PA system strategy in XUAR that can better achieve conservation and development goals across the province.

The following barriers were identified as hindering effective management of the PA system in XUAR and AMWL:

Barrier 1: Insufficient systemic and institutional capacity at provincial level to plan and manage the PA system and the sub-system of wetland PAs

Barrier 2: Disconnect between the management of PA systems and development and sectoral planning processes at the Altai landscape level

Barrier 3: Limited nature reserve staff capacities and limited community participation in PA management

2.3 Immediate and development objectives of the project

The project was aligned with Outcome 1 of the 2011-2015 United Nations Development Assistance Framework (UNDAF) for China: "Government and other stakeholders ensure environmental sustainability, address climate change, and promote a green, low-carbon economy", and with two outcomes of the UNDP Country Programme Document for China: Outcome 4: "Low carbon and other environmentally sustainable strategies and technologies are adapted widely to meet China's commitments and compliance with Multilateral Environmental Agreements"; and Outcome 5: "The vulnerability of poor communities and ecosystems to climate change is reduced". The project was also consistent with the 2008-2011 UNDP Strategic Plan, specifically the objective of "Environment and Sustainable Development" and primary outcome "mobilizing environmental financing".

The situation analysis included in the project document describes how the ecosystems of the AMWL region are intertwined with the livelihoods of the pastoral communities residing in these landscapes, particularly Kazakh herders. For centuries, the alpine grasslands have been used for summer pastures and the lower lying, more arid lands used in the colder winter seasons. Pressures on natural resources in the region have increased in recent years, as a result of changing grazing patterns, e.g., as a result of the availability of winter fodder, and also due to increased demand as the human populations and consumption habits have changed across China.

Protection of globally significant biodiversity and regionally important ecological functions is critical in achieving mutually beneficial outcomes of conservation and improved well-being of local communities.

2.4 Baseline indicators established

Baseline indicators are summarized below:

- Baseline provincial institutional capacities, as measured by the UNDP Capacity Development Scorecard, summarized below in **Table 5**.

***Table 5**: Baseline institutional capacity scores*

Institution	Baseline Capacity Development Scorecard score (2012)
Forestry Department	59%
Water Resources Department	60%
Environmental Protection Department	52%

- Baseline financial sustainability, as measured by the Financial Scorecard, Part II of the GEF-5 Financial Sustainability Scorecard, summarized below in **Table 6**.

***Table 6**: Baseline financial sustainability scores*

Component	Baseline score (2012)
Component 1: Legal, regulatory and institutional frameworks	24%
Component 2: Business planning and tools for cost-effective management	20%
Component 3: Tools for revenue generation	11%

- Protected area (PA) network design not optimized for resilience and connectivity.
- No provincial level PA regulations with guidance for managers or clear stipulation of levels of authority.
- No sector plans that integrate PA objectives as well as biodiversity.
- Most PA management plans not designed in participatory ways and not comprehensive.
- Most PA's not managed collaboratively.
- Many Forestry and PA staff with inadequate skills for their jobs.
- Systematic monitoring and reporting systems not established, limited availability or access to information necessary for PA operations, including biodiversity and socioeconomic conditions in and near the PA's.
- EIA procedures are not adequately followed, leading to undesirable impacts from infrastructure construction and mining.
- No legal obligations for post-mining rehabilitation.
- No system for reporting malfeasance, or through which to submit formal concerns or complaints or to make suggestions.
- Management effectiveness of nature reserves in the AMWL region as measured by the GEF-5 adapted version of the management effectiveness tracking tool METT and ecosystem health measured by the ecosystem health index (EHI) at project baseline are presented below in **Table 7**.

***Table 7**: Baseline METT and EHI scores*

Protected Area:	METT (GEF-5 version, baseline year: 2012)	EHI (baseline year: 2012)
Liangheyuan NR	65	67
Kekesu Wetland NR	71	67
Buergen Beaver NR	47	57
Kanas NR	64	Not reported
Ertix Keketuohai NR	28	Not reported
Average	**55**	Not reported

- Gold mining still occurs in some PA's, despite regulations (but no specific baseline figures were available).
- No assistance available from PA system to help local communities with economic opportunities.
- No conservation action plan for Chinese beaver.
- No relationship between two NR's in Altai Mountains.
- Annual operational budget (excluding salaries) for the 5 NR's in the AMWL PA network: USD 1,515,594.
- 7,000 herder families graze livestock in the Liangheyuan NR in summer, including 170 families (approx. 40,000 livestock) in ecologically sensitive Sandaohaizi wetland.
- Management zones in Liangheyuan NR not rationalized.
- Community ecotourism not present in Liangheyuan NR area.
- Average household income of herder family in Sandaohaizi community: CNY 1,980.
- 6,000 ha of PA land in Liangheyuan is threatened by mining activities.
- Populations of beaver in Liangheyuan NR: 300-400 (baseline year 2012).

2.5 Main stakeholders

The main stakeholders relevant to the project were described in the project document, as listed below in **Table 8**.

***Table 8**: Project stakeholders*

Stakeholder	Roles and responsibilities
Ministry of Finance (MoF)	Operational Focal Point (OFP). Coordination and implementation of GEF financed projects.
UNEP, WB, ADB	Partners in the CBPF umbrella programme for China CBD actions for biodiversity conservation. WB manages another GEF co-financed wetland project in Xinjiang

Stakeholder	Roles and responsibilities
	(*Mainstreaming Biodiversity Protection within the Production Landscapes and PAs of the Lake Aibi Basin*) which should be coordinated with this project.
Environment protection sector, at different levels (National Ministry of Environmental Protection, Xinjiang Department of Environment Protection, and Altai Environmental Protection Bureau)	Coordination of environmental issues, pollution control, and CBD implementation and reporting in China. Execution agency for CBPF. Processing and coordination of drafting of legislation related to environmental protection in China. Responsible for the Regulations on Nature Reserves. Directly manages 21 national wetland NRs and 28 provincial wetland NRs across the country (none in Xinjiang). Necessarily involved in any proposed regulatory revisions for nature reserve management.
State Forestry Administration (SFA) (incl. the National Wetland Conservation Centre)	Responsible for China's forest lands, for most nature reserves, for wildlife issues including trade (CITES), for wetlands protection (Ramsar Convention) and for the drafting of departmental (provincial) level regulations, especially with regard to wetlands. Also responsible for ensuring effective wetland PA management, with provision of supervisory and technical support for local PA authorities. Manages the vast majority of NRs in China (covering over 80% of NR area) and provides financial support for the construction and regular operations of national NRs.
Standing Committee of People's Congress of Xinjiang UAR	Responsible for the coordination of legislation and regulation functions in XUAR, including provincial regulations for NR management and regulations of wetland conservation.
Xinjiang Uygur Autonomous Region Development and Reform Commission	Responsible for large national and provincial construction projects (the commission reviews and grants permission for projects). Also responsible for oversight of the 12th FYP, as well as regional planning including Altai Region as one of China's 25 priority ecological function zones
Xinjiang Finance Department	Financial responsibility for the project, including compilation and submission of budget requests, and co-leadership of the project together with XFD and UNDP.
* **Xinjiang Forestry Department** (**XFD**) including the XFD's *Foreign Economic and Technical Cooperation Office* and XFD's *Wetland and PA Management Office*	Planning and management of wetland (and non-wetland) PAs. Executing agency at provincial level for many projects, including the GEF-12 Degradation Project and the current WB Lake Aibi conservation project. Executing agency for the provincial level component of the project, through the XFD Wetland Conservation and PA Management Office.
* **Altai Mountains Forestry Bureau** (**AMFB**) (provincial level bureau, managed under the XFD)	Planning and management of the national Natural Forest Protection Plan (NFPP) in Altai Mountains, executed through branch offices in 6 counties in Altai Prefecture. Planning and management of Liangheyuan NR. Executing agency, through the Liangheyuan NR management division, for landscape and site level components of the project.
* **Management Bureau of Liangheyuan Nature Reserve** (**LNR**) (a major division of the Altai Mountains Forestry Bureau)	Responsible for the management of Liangheyuan NR. Will oversee and implement the project's landscape and site level project interventions as well as coordinate with XFD for implementation of the project's provincial level component.
Agriculture sector, at different levels (National Ministry of Agriculture, Xinjiang Department of Agriculture and Pastoralism, Altai Agriculture and Pastoralism Bureaus)	Responsible for fish conservation and management, and grassland conservation and management. Major stakeholder in terms of water use and sources of agricultural water pollution, grassland management, and development of pastoralism. The project should mainstream biodiversity and PA management within their plans, including pollution control measures for wetland sites. This sector can help to monitor wetland biodiversity on agricultural lands adjacent to NRs. Need their cooperation for control of fishing within sustainable limits.
Water resource sector, at different levels (National Ministry of Water Resources, Xinjiang Department of Water Resources, and Altai Water Resources Bureau)	Responsible for water resource management and security. Important stakeholder with high interest in project due to responsibilities in water quality, flood control and other water and wetland related ecological functions.
Tourism sector, at different levels (National Ministry of Tourism, Xinjiang Department of Tourism, Altai Tourism Bureau)	Responsible for tourism planning, development, and marketing. Designation of specific sites or scenic areas under national accreditation schemes (e.g., 5* sites).
Xinjiang Land Resources Department	Supervision and administration of land-use planning and management, of exploration and development of mineral resources It also takes charge of the supervision and management of geological park system(the department can lead to environmental damage, and potentially can prevent establishment or expansion of NRs in mineral-rich areas of the province. Please be noticed that not the department lead to environmental damage and other negative effects. It is the weak enforcement and un-sustainable use and illegal ming lead to all the negative effects).
Government of Altai Prefecture (including the Altai Forestry Bureau, Tourism	Planning and management of wetland (and non-wetland) PAs in Altai Prefecture (Forestry Department) as well as tourism development, agricultural development, mining, and other landscape level or site-specific development planning matters in

Stakeholder	Roles and responsibilities
Bureau, Mining and Land Resources Bureau, etc.)	Altai Prefecture. Also responsible for legal and regulatory matters pertaining to the Altai prefectural context. All relevant county-level government bureaus also should be engaged in dialogue regarding site-specific project interventions.
Kanas management committee	This important committee provides comprehensive oversight for the development and management of the Kanas Scenic Area and the Kanas National NR.
Companies (business sector) in the project area, including public-private partnerships (PPPs) such as the Fuyun Keketuohai Forest Park - Keketuohai Tourism Company partnership	May help raise environmental awareness in the project area as well as increase or enhance local socio-economic livelihood opportunities.
Target herding communities	Principal natural resource users in Altai region. Community members are mainly Kazakh people, but also include other minority groups such as Tuwa, Mongol and Uyghur people who also herd their livestock in and around NRs. Local community members were involved during the preparatory phase of the project, and will also be centrally involved through the lifespan of the project. Appropriate consultation was undertaken to ensure community participation and consent for the project.
National and provincial Research Institutes focused on XUAR and on relevant thematic topics in the natural sciences or social sciences	Technical expertise available in fields such as hydrology and water management, biology including botany and zoology, economic development, sociology, sectoral planning, and other aspects of conservation and development in AMWL/XUAR. Strong assets include multi-disciplinary, cross-sectoral research and planning.
National and international organizations (NGOs) with prior experience in XUAR and AMWL, such as GIZ, Wetlands International, etc.	Concerns for the environment and biodiversity, especially wetlands. Involvement in wetlands and biodiversity projects. Available for technical support, consultancies, training and monitoring. ECBP with GIZ previously also has undertaken a parallel project, which included wetland oriented work in Liangheyuan NR. Other potential partners also include the Altai Wildlife Conservation Association and local forest protection unions, herder's unions and tourism home-stay associations.
Other organizations with interest in the *Altai-Sayan Ecoregion*, or with experience of co-management or of development of community tourism (such as WWF, Snow Leopard Enterprises, PCC-Mongolia, IUCN/WCPA, Plateau Perspectives, etc.	Concerns for biodiversity conservation and/or the welfare of local communities. High capacity for grassroots action, working in partnership with local people. A *stakeholder advisory group* will be formed at time of project inception to avoid duplication of effort and to ensure synergies in the project.

* Implementing agencies (for different components of the project)

2.6 Project theory of change

The GEF alternative addressed the three primary barriers that were identified in the project design as hindering effective management of PA's in the AMWL region and protection of globally significant biodiversity and regionally important ecological functions. The project objective was "to strengthen the management effectiveness of PAs to respond to existing and emerging threats to the globally significant biodiversity and essential ecosystem services in the Altai Mountains and Wetland Landscapes in Xinjiang Uyghur Autonomous Region". The objective was designed to be achieved through three mutually supportive outcomes:

Outcome 1: The protection of wetland ecosystems through PA planning and management is enhanced in Altai Prefecture and XUAR through systemic, legal and institutional capacity strengthening;

Outcome 2: The biodiversity of the Altai Mountains and Wetland Landscape is effectively conserved with a strengthened PA network and enhanced operational budget through adoption of a landscape level approach to conservation planning and environmental management and

Outcome 3: The adoption and development of a 'community co-management' approach to conservation in Liangheyuan Nature Reserve demonstrates improved management effectiveness for a wetland PA in the Altai Mountains and Wetland Landscape.

The project aimed to strengthen the enabling environment required to facilitate the representative design of the PA sub-system in the AMWL region through applying a landscape approach, and effective management of the expanded PA system through collaborative arrangements with local communities. The theory of change illustrated in **Figure 2** presents the intermediate states and ultimate impacts following achievement of the project outcomes. Making further progress towards impact will be contingent upon the assumptions impact drivers outlined, including continued expansion of the national PA system to further capture under-represented ecosystems, integrating conservation objectives with socioeconomic development priorities, securing PA financing and expanding incentives for encouraging local communities and the private sector to actively engage in collaborative PA management.

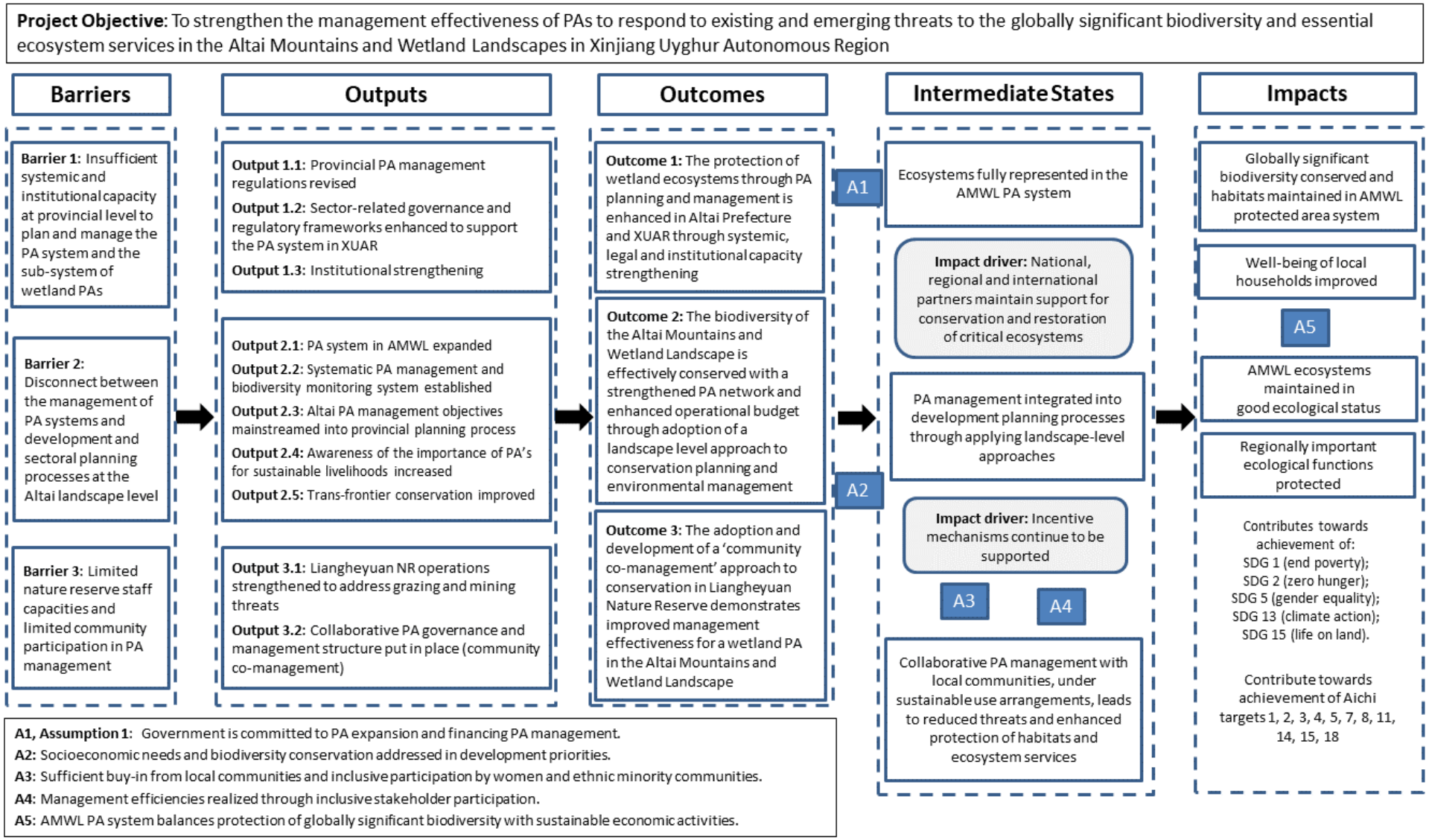


***Figure 2**: Theory of change diagram*

3 Assessment of Project Design

The project was approved under the GEF-5 replenishment cycle and aligned to the GEF-5 Biodiversity Strategy, specifically Objective 1, "Improve Sustainability of Protected Area Systems", Outcome 1.1, "Improved management effectiveness of existing and new protected areas" and Outcome 1.2, "Increased revenue for protected area systems to meet total expenditures required for management."

The project design addresses the key barriers identified as hindering implementation the long-term solution of protecting biodiversity and ecosystem services in the AMWL region, and the three project outcomes were formulated to be mutually supportive in achieving the project objective "to strengthen the management effectiveness of PAs to respond to existing and emerging threats to the globally significant biodiversity and essential ecosystem services in AMWL in northern XUAR, People's Republic of China.":

Outcome 1: The protection of wetland ecosystems with PA planning and management is enhanced in XUAR through systemic, legal and institutional capacity strengthening

Outcome 2: The biodiversity of AMWL is effectively conserved with a strengthened PA network and enhanced operational budget through adoption of a landscape approach to conservation planning and environmental management

Outcome 3: The adoption and development of a 'community co-management' approach to conservation in Liangheyuan NR demonstrates improved management effectiveness for a wetland PA in the Altai Mountains and Wetland Landscape

The project design was logically arranged, with each outcome focused on a different administrative level. At provincial level (XUAR), the project aimed to strengthen the enabling environment, including the institutional framework and governance capacity. At landscape level (Altai Prefecture), the design focused on developing and demonstrating an effective PA management framework, focusing on the Altai mountains and wetland biodiversity. At site level (Liangheyuan NR), the project focused on fostering a collaborative approach to conservation, with enhanced government-community partnerships in a NR where the local herder communities are highly reliant on the grassland resources in the AMWL region and have limited options for alternative livelihoods. The design facilitated broad stakeholder engagement and highlighted the interconnectivity between the three administrative levels.

3.1 Analysis of project results framework

As part of this terminal evaluation, the project results framework for the project was assessed against "SMART" criteria, to evaluate whether the indicators and targets were sufficiently specific, measurable, achievable, relevant, and time-bound. With respect to the time-bound criterion, all targets are assumed compliant, as they are set as end-of-project performance metrics.

Project Objective:

There are three indicators at the project objective level, with the first two indicators aimed at strengthening provincial institutional capacities and enhancing the financial sustainability of the PA system in XUAR. The third objective level indicator focuses on increasing PA coverage, strengthening resilience and improving connectivity through cross-border collaboration.

The SMART analysis of the objective section of the project results framework is presented below **Table 9**.

***Table 9**: SMART analysis of project results framework (project objective)*

Indicator	Baseline	End-of-Project target	MTR SMART analysis				
			S	M	A	R	T
Objective: To strengthen the management effectiveness of PAs to respond to existing and emerging threats to the globally significant biodiversity and essential ecosystem services in AMWL in northern XUAR, People's Republic of China							
1. Provincial Capacity: - Forestry Department - Water Resources Dept. - Environmental Protection	59% 60% 52%	All >70%	Y	Y	?	?	Y
2. Financial sustainability: - Component 1: Legal, regulatory and institutional frameworks - Component 2: Business planning and tools for cost-effective management - Component 3: Tools for revenue generation	24% 20% 11%	40% 50% 40%	Y	Y	?	?	Y

Indicator	Baseline	End-of-Project target	MTR SMART analysis				
			S	M	A	R	T
3. Increase in PA coverage, strengthened resilience and connectivity in the AMWL	Not indicated	Incorporation of AMNFPPA into AMWL PA framework	?	Y	?	Y	Y
		Expansion of PA system in AMWL – with total increase of at least 150,000 ha in coverage	Y	Y	Y	Y	Y
		Regional collaboration with neighboring PAs enhanced	?	Y	Y	Y	Y
SMART: Specific, Measurable, Achievable, Relevant, Time-Bound Green: SMART criteria compliant; Yellow: questionably compliant with SMART criteria; Red: not compliant with SMART criteria							

Indicator Nos. 1 and 2 were found to be mostly SMART-compliant. The Altai Mountain Forestry Bureau (AMFB), which reports directly to the National Forestry and Grassland Administration (NFGA) and not the provincial government, is not included as one of the institutions under Indicator No. 1. The provincial Water Resources Department and Environmental Protection Departments managed protected areas when the project was developed; however, these two institutions did not have any direct implementation role in the project, rendering the achievability of strengthening the capacities questionable. The UNDP Capacity Development Scorecard used for measuring progress towards achievement of Indicator No. 1 is for PA management; it might have sensible to adapt the scorecard to highlight aspects important for management of wetland PA's.

The GEF financial sustainability scorecard, used as the performance metric for Indicator No. 2, was prepared for the entire PA system in the province. The project design, on the other hand, focuses on the Altai Mountain wetland landscape. It might have been more relevant to focus on the wetland PA sub-system in this part of XUAR.

Regarding Indicator No. 3, it is unclear what is meant by "incorporation of AMNFPPA into AMWL PA framework", and final sub-target of enhancing regional collaboration with neighboring PAs is insufficiently specific.

With "to strengthen management effectiveness of PA's ..." included in the phrasing of the project objective, it might have been advisable to include the management effectiveness tracking tool scores among the indicators at the project objective level. (lesson learned)

Outcome 1:

There are three indicators under Outcome 1, including strengthening the legal framework for enhancing conservation of wetland ecosystems; improving the capacity of the XUAR Department of Forestry and Grasslands (XDFG) for implementing participatory approaches, increasing PA staff competences; enhancing public awareness and support; and establishing and operationalizing safeguard measures to protect wetland ecosystems from the adverse effects of infrastructure development and mining.

The SMART analysis of Outcome 1 indicators included in the project results framework is presented below in **Table 10**.

***Table 10**: SMART analysis of project results framework (Outcome 1)*

Indicator	Baseline	End-of-Project target	MTR SMART analysis				
			S	M	A	R	T
Outcome 1: The protection of wetland ecosystems through PA planning and management is enhanced in Altai Prefecture and XUAR through systemic, legal and institutional capacity strengthening							
4. Existence of effective legal framework for the Xinjiang PA system emplaced, enhancing the conservation status of natural wetlands within the 35 PAs in Xinjiang UAR	PA network design not optimized for resilience and connectivity	Provincial regulations for PAs proposed by the XFD, including wetland considerations, greater clarity of different management categories, and new framework for co-managed PA zones	?	?	Y	Y	Y
		At least two sectoral plans integrate PA objectives and biodiversity considerations, such as water resources and agricultural bureaus.	?	?	?	Y	Y
5. Improved capacity scorecard (SC) scores of Forestry Department for participatory approaches in PA planning and management (Q8 in SC), PA staff competencies (Q9 & 16-19 in SC), and public awareness and support (Q21 in SC)	Average score for Q8,9, 16-19 and 21 is 1.43.	Average score for Q8,9, 16-19 and 21 is 2.4 at minimum, through inter alia the following improvements:	Y	Y	Y	Y	Y
	Most PA management plans not designed in participatory ways, and not comprehensive; and most PAs not managed collaboratively	Majority of PAs in AMWL with updated and participatorially prepared management plans, including co-management components	?	?	Y	Y	Y
	Many Forestry and PA staff with inadequate skills for their jobs	More systematic staff training program designed and initiated	?	?	?	Y	Y
	Systematic monitoring and reporting systems not established, limited availability or access to	Accessible data and information sharing platform developed under supervision of XFD in support of PA management operationalised	Y	Y	Y	Y	Y

Indicator	Baseline	End-of-Project target	MTR SMART analysis				
			S	M	A	R	T
	information necessary for PA operations, incl. biodiversity and socio-economic development situations in/near PAs	Data sharing platform includes 'freeform' categories for observations or information (incl. complaints) submitted anonymously or by the public					
6. Existence of operational safeguard measures to protect wetland habitat and biodiversity from infrastructure placement and mining	EIA procedures are not adequately followed leading to undesirable impacts from infrastructure construction and mining.	EIA law is strictly enforced for construction and mining projects affecting wetland PAs, with full participation of the wetland and PA management authorities.	?	?	Y	Y	Y
	No legal obligation for post-mining rehabilitation.	Clear standards are officially set up and enforced with minimum requirements for post-extraction site restoration of mining sites.	Y	Y	?	Y	Y
	No system for reporting malfeasance, or through which to submit formal concerns or complaints or to make suggestions	Hotline contact number operationalized – also see the information platform above – with referral system (i.e., to other sectors) in place	Y	Y	Y	Y	Y
SMART: Specific, Measurable, Achievable, Relevant, Time-Bound Green: SMART criteria compliant; Yellow: questionably compliant with SMART criteria; Red: not compliant with SMART criteria							

The two sub-targets for measuring the achievement of Indicator No. 4 are lacking in specifics. The first sub-target calls for provincial regulations for PA's "proposed"; it is unclear whether the proposed regulations would be submitted for official approval by project closure, or rather proposed to the project steering committee or project leading group. The term "sectoral plans" included in the phrasing of the second sub-target is also unclear; for example, it might have been more advisable to indicate the 5-year plan, which could be considered as a sectoral plan. Considering that other sectors apart from forestry did not have direct implementation roles in the project, the achievability of influencing water resources or agricultural sectoral plans is questionable.

Regarding Indicator No. 5, indicating the number of PA management plans envisaged to be developed would have provided a more specific indication of the expected level of effort, rather than stating that the "majority" of PA's would have updated management plans. The term "more systematic training program designed and initiated" is unclear and, therefore, the measurability and achievability of this sub-target is questionable.

Under Indicator No. 6, it is unclear how enforcement of the EIA law and full participation of wetland and PA management authorities would be measured. It would have been advisable to state more specifically a measurable metric for this indicator. The achievability of developing "clear standards" for reclamation of abandoned mining sites is questionable; it might have been more advisable to focus on formulating technical guidelines or standard practice guidelines. Developing mandatory standards with minimum requirements is a timely process, likely extending beyond the timeframe of the 5-year project.

Outcome 2:

The six indicators established for Outcome 2 include metrics on PA management effectiveness, ecosystem health, reduction of mining threats, co-management opportunities and cross-border cooperation. The SMART analysis of the Outcome 2 indicators included in the project results framework is presented below in **Table 11**.

Table 11: *SMART analysis of project results framework (Outcome 2)*

Indicator	Baseline	End-of-Project target	MTR SMART analysis				
			S	M	A	R	T
Outcome 2: The biodiversity of the Altai Mountains and Wetland Landscape is effectively conserved with a strengthened PA network and enhanced operational budget through adoption of a landscape level approach to conservation planning and environmental management							
7. Increase in management effectiveness of AMWL PA complex, as per the average METT scores of individual Pas	Liangheyuan NR = 65	Liangheyuan NR >80	?	Y	Y	Y	Y
	Kekesu Wetland NR = 71	Kekesu Wetland NR >80	?	Y	Y	Y	Y
	Buergen Beaver NR = 47	Buergen Beaver NR >65	?	Y	Y	Y	Y
	Kanas NR = 64	Kanas NR >75	?	Y	Y	Y	Y
	Ertix Keketuohai NR =28	Ertix Keketuohai NR >60	?	Y	?	Y	Y
	Average = 55	Average = 72	?	Y	Y	Y	Y
8. Improved ecological conditions of PAs, as per Ecosystem Health Index (EHI)	Liangheyuan NR = 67	Liangheyuan NR >75	Y	Y	Y	Y	Y
	Kekesu Wetland NR = 67	Kekesu Wetland NR >75					
	Buergen Beaver NR = 57	Buergen Beaver NR >70					
9. Reduction in incidence of new mining contracts in PAs in AMWL region	Gold mining still occurs in some PAs, despite current regulations (but no specific baseline figures available)	No mining occurs inside PAs in AMWL region	Y	Y	?	Y	Y

Indicator	Baseline	End-of-Project target	MTR SMART analysis				
			S	M	A	R	T
10. Viable alternative options are developed for herding communities, that offset economic dependency on grazing inside Pas	No assistance available from PA system to help local communities with economic opportunities	New co-management structures are in place, which support and strengthen alternative livelihood options for Kazakh herders (and other forms of collaboration)	Y	Y	Y	Y	Y
11. Cooperation between Altai-Sayan Ecoregion countries is enhanced	No conservation action plan for Chinese beaver	Beaver conservation action plan developed and adopted (agreed) by Altai Prefecture and the local government in Mongolia	Y	Y	Y	Y	Y
	No relationship between two adjacent NRs in Altai Mtns	Tavan Bogd NP – Liangheyuan NR partnership MOU is reached	Y	Y	Y	Y	Y
12. Operational budgets for PAs in AMWL increase	Operational budget for AMWL PA network is US$ 1,515,594 per year	Operational budget is increased by 40%, with new contributions from local, prefecture and provincial government	?	?	?	Y	Y
SMART: Specific, Measurable, Achievable, Relevant, Time-Bound Green: SMART criteria compliant; Yellow: questionably compliant with SMART criteria; Red: not compliant with SMART criteria							

Indicator No. 7 is a measure of PA management effectiveness, applying the GEF-5 adapted management effectiveness tracking tool (METT) as a performance metric. Five PA's in the AMWL region are included, with baseline METT scores ranging from 28 for the Ertix Keketuohai NR to 71 for the Kekesu NR. The point scores were indicated as baseline figures and end targets rather than percentage of the maximum possible score. And the average METT score of the 5 PA's was indicated as the final sub-target. With figures ranging from 28 to 71, the median would be a better measure than average of the group of scores.

The end target for Indicator No. 9 calls for no mining occurring inside PA's in the AMWL. The indicator is an appropriate measure of reduction of threats associated with mining, the question is whether the target is achievable taking into account the legal arrangements associated with revoking mining and prospecting rights.

With respect to Indicator No. 12, a baseline figure of USD 1,515,594 was presented for the operational budget (excluding salaries) for the PA's in the AMWL. According to Table 4 in the project document, the operational budget for the 220,162-ha Kanas NNR (USD 1,412,872) makes up 93% of this baseline figure. The baseline operational budget for the 30,667-ha Kekesu Wetlands PNR was only USD 5,000; however, this PA had the highest baseline METT score. The operational budgets for wetlands parks were not included in the baseline figure. Moreover, it is unclear why salaries were excluded in the operational budget figure; the GEF Financial Sustainability Scorecard includes salaries in the operational budget calculation. The baseline figure for Indicator No. 12 is not consistent with the baseline figures included in the GEF-5 tracking tool; the tracking tool includes the entire PA system in the XUAR. It would have been advisable to synchronize the information in the results framework with the GEF tracking tools. Outcome 2 focuses on the AMWL; the figures in the GEF tracking tool should have also represented the sub-system of wetland PA's in this landscape. (lesson learned)

Outcome 3:

Outcome 3 is focused on demonstrating the influencing of community co-management in delivering conservation and socioeconomic benefits in the Liangheyuan Nature Reserve. The four indicators established for Outcome 3 include reduction of livestock related threats in the nature reserve, sustainable livelihood benefits to local communities, reduction of threats associated with mining in the nature reserve and populations of select wildlife species. The SMART analysis of the Outcome 3 is presented below in **Table 12**.

Table 12: *SMART analysis of project results framework (Outcome 3)*

Indicator	Baseline	End-of-Project target	MTR SMART analysis				
			S	M	A	R	T
Outcome 3: The adoption and development of a 'community co-management' approach to conservation in Liangheyuan Nature Reserve demonstrates improved management effectiveness for a wetland PA in the Altai Mountains and Wetland Landscape							
13. Reduction in biodiversity pressure from overgrazing	7,000 herding families graze livestock in the NR in summer, incl. 170 families (approx. 40,000 stock) in ecologically sensitive Sandaohaizi wetland	Livestock numbers reduced by 20% in Sandaohaizi wetland, with economic burden to local people offset with alternative (complementary) livelihoods	?	?	?	Y	Y
	Management zones in Liangheyuan NR not rationalized	Zoning of Liangheyuan NR re-assessed and modified based on EHI surveys with illegal mining banned in core/buffer zones and grazing banned in core zones	Y	Y	Y	Y	Y

Indicator	Baseline	End-of-Project target	MTR SMART analysis				
			S	M	A	R	T
14. Enhanced socio-economic options to compensate for lost opportunities improving local economic situation	Community ecotourism not present in project area (Liangheyuan NR)	At least 3 community tourism ventures established, bringing benefit to at least 30 families serving as a model for up-scaling	Y	Y	Y	Y	Y
	Avg. household income is 1,980 CNY/year in Sandaohaizi community	Average household income for park residents increased by at least 20%, as a result of new livelihood opportunities	?	?	?	Y	Y
15. Reduction in biodiversity pressure from mining	6,800 ha of PA land in NR is still threatened by mining activities	Illegal gold mining activities stopped in NR, & restoration of 800 ha of land previously degraded by mining	Y	Y	Y	Y	Y
16. Populations of threatened species (beavers, moose, wolverine) are stable	Wildlife populations: Beaver = 300-400 Moose = tbd Wolverine = tbd	All select wildlife populations are stable or increasing	?	?	?	?	Y
SMART: Specific, Measurable, Achievable, Relevant, Time-Bound Green: SMART criteria compliant; Yellow: questionably compliant with SMART criteria; Red: not compliant with SMART criteria							

Regarding Indicator No. 13, the sub-target of reducing livestock in the Sandohaizi wetland is reasonable and appropriate; however, offsetting these reductions with economic benefits to local people through alternative livelihoods is more difficult to achieve within the timeframe of the project. It often takes years before alternative livelihoods can reach the level of economic benefits realized through livestock rearing. Similarly, with respect to Indicator No. 14, the achievability of increasing household income as a result of new livelihood opportunities is questionable within the lifespan of the project, except for the rather limited number households directly involved, and measuring this metric is not straight forward. Household income of herder families is often highly variable and seasonal. Often, an important benefit of alternative livelihoods is to provide income opportunities during low parts of the season. And, moreover, income streams from the many alternative livelihoods are often irregular throughout the year.

With respect to Indicator No. 16, there seems to have been insufficient vetting of the selected species, e.g., interviewed stakeholders during the TE mission indicated that moose is not a representative species for the Liangheyuan NR. It might have also been advisable to consider one or more migratory bird species, as the underlying project goal is strengthening the management effectiveness of wetland protected areas.

3.2 Assumptions and risks

Seven risks were identified in the risk assessment presented in the project document, four (4) were rated as medium risk and the other three (3) as low risk. The risks are listed below in **Table 13**, along with an evaluation of whether the risks materialized during implementation and if they remain valid at project closure.

Table 13: *Project risks*

Risk	Risk Rating in ProDoc	Validity of the identified risk at project closure
Different sectors involved in the establishment and management of PAs work in isolation	Low	Following the institutional restructuring at the national level with the consolidation of protected area management under a single ministry, the Ministry of Natural Resources, similar changes have been implemented at the provincial level. This risk has been mitigated through the updated institutional arrangements.
Local communities may still follow incompatible land use and resource use practices, jeopardizing biodiversity	Medium	Local herding communities were receptive to alternative livelihoods and collaborative PA management through participation in co-management committees. Moreover, the government community ranger program has helped reduce pressures on grassland resources. The risk, however, remains relevant, although downgraded from medium to low.
Conservation efforts may be limited by ecological responses to climate change	Medium	This is a longer-term risk that remains relevant at project closure. The project has help promote strengthened resilience of local communities and AMWL ecosystems, through facilitating more inclusive governance, increasing knowledge and awareness of the value of wetland resources and reduction of threats to natural resources through development of alternative livelihoods.
Project implementation may be halted by political unrest in the project area	Low	The political situation in XUAR has become more challenging over the past couple of years, and the project efficiency was affected, e.g., high turnover of government officials. The risk remains relevant and might have increased from low to medium.
Lack of financial incentives and poor or limited enforcement of agreed plans or priorities hinder	Medium	The XUAR government has approved a wetlands conservation and rehabilitation plan, and several sectors have addressed wetlands conservation in their 13th 5-year plans. This risk has been mitigated from medium to low.

Risk	Risk Rating in ProDoc	Validity of the identified risk at project closure
mainstreaming wetland PAs and biodiversity in other sectors		
Local government lacks an interest to establish or enlarge wetland PAs	Medium	Local governments are widely interested in establishing wetland parks, which offer socioeconomic benefits, including private sector investment, ecotourism opportunities and central government funding support. Establishing or enlarging nature reserves is more restrictive than for nature parks including wetland parks. This risk has been mitigated from medium to low.
Management of PAs remains ineffective, leading to a decline of biodiversity	Low	Management effectiveness increased in each of the 5 nature reserves in the AMWL region that were involved in the project. Demonstrating scale-able and replicable community co-management arrangements provides scale-able and replicable frameworks for inclusive PA governance and improved management effectiveness.

The risks identified in the social and environmental screening process were not included in the risk assessment included in the main body of the project document; these risks included gender equality and women empowerment, potential impacts to ethnic communities and changes to land tenure arrangements. (lesson learned)

3.3 Lessons learned and linkages with other projects

The project built upon the achievements (lessons learned) of UNDP-GEF national projects, including experiences gained with respect to community co-management arrangements. The project design also took into account lessons from GEF-financed regional biodiversity conservation initiatives elsewhere in the greater Altai-Sayan Ecoregion carried out over the past decade in Mongolia, Kazakhstan and Russia.

The stakeholder engagement plan included the project document outlines how the project was expected to coordinate and collaborate with other related initiatives, e.g., the WB-GEF project “Mainstreaming biodiversity protection within the production landscapes and PAs of the Lake Aibi Basin”, which was also implemented in XUAR; the UN World Tourism Organization (UNWTO) “Sustainable tourism observation site”, established at the Kanas Scenic Area; and regional projects, such as the proposed IUCN-WCPA “Altai-Sayan mega connectivity conservation corridor: an adaptation response to climate change in the heart of Asia”, which was under development when the design of this project was prepared.

3.4 Planned stakeholder participation

The project document includes a tabulated stakeholder analysis, which outlines the general roles and responsibilities of the listed stakeholders. The list is extensive and provides a reasonable level detail for many of the stakeholders. In some cases, the mandate of the stakeholders is described but there is no description of the role or responsibility on the project; for the example, the Kanas management committee, tourism sector, water resources sector, XUAR Department of Land Resources and the XUAR Development and Reform Commission. (lesson learned)

The project document includes a stakeholder involvement plan, which breaks down the project stakeholders by national, XUAR and AMWL levels, and outlines the proposed approach towards stakeholder engagement. One of the important mechanisms for stakeholder involvement was the planned capacity building activities, and important stakeholder engagement structures included the project steering committee (PSC), the cross-sectoral project leading group (PLG) and the project management office (PMO).

3.5 Replication approach

The replication approach is outlined in the Sustainability and Replicability section of the project document. For instance, the discussion in this part of the project document explains how the barriers that this project addresses are shared by other provinces in China, and, therefore, the approaches taken can be readily replicated across China. The community-based modalities of PA management proposed in the project design were considered applicable for the vast areas of rangelands in northwestern China, including the Autonomous Region of Tibet, Qinghai Province, Sichuan Province, Gansu Province and Inner Mongolia. The replication approach also highlights the benefits of the programmatic approach. As a child project under the CBPF-MSL program, the demonstrated good practices could be upscaled on other child projects and in other areas in the country.

In terms of replication within XUAR, the important role of the cross-sectoral project leading groups (PLG’s) in disseminating good practices and lessons learned was also discussed in the project document.

3.6 UNDP comparative advantage

The UNDP comparative advantage as the GEF agency was based on their extensive experience working in China, with in-country operations in Beijing, their favorable standing among national and provincial stakeholders and their institutional expertise in supporting biodiversity conservation projects. Protected areas remain one of the key focal areas of UNDP's Ecosystems and Biodiversity team. UNDP has delivered extensive and continuous in-country support to the Chinese government and other partners in strengthening institutional and individual capacities with respect to biodiversity conservation, and the multitude of aspects centered on human development, including gender and social inclusion.

The in-house specialists within the Energy and Environment team at the UNDP Country Office supported the project during the preparation and implementation phase, and senior management in the CO provided strategic guidance. The UNDP Regional Technical Advisor provided high level advisory services, e.g., through sharing best practices and lessons learned from the large portfolio of GEF biodiversity projects supported by UNDP.

3.7 Management arrangements

The project was designed under a national implementation modality (NIM), with the Xinjiang Forestry Department (XFD) designated as the executing agency (lead implementing partner), and UNDP as the GEF implementing agency. The implementation arrangements are illustrated in the organigram shown below in **Figure 3**.

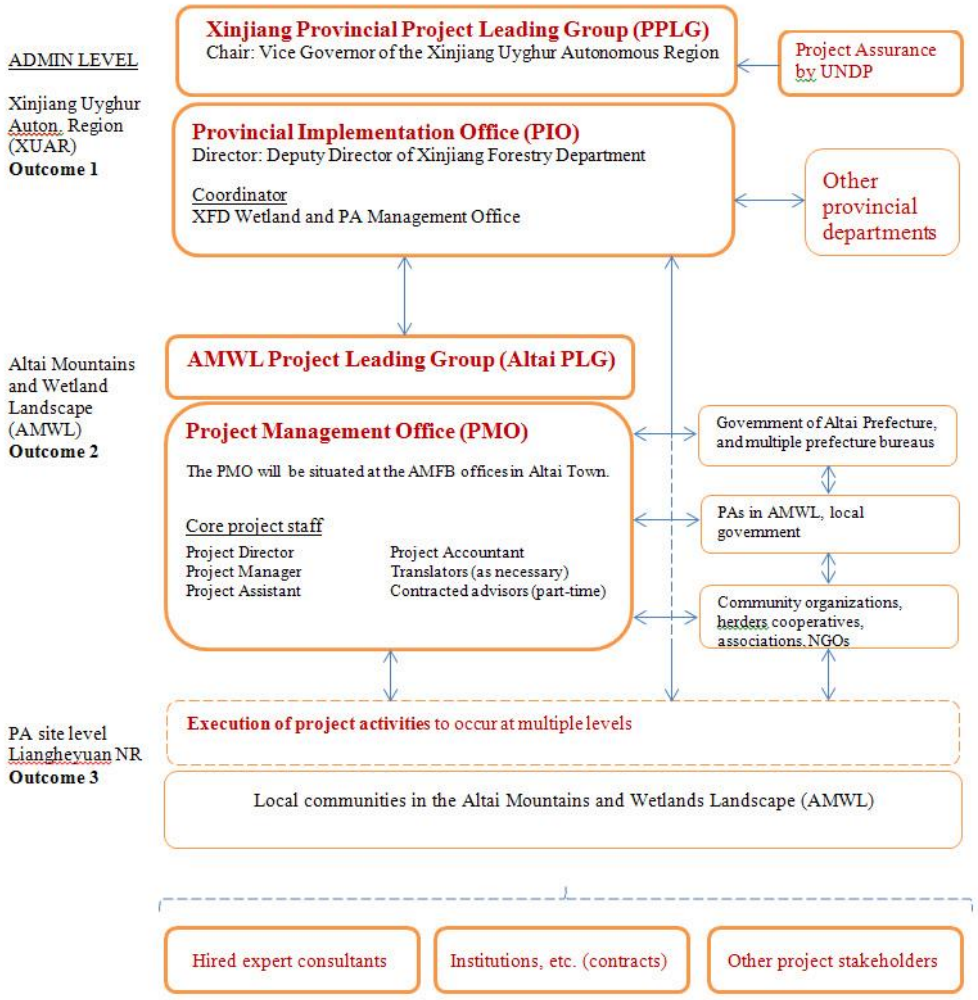


***Figure 3**: Project organigram*[3]

The XFD was responsible for the project, with the National Project Director (NPD) position assigned to the Deputy Director of the department. The Project Implementation Office (PIO) consisted of the NPD and the Project Coordinator, and was situated under the XFD Wetland and PA Management Office. The Project Management Office (PMO) was established at the Altai Mountains Forestry Bureau (AMFB) in Altai City. PMO staff included the Project Director, Project Manager and Project Assistant. The AMFB and the Liangheyuan NR Management Bureau were sub-level responsible

[3] Source: Project document (Figure 13)

parties, reporting directly to the NIM implementing partner (XFD) and having implementation roles for Outcome 2 and Outcome 3, respectively.

The XUAR level project leading group (PLG) functioned as the project steering committee. A separate leading group was established at the AMWL level, to facilitate cross-sectoral and inter-sectoral coordination during project implementation.

It is important to note that AMFB is one of three national forestry sections in XUAR responsible for the administration of mountain areas of special national and global significance, managed directly under SFA and XFD. The reporting arrangement for these special bureaus is directly to XFD and SFA; not through prefecture governments.

4 Assessment of Project Results

4.1 Outputs

Output 1.1: Provincial PA management regulations revised	**TE assessment**
	Mostly delivered

Key Achievements:

- Through technical assistance consultancy contracts, experts analyzed environmental policies and legislation in XUAR and prepared a report on recommendations to the regulation on management of the XUAR nature reserves. On 21 September 2018 at the Sixth Meeting of the Standing Committee of the 13th XUAR People's Congress, an amendment to the "Regulation on Management of XUAR Nature Reserves" was adopted.
- Consistent with the implementation of the One Area / One Park policy, the following regulations on wetland protected areas were issued:
    - Regulations on the Management of Ungulata Wildlife Nature Reserves in Kalamaili Mountains of XUAR (July 1, 2017);
    - Regulations on Regional Management of Glacier Water Resources Protection in Sawuer Mountain of Jimonai County (September 1, 2016);
    - Regulations on the Protection of Manas National Wetland Park in Xinjiang (August 1, 2014);
    - Urumqi Municipal Regulations on wetland conservation (July 2016); and
    - Regulations on the Protection of Wetlands in the Mongolian Autonomous County of Hebukeser (March 2016).

Issues/Challenges:

- The 2012 wetland regulation was considered too new for issuing an amendment.
- Co-management remains a legislative gap.

Output 1.2: Sector-related governance and regulatory frameworks enhanced to support the PA system in XUAR	**TE assessment**
	Mostly delivered

Key Achievements:

- The "Implementation Plan for Wetland Conservation and Restoration" was issued by the General Office of the People's Government of the XUAR and implemented by relevant departments (XUAR Government Decision No. 199, dated 18 October 2017).
- The "Strategic Plan for the Altai Mountains and Liangheyuan Wetland Landscape Protection and Sustainable Development and Altai Ecotourism Guide in the Altai Mountains" (Dec 2018) has been approved by Altai Prefectural Administration and forwarded to all relevant units for implementation.
- "Measures for the Management of Wetland Parks in XUAR" passed the deliberation of the third Party Committee of the Department of Forestry and Grasslands and was adopted and issued to all localities for implementation in 2018.
- "Methods for the identification of important wetlands in XUAR" passed the deliberation of the third Party Committee of the Department of Forestry and Grasslands and was adopted and issued to all localities for implementation in 2018.
- In 2018, the Altai Prefectural Commission and Administrative Office extended the period of the fishing ban in natural waters by one month, from 01 April to 31 July each year.

- A biodiversity monitoring system for protected areas has been established to continuously carry out field monitoring and investigation work. The biodiversity monitoring system has been expanded from Liangheyuan NR to five PAs, forming a PA monitoring network the Altai Mountains region.
- Sectoral plans address wetland conservation and rehabilitation, including:
    - The 13th 5-year plan (2016-2020) for the XUAR Department of Ecology and Environment contains actions related to wetland protection and rehabilitation.
    - The 13th 5-year plan (2016-2020) for tourism development in XUAR mentions that development activities are strictly prohibited in the core zones of nature reserves, and calls for strengthening management of wetland parks and water conservation areas.
    - The 13th 5-year plan (2016-2020) for the XUAR mining sector indicates that mining is strictly prohibited in provincial and national nature reserves, water conservation areas and in important wetland and forest areas.
    - The 13th 5-year plan (2016-2020) for the XUAR Office of Poverty Alleviation calls for strengthening public interest services and job opportunities, especially in poverty stricken areas near protected areas, including wetland parks and nature reserves.
- Four voluntary sectoral standards are under development:
    - Standard for Construction and Service in Ecological Tourism area in Xinjiang Nature Reserves and Wetland Community.
    - Standard for Information Metadata for Xinjiang Nature Reserves.
    - Standard for Basic Information Code Compilation in Xinjiang Nature Reserves.
    - Standard for Establishing Database for Biological Specimen in Xinjiang Nature Reserves.
- 13 national wetland parks in XUAR issued management measures during the implementation phase of the project.

Issues/Challenges:

- The four voluntary sectoral standards were under development at the time of the TE mission in April 2019. It will be necessary that the completion of the standards is supervised and reported by the project.
- There was a lack of coordination between the teams preparing the voluntary standards and developing the information management platform under Output 1.3.

Output 1.3: Institutional strengthening	**TE assessment**
	Mostly delivered

Key Achievements:

- Substantive project resources are allocated for training, including but not limited to the following:14 training courses delivered on wetland and nature reserve management for senior managers; operational training for publicity staff of Xinjiang protected areas; training on development of wetland parks and nature reserves in the XUAR; exchange visits were arranged within the XUAR with staff rom nature reserves and wetland parks; exchange visits were arranged to other child projects under the MSL program.
- A project leading group (PLG) was established to support the implementation of the project and foster cross-sectoral and inter-sectoral coordination. The PLG was headed by the Deputy Commissioner of Altai Prefectural Administrative Office and another Deputy Commissioner and the Director of AMFB served as deputy team leaders. Members also included representatives from the AMFB, Altai Forestry Bureau (AFB), the Bureau of Water Resources, the Bureau of Ecology and Environmental Protection and other departments
- A comprehensive information management (big data) system has been developed that includes real-time presentation of data obtained from monitoring stations and is envisaged to be further strengthened in recent years as a PA management decision support tool and an early warning system. A screenshot of the dashboard of the current system is shown below in **Figure 4**.

***Figure 4**: Screenshot of the Xinjiang PA information management system (big data)*

- GEF resources were also allocated for the development of 48 websites for many of the protected areas in the AMWL and elsewhere in the XUAR. A screenshot of one of these websites, for the Liangheyuan NR is shown below in **Figure 5**.

***Figure 5**: Screenshot of the homepage of the website for the Liangheyuan NR*

Issues/Challenges:

- The systemic training program was not developed as envisaged. The XFDG has an existing training program and receives earmarked funding for professional development. The Publicity and Education Center of the XFDG operates the training program, and reportedly co-management and alternative livelihood topics have been added.
- Maintenance and updating the information management system will require expert support, likely from external service providers. Interviewed officials indicated that the XFDG has an agreement with the developer to provide support services.

Output 2.1: PA system in AMWL expanded	**TE assessment:**
	Delivered

Key Achievements:

- During the 5-year project implementation lifespan, from 2014 through 2018, the PA system in the Altay Mountains and Wetlands Landscape expanded by 222,699 hectares (ha), as broken down below in **Table 14**.

***Table 14**: Summary of PA expansion and upgrades, 2014-2018*

Protected Area	New PA, after 2014 hectare (ha)	Upgraded PA, after 2014 hectare (ha)	Comments
Ulungur River National Wetland Park	13,590	N/A	Established in 2014
Jeminay Alpine National Wetland Park	4,965	N/A	Established in 2014
Tokumut National Wetland Park	1,175	N/A	Established in 2015
Keketuohai National Wetland Park	3,215	N/A	Established in 2015
Habahe Akqi National Wetland Park	1,250	N/A	Established in 2016
Kalamaili Mountains (Kashan) Provincial NR	198,504	N/A	The NR was reinstated in 2017; expected to be upgraded to NNR in first half of 2019
Altay Kekesu Wetlands National NR	N/A	30,667	Upgraded to NNR in 2017
Buergen Beaver National NR	N/A	5,000	Upgraded to NNR in 2013
Total:	**222,699**	**35,667**	

- Apart from the expansion of the PA system, the 30,667-ha Altay Kekesu wetlands nature reserve was upgraded in 2017 from a provincial nature reserve, and the 5,000-ha Buergen Beaver nature reserve was upgraded in 2013 from provincial to national level.
- The "Strategic Plan for the Altai Mountains and Liangheyuan Wetland Landscape Protection and Sustainable Development and Altai Ecotourism Guide in the Altai Mountains" approved in 2018 for implementation by the Altai Prefecture Administration provides a framework for applying a landscape approach to managing wetland ecosystems in the AMWL, including coordinating management of protected areas.

Issues/Challenges:

- The focus in recent years in XUAR and elsewhere in China on expanding the PA system have largely been on nature parks, including wetland parks. These types of PA's offer more opportunities for ecotourism for many local governments, for example, and the process of declaring the PA's is less rigorous than for nature reserves or national parks. One concern with this trend is whether conservation objectives, e.g., habitat connectivity, are being fulfilled.
- Successful implementation of the "Strategic Plan for the Altai Mountains and Liangheyuan Wetland Landscape Protection and Sustainable Development and Altai Ecotourism Guide in the Altai Mountains" will require effective coordination between the AFB and AMFB.

Output 2.2: Systematic PA management and biodiversity monitoring system established	**TE assessment:**
	Mostly delivered

Key Achievements:

- Through a technical assistance consultancy agreement with an expert from the Xinjiang Normal University, a PA biodiversity monitoring plan has been developed for 5 nature reserves in the AMWL. The plan includes 5 major categories, including diversity of key flora and fauna, human disturbance factors, activities associated with local herders, environmental conditions (meteorology, hydrology, soil) and ecosystem health assessment. The monitoring plan has been approved by AMFB in 2108.
- Apart from the monitoring plan, a number of monitoring guidebooks, e.g., on flora and fauna in the AMWL, were produced and disseminated to relevant stakeholders.
- The management effective tracing tool (METT) and the ecosystem health index (EHI) tools were implemented for the 5 nature reserves included in the baseline assessments, with participation by PA staff and managers.
- The project organized several training courses covering a variety of topics, including conservation planning and management, environmental monitoring and equipment use, wetland knowledge, community co-management, ecotourism, ecological rehabilitation, GIS applications, etc. Training records indicate that trainings were delivered to more than 550 people, including managers and technicians from nature reserves, wetland parks and other protected areas in the AMWL.

Issues/Challenges:

- The monitoring plan and monitoring assessments completed during the project implementation focused on the nature reserves in the AMWL, and there was limited involvement of the wetland parks, e.g., in the METT assessments, EHI assessments or inclusion in the AMWL monitoring plan. (lesson learned)
- The role of community rangers in supporting the management of the PA system in the AMWL and throughout the XUAR is likely to increase in coming years. It will be important that these rangers are included in training and implementation of the monitoring plan.
- The small grants scheme outlined in the project document, to promote greater participation and awareness of PA staff and conservation institutions in the AMWL was not realized as planned.

Output 2.3: Altai PA management objectives mainstreamed into provincial planning process	**TE assessment:**
	Mostly delivered

Key Achievements:

- The project organized several trainings and seminars to Altai Prefecture stakeholders on mainstreaming ecological protection. Stakeholders included representatives from prefectural, county and city level governmental agencies, AMFB, forest farms, PA's and wetland parks.
- The 13th 5-year socioeconomic development plans for the XUAR and the Altai Prefecture include reference to wetland conservation and rehabilitation priorities.
- The project produced a report on "Evaluation of Mainstreaming Wetland Conservation Policy into Development Priorities of Altai Prefecture".
- The project provided technical assistance consultancies for production of three economic studies, including a "Report on the Eco-Economic Value of Grazing in Kuermutu Area", "Report on the Evaluation of the Eco-Economic Value of Mining in the Kuermutu Area" and "Report on the Evaluation of Ecosystem Values in the Altai Prefecture".
- The project also actively participated in communications with local government stakeholders in discussions on ecological protection strategies and plans.

Issues/Challenges:

- The intended purpose of the economic valuation activities was to provide guidance on generating revenue for biodiversity conservation and PA management. The project funded three separate studies, but the envisaged sustainable financing plan for the PA system was not completed as planned in the project document.

Output 2.4: Awareness of the importance of PAs for sustainable livelihoods increased	**TE assessment:**
	Mostly delivered

Key Achievements:

- The project supported numerous awareness campaigns, including but not limited to the following:
  - Joint promotional events were organized in conjunction with World Wetland Day, Xinjiang Wetland Day, Arbor Day, Bird-loving Week, World Biodiversity Datay, etc.
  - The CCTV-News channel was invited to film the source of the Ertix River and the Kuermutu area. An image of a snow-leopard captured by an infrared camera in the nature reserve was broadcast.
  - An ecological protection publicity campaign was organized in 2015 through a joint effort with the government of Takshken in Qinghe County.
  - Nature photography competitions were organized, including the Altai Mounty City of Beauty Photography Competition.
- Environmental education was promoted in Altai City, with documentary and photographic information provided to the No. 3 Middle School (see photograph below in **Figure 6**) and No. 2 Senior Middle School. An outdoor natural science experience base is being constructed across the street from the No. 2 Senior Middle School (see photograph below in **Figure 6**.

Wetland School, Photograph exhibit, No. 3 Middle School, Altai City

Outdoor experience base, No. 2 Senior Middle School, Altai City

Figure 6*: Photographs of project-supported activities at schools in Altai City, April 2019*

- The project supported development of an education and exhibition center at the Keketuohai Forest Park in Fuyun County. The center includes plant specimen cabinets, display boards, promotional columns and an outdoor walkway.
- Promotional publications and audio-visual products were produced, including but not limited to the following:
  - Xinjiang Wetlands Atlas.
  - Identification manuals for common birds and other animals and common flora in the Altai region (see **Figure 7**).
  - A short film named "Source of the River, which reflects the conservation efforts at the Liangheyuan Nature Reserve. This film won second prize in a short film competition in 2014.
  - International photo exhibition album, traditional cultural pocketbook, wetland conservation brochure, etc.
- An eco-tourism guide was prepared in collaboration with the Aletai District Tourism Administration, and an eco-tourism seminar was convened with prefecture level stakeholders.

Figure 7: *Photograph of cover pages of flora and fauna guidebooks*

Issues/Challenges:

- Whilst substantive project resources were spent on awareness raising, there was a general lack of strategic approach. It would have been advisable to have developed a communications and knowledge management strategy and action plan. (lesson learned)

- The value for money of the investment made in Altai City for the outdoor experience base is questionable. This is not consistent with the focus of this output, i.e., awareness of the importance of PA's for sustainable livelihoods increased. It might have been more appropriate to invest these funds at or near one of the protected areas where local communities are working towards increasing ecotourism activity.

Output 2.5: Trans-frontier conservation improved	**TE assessment:**
	Delivered

Key Achievements:

- A cross-border coordination and conservation mechanism has been proposed between protected area administrations in the Sino-Mongolian Altai-Sayan Ecoregion. Exchange visits and study tours were conducted and meetings held to discuss issues associated with transboundary protection of the Sino-Mongolian beaver, a sub-species (*Castor fiber birulai*) of the Eurasian beaver found in the Ulungur River basin. A draft beaver protection plan has been drafted and has been submitted to counterparts in Mongolia for review.
- The project funded a technical assistance consultancy for assessing the feasibility of establishing wildlife migration corridors in the border areas. A seminar was organized in August 2017 with representatives of relevant Altai Prefecture departments, as well as the Altai Military Division, the Armed Police, the Frontier Defense and local governmental stakeholders.

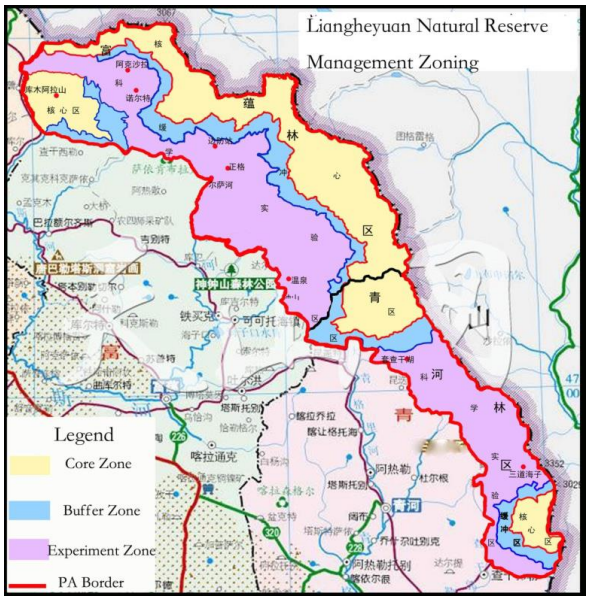
Issues/Challenges:

- Opening wildlife corridors at the border with Mongolia will not be easy, considering higher level of threats on the Chinese side, due to larger populations of herders and livestock.
- Follow-up will require concerted efforts, high level involvement, language skills, travel funding, etc.

Output 3.1: Liangheyuan NR operations strengthened to address grazing and mining threats	**TE assessment:**
	Delivered

Key Achievements:

- The project supported the Liangheyuan NR Administration in updating their management plan. Prior to developing the management plan, a treats analysis was carried out, extensive stakeholder consultations were completed and a seminar was convened on threats and constraints of the management plan. The updated management plan (2019-2022) for the Liangheyuan NR was approved by the AMFB in 2019 and implementation was initiated during the lifespan of the project.
- The project also supported the development of an updated master plan for the Liangheyuan NR, including a re-assessment of management zoning (see **Figure 8**). The master plan covers the 10-year period of 2019-2028 and has been submitted to the XUAR Department of Forestry and Grasslands for approval.



Baseline management zoning (taken from project document)

Proposed management zoning (master plan 2019-2028)

***Figure 8**: Map of Lianheyuan NR showing management zoning*

- Several capacity development activities were carried out, including more than 30 training courses for PA staff on a variety of topics, including conservation management, ecological rehabilitation, biodiversity monitoring, use of the METT and EHI tools, etc. The trainings were delivered to a reported 915 PA staff members, of which 24.4% were women. Some of the trainings were held in Kazakh language, to benefit the community rangers on staff.
- In October 2016, six staff from the Liangheyuan NR took part in a study tour to the Wanglang NR in Sichuan Province, to learn from their advanced experience in conservation management, research and monitoring.
- The project supported the establishment of three ecological monitoring stations in the Kuermutu and Sandaohaizi sections of the Liangheyuan NR. Monitoring transects were established, staff were trained on the implementation of the biodiversity monitoring plan and the application of the EHI tool in the field.
- Through a technical assistance consultancy agreement with experts from the Xinjiang Institute of Ecology and Geography (Chinese Academy of Sciences), the project supported the AMFB and the Liangheyuan NR Administration in developing and implementation demonstration scale reclamation of abandoned mining sites within the nature reserve and other parts of the AMWL region. Several reclamation techniques were evaluated and 9 of these were demonstrated in the field. Reclamation demonstrations were completed a numerous sites, totaling 12,141 mu (809 ha) in area (see **Table 15**), including 5,019 ha in the Liangheyuan NR managed by the NR Administration and 1,210 mu (81 ha) in the NR managed by Fuyun County officials, as well as 3,400 mu (227 ha) in the Kalamaili Mountains NR and 2,512 mu (167 ha) in Fuyun County.

Table 15: *Locations where reclamation of abandoned mining sites has been completed*

Location	Area reclaimed	
	mu	ha
Liangheyuan Nature Reserve	5,019	335
Liangheyuan Nature Reserve (led by Fuyun County)	1,210	81
Kalamaili Mountains NR	3,400	227
Fuyun County	2,512	167
Total:	**12,141**	**809**

- The reclaimed sites ranged in size from 6.6 mu (0.4 ha) to 600 mu (40 ha).
- The demonstrated reclamation techniques were based on the unique circumstances at the nature reserve, e.g., limited available topsoil and high costs associated with transport of topsoil to the sites. Certain innovations were implemented, using livestock manure to prepare a fertilizer slurry that was sprayed onto the reclaimed surfaces (good practice). According to interviews with the technical experts retained by the project, the average cost for the reclamations was CNY 2,500 per mu (approx. USD 5,600 per ha).
- Training on the reclamation techniques were held with forestry department staff members from all prefectures in XUAR and with staff members from most of the wetland protected areas in XUAR.

Issues/Challenges:

- The updated management plan for the Liangheyuan NR does not provide special consideration for protection of the valuable peatlands in the nature reserve that provide important ecosystem regulatory (carbon storage) functions.
- The demonstrated reclamation of abandoned mining sites has not been documented into the form of a technical guidance. It is also unclear how existing Chinese and international reclamation standards and standard practices were taken into account into the demonstrations implemented.

Output 3.2: Collaborative PA governance and management structure put in place (community co-management)	**TE assessment:**
	Delivered

Key Achievements:

- Under this output, the project facilitated collaborative management with local communities living close to the Liangheyuan NR. Two county level co-management committees were established, in Fuyun and Qinghe Counties, and three committees at the township level and eight committees at the village level were formed. Cooperation agreements were signed with the NR Administration and the respective local government administration. A series of rules and procedures were formulated, including articles of association of the co-management committees, eco-tourism code of conduct, best practices for pasture management, etc.

- Community members were trained to support the NR Administration in ecological monitoring. In total, 13 local residents were hired by the NR Administration to perform management and monitoring tasks. The participation of local communities in PA management and monitoring provided additional income streams to some households and also improved the effectiveness and efficiency of managing the NR. The hired community residents were trained in monitoring and identifying flora and fauna species and in operating monitoring equipment, such as infrared cameras.
- Broad involvement of enabling stakeholders, including local governments (county, township, village), NGOs and foundations.
- As part of the poverty alleviation program aimed at reducing pressure on grassland ecosystems, herders are hired as community rangers, providing herder households with a steady income source and offsetting burden associated with reducing livestock. There are several thousand community ranger positions in XUAR and more than 600 in the Altai Prefecture. The quota for community rangers at the Liangheyuan NR has steadily increased from 80 in 2017, to 89 in 2018 and 100 in 2019. The timing of this project was opportune in this regard, as project resources were allocated for training community rangers in the project demonstration areas.
- Trainings were provided to individuals, herder households, community-based groups and local cooperatives to advance the development of alternative livelihood opportunities, to reduce pressure to grasslands in the Liangheyuan NR associated with over-grazing. The Jiangbutas Village in Chaganguole Township in Qinghe County, Altai Prefecture was a project implementation center, with participation by two embroidery cooperatives, six ecotourism households, one black soap production group, one handicraft manufacturing household and a youth entrepreneurship group. In total, 58 households in this village became engaged in alternative livelihood ventures and 12 herder families reportedly reduced the number of their livestock. A couple of photographs taken during the TE mission in April 2019 of the alternative livelihood activities are shown below in **Figure 9**.

Workshop for embroidery group

Preparing black soap

***Figure 9**: Photographs of weaving and black soap community-based groups, Jiangbutas village, April 2019*

- The project set up a community development fund with USD 30,769, providing zero-interest loans to 10 households, ranging from ranging from USD 1,538 to USD 4,515, for investments in alternative livelihood ventures.

Issues/Challenges:

- The co-management committees and community rangers operating in and near the Liangheyuan NR will require further support over the short to medium term, to further increase awareness and knowledge and strengthen capacities.
- The co-management committees were not party to the cooperation agreements signed between the NR Administration and the local government administrations. (lesson learned)

- It is uncertain how the community development fund will be managed after project closure; there was no evidence available demonstrating that the funds will continue to be earmarked for supporting sustainable alternative livelihoods for communities living near the Liangheyuan NR.

4.2 Outcomes

4.2.1 Effectiveness

Effectiveness was evaluated by assessing achievement of the project objective and outcomes according to the agreed performance metrics included in the project results framework and the GEF-5 focal area targets. The project contributions towards the biodiversity strategy for GEF-5 are presented below.

***Table 16**: Project contributions towards the biodiversity strategy for GEF-5*

Focal Area Outcomes and Indicators	Focal Area Outputs	Project contributions
BD-1, Outcome 1.1: Improved management effectiveness of existing and new protected areas Indicator 1.1: Protected area management effectiveness score as recorded by Management Effectiveness Tracking Tool. BD-1, Outcome 1.2: Increased revenue for protected area systems to meet total expenditures required for management Indicator 1.2: Funding gap for management of protected area systems as recorded by protected area financing scorecards.	Output 1. New protected areas (number) and coverage (hectares) of unprotected ecosystems. Output 2. New protected areas (number) and coverage (hectares) of unprotected threatened species (number). Output 3: Sustainable financing plans (number).	• Number of new protected areas: 5 (Ulungur River, Jeminay Alpine, Tokumut, Keketuohai and Habahe Akqi national wetland parks) • New coverage of unprotected ecosystems: 222,699 ha • Management effectiveness exceeded or met targets for 5 PA's covering a cumulative area of 1,035,645 ha • Increased government financing for operation of the five monitored nature reserves in the AMWL PA system from USD 1.5 million at project baseline in 2012 to USD 3 million by 2018, and strengthened financial sustainability of the AMWL PA system as measured by improvements in the GEF-5 Financial Scorecard

Project objective: To strengthen the management effectiveness of PAs to respond to existing and emerging threats to the globally significant biodiversity and essential ecosystem services in AMWL in northern XUAR, People's Republic of China

Achievement of the project objective is rated as: Satisfactory

Achievement of the project objective is rated as **satisfactory**, as outlined below in **Table 17** and the ensuing discussion.

***Table 17**: Evaluation of achievement of project objective*

Indicator	Baseline	End-of-Project target	Status at TE	TE Assessment
1. Provincial Capacity: - Forestry Department - Water Resources Dept. - Environmental Protection	59% 60% 52%	All >70%	85% 87% 73% Protected area management consolidated to the Department of Forestry and Grasslands.	**Achieved**
2. Financial sustainability: - Component 1: Legal, regulatory and institutional frameworks - Component 2: Business planning and tools for cost-effective management - Component 3: Tools for revenue generation	24% 20% 11%	40% 50% 40%	63.16% 54.24% 40.85% The terminal assessment of the GEF Financial Sustainability Scorecard (Part II) indicates improvements exceeding the end targets. There are inconsistencies in the baseline and terminal scorecard assessments; the assessments should be re-assessed with multiple stakeholder participation.	**Achieved**
3. Increase in PA coverage, strengthened resilience and connectivity in the AMWL	Not indicated	Incorporation of AMNFPPA into AMWL PA framework	"Landscape Conservation and Sustainable Development Plan" of Altay Mountains and Liangheyuan Wetlands approved by the Altai Prefecture Administrative Office. The plan promotes a landscape approach; incorporation of AMNFPPA into AMWL	**Partially achieved**

Indicator	Baseline	End-of-Project target	Status at TE	TE Assessment
			PA framework not explicitly included in the plan.	
		Expansion of PA system in AMWL – with total increase of at least 150,000 ha in coverage	222,699 ha expansion of PA system in the AMWL, including 5 wetland parks and 198,504 ha of new coverage in the reinstated Kalamaili NR.	**Achieved**
		Regional collaboration with neighboring PAs enhanced	Two memoranda of cooperation signed in 2014 and 2016 between nature reserve management administrations in China and Mongolia. Investigations carried out regarding establishment of wildlife corridors in the border area of the Altay Mountains.	**Achieved**
Year:	**2012**	**Feb 2019**	**Apr 2019**	**Apr 2019**

Key evidence reviewed:

- Capacity Development Scorecards, terminal assessment (March 2019)
- GEF Financial Sustainability Scorecard, terminal assessment (March 2019)
- Government decision approving the "Landscape Conservation and Sustainable Development Plan of Altay Mountains and Liangheyuan Wetlands" (Altai Prefectural Administrative Office, Dec 2018, [2018] 90)
- Government decision approving establishment of Ulungur River, Jeminay, Tokumut, Keketuouhai and Habahe Akqi wetland parks (Xinjiang Forestry Department, from 2013 to 2015, Ulungur River: XFD Xinjiang Wetland [2013]243; Jimunai: XFD Xinjiang Wetland [2013]243; Tokumut, Keketuohai: XFD [2014]205; Habahe Akqi: XFD [2015]189)
- Government decision approving the 198,504 ha of additional coverage for the reinstated Kalamaili Mountain NR (XFD, April 2019)
- Memoranda of cooperation between nature reserves in China and Mongolia for biodiversity conservation in the Altay-Sayan Ecoregion (22 July 2014. Liangheyuan NR & Bayan Province, Mongolia, Mongolian Altay Mountain NNR; October 12, 2016. With Monhk Khairkhan NP
- Draft Beaver Protection Action Plan (Feb 2019, AFB & Forestry Department of Burgen County, Mongolia)

The first indicator at the project objective level is a measure of institutional capacities of the XUAR Department of Forestry (currently the Department of Forestry and Grasslands - XDFG), Department of Water Resources (XDWR) and the Department of Environmental Protection (currently the Department of Ecology and Environment - XDEE). The institutional capacity for the XDFG changed from 57% at project baseline in 2012 to 85% at project closure (in 2018), which is an increase of 44%. The capacity development increases for the XDWR and XDEE were 45% and 40%, respectively. Consistent with the institutional restructuring at the national level in 2018, PA management responsibility was consolidated to the XDFG devolved from the XDWR and XDEE. For this reason, the end of project capacity assessments for the XDWR and XDEE seem irrelevant.

Indicator No. 2 is based on Part II (Financial Scorecard) of the scorecard, which is broken down into three components: legal, regulatory and institutional frameworks (Component 1); business planning and tools for cost-effective management (Component 2); and tools for revenue generation (Component 3). As indicated in the terminal assessments of the financial scorecards, improvements were achieved for each of the three components, with the largest proportional change occurring for Component 3. There are, however, a number of inconsistencies in both the baseline and terminal assessments. For instance, under Element 1 of the scorecard, it is indicated that there are no laws or policies in place that facilitate PA revenue mechanisms; however, Part I of the scorecard presents PA tourism entrance fees of USD 15 million in 2011 (this figure reached USD 46 million by 2018). There are also inconsistencies with respect to management plans, master plans and business plans described in the scorecard. The baseline scorecard indicates that there are no operational PES schemes; however, Part I of the document includes USD 5.8 million of PES revenue, from the natural forest program (the terminal assessment includes USD 11.6 million). Similarly, Part II of the scorecard indicates there are no non-tourism related fees and charges; whereas, Part I includes USD 0.729 million (baseline) for forestry related development.

The first sub-target under Indicator No. 3 is a measure of incorporation of AMNFPPA into AMWL PA framework. The project facilitated the development of the "Landscape Conservation and Sustainable Development Plan of Altay Mountains and Liangheyuan Wetlands", which was approved in December 2018 by the Altay Prefecture Administrative Office. The plan promotes a landscape approach within the Altay Mountains and Wetlands landscape; however, incorporation of AMNFPPA into the AMWL PA framework is not explicitly included.

During the 5-year project implementation lifespan, extending from 2014 through 2018, the PA system in the Altay Mountains and Wetlands Landscape expanded by 222,699 hectares (ha), exceeding the 150,000-ha end target.

Apart from the expansion of the PA system, the 30,700-ha Altay Kekesu Wetland Nature Reserve and the 5,000-ha Buergen Beaver Nature Reserve were upgraded in 2017 from provincial to national level.

The project was also successful in facilitating enhanced regional collaboration, particularly with Mongolia. In 2014, a memorandum of cooperation on biodiversity conservation was signed between the nature reserve management administrations in the Altay-Sayan Ecoregion. Joint visits among Chinese and Mongolian experts were organized regarding beaver conservation and in 2018 representatives from the Altay Prefecture Forestry Bureau, the Burgan Beaver Nature Reserve and the Mongolian Beaver Protection Agency collaborated on the Beaver Protection Action Plan, which provides a framework for regional cooperation. Chinese and Mongolian officials also met to discuss options for establishing wildlife corridors at the border area.

Outcome 1: The protection of wetland ecosystems through PA planning and management is enhanced in Altai Prefecture and XUAR through systemic, legal and institutional capacity strengthening

Achievement of Outcome 1 is rated as: Satisfactory

Achievement of the Outcome 1 is rated as **satisfactory**, as outlined below in **Table 17** and the ensuing discussion.

***Table 18**: Evaluation of achievement of Outcome 1*

Indicator	Baseline	End-of-Project target	Status at TE	TE Assessment
4. Existence of effective legal framework for the Xinjiang PA system emplaced, enhancing the conservation status of natural wetlands within the 35 PAs in Xinjiang UAR	PA network design not optimized for resilience and connectivity	Provincial regulations for PAs proposed by the XFD, including wetland considerations, greater clarity of different management categories, and new framework for co-managed PA zones	An amendment to the "Regulation on Management of XUAR nature reserves" was adopted in Sep 2018. Several wetland PA's issued regulations during 2014-2017. Co-management remains a gap in the PA legislative framework	**Mostly achieved**
		At least two sectoral plans integrate PA objectives and biodiversity considerations, such as water resources and agricultural bureaus.	The "Implementation plan for wetland conservation and restoration" issued by the XUAR government in 2017 is an important framework for cross-sectoral departments. Wetland issues addressed in several sector plans, including ecology and environment, tourism, mining and poverty alleviation.	**Achieved**
5. Improved capacity scorecard (SC) scores of Forestry Department for participatory approaches in PA planning and management (Q8 in SC), PA staff competencies (Q9 & 16-19 in SC), and public awareness and support (Q21 in SC)	Average score for Q8,9, 16-19 and 21 is 1.43.	Average score for Q8,9, 16-19 and 21 is 2.4 at minimum, through inter alia the following improvements:	Average score: 2.29	**Mostly achieved**
	Most PA management plans not designed in participatory ways, and not comprehensive; and most PAs not managed collaboratively	Majority of PAs in AMWL with updated and participatorially prepared management plans, including co-management components	Updated management plans were developed for 5 protected areas. Management plans were not made for some of the nature reserves in the AMWL, including Jingtasi Rangeland PNR and Kalamaili Mountains PNR, or for wetland parks.	**Achieved**
	Many Forestry and PA staff with inadequate skills for their jobs	More systematic staff training program designed and initiated	The project delivered a substantive number of trainings; however, a systematic training program was not established as envisaged.	**Not achieved**
	Systematic monitoring and reporting systems not established, limited availability or access to information necessary for PA operations, incl. biodiversity and socio-economic development situations in/near PAs	Accessible data and information sharing platform developed under supervision of XFD in support of PA management operationalised Data sharing platform includes 'freeform' categories for observations or information (incl. complaints) submitted anonymously or by the public	A comprehensive information management system (big data) has been developed. As of April 2019, baseline data has been updated for 22 protected areas. Nature reserve websites have contact forms for submitting information, including complaints.	**Achieved**

Indicator	Baseline	End-of-Project target	Status at TE	TE Assessment
6. Existence of operational safeguard measures to protect wetland habitat and biodiversity from infrastructure placement and mining	EIA procedures are not adequately followed leading to undesirable impacts from infrastructure construction and mining.	EIA law is strictly enforced for construction and mining projects affecting wetland PAs, with full participation of the wetland and PA management authorities.	Wetland conservation has been addressed in EIA's in recent years	**Achieved**
	No legal obligation for post-mining rehabilitation.	Clear standards are officially set up and enforced with minimum requirements for post-extraction site restoration of mining sites.	Demonstration scale reclamation of abandoned mining sites has been completed; setting up and enforcing standards will require longer timeframes.	**Partially achieved**
	No system for reporting malfeasance, or through which to submit formal concerns or complaints or to make suggestions	Hotline contact number operationalized – also see the information platform above – with referral system (i.e., to other sectors) in place	A specific hotline was not established, but there is an existing hotline service managed by China Post (Tel. No. 118114). And websites of the nature reserves contain contact forms that are actively being used.	**Achieved**
Year:	**2012**	**Feb 2019**	**Apr 2019**	**Apr 2019**

Key evidence reviewed:

- "Regulation on Management of XUAR nature reserves" (Sep 2018).
- "Implementation plan for wetland conservation and restoration" (2017).
- Regulations on the management of Ungulata Wildlife NR's in Kalamaili Mountains (2017); regulations on the regional management of glacial water resources protection in Sawuer Mountains of Jimonai County (2016); regulations for the Manas National Wetland Park (2014); Urumqi municipal regulations on wetland conservation (2016); regulations on the protection of wetlands in the Mongolian Autonomous County of Hebukeser (2016).
- "Strategic Plan for the Altai Mountains and Liangheyuan Wetland Landscape Protection and Sustainable Development and Altai Ecotourism Guide in the Altai Mountains" (2018).
- 13th 5-year plans for the XUAR Department of Ecology and Environment, XUAR tourism sector, XUAR mining sector and XUAR Office of Poverty Alleviation.
- Capacity development scorecard, terminal assessment for XDFG (March 2019).
- Management plans (2018-2022) for Liangheyuan NR, Kekesu Wetlands NR, Buergen Beaver NR, Kanas NR and Keketou River NR.
- Training records.
- Demonstration of the information management system (big data) by the developer during the TE mission.
- Websites of nature reserves and wetland parks.

Substantive advances in the regulations on conservation of wetland ecosystems in the XUAR were realized during the implementation timeframe of the project, from 2014 through 2018. Notably, an amendment to the regulation on management of XUAR nature reserves was adopted in September 2018, partly in response to the institutional restructuring earlier that year at the national level, involving the creation of the Ministry of Natural Resources and consolidation of protected area management responsibility under this new ministry. Collaborative management with local communities is increasingly being promoted throughout China and demonstrated on this project; however, co-management is not yet incorporated into the protected area legislation frameworks.

Several wetlands protected areas issued regulations in recent years as well. Following the national level wetland conservation and restoration system plan that was approved by the State Council in November 2016, the XUAR issued an implementation plan for wetland conservation and restoration. This plan provides an important framework for wetlands management in the autonomous region. In response to this plan and based on increased awareness of the importance of wetland ecosystems, the 13th 5-year plans (2016-2020) of a number of sectors integrate wetland management.

Substantive project resources were expended on capacity development, with numerous trainings delivered to a variety of stakeholders, from senior level XUAR officials to protected area staff and community rangers. A systematic training program was not developed as envisaged, something that would remain in place after project closure, but the trainings

delivered by the Publicity and Education Center of the XFDG have reportedly expanded their offerings with wetlands related issues and co-management of protected areas.

The project supported updates to management plans for five protected areas in the AMWL, including the Liangheyuan NR, the Kanas NNR, Kekesu Wetlands PNR, Buergen Beaver PNR, Keketuohai Wetlands PNR. Management plans were not prepared for the Jingtasi Rangeland PNR, the Ulungur Lake Endemic Fish National Fishery Germplasm Resources PA, the Kalamali PNR or for the wetland parks in the AMWL (recommendation).

GEF funds supported the development of comprehensive information management system (big data). At the time of the TE mission in April 2019, baseline data for 22 protected areas had been uploaded to the system. Real-time monitoring data, e.g., from weather stations, are captured by the big data system, as well as from sampling events, drone surveys, etc. The XFDG plans on further developing the system, including early warning and more advanced learning functions.

The project also funded the development of 48 websites for many of the protected areas in the AMWL and elsewhere in the XUAR.

Through enhanced knowledge and awareness of the importance of wetland ecosystems and the government's increased focus on integrating ecological civilization principles into the socioeconomic development priorities in the country and the XUAR, environmental impact assessment (EIA) processes have become more robust. Several EIA's prepared during the lifespan of the project addressed wetland conservation issues.

The project facilitated demonstration scale reclamation of abandoned mining sites under Component 3 (Outcome 3), and experiences and lessons learned have supported scaling up on the demonstrated approaches. Setting up official standards has not been realized; this is something that will require more time and coordination with national and international state-of-the art practices.

Although a specific hotline number was not established as designed under this outcome, there are opportunities for citizens to voice concerns regarding issues. For instance, there is an existing national hotline service managed by China Post (telephone number 118114); for issues associated with wetlands, the operator provides the office number of the manager of the Wetlands Office at the XFDG. Moreover, there are contact forms on the protected area websites. The TE team viewed a few of the comments uploaded to the protected area websites and responses by PA officials; these systems were found to be active and transparent.

Outcome 2: The biodiversity of the Altai Mountains and Wetland Landscape is effectively conserved with a strengthened PA network and enhanced operational budget through adoption of a landscape level approach to conservation planning and environmental management

Achievement of Outcome 2 is rated as: Satisfactory

Achievement of the Outcome 2 is rated as **satisfactory**, as outlined below in **Table 19 Table 17** and the ensuing discussion.

***Table 19**: Evaluation of achievement of Outcome 2*

Indicator	Baseline	End-of-Project target	Status at TE	TE Assessment
7. Increase in management effectiveness of AMWL PA complex, as per the average METT scores of individual PAs	Liangheyuan NR = 65 Kekesu Wetland NR = 71 Buergen Beaver NR = 47 Kanas NR = 64 Ertix Keketuohai NR =28 Average = 55	Liangheyuan NR >80 Kekesu Wetland NR >80 Buergen Beaver NR >65 Kanas NR >75 Ertix Keketuohai NR >60 Average = 72	Liangheyuan NR = 81 Kekesu Wetland NR = 73 Buergen Beaver NR = 70 Kanas NR = 77 Ertix Keketuohai NR = 43 Average = 69 Several inconsistencies observed in baseline and terminal METT assessments. It would be advisable to redo these assessments.	**Achieved (pending final review)**
8. Improved ecological conditions of PAs, as per Ecosystem Health Index (EHI)	Liangheyuan NR = 67 Kekesu Wetland NR = 67 Buergen Beaver NR = 57	Liangheyuan NR >75 Kekesu Wetland NR >75 Buergen Beaver NR >70	Liangheyuan NR = 72.2 Kekesu Wetland NR = 72.2 Buergen Beaver NR = 83.3	**Achieved**
9. Reduction in incidence of new mining contracts in PAs in AMWL region	Gold mining still occurs in some PAs, despite current regulations (but no specific baseline figures available)	No mining occurs inside PAs in AMWL region	Mining rights revoked from 78 sites within the Liangheyuan NR. No evidence that similar measures have been implemented in other PA's in the AMWL region.	**Achieved (pending final review)**

Indicator	Baseline	End-of-Project target	Status at TE	TE Assessment
10. Viable alternative options are developed for herding communities, that offset economic dependency on grazing inside Pas	No assistance available from PA system to help local communities with economic opportunities	New co-management structures are in place, which support and strengthen alternative livelihood options for Kazakh herders (and other forms of collaboration)	Co-management committees set up for several communities near the Liangheyuan NR under Component 3.	**Mostly achieved**
11. Cooperation between Altai-Sayan Ecoregion countries is enhanced	No conservation action plan for Chinese beaver	Beaver conservation action plan developed and adopted (agreed) by Altai Prefecture and the local government in Mongolia	Memorandum of cooperation signed in 2014 and 2016 between nature reserve management administrations in China and Mongolia. Agreement is at the site level, not the local government level.	**Mostly achieved**
	No relationship between two adjacent NRs in Altai Mtns	Tavan Bogd NP – Liangheyuan NR partnership MOU is reached	Memorandum of cooperation signed in 2014 between Tavan Bogd NP (Mongolia) and Liangheyuan NR.	**Achieved**
12. Operational budgets for PAs in AMWL increase	Operational budget for AMWL PA network is US$ 1,515,594 per year	Operational budget is increased by 40%, with new contributions from local, prefecture and provincial government	Baseline figures are questionable, with one PA (Kanas NR) making up 93% of the operational budget for the AMWL PA system. No evidence of new contributions from local, prefecture and autonomous region governments.	**Achieved**
Year:	**2012**	**Feb 2019**	**Apr 2019**	**Apr 2019**

Key evidence reviewed:

- Terminal METT assessments of 5 nature reserves (May 2018).
- Terminal EHI assessments of 3 nature reserves (May 2018).
- Prefecture government decisions to revoke mining rights for 78 sites inside the Liangheyuan NR.
- Interviews with representatives of the Chaganguole Township co-management committee, and review of project progress reports.
- Memorandum of cooperation signed in 2014 between 2016 and nature reserve management administrations in China and Mongolia, regarding transboundary collaboration on beaver conservation.
- Memorandum of cooperation signed in 2014 between the Tavan Bogd NP (Mongolia) and Liangheyuan NR, regarding transboundary collaboration on biodiversity conservation in the Altai-Sayan Ecoregion border region.

Based on the terminal assessments made in May 2018, METT scores for three of the five nature reserves exceeded the end targets, whereas the average of the five fell short of the 72 end target. The TE team noticed several inconsistences in the METT assessments, e.g., regarding whether there are protected area regulations, review of management plans, involvement of local communities, adequacy of PA budgets and staffing, etc. It would be advisable if the METT tool is better explained to the PMO and the contracted expert who facilitated the assessments and if the process is carried out with wider stakeholder participation (lesson learned).

The terminal assessments of the ecosystem health index (EHI) scores exceeded the end targets for the three designated nature reserves, with the largest increase reported for the Buergen Beaver NR. It is noted that the self-assessment information provided by the PMO (see Annex 5) is different than the EHI scores included in the Excel spreadsheets.

Based on project reports of government decisions regarding the delisting of mining rights for 78 sites within the Liangheyuan NR, it appears that administrative efforts have been successful in prohibiting mining in this nature reserve. Indicator No. 9 covers all protected areas in the AMWL region and there was no evidence available to the TE team that demonstrates that similar administrative measures have taken place in other PA's (recommendation).

Co-management committees set up for two communities in the Liangheyuan NR under Component 3. The committees are functioning but have not been formalized; that is, agreements have been signed between the Liangheyuan NR and local villages, but the co-management committees are not party to these agreements. It would be advisable to formalize the co-management committees and work towards registering the committees as community-based organizations or equivalent, enabling them to raise funds on their own.

Cross-border collaboration has been enhanced through execution of two memoranda of cooperation, one signed in 2014 and 2016 between nature reserve management administrations in China and Mongolia, regarding beaver conservation, and the other signed in 2014 between the Tavan Bogd NP (Mongolia) and Liangheyuan NR.

Regarding changes in the operational budget for PA management in the AMWL region, the project has reported that the midterm figure (presumably for the year 2015) was USD 2.6 million, an increase of more than 70% from the baseline of USD 1.515 million (2011-2012). It would be more appropriate to provide updated figures, e.g., for 2018, and also indicate whether new contributions were allocated by local, prefectural and autonomous region governments.

Outcome 3: The adoption and development of a 'community co-management' approach to conservation in Liangheyuan Nature Reserve demonstrates improved management effectiveness for a wetland PA in the Altai Mountains and Wetland Landscape

Achievement of Outcome 3 is rated as: Moderately Satisfactory

Achievement of the Outcome 3 is rated as **moderately satisfactory**, as outlined below in **Table 17** and the ensuing discussion.

***Table 20**: Evaluation of achievement of Outcome 3*

Indicator	Baseline	End-of-Project target	Status at TE	TE Assessment
13. Reduction in biodiversity pressure from overgrazing	7,000 herding families graze livestock in the NR in summer, incl. 170 families (approx. 40,000 stock) in ecologically sensitive Sandaohaizi wetland	Livestock numbers reduced by 20% in Sandaohaizi wetland, with economic burden to local people offset with alternative (complementary) livelihoods	Project progress reports indicate livestock numbers of 15,372 sheep-equivalent in 2017 and 11,763 sheep-equivalent in 2018 in Jiangbutas Village. Uncertain if the baseline figure was only for this village; Sandaohaizi wetland indicated as baseline.	**Mostly achieved**
	Management zones in Liangheyuan NR not rationalized	Zoning of Liangheyuan NR re-assessed and modified based on EHI surveys with illegal mining banned in core/buffer zones and grazing banned in core zones	Management zoning of the NR is reassessed in the updated master plan (2019-2028); the master plan is pending approval by the XUAR government.	**Partially achieved**
14. Enhanced socio-economic options to compensate for lost opportunities improving local economic situation	Community ecotourism not present in project area (Liangheyuan NR)	At least 3 community tourism ventures established, bringing benefit to at least 30 families serving as a model for up-scaling	Ecotourism ventures strengthened for 6 households in Jiangbutas Village, Chaganguole Township, Qinghe County.	**Achieved**
	Avg. household income is 1,980 CNY/year in Sandaohaizi community	Average household income for park residents increased by at least 20%, as a result of new livelihood opportunities	At a demonstration scale, household income increased for those households that participated in the alternative livelihood activities. The number of participating households is approx. _% of the total population of local communities near the NR.	**Partially achieved**
15. Reduction in biodiversity pressure from mining	6,800 ha of PA land in NR is still threatened by mining activities	Illegal gold mining activities stopped in NR, & restoration of 800 ha of land previously degraded by mining	Mining rights have been delisted for 78 sites within the NR, effectively stopping gold mining activities in the NR. Reclamation of abandoned mining sites completed in 415 ha in the Liangheyuan NR, 227 ha in the Kalamaili NR and 167 ha elsewhere in Fuyun County.	**Achieved**
16. Populations of threatened species (beavers, moose, wolverine) are stable	Wildlife populations: Beaver = 300-400 Moose = tbd Wolverine = tbd	All select wildlife populations are stable or increasing	Beaver populations regularly monitored at the Buergen Beaver NR; there are limited beaver in the Liangheyuan NR. Populations of beaver families at the Buergen Beaver NR were 32 in 2014 and 38 in 2018. Moose not a relevant species for the Liangheyuan NR and no data available regarding wolverine.	**Partially achieved**

Indicator	Baseline	End-of-Project target	Status at TE	TE Assessment
Year:	2012	Feb 2019	Apr 2019	Apr 2019

Key evidence reviewed:

- Livestock records from reports prepared by the local NGO named Xinjiang Landscape
- Proposed updated master plan (2019-2028) for the Liangheyuan NR.
- Project progress reports, regarding alternative livelihood activities.
- Government decision to delist mining rights for 78 sites in the Liangheyuan NR.
- Records of completion of reclamation of abandoned mining sites
- Wildlife monitoring reports

Livestock numbers in the Liangheyuan NR and elsewhere in sensitive areas in XUAR and throughout China have steadily decreased in the past 5-10 years, as management effectiveness of protected areas has improved, eco-compensation programs have expanded and poverty alleviation programs such as the community ranger program have grown. According to project progress reports, livestock numbers in the Liangheyuan NR, in the Sandaohaizi wetland area, have decreased from a baseline figure of 40,000 in 2012 to 11,763 sheep-equivalent in 2018.

Management zoning of the Liangheyuan NR was reassessed as part of process of updating the master plan for the NR. The updated, 10-year master plan (2019-2028) has been submitted to the XUAR government for approval.

There are a number of popular tourism destinations near the Liangheyuan NR and within the AMWL region. The project was effective at strengthening ecotourism ventures for 6 households in Jiangbutas Village, through training and zero-interest loans. Apart from ecotourism, other alternative livelihood opportunities were also facilitated, including women's embroidery and soap production, and as support staff for ecological monitoring in the NR. These activities have generated increases household incomes; however, the end target for Indicator No. 14 calls for the "average household income for park residents increased by at least 20% ...".

Illegal gold mining activities have been stopped in the NR, through official delisting of 78 mining rights. And, the project supported demonstrations of reclamation of abandoned mining sites, totaling 12,141 mu (809 ha).

In terms of wildlife monitoring, there has been limited monitoring data reported during the project implementation phase. The TE team requested inputs from the AMFB, including annual reports produced by the Liangheyuan NR and other protected areas. The selected species for Indicator No. 16 were not fully appropriate. For instance, beavers are not prevalent in the Liangheyuan NR, moose are not relevant for this NR and there are limited data on wolverine. Available monitoring reports indicate, for instance that beaver family populations for the Buergen Beaver NR and at other monitoring stations in the AMWL region have been stable, comparing figures from 2014 and 2018.

4.2.2 Relevance

Relevance is rated as: Highly satisfactory

The project was aligned to the GEF-5 Biodiversity Strategy, specifically Objective 1, "Improve Sustainability of Protected Area Systems", Outcome 1.1, "Improved management effectiveness of existing and new protected areas", and Outcome 1.2, "Increased revenue for protected area systems to meet total expenditures required for management."

The project is relevant to the strategic directions outlined in the National Biodiversity Conservation Strategy and Action Plan (NBCSAP), which designates the *Altai Mountains Forest and Grassland Ecological Function* as one of the country's 25 "key ecological function zones" that must be protected and managed sustainable. And, the Altai Mountains are recognized among China's 35 "priority conservation areas".

At the time of project development, the project was closely aligned with the target of the State Forestry Administration (currently the National Forestry and Grassland Administration) of protecting 55% of natural wetlands by the end of 2015. At project closure in 2019, wetland conservation remains a priority in China, as reflected among the priority actions in the XUAR biodiversity strategy and action plan (2015-2030).

The project is relevant with respect to globally significant biodiversity, based on project sites situated within key biodiversity areas (KBAs) – see **Table 21**.

Table 21: *Key Biodiversity Areas (KBAs) in the AMWL region*

KBA Name	KBA Code	Area (ha)	Latitude	Longitude
Burqin River and Kanas Lake	CN091	210,000	48.33	87.00

Altay forest and steppe	CN092	120,000	47.83	88.67
Ulungur Hu and Jili Hu (Fu Hai)	CN093	110,000	47.25	87.33
Burgen River Valley	CN100	15,000	46.25	90.33

Source: Key biodiversity areas in China, www.keybiodiversityareas.org

As one of the child projects under the UNDP-GEF program "Main Streams of Life – Wetland PA System Strengthening for Biodiversity Conservation (MSL)", the project contributed towards mainstreaming wetland conservation nationwide, and building upon GEF-financed initiatives in the Altai-Sayan Ecoregion, in Mongolia, Kazakhstan and Russia.

At project entry, the project objective was consistent with two outcomes of the 2011-2015 UNDP Country Programme Document for China: Outcome 4: "Low carbon and other environmentally sustainable strategies and technologies are adapted widely to meet China's commitments and compliance with Multilateral Environmental Agreements"; and Outcome 5: "The vulnerability of poor communities and ecosystems to climate change is reduced". The project remains relevant with respect to the priorities outlined in the 2016-2020 UNDP Country Programme Document, specifically Output 2.1, "China's actions on climate change mitigation, biodiversity and chemicals across sectors are scaled up, funded and implemented".

In summary, the TE team has applied a rating of highly satisfactory for relevance.

4.2.3 Efficiency

Efficiency is rated as: Moderately satisfactory

Supporting Evidence:

- ✚ The GEF funding addressed the key barriers highlighted in the project design.
- ✚ Satisfactorily achieved the intended project outcomes within the allocated budget and timeframe.
- ✚ Materialized cofinancing exceeds confirmed amount at project entry.
- — Financial delivery was inconsistent during project implementation.
- — Several project activities unfinished at operational closure.
- — Questionable value-for-money for the investment of the outdoor experience base in Altai City.

As of 31 March 2019, total project expenditures incurred were USD 3,047,595, or 86% of the USD 3,544,679 GEF grant for implementation, as broken down below in **Table 22**.

***Table 22**: Actual expenditures broken down by project component, 2014-2019*

Outcome	Actual expenditures (USD)							Indicative
	2014	2015	2016	2017	2018	2019*	Total	Prodoc Budget
Component 1	66,105	149,270	46,215	128,857	74,655	4,949	470,052	515,000
Component 2	95,576	444,809	79,942	215,113	524,380	103,624	1,463,444	1,631,000
Component 3	53,343	394,273	68,952	271,756	109,151	81,261	978,736	1,221,679
Project Management	11,722	26,271	11,689	22,910	40,353	4,137	117,083	177,000
Unrealized loss	3,374	20,896	26,694	1,604	28,124	0	80,692	N/A
Unrealized gain	(895)	(3,460)	(1,060)	(32,937)	(15,648)	(8,411)	(62,412)	N/A
Total	**229,225**	**1,032,060**	**232,432**	**607,302**	**761,016**	**185,560**	**3,047,595**	**3,544,679**
Source of budget figures: approved Project Document				**Balance, 31 Mar 2019:**			**497,084**	

Source of expenditures: Combined Delivery Reports (CDR), provided by UNDP

*2019 expenditures reported through 31 March

Spending on the three components and project management has been roughly in line with the breakdown included in the indicative budget in the project document. Financial delivery has been inconsistent during the project implementation timeframe. The highest rate of delivery, at 88%, occurred in 2015, when annual expenditures peaked at USD 1,170,209. Delivery dropped to 23% in 2016, with expenditures at USD 232,432 in that year. Delivery rates improved in 2017 and 2018, at 54% and 74%, respectively (see **Figure 10**).

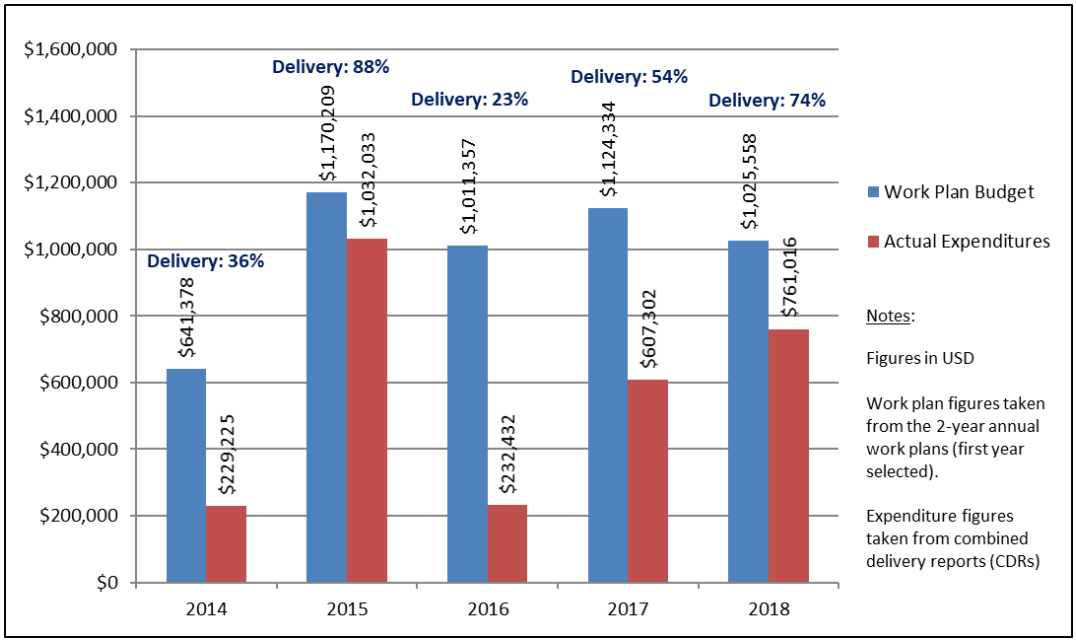


Figure 10: *Planned annual budgets and actual expenditures, 2014-2018*

The project has been largely successful in achieving the intended outcomes within the allocated timeframe and budget. Inconsistent delivery has, however, reduced overall project efficiency. For example, spending in 2018, the last complete year of implementation was the highest except for 2015. And, the balance of USD 497,084 is slated to be incurred over the remaining months in 2019, prior to financial closure. With operational closure occurring on 26 February 2019, a substantial proportion of the implementation grant has not yet been expended. According to interviews with PMO members, the full value of the implementation grant has been contracted out; final payments are expected to be made later in 2019 after final activity deliverables are completed.

The TE team made one observation of questionable value-for-money, specifically the investment in the outdoor experience base at the higher middle school in Altai City. It seems that these funds would have been better spent near one of the nature reserves, where tourists could benefit from environmental education experiences.

Moderate efficiency gains were also achieved as a result of the decreasing value of the Chinese yuan against the US dollar over the course of the project. At the project start date on 27 February 2014, the USD:CNY exchange rate was 6.12491 and by project closure on 26 February 2019, the exchange rate was 6.6942 (see **Figure 11**).

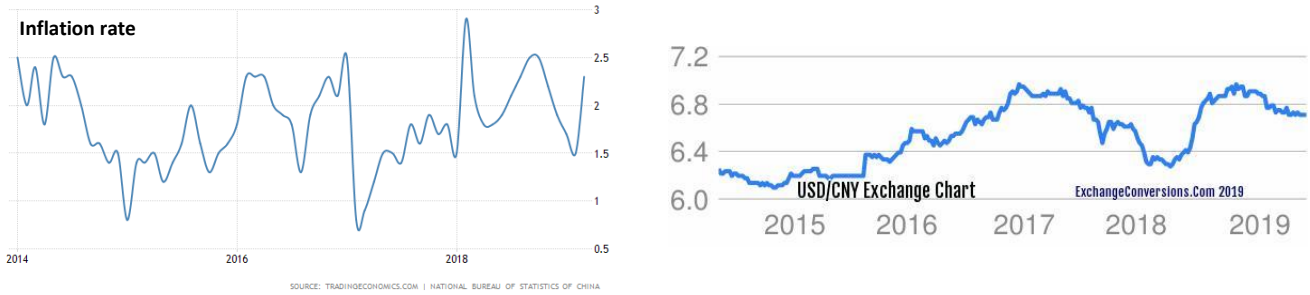


Figure 11*: Consumer inflation rates in China and USD:CNY exchange rates, 2014-2019*

According the project asset report with the effective date of 31 December 2017, the cumulative purchase values of assets procured were USD 115,248.69 for assets acquired at <USD 1,500 and USD 145,922.94 for assets acquired at >USD 1,500. The purchased assets included field monitoring equipment, such as soil monitoring systems, weather stations, chlorophyll monitoring systems, infrared cameras, handheld cameras, binoculars, GPS units and dendrometers. Computer and other information technology equipment were also purchased, as well as office furniture and specimen cabinets.

Independent financial audits have been completed of the project to demonstrate due diligence in the management of funds. Audit reports by the auditing company Mazars Certified Public Accountants for fiscal years 2015 and 2017 were provided to the TE team for review. The 2015 audit report indicated a medium risk finding regarding financial reporting and a low risk item associated with the lack of tagging of assets. The 2017 audit report contained two findings, one on financial reporting (low risk) and on asset management (low risk).

4.3 Sustainability

Sustainability is generally considered to be the likelihood of continued benefits after the GEF funding ends. Under GEF criteria each sustainability dimension is critical, i.e., the overall ranking cannot be higher than the lowest one.

Overall:
Likelihood that benefits will continue to be delivered after project closure: Moderately Likely

Supporting Evidence:

- ✚ Expanded coverage of PA system in AMWL region, improved management effectiveness and updated PA management plans increases protection of regional important ecosystem services and globally significant biodiversity.
- ✚ Inclusive PA governance through participation of local communities, and scale-able and replicable collaborative management demonstrations.
- ✚ Strengthened enabling environment for wetland conservation and rehabilitation, including mainstreaming of wetland issues into sectoral 13th 5-year plans and inclusion as one of the green development indicators.
- ✚ Enhanced monitoring capacities, equipment and information management systems, and budgeted monitoring tasks in the approved monitoring plan.
- ✚ Materialized cofinancing exceeded confirmed amounts at project entry.
- ✚ Strengthened capacities and empowerment of women and ethnic minorities.
- ✚ Improved transboundary collaboration, through two memoranda of cooperation with Mongolian counterparts.
- ✚ CNY 6.4 billion (approx. USD 950 million) government integrated environmental program (2018-2021) in Altai Prefecture
- ✚ Government community ranger program supports many herder families throughout XUAR, with 620 positions in Altai Prefecture in 2018.
- ✚ Partnerships with NGOs and foundations established.
- — Lack of legal framework for PA co-management modalities, and co-management committees established on the project not formalized, e.g., as community-based organizations.
- — High turnover in government agencies diminishes retention of institutional capacity.
- — Constraints facing the eco-tourism market (e.g., logistics, infrastructure, quality of service, security, etc.)
- — Low risk of illegal and unauthorized activities within PA's and other sensitive ecosystems.
- — Capacity limitations of community groups in expanding alternative livelihood ventures.
- — Lack of a sustainability strategy and action plan.
- — Uncertainties associated with potential impacts of climate change.

Financial Dimension:
Likelihood that benefits will continue to be delivered after project closure: Likely

With respect to the financial resources dimension of sustainability, a rating of "likely" is applied. There is substantive evidence demonstrating financial commitment for continuing to fund conservation and environmental protection in the AMWL region and throughout XUAR. For instance, a CNY 6.4 billion (approx. USD 950 million) integrated environmental protection program, with CNY 2 billion (approx. USD 300 million) of funding from the central government, was initiated in 2018 and is scheduled to be implemented through 2021. The government funded community ranger program continues to be expanded in XUAR, with 620 rangers from low-income herder households allocated in the Altai Mountains area, including 100 in 2019 for the Liangheyuan NR. This program provides secure income for herder households and, in turn, livestock are being moved out of core zones in NR's and reduced overall. Another example of financial sustainability is the purchase of 600 infrared cameras by the AMFB for the Liangheyuan NR, after experiencing the benefits of the 80 cameras acquired with the GEF funds.

Moreover, operational budgets have steadily increased for the NR's in the AMWL region throughout the past 5 years, and the amount of project cofinancing that materialized exceeds the sum confirmed at project entry. And, the approved

AMWL biodiversity monitoring plan includes budget estimations for specific actions, including an estimated CNY 2.07 million (approx. USD 310,000) for further improvements to monitoring stations and systems over the period 2018-2022, and CNY 0.8 million (approx. USD 120,000) for scientific research for the period 2019-2022. Funding has been applied for the proposed actions in the monitoring plan.

There are a few factors that diminish financial sustainability, including the limited discretion by NR management administrations on spending. Some stakeholders mentioned government restrictions on hiring new staff as a constraint towards achieving continued improvements in PA management effectiveness. However, alternative approaches are being implemented, e.g., newly declared wetland parks and other protected areas have the option to hire staff for the first 2 years; there are often project-based funding that provide opportunities for adding staff; the community ranger program provides a large number of support for patrolling; and volunteerism is gaining popularity in China.

Socioeconomic Dimension:
Likelihood that benefits will continue to be delivered after project closure: Moderately Likely

A rating of "moderately likely" is applied to the socioeconomic dimension in the sustainability analysis. The project has provided scale-able demonstrations of co-management approaches with local communities and alternative livelihood ventures that provide mutually beneficial conservation and social well-being outcomes, and empower women and ethnic minorities. There is evidence of commitment by local governments, e.g., through the expansion of the community ranger program and the decision by the Chaganguole Township government[4] to invest in a small workshop for the black soap women's group. Another positive factor is the involvement of NGOs and foundations. The local NGO Green Xinjiang provided community development support, and separate NGOs delivered assistance with regard to bird-watching and wildlife monitoring. A few foundations provided small grants supporting the community development activities in the AMWL landscape, including CNY 30,000 (approx. USD 4,500) from the China Green Carbon Sequestration Foundation (special found for community development), and CNY 25,000 (approx. USD 3,750) from the Beijing United Green Public Welfare Foundation. There has also been an increase in awareness and knowledge of the value of wetland resources, through involvement of local communities in project interventions, the environmental education activities at local school, participation of local government officials in project events and trainings.

While co-management with local communities was successfully demonstrated, the co-management committees are not yet formalized or have legal status, e.g., registered as community-based organizations. Further capacity building will be needed for the groups engaged in alternative livelihood ventures. And, there are certain constraints limiting development of the eco-tourism market in the Altai region and throughout XUAR; including security concerns and quality of service.

Institutional Framework and Governance Dimension:
Likelihood that benefits will continue to be delivered after project closure: Likely

A rating of "likely" is applied to the institutional framework and governance dimension of the sustainability analysis. The institutional framework regarding wetlands conservation has been substantially strengthened through approval of the XUAR wetland conservation and rehabilitation plan, the updated management plans for the 5 nature reserves in the AMWL region, mainstreaming conservation priorities in sectoral 13th 5-year plans and the pending sectoral standards under development. Institutional capacities for the XFD, Xinjiang Department of Ecology and Environment and the Xinjiang Department of Water Resources have improved, as measured by the UNDP Capacity Development Scorecards. It is also important to note that wetland conservation (weighting of 1.83%) has been included in the green development index (GDI) for local governments, introduced in 2016.

Governance has also been strengthened through the functioning of the cross-sectoral project leading group (PLG) during the implementation phase. According to interviewed stakeholders, there is an inter-sectoral coordination committee in place in the Altai Prefecture. The demonstrated co-management committees provide a practical framework for scaling up this type of inclusive governance. Moreover, transboundary cooperation has been enhanced, including two memoranda of cooperation signed between NR administrations in China and Mongolia.

The prospects for sustainability are diminished by a few factors, including the lack of a legal framework for community co-management. And, the implementation of the AMWL landscape strategy will require expanded collaboration between AMFB and AFB; these institutional collaborative arrangements have been substantiated.

Environmental Dimension:
Likelihood that benefits will continue to be delivered after project closure: Likely

[4] The township manager indicated the plan for the black soap investment during the group TE interview.

A rating of "likely" is applied to the environmental dimension of the sustainability analysis. The substantial levels of government funding for conservation and environmental improvements, including the CNY 6.4 billion (approx. USD 950 million) integrated program (2018-2021) for the AMWL region enhances environmental sustainability. Threats to natural resources in the Liangheyuan NR have been reduced through revoking 78 mining rights; reduced numbers of livestock, as a result of eco-compensation and community ranger programs; and promotion of alternative livelihoods that further reduce pressure on grassland resources. Increased awareness and participation of local co-management arrangements have increased the resilience of local communities. The updated management plans for the 5 nature reserves in the AMWL region and the approved biodiversity monitoring plan further enhance the likelihood that results achieved on the project will be sustained. Moreover, the information management system (big data) that is under development includes early warning functions that will help PA managers adapt and respond to changing environmental conditions.

Certain risks of illegal and unauthorized activities, such as over-grazing, logging and mining, remain among the nature reserves in the AMWL region. Enforcement is difficult to ensure across these vast and remote areas, and there are significant potential economic gains associated with such illegal and authorized activities. Climate change also pose potential environmental threats over the long-term.

4.4 Progress towards impact

Environmental Stress Reduction:

There are a number of examples of environmental stress reduction in response to activities implemented during the project and through ongoing government programs, including but not limited to the following:

- Expansion of the wetland PA sub-system in the AMWL region by 222,699 ha.
- Improvements in management effectiveness, as measured by the GEF-5 adapted management effectiveness tracking tool (METT), of the five nature reserves in the AMWL region having a cumulative area of 1,035,645 ha.
- Enhanced connectivity through strengthened transboundary collaboration (two memoranda of cooperation signed with Mongolian counterparts);
- Reduced livestock in core zones of nature reserves in the AMWL region, as a result of government ecological migration and community ranger programs.
- Reduced pressure on grassland resources through introduction and development of alternative livelihoods for herder households.
- Revocation by the government in 2018 of mining rights for 78 sites within the Liangheyuan NR.
- Year-round fishing ban issued by the XUAR (fishery management center) in 2018 for all natural rivers, including the Ertix River in the region under their jurisdiction. The Ertix River originates in the Altai Mountains in China and is the only river in China that flows to the Arctic Ocean, after flowing through Kazakhstan and Russia. And, in 2017, the AMFB issued a one-month extension to the seasonal fishing ban introduced in 2005.

Environmental Status Change:

Ecosystem health of three of the nature reserves in the AMWL region improved over the course of the project, as measured by the Ecosystem Health Index (see **Table 23**).

***Table 23**: Ecosystem Health Index scores, 2012 and 2018*

Protected Area:	EHI (baseline year: 2012)	EHI (2018)
Liangheyuan NR	67	83.3
Kekesu Wetlands NR	67	72.2
Buergen Beaver NR	57	72.2

For the Liangheyuan NR, improvements in the EHI score are mostly attributed to the positive consequences of delisting mining rights/claims, reclaiming abandoned mining sites and reducing livestock numbers in core zones. With respect to the Kekesu Wetlands NR, improvements in the EHI score between 2012 and 2018 were largely based on the species health assessment, possibly due to reduced levels of poaching, results of the fishing ban, etc. There are limited details provided in the EHI spreadsheet. The Buergen Beaver NR had the largest increase in ecosystem health, from 57 at project baseline in 2012 to 72.2 in 2018. The improvements included reduction in threats associated with water diversions; this might have been a result of the upgrade of the NR from provincial to national level, thus providing a higher level of protection – and resources for management.

Populations of key wildlife species are reported to be stable or increasing in recent years, including the Chinese sub-species of the Eurasian beaver (see **Table 24**).

***Table 24**: Beaver monitoring data, 2014 and 2018*

Area	Number of Mengxin beaver families observed	
	Year 2014	Year 2018
Buergen Beaver NR	32	38
Qinghe County	65	66
Fuyun County	45	46
Fuhai County	11	12
Total	**153**	**162**

Source: Survey report on the current status of beaver in the Ulungu River Basin, 2018.

It is important to note that among the 162 beaver families observed in 2018, the many are outside the Buergen Beaver NR and other protected areas, and are consequently vulnerable to human and development related threats.

The infrared cameras deployed during the project in the Liangheyuan NR have revealed several species, including the snow leopard (see **Figure 12**), mink, mountain goat, lynx, wolf, brown bear and snow rabbit.

23 May 2017

25 January 2018

***Figure 12:** Photographs of snow leopards captured by infrared cameras in the Liangheyuan NR*

Ecosystem status change has also been initiated in the Liangheyuan NR and other parts of the AMWL region through reclamation of abandoned mining sites. Based on project reports, native vegetation has successfully established at several of the reclaimed plots (see **Figure 13**).

***Figure 13**: Photographs of reclamation of abandoned mining sites at Liangheyuan NR*[5]

Extensive monitoring has been carried out at the reclamation demonstration sites, assessing a wide range of indicators, including vegetation cover, diversity index, similarity index, aboveground biomass and seed content in soil.

A seasonal fishing ban was introduced in 2005 for the Ertix River, originally extending from 01 April to June 30. In 2017, the XUAR government extended the ban by one month, until 31 July. According to news reports, the numbers of cold-

[5] Source: Investigation report on the recovery of abandoned mining areas in Liangheyuan of Altai mountains by GEF project execution office in Xinjiang Uygur Autonomous region in December 2018.

water fish such as white bream and northern pike has increased since the ban was enforced in 2005[6]. In 2018, the XUAR government (fishery management center) issued a year-round fishing ban in all natural rivers in the Altai region, including the Ertix River.

Contributions to Changes in Policy/Legal/Regulatory Enabling Frameworks:

Significant advances to enabling policies occurred in recent years, including the following:

- The "Implementation Plan for Wetland Conservation and Restoration" was issued by the General Office of the People's Government of the XUAR and implemented by relevant departments (XUAR Government Decision No. 199, dated 18 October 2017).
- The "Strategic Plan for the Altai Mountains and Liangheyuan Wetland Landscape Protection and Sustainable Development and Altai Ecotourism Guide in the Altai Mountains" (Dec 2018) has been approved by Altai Prefectural Administration and forwarded to all relevant units for implementation.
- "Measures for the Management of Wetland Parks in XUAR" passed the deliberation of the third Party Committee of the Department of Forestry and Grasslands and was adopted and issued to all localities for implementation in 2018.
- "Methods for the identification of important wetlands in XUAR" passed the deliberation of the third Party Committee of the Department of Forestry and Grasslands and was adopted and issued to all localities for implementation in 2018.

Arrangements to Facilitate Follow-up Actions:

Improved management effectiveness of the five target nature reserves in the AMWL imply strengthened capacities for achieving management objectives of these protected areas. The updated management plans for the 5 target nature reserves in the AMWL region provide practical frameworks for facilitating follow-up actions. Provincial and central government funding for PA management has increased steadily over the duration of the project implementation timeframe and is expected to continue after project closure.

The AMWL ecological coordination committee is a functioning platform with many of the same members as those participating on the project leading groups.

Demonstration of community co-management committees provide the foundation for collaborative PA management with local communities in the AMWL region.

The two memoranda of cooperation signed with Mongolian counterparts provide a clear strategic direction for improving transboundary collaboration on biodiversity conservation and ecosystem protection.

Replication:

The replication approach in the project design was mostly focused on the community co-management demonstrations under Outcome 3. Successful co-management demonstrations were implemented under the project and the updated management plans for the five targeted nature reserves include provisions for community co-management. Moreover, the government community ranger program is a type of participatory management that protected areas could further expand upon. The project also involved local NGOs and foundations that are important partners in facilitating community development initiatives. The challenge moving forward will be whether there are sufficient incentives and local champions to scale up and replicate the bottom-up type approaches demonstrated on the project. It would be advisable for protected area management administrations to strengthen their partnership arrangements with local NGOs and foundations, in this regard.

There are replication opportunities with respect to the demonstrated reclamations of abandoned mining sites. There are extensive degraded lands in the AMWL region that require reclamation.

The information management system (big data) for the XUAR system provides a powerful platform for disseminating best practices and lessons learned. XFD, AMFB and AFB managers will need to provide guidance to the entities responsible for further developing and mainlining this system.

The project has also produced several guidebooks and other knowledge products to promote replication. These could be further disseminated on the XUAR information management system and nationally, e.g., over the information management system that is under development on the national project (PIMS 4391) under the MSL program.

[6] For example: China Daily (www.chinadaily.org.cn), 26 March 2019, "Fishing banned in Ertix River to restore habitat, guard water"

5 Assessment of Monitoring & Evaluation Systems

5.1 M&E Design

Monitoring and Evaluation design at entry is rated as: Satisfactory

The M&E plan was developed using the standard UNDP template for GEF-financed projects. The indicative budget for the M&E plan was USD 177,000 (excluding PMO and UNDP staff time and travel expenses), which is 6.2% of the USD 3,544,679 GEF grant for project implementation. The M&E budget included allocations of USD 10,000 for the inception workshop, 15,000 for measurement of means of verification for project purpose indicators, and USD 32,000 (USD 8,000 per year) for annual measurement of means of verification for project progress and performance, USD 40,000 for the midterm review, USD 40,000 for the terminal evaluation, USD 15,000 (USD 3,000 per year) for capturing lessons learned and USD 25,000 (USD 5,000 per year) for financial auditing.

The project document includes detailed descriptions supporting the indicators in the results framework. There were some shortcomings with respect to validating some of the baseline information, including the baseline METT scores. The selection of indicator wildlife species under Outcome 3 was also not fully vetted. Stakeholders informed the TE team, for example, that moose is not an appropriate indicator species and there are limited data on wolverine occurrence.

5.2 M&E implementation

Implementation of Monitoring and Evaluation Plan is rated as: Moderately Satisfactory

The project results framework is annexed to the inception workshop report, but there is no evidence that the framework was discussed and validated during the workshop. (lesson learned).

M&E results were documented in project implementation review (PIR) review reports, annual progress reports and stand-alone monitoring reports. The steering committee was an important platform for M&E, providing strategic feedback to issues raised through project reporting and discussions during the meetings. PSC meetings were convened annually. The PIR reports were found to be well written and internal ratings were realistic. For instance, a rating of "moderately unsatisfactory" was applied in the 2017 PIR report, and efficiency shortcomings were discussed in the reports.

There was room for improvement with respect to results-based management; e.g., certain indicators and baseline figures remain unclear at the time of the TE and monitoring was inconsistent on some of the project indicators. For example, PA expansion and upgrade figures were unclear (project objective); there was no regular monitoring of EIA's that addressed potential impacts to wetlands (Outcome 1); reported figures regarding PA operational expenditures were not consistent with the baseline data (Outcome 2); livestock reductions in the Sandaohaizi wetland area were not reported (Outcome 3); updated zoning of the Liangheyuan NR not reported (Outcome 3); the method of calculating household income was not explained (Outcome 3); limited wildlife monitoring figures reported (Outcome 3).

Tracking Tools:

The project was obliged to complete the three sections to the Objective 1 portion of the GEF-5 tracking tools. External consultants and specialists were hired to make the baseline, midterm and terminal assessments.

- In a global study of PA management effectiveness, a threshold of 67% was deemed representative of "sound management", and 'basic management" was defined for METT scores ranging from 33% to 67%.[7] Three of the five nature reserves included in the project results had METT scores exceeding or close to 67%: Liangheyuan NR (65); Kekesu Wetland NR (71) and Kanas NR (64). Considering the situational analysis described in the project document, the baseline METT scores might have been too high.
- There was an apparent lack of understanding of the METT tool by the contracted consultant. For example, the METT scores rather than the percentages of the maximum possible score were reported in the results framework. There were no items indicated as not relevant (with adjustments to the total maximum possible score).
- There were several inconsistencies observed in the terminal assessments of the tracking tools, e.g., whether there is a regulatory framework for protected areas, how management plans are reviewed annually, the adequacy of PA staff and budget, and the level of involvement of local communities.

[7] Leverington, F., K.L. Costa, J. Courrau, H. Pavese, C. Nolte, M. Marr, L. Coad, N. Burgess, B. Bomhard, and M. Hockings. 2010. Management effectiveness evaluation in protected areas – a global study. Second Edition. The University of Queensland, Australia

- The terminal assessments do not include Section I spreadsheets, and Section II only indicated the METT assessment form. Data sheets 1 and 2 were not filled in.

Midterm review:

The midterm review (MTR) of the project was completed in 2016 and the management response issued by the PMO on 01 December 2016. The MTR presented a comprehensive assessment of progress made and several recommendations were made for improving project performance and enhancing the likelihood for sustainability of results. The recommendations from the midterm review were satisfactorily addressed by the project team during the second half of the implementation timeframe, as summarized below in **Table 25**.

Table 25: *Status of MTR recommendations at terminal evaluation*

Midterm review recommendation	Status at terminal evaluation
Recommendation 1: The corrective action taken in March 2016 to replace the PMO manager needs to be followed up. The PMO should be placed directly under the line management of the AMFB with the director or deputy director of AMFB having signatory control of activity approval. The PMO office should sit within AMFB. New project management regulations need to be drafted and reviewed by PSC before UNDP approval. It is expected that under the AMFB line control, the focus on Outcome 1 and 2 will be enhanced.	The PMO was relocated to the AMFB according to a decision taken by the XFD in November 2016. Project performance and coordination across the three project components improved after this change was implemented.
Recommendation 2: The PMO operational budget needs to be quadrupled and the PIO also needs an operational budget equal to about a quarter of the PMO level. The budget for PMO operational activities was inadequate to begin with (e.g. due to the extensive PA coverage of the project), added to which costs have risen twofold since the project design, especially for travel, hotel and sustenance.	PM costs have been modest throughout the project implementation, representing approx. 4% of the total spent through the end of 2018. Substantive government cofinancing contributed towards PMO operations.
Recommendation 3: New project finance regulations need to be drafted to accommodate the costs of implementing local activities. The regulations need to include a 'no-receipt' invoice claim form for activities where official receipting is not possible.	New financial regulations were drafted for "no-receipt" expenditures. There was no evidence available indicating whether these regulations were approved by the National Project Director (NPD) and the PSC and implemented during the second half of the project.
Recommendation 4: The building of an institutional coordination mechanism for AMWL is important for the success of the project. The Altai Leading Group (ALG) has recently become active and begun discussing an AMWL Sustainable Development Plan. This is a very positive move. In order to ensure sustainability, the Altai Government needs to support the ALG together with its Altai Ecological Conservation Committee (AECC) as a cross-sector collaborative working group.	The Altai Ecological Conservation Committee continues to function.
Recommendation 5: The Forest station guards at Sandaohaizi need clear instruction on engagement with the Kazakh shepherds and need to work much more closely with the Animal Husbandry bureau to better understand the number of shepherding families and numbers of livestock in each of the three alpine pasture areas.	Livestock reduction numbers were not clearly reported in project progress reports. Upon a request by the TE team, it seems that the local NGO that supported the project in community development activities had livestock data for the Sandaohaizi wetland area.
Recommendation 6: Strengthened collaborative management (co-management) between the Liangheyuan NR and interested Kazakh shepherds' groups needs to be established. The objective would be 'sustainable biodiversity conservation of Sandaohaizi with Kazakh-supported management and control of livestock'.	The project facilitated co-management committees involving local herders; some herders have been hired to support monitoring activities; the government community ranger program has engaged 620 herders in Altai Prefecture in 2018, including 100 for the Liangheyuan NR; and the updated management plan (2019-2022) for the Liangheyuan NR contains provisions for community co-management.
Recommendation 7: The target 20% reduction in livestock numbers is insufficient in order to protect wetland biodiversity. It is recommended that the target for the central valley is increased to 30% reduction and that of the furthest pasture valley increased to 50% reduction. This will allow a level of comparison in differing protection regimes.	Reported livestock numbers in the Sandaohaizi area have reduced from 40,000 in 2012 to 11,763 sheep-equivalent in 2018. There is no reported breakdown between the central valley and furthest pasture valley.
Recommendation 8: The PMO needs to commission further vegetation surveys within Sandaohaizi and continue to build on monitoring data so that the project and forestry authorities can demonstrate measurable impacts of 'sheep grazing numbers against upland peat-meadow health'. Without such	Additional vegetation surveys were commissioned in 2017. Results of these surveys were unavailable for the TE team to review.

Midterm review recommendation	Status at terminal evaluation
evidence, the XFD and AMFB will remain weak in its arguments to conserve important wetland biodiversity.	
Recommendation 9: The findings and recommendations of consultant / sub-contract reports need to be distilled as a matter of priority. If they are not distilled soon, they are likely to be too late to have any relevance or bearing on this project. Under performing contracts need to be cancelled.	The new CTA hired at the end of 2016, a Chinese national, provided more thorough oversight and quality control of deliverables by consultants and sub-contractors.
Recommendation 10: The Liangheyuan NR mining restoration efforts (physical and bio-engineering) should be captured and promoted through a short technical brochure, so that the opportunity to replicate such efforts in another AMWL PA and / or adjacent or nearby mining areas to Liangheyuan NR can be enhanced.	The sub-contractor for managing the reclamation works has produced technical reports. One of the recommendations of the TE is to distill the results into a technical guidance document, presenting good practice methods and approaches for reclaiming abandoned mining sites in the AMWL region. (TE recommendation)
Recommendation 11: In 2015, remote-sensed images from five decades in Altai were analysed. The consultant needs to produce a graphical time sequence of the five-decade imagery, allied to a known threat analysis with the Liangheyuan NR staff and AMFB for the AMWL. This should be presented in two workshops with the results feeding into the XFD PA expansion plans.	It is unclear whether this recommendation was followed up. The AMWL landscape plan approved in Dec 2018 does not include a PA expansion strategy.
Recommendation 12: On a trans-frontier conservation level, cross-border cooperation needs to be initiated on a XUAR government level. On a nature reserve level, cross-border cooperation with Mongolia has started, but this needs to be strengthened. The cross-border actions need a higher level of government involvement, such as via a diplomat / 'government officer of China'. This activity needs to be added as a new Output to Outcome 1 (protection of ecosystems though PA planning).	Cooperation agreements at the site level have been made. The project supported a feasibility study on opening ecological corridors along the trans-frontier border fence; however, negotiations will require time and higher level involvement after project closure.
Recommendation 13: The AMFB and the XFD should engage with the Cultural Heritage Department and the Xinjiang government directly in discussing the damage that tourism is already bringing to Sandaohaizi.	The Altai eco-tourism guide (Dec 2018) addresses increased threats by tourists and proposes mitigation actions.
Recommendation 14: In the lowlands (and possibly midland staging pasture areas) the traditional winter grazing lands are being eroded by land allocation for infrastructure and new re-settlements for the migrant influx of Han Chinese families. This is creating a greater pressure on Kazakh shepherds to pasture their livestock longer in Sandaohaizi. XUAR government funds from past mining revenues should allow for not only re-settlement of Kazakh herders in new accommodation with courtyard wintering pens for their sheep, goats, horses and camels, but also the allocation of wintering pasture lands.	The project response indicates that there was a misunderstanding of the issue by the MTR consultant. However, the MTR recommendation does not state that development is occurring in Sandaohaizi area, but rather indicates that grazing pressures are increasing at Sandaohaizi as a result of erosion of winter grazing lands.
Recommendation 15: Road access for tourist vehicles across the meadows needs to be prohibited. Further, truck access for shepherds' yurts should be restricted to allow delivery at the start of the season and pick-up at the end with limited movement in between. Parking designated areas may need to be developed higher up the valleys on the existing road areas and outside the reserve.	There was no evidence available indicating that this recommendation was implemented.

6 Assessment of Implementation and Execution

6.1 Quality of implementation

Quality of Implementation (UNDP) is rated as: Satisfactory

The quality of implementation by UNDP as the GEF agency on this project is rated as satisfactory. UNDP has provided support throughout the project life cycle, from conceptualization to project development and throughout implementation.

The UNDP Country Office (CO) provided strategic guidance to the project, and the Environment and Energy Program Manager participated in each of the project steering committee meetings. The UNDP CO also provided extensive implementation support to the implementing partner; including training to project stakeholders, procurement, contracting and financial administration. There could have been broader involvement of the UNDP CO, e.g., with respect to gender mainstreaming, consistent with the institutional strength of UNDP in human development issues.

Grant cofinancing from UNDP did not materialized as planned, as allocation of core resources[8] across the UNDP have been significantly decreased. The UNDP CO has reported in-kind cofinancing as part of the UNDP-CICETE[9]-Coca Cola Partnership on Water Governance. The TE team concurs that the scope of this program is consistent with the project objectives, but the reported in-kind contribution of USD 1 million seems too high for this project.

The UNDP regional technical advisor (RTA) was actively involved, providing overall guidance during the project preparation phase, liaising with the Ecosystems and Biodiversity team at UNDP headquarters and with the GEF Secretariat. Project progress reports provided candor accounts of issues, and these were followed up during project steering committee meetings. Internal ratings were reasonable and project risks were monitored. Progress reports also contained constructive recommendations.

6.2 Quality of execution

Quality of Execution (Xinjiang Department of Forestry) is rated as: Moderately Satisfactory

The quality of execution by the Xinjiang Forestry Department (XFD) is rated as moderately satisfactory.

According to the designed implementation arrangements, the role of the XFD was project coordination and overall project oversight. The project management office (PMO) was initially set up at the Liangheyuan NR Management Bureau, but in response to one of the MTR recommendations, the PMO was shifted to the AMFB during the second half of the project.

There has been a number of changes in the positions of national project director, project coordinator and project manager throughout the project implementation phase. This is partly reflective of the relatively high turnover of government officials in XUAR. Executing a project in XUAR has unique challenges, e.g., due to security issues and remoteness. Even with the changes in project staff, high level officials were consistently involved in the project, which demonstrates a high level of country ownership. The chief technical advisor (CTA) was also changed after the MTR and he helped guide the implementation with strategic guidance and practical advice on project management.

A moderately satisfactory rating has been applied because of shortcomings in project efficiency. Approximately 40% of the GEF implementation grant has been expended in the 2018 and 2019, with an operational closing date of 26 February 2019. The frequent changes to National Project Director and Manager affected project efficiency.

7 Other Assessments

7.1 Need for follow-up

There are a few issues that need to be followed up after project closure, including but not limited to:

a. Preparation of a technical guidance document for best practices in reclamation of abandoned mining sites in the Altai Mountains.
b. Approval of the updated master plan (2019-2028) for the Liangheyuan NR.
c. Agreeing on fund management roles, responsibilities and reporting of the community development fund initiated by the project.
d. Completion and approval of the provincial sectoral standards.
e. Completion of the construction and commissioning of the outdoor experience base near the higher middle school in Altai City.
f. Transfer of assets acquired with GEF funds to the designated owners.

7.2 Materialization of cofinancing

The amount of cofinancing that has reportedly materialized during project implementation is USD 26,885,215, which exceeds the USD 22,000,000 confirmed at project entry (see **Annex 6**). The majority of project cofinancing was contributed from governmental partners. Two governmental cofinancing streams were reported: operating funds from the XUAR and Altai Prefecture governments contributed as grant cofinancing (USD 10,499,308 from 2013-2018), and public welfare forest funding from the national government contributed as in-kind cofinancing (USD 16,285,908 from 2013-2018).

[8] Target for Resource Assignments from the Core (TRAC).

[9] China International Center for Economic and Technical Exchanges (CICETE) of Ministry of Commerce, Ministry of Water Resources, Beijing Normal University and Xiamen University of Technology.

Some other examples of governmental cofinancing include, but are not limited to, the following:

- Financing for the reclamation of the 12,141 mu of abandoned mining sites.
- Operational expenditures for the management of the protected areas in the AMWL region
- Office space and office services in Urumqi, Altai City and at the local level
- Time spent by XDFG, AMFB, Liangheyuan NR Administration and other governmental agencies
- Use of vehicles for field work

Apart from the reported cofinancing contributions, there were investments mobilized that are not clearly accounted as cofinancing, including government investments in 600 infrared cameras for the Liangheyuan NR, governmental financing for the information management system (big data) for the XUAR PA system.

Grant cofinancing from UNDP did not materialized as planned. Allocation of core resources[10] across the UNDP have been significantly decreased due to budget cuts arising from global UN reform processes. Without TRAC allocation, grant cofinancing from UNDP could not be mobilized. The UNDP has reported in-kind cofinancing as part of the UNDP-CICETE[11]-Coca Cola Partnership on Water Governance that has been implemented since 2013, and the second 5-year phase was approved in 2018. The water governance program has funded water conservation projects throughout China, including in XUAR in 2013, on pollution control, promotion of sustainable agriculture, demonstration of innovative wastewater treatment, rehabilitation of degraded wetlands, etc. The TE team concurs that the scope of this program is consistent with the project objectives and the benefits of implementing best practice water conservation approaches extends throughout the country. The reported USD 1 million of in-kind contribution seems too high for this project. Based on review of annual reports of the water governance program, USD 100,000 of in-kind cofinancing is considered appropriate for the project.

There was evidence shared with the TE team of other cofinancing that materialized during implementation, but has not been accounted or reported as cofinancing. This includes grants from foundations in support of the community development activities under Outcome 3.

The project did not maintain a tracking system for project cofinancing. (lesson learned) The limited tracking of cofinancing contributions also implies that there might have been missed opportunities with other potential cofinancing partners.

7.3 Environmental and social safeguards

Environmental and social risks were screened at the project preparation phase; the results of the screening were included as Annex 8 to the project document.

Potential risks were identified with respect to potential environmental and social impacts that could affect indigenous people (ethnic minorities) or other vulnerable groups; to gender equality and women's empowerment; to potential impacts that could affect women's or men's ability to use, develop and protect natural resources and other natural capital assets; and to potential impacts associated with land tenure arrangements and/or traditional cultural ownership patterns. The outcome of the screening process was a Category 3a classification, which represent impacts and risks are limited in scale and can be identified with a reasonable degree of certainty and can often be handled through application of standard best practice, but require some minimal or targeted further review and assessment to identify and evaluate whether there is a need for a full environmental and social assessment.

The narrative description in the screening document outlines the overall positive social and environmental benefits expected through the project interventions. With respect to environmental impacts, the narrative includes the following statement: "In addition, all restoration-oriented activities under this project will undergo an independent review through a formal environmental impact assessment". The reclamations of abandoned mining sites were carried out by expert institutions; however, EIA's were not carried out as planned. The systematic process of an EIA could reveal issues that would not otherwise be considered. (lesson learned)

One item that was not addressed in the environmental screening process was pollution associated with the abandoned gold mining sites, including impacts associated with potential use of mercury. (lesson learned)

With respect to social impacts, one of the main issues discussed was providing alternative livelihood opportunities to herders to counteract the economic burden associated with reducing livestock numbers. Governmental ecological migration and community ranger programs provide compensation to a large number of herder households in the AMWL

[10] Target for Resource Assignments from the Core (TRAC)

[11] China International Center for Economic and Technical Exchanges (CICETE) of Ministry of Commerce, Ministry of Water Resources, Beijing Normal University and Xiamen University of Technology.

region and elsewhere in XUAR. And, the project facilitated alternative livelihood opportunities for some households in the project implementation villages. It typically takes time before such alternative livelihood ventures can offset loss of household income associated with livestock rearing or other natural resource intensive activity. It would have been prudent if the social and environmental screening report contained more information on how governmental programs are addressing socioeconomic burden of herder households in response to implementing stricter control on activities within NR core zones and other sensitive ecosystems. (lesson learned)

Considering the project objective had a specific emphasis on promoting livelihoods, environmental and social safeguard plans should have been developed during the project preparation phase or at project inception and monitored throughout the implementation phase. (lesson learned)

7.4 Gender concerns

Potential gender risks were identified in the social and environmental screening made during the project preparation phase. A gender analysis and action plan were not prepared as part of project development, and gender mainstreaming objectives were not integrated into the project design or results framework. The project document does include discussion on how cross-cutting themes, including gender, would be addressed, e.g., development of collaborative management arrangements and promotion of alternative livelihoods. And, the important of Kazakh women among the ethnic minority herder households in the AMWL region was highlighted in the project document section on socioeconomic benefits.

The project did a good job involving women in implementation and delivering benefits to women as part of the community development activities under Outcome 3, including:

- Four women were included on the project management teams.
- An estimated 30% of the contracted technical assistance specialists were women.
- The contracted community development specialist conducted a gender analysis of the proposed project activities in the implementation village of Jiangbutasi in Chaganguole Township. Specific trainings were designed for women, based on the results of this gender analysis.
- Among the reported 447 people participating in 18 training sessions on community co-management, community development and alternative livelihoods, 90 of them were Kazakh women.
- Women's groups, including two embroidery groups and a black soap production group, benefitted from the alternative livelihood ventures.

It would have been advisable to have prepared a gender analysis and action plan, with specific gender mainstreaming metrics that could have been monitored and evaluated during project implementation. One of the advantageous that international donor projects have in China is that issues, such as gender, can be addressed that might not necessarily be considered on government funded programs. And, sustainability of gender mainstreaming results could be further enhanced through identifying specific actions based on a gender analysis, e.g., involving the Women's Federation on the project leading groups, integrating gender mainstreaming into the NR management plans, etc. (lesson learned).

7.5 Indigenous peoples (ethnic minorities)

According to the situational analysis presented in the project document, approximately half the population in the Altai Prefecture is comprised of Kazakh ethnic minorities. And, the co-management modalities demonstrated on the project were focused on Kazakh herding communities.

Potential risks associated with impacts to ethnic minority communities was highlighted in the social and environmental screening process during the project preparation phase. The strategic approach proposed by the project included initiating collaborative management arrangements with Kazakh minority communities. The threat reduction targets in the project results framework for Outcome 3 were focused on herder communities, e.g., reduction of livestock win the Sandaohaizi wetland and promotion of complementary alternative livelihood opportunities.

Kazakh minorities were extensively involved during the project, as summarized below.

- Community co-management committees were comprised primarily of Kazakh ethnic minorities, demonstrating inclusive governance arrangements.
- Some trainings with local communities were held in Kazakh language.
- The alternative livelihood ventures promoted under Outcome 3 primarily focused on Kazakh minorities.
- Community rangers engaged by the project and hired through the government program are primarily Kazakh minorities in the AMWL region.

- Traditional songs and dance were integrated into the eco-tourism activities promoted on the project. In 2014, the project supported the 3rd annual Community Culture and Art Festival at the Liangheyuan NR, and has since become a regular annual event.
- Some of the project management staff were Kazakh ethnic minorities and fluent in Kazakh, Chinese and English languages.
- The total number of Kazakh minorities who directly benefited on the project is estimated to be 450.

It would have been advisable to have prepared an Indigenous Peoples Plan at the project preparation phase or at project inception, to establish a targeted monitoring and evaluation system for assessing and promoting active involvement among ethnic minority communities. (lesson learned)

7.6 Contributions to Aichi Targets and Sustainable Development Goals

The project has made contributions to several of the Aichi targets, as summarized below in **Table 26**.

***Table 26**: Project contributions to Aichi targets*

Aichi Target		Project Contribution
Strategic Goal A: Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society		
	**Target 1**: By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.	Increased involvement of local communities in conservation and collaborative management of protected areas. An estimated 450 direct beneficiaries, primarily from Kazakh minority herder households, were involved on the project.
	**Target 2:** By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.	Conservation of wetland ecosystems and biodiversity reflected in several sector plans, including the 13th 5-year plans for forestry, ecology and environment, tourism development, mining and poverty alleviation.
Strategic Goal B: Reduce the direct pressures on biodiversity and promote sustainable use		
	**Target 5**: By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced,	809 ha of wetland ecosystems degraded as a result of former mining activities were reclaimed.
Strategic Goal C: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity		
	**Target 11**: By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.	New coverage of unprotected wetland ecosystems: 222,699 ha. Improved protection of globally significant biodiversity, among the four key biodiversity areas (KBAs) within the AMWL region, including Burqin River and Kanas Lake (CN091), Altai forest steppe (CN092), Ulungur Hu and Jili Hu (Fu Hai) (CN093) and Buergen River Valley (CN100).
Strategic Goal D: Enhance the benefits to all from biodiversity and ecosystem services		
	**Target 14**: By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable.	Management effectiveness exceeded or met targets for 5 wetland PA's covering a cumulative area of 1,035,645 ha, through increased involvement of local communities, including women.
Strategic Goal E: Enhance implementation through participatory planning, knowledge management and capacity building		
	**Target 18**: By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels.	Collaborative management with local communities living close to the Liangheyuan NR facilitated through two county-level co-management committees, three at the township level and eight at the village level. Local Kazakh minority herders trained to support the NR management administration in monitoring and patrolling, utilizing their traditional knowledge of the ecosystem. And, alternative livelihood activities supported among herder households, to reduce pressure on wetland resources.

The project has also made contributions towards achievement of the Sustainable Development Goals (see **Table 27**).

***Table 27**: Project contributions to Sustainable Development Goals*

Sustainable Development Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Relevant SDG 15 targets and indicators	Project Contributions
Target 15.1: By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements. **Indicator 15.1.2**: Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type.	New coverage of unprotected wetland ecosystems: 222,699 ha
Target 15.9: By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts. **Indicator 15.9.1**: Progress towards national targets established in accordance with Aichi Biodiversity Target 2 of the Strategic Plan for Biodiversity 2011-2020.	The "Implementation Plan for Wetland Conservation and Restoration" was issued by the General Office of the People's Government of the XUAR and implemented by relevant departments (XUAR Government Decision No. 199, dated 18 October 2017). Conservation of wetland ecosystems and biodiversity reflected in several sector plans, including the 13th 5-year plans for forestry, ecology and environment, tourism development, mining and poverty alleviation.
Target 15.A: Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems **Indicator 15.A.1**: Official development assistance and public expenditure on conservation and sustainable use of biodiversity and ecosystems.	Increased government financing for operation of the five monitored nature reserves in the AMWL PA system from USD 1.5 million at project baseline in 2012 to USD 3 million by 2018, and strengthened financial sustainability of the AMWL PA system as measured by improvements in the GEF-5 Financial Scorecard.

Secondary contributions were made to other SDG's, including SDG 2 (No Poverty) and SDG 5 (Gender Equality).

7.7 Stakeholder engagement

The project design and implementation arrangements were conducive to facilitating broad stakeholder engagement, with Outcome 1 focused on XUAR level activities, Outcome 2 centered on Altai Prefecture level priorities and the Liangheyuan NR and nearby communities were emphasized in Outcome 3. Governmental stakeholders at these three levels were involved directly on several project activities, such as policy reform, preparation of management plans, development of information management systems, trainings, etc. The project leading groups were effective in promoting cross-sectoral and inter-sectoral stakeholder involvement. The community co-management committees promoted improved coordination between local government, NR administration and local residents. The established PA public committees provide stakeholder engagement platforms for years to come, provided these committees are formalized. (good practice)

Several XUAR based academic and research institutions were directly involved on the project through technical assistance agreements and participation on trainings. These institutions included Xinjiang University, Xinjiang Institute of Ecology and Geography (Chinese Academy of Sciences), Xinjiang Agricultural University and the Xinjiang Normal University.

The project did a good job with respect to involvement with local NGOs and foundations. Local NGOs provided direct support in community development activities and training in biodiversity monitoring. And the Green China and China Environment foundations contributed small grants in support of the community development activities.

Increased transboundary collaboration with counterparts in Mongolia would likely not have happened without the GEF funding. And, cross visits among the child projects under the MSL program provided opportunities for XUAR stakeholders to learn from distant provinces, including Hainan, Hubei, Anhui, Inner Mongolia and Heilongjiang.

Involvement with tourism operators and the business sector did not seem to materialize as planned, for example, with the Kanas management committee which oversees the Kanas Scenic Area, a popular tourist destination, or with the Fuyun Keketuohai Forest Park - Keketuohai Tourism Company, a public-private partnership. (lesson learned)

8 Lessons and Recommendations

The TE recommendations are summarized below.

No.	Recommendation	Responsible Entities	Timeframe
Corrective actions for the design, implementation, monitoring and evaluation of the project			
1.	**Prepare a sustainability strategy and action plan**. A sustainability strategy and action plan should be developed to guide enabling stakeholders in ensuring project results are sustained after GEF funding ceases. The strategy and action plan should be based on the project theory of change, e.g., focusing on the assumptions and impact drivers for achieving long-term impacts. The plan should outline the actions requiring follow-up after project closure, assigning roles and responsibilities and identifying timeframes.	**PIO**, PMO	Before project closure
2.	**Reassess PA management effectiveness of the target PA's**. The baseline and terminal METT assessments should be redone, to provide a more realistic indication of improvements achieved with respect to PA management effectiveness.	**PMO**, UNDP	Before project closure
3.	**Ensure supervision and reporting functions are in place until all contracted activities are completed**. With operational closure occurring on 26 February 2019, it is important that there are appropriate supervisory and reporting functions in place for project activities that are not yet completed.	**PIO,** PMO, UNDP	Before project closure
4.	**Prepare a technical guidance document for reclamation of abandoned mining sites in the Altai Mountains and Wetlands Landscape.** The experiences and lessons learned should be distilled into a practical technical guidance document on reclamation of abandoned mining sites in the AMWL region.	**AMFB**, PMO, PIO	Before project closure
5.	**Identify a fund management entity for the community development fund and conclude an agreement before project closure**. Renegotiate the agreement with the FFSA on the continuation (or conclusion) of the Eco-Damu microcredit scheme. If the parties agree to continue the scheme beyond the second phase of loan disbursements, then it would be important, for example, to ensure the contributed GEF funds remain earmarked for biodiversity conservation or restoration of degraded lands, preference should be given to women and other vulnerable groups.	**AMFB**, LNRMB, PMO, UNDP	Before project closure
Actions to follow up or reinforce initial benefits from the project			
6.	**Formalize the co-management committees**. The co-management agreements should be signed by three parties, including representatives of the local communities. And, community-based organizations (or equivalent) should be established that would formally represent the interests of the local people on the co-management committees and also have the ability to raise funds on their own.	LNRMB, local governments, local communities	Within 1 year
7.	**Apply the METT tool in assessing management effectiveness of wetland parks.** Wetland parks and other nature parks are increasingly important part of PA systems in China. On this project, METT and EHI assessments were carried out at nature reserves but not wetland parks. It would be advisable to apply the METT tool to wetland parks within the AMWL region, to identify gaps in management and assist the management administrations in prioritizing resource allocations.	**XFD,** AMFB, AFB	Within 1 year
8.	**Further advance transboundary collaboration.** Achieving effective and sustainable transboundary collaborative arrangements will require involvement of higher level governmental stakeholders and proactive regional engagement. As a first step, it would be advisable to increase the participation of XUAR stakeholder among regional platforms, such as the Global Snow Leopard and Ecosystem Protection Program (GSLEP).	XFD, AMFB, AFB, NGOs	Within 1 year
Proposals for future directions underlining main objectives			
9.	**Enhance the community develop fund through provision of an integrated package of services**. Consider an integrated package of services rather than just disbursing zero-interest loans; for example, offering insurance, enterprise development (such as management training, marketing support) and welfare related services (e.g., gender awareness training).	AMFB, LNRMB	Within the next 1-2 years
10.	**Consider a complementary project focusing on cross-cutting approaches, such as ecosystem-based adaptation or integrated water resources management**. The strengthened enabling conditions associated with biodiversity conservation and sustainable land management provide solid foundational capacity for implementing ecosystem-based adaptation interventions and integrated water resource management in the AMWL region.	XFD, AMFB, AFB	Within the next 1-2 years

A few examples of good practices and lessons learned on the project are presented below.

Good Practices:

Project design fostered broad stakeholder engagement across three administrative levels. Designing activities that required stakeholder involvement at the provincial (XUAR), landscape (AMWL) and site level (Liangheyuan NR) was good practice in fostering improved cross-sectoral and inter-sectoral collaboration. Setting up project leading groups at the provincial and landscape level further enhanced stakeholder engagement on the project.

Facilitating inclusive PA governance through community co-management arrangements. Community co-management is widely recognized as the most sensible approach to reduce threats to biodiversity and ecosystems, but there had been limited implementation of these modalities in XUAR. The project provided scale-able and replicable demonstrations of community co-management that enabling stakeholders can build upon.

Demonstrating innovative approaches in reclaiming abandoned mining sites. Reclamation of abandoned mining sites is not cheap, particularly for illegal sites where there is no mining entity that is legally obliged to finance the work. There are unique challenges in the AMWL region, e.g., due to remoteness and limited supply of topsoil. In collaboration with ongoing governmental programs, the project contributed to implementation of reclamation demonstrations that involved innovative approaches, e.g., utilizing available resources, such as using livestock manure in preparing a fertilizer slurry that was spread onto the reclaimed surfaces.

Forward-thinking approach taken in the design and development of the information management system (big data). The information management system (big data) developed for the XUAR PA system is comprehensive and forward-thinking, e.g., capturing real-time monitoring data and integrating advanced learning functions, that will eventually support PA managers with respect to early warning and biodiversity monitoring.

Inclusive stakeholder involvement in promoting alternative livelihood ventures. The project facilitated broad and inclusive stakeholder involvement, including the NR management bureau, local government, local communities, NGOs and foundations, in promoting alternative livelihood ventures.

Community development fund provided accessible and learning opportunities to local communities. The disbursement of zero-interest loans to local applicants under community development fund (approx. USD 30,000 in total) demonstrated how local entrepreneurs can advance alternative livelihood ventures with relatively modest inputs and how effective such microcredit programs are at facilitating information transfer.

Production of practical knowledge products. The project did a good job documenting producing several informative knowledge products, designed to appeal to a wide-range of stakeholders, ranging from middle school students to expert conservation professionals.

Lessons Learned:

Insufficient validation of the project strategy at project inception. The project inception is an important phase of the project, particularly for validating the project strategy, including clarification of what is expected with respect to policy reform, the project results framework, tracking tools, budget allocation, etc.

Inconsistencies in application of M&E tools, including the METT, capacity development scorecard and financial sustainability scorecard. The quality control review of the M&E tools, including the METT should consider other assessments made in China and globally; if certain questions are not relevant to the project then the maximum possible score should be adjusted accordingly; project teams should be encouraged to allow room for improvement, i.e., avoid scoring baselines too high; the process should be participatory, including PA management staff, field technicians, local government officials, local community members, NGO representatives and expert professionals; teams should be informed of the difference between management plans and business plans; etc.

Co-management committees were not formalized. The local community members did not sign the co-management agreements. The agreements were signed by the NR management bureau and the local governments. It would be advisable to also establish community-based organizations (or equivalent) that would represent the local communities in the committees and have the ability to raise funds on their own.

Lack of a communications and knowledge management strategy. There were a number of activities on the project that were focused on communications and knowledge management, but there was a lack of a strategic approach. It would have been advisable to have developed communications and knowledge management strategy and action plan.

Gender mainstreaming and inclusion of ethnic minorities not sufficiently integrated into the project design. Risks associated with gender equality and inclusion of ethnic minorities were identified in the social and environmental

screening process at the project development phase, but detailed analyses were not made and these aspects were not fully integrated into the project design.

Limited tracking of cofinancing and coordinating with cofinancing partners. Materialized government cofinancing exceeded the confirmed sum at project entry; however, there were only two sources indicated: operational cofinancing and parallel financing associated with the public welfare (natural) forest program. The project was not regularly tracking cofinancing contributions, including mobilized investments and contributions from other partners, such as foundations, that were not confirmed at project entry. The lack of tracking project cofinancing implies that the project was not actively pursuing potential synergies with cofinancing partners.

Risks associated with possible pollution (including mercury) at abandoned mining sites were not vetted at the project preparation phase. Risks associated with pollution at abandoned mining sites was not addressed as part of the social and environmental screening process. Considering that mining related threats in the AMWL were attributed to illegal mining activities, there are potential risks associated with possible unsafe use of mercury and other chemicals.

Involvement with tourism operators and the business sector did not materialize as planned. The stakeholder involvement plan in the project document included reference to the Kanas management committee which oversees the Kanas Scenic Area, a popular tourist destination, and the Fuyun Keketuohai Forest Park - Keketuohai Tourism Company, a public-private partnership. Eco-tourism is a significant focus of the XUAR and Altai Prefecture governments in their economic development plans and the emerging threats posed by increasing numbers of tourists.

It is better to use national currency, CNY for monetary-based targets instead of USD. For monetary-based targets, such as PA operational expenditures and household income, it is better to use the currency that the expenditures and incomes are denominated in. It is useful to indicate inflation rates in monitoring reports

Annex 1: TE Mission Itinerary

日期Date	内容Theme	
3月31日 Mar.31	The international consultant arrives to Beijing 国际专家抵达北京	
4月1日 Apr.01	9:00-10:00 Briefing with UNDP 与UNDP召开终期评估情况介绍会	
	12:00 Transport to airport 乘车前往机场	
	接机CA1291（14:45-19:10）终评专家抵达乌鲁木齐，入住酒店 20:00晚餐 TE team arrive in Urumqi (Beijing-Urumqi, CA1291 14:45-19:10), check in and dinner at 20:00	
4月2日	10:30-11:30	UNDP-GEF“阿尔泰山两河源流域有效管理”项目终期评估启动仪式 Inception of Terminal Evaluation, meeting with project steering committee(PSC) 主持人： 梅莲香 （新疆林业重点工程稽查总站 副站长、 新疆GEF阿尔泰山项目执行办副主任 ） Host: Ms. Mei Lianxiang, Deputy section chief of Project Inspection Office of Xinjiang Forestry and Grassland Administration; Deputy director of Project Implementing Office(PIO) 1、介绍项目指导委员会成员单位代表及其他参会代表 Introduce the representatives of the project steering committee and other participants 2、新疆林业和草原局领导致辞（领导待定） Welcome remarks 3、介绍评估日程安排（梅莲香） Introduce the TE schedule 4、评估组对项目评估的要求（评估组专家） Speech by TE consultants
	11:30-12:15	播放UNDP-GEF新疆项目制作的3个宣传片 1、 阿尔泰山项目汇报片（播放： 艾森电影） 2、 两河源矿区恢复宣传片（播放：艾森电影） 3、 社区替代生计宣传片（播放：新疆山水生态可持续发展中心） View 3 promotional videos of project
	12:15-12:30	茶歇、合影 Tea break
	12:30-13:10	项目自评估报告汇报 汇报人：杨艺渊（新疆GEF项目跟踪评估专家） Self-assessment report by project tracking and assessment expert Ms. Yang Yiyuan
	13:10-13:30	答辩释疑（回答评估组及专家提出的相关问题） Q&A
	15:30-16:00	访谈：李东升 新疆阿尔泰山项目指导委员会主任、新疆林业和草原局副局长 Individual meeting with Mr. Li Dongsheng, Director Deputy director of Xinjiang Forestry and Grassland Administration/Director of PSC/Director of PIO
	16:00-16:30	访谈百合蒂亚· 依明/汪亚军 新疆自治区财政厅涉外处 Individual meeting with Ms. Baihetiya· Yiming/Mr.Wang Yajun, representative of Foreign Affairs of Xinjiang Financial Department 访谈参考内容：新疆对项目赠款及配套资金管理，本项目资金使用情况评价
	16:30-16:50	访谈梅莲香（新疆GEF项目执行办副主任/新疆林业重点工程稽查总站副站长） Individual meeting with Ms. Mei Lianxiang, Deputy director of PIO/Deputy section chief of Project Inception Station 访谈参考内容：援建项目管理体会
	16:50-17:20	访谈曹泽红（新疆自治区水利厅 水土保持处处长）

日期Date	内容Theme	
		Individual meeting with Mr. Cao Zehong, Section chief of Xinjiang Water Conservancy Department 访谈参考内容：水利厅在项目湿地保护中的贡献，关于新疆的“河长制、湖长制”实施情况
	17:20-17:40	访谈 赵志刚/或相关人员 新疆自治区资源环保厅 Individual meeting with Mr.Zhao Zhigang, Natural Ecology section of Xinjiang Environmental Department 访谈参考内容：新疆环境保护相关法律法规在GEF项目执行中的主要作用与关系
	17:40-18:00	访谈崔培毅（新疆GEF阿尔泰山项目经理） Meeting with project manager Mr. Cui Peiyi 访谈参考内容：对GEF项目管理的体会
	18:15-18:35	访谈 罗万杰/李巍（新疆自治区林业和草原局法规处/计财处） Individual meeting with Mr. Luo Wanjie, Ms. Li Wei (Laws and Regulations Division, Finance Section) 访谈参考内容：关于GEF阿尔泰山项目的法律法规建设；项目财务管理；
	18:35-19:10	与新疆自治区林业和草原局湿地办、保护处、草原处访谈 杜农/刘亚峰/曹杰/熊玲 Meeting with Wetland Office, Conservation Office, Grassland Office of Xinjiang Forestry and Grassland Administration Mr. Du Nong, Liu Yafeng, Cao Jie and Ms. Xiong Ling 访谈参考内容：新疆生物多样性与湿地保护、保护区
	19:10-19:30	与新疆大学生态环境资源学院访谈 杨建军教授 Individual meeting with project mainstreaming consultant Mr. Yang Jianjun, College of Ecological Environment and Resources of Xinjiang University 访谈参考内容：UNDP-GEF阿尔泰山景观生物多样性与湿地保护主流化
4月3日	10:00-10:30	鸿福酒店赴中科院生地所考察（路途10.2千米） Visit Xinjiang Institute of Ecology and Geography, Chinese Academy of Sciences (10.2KM from hotel)
	10:30-12:00	访问中科院生地所 1、参观生地所生物实验室、标本馆 2、与项目相关专家座谈 1.Visit biological laboratory and herbarium; 2.Meeting with relevant project conslutants 访谈参考内容：退化土地（矿区）植被恢复、生物多样性保护
	12:00-12:30	前往新疆农业大学考察（路途7.4千米） Visit Xinjiang Agricultural University (7.4KM)
	12:30-13:30	访问新疆农业大学 1、 与农业大学参与GEF项目专家座谈 Meeting with project experts of Xinjiang Agricultural University 访谈参考内容：新疆湿地保护大数据平台建设及标准化
	15:00-15:40	访谈叶茂教授 Individual meeting with Ms. Ye Mao 访谈参考内容：UNDP-GEF阿尔泰山项目 监测体系实践
	15:40-16:40	访问自治区林业和草原局相关处室 1、查看UNDP-GEF阿尔泰山项目成果一项目档案 2、查看自治区GEF项目执行办项目档案 3、借阅其他部门的相关档案 Meeting with relevant sections of Xinjiag Forestry and Grassland Administration 1. Review documents and materials of Outcome 1 2. Review and check documents of PIO 3. Review documentary materials of relevant sections

日期Date	内容Theme	
	16:40-18:00	访谈UNDP-GEF新疆GEF项目办 （崔培毅、杨艺渊、蔡寅潮、王鹏、李克波） Meeting with PIO staff (Mr. Cui Peiyi, Ms. Yang Yiyuan, Ms. Cai Yinchao, Mr. Wang Peng, Mr. Li Kebo) 访谈参考内容：项目对新疆湿地、草地、生物多样性保护及保护区建设发挥的作用
	18:00-18:50	前往机场（路途18.8千米），飞往阿勒泰（CZ6843 20:05-21:35 或乘MU4742 20:05-21:35两航班均21:35抵达阿勒泰） Drive to airport (18.8KM) Travel to Altay (CA6843 20:05-21:35 or MU4742 20:05-21:35)
	UNDP-GEF加强阿尔泰山两河源流域景观保护区有效管理项目终期评估会议，与阿勒泰地区协调领导小组成员座谈 Terminal Evaluation meeting/Group meeting with Altay Project Leading Group (PLG)	
4月4日	10:00-10:25	1、 阿勒泰GEF项目协调领导小组组长致欢迎辞 2、 介绍参加会议代表 3、 介绍终期评估程序（终期评估专家组） 1. Welcome Remarks by Leader of Project Leading Group(PLG) 2. Introduce the participants 3. Introduce procedure (TE consultants)
	10:25-10:45	1、 阿尔泰山林管局汇报成果二 2、 汇报人：韩尚平/米娜 3、 释疑答辩 Introduction of progress of Outcome 2 Q&A
	10:45-11:05	1、阿尔泰山两河源管理局汇报成果三执行情况 汇报人：李德怀/合依劳别克 2、释疑答辩 Introduction of progress of Outcome 3 Q&A
	11:05-11:30	两河源矿区植被恢复情况汇报 汇报人：徐海量 Report on restoration of old mining areas in demonstration site Liangheyuan NR Reporter: Mr. Xu Hailiang, Land restoration consultant
	11:30-12:30	1、 与阿勒泰地区项目协调领导小组成员单位座谈 2、 访谈与项目指导委员会副主任/项目协调领导小组组长/阿勒泰地区行署领导会面 3、 与项目指导委员会副主任/项目办主任/阿尔泰山国有林管理局领导会面访谈 主持人：阿尔泰山国有林管理局领导 1. Meeting with PLG members 2. Individual meeting with the Deputy Director of Project Steering Committee(PSC)/Group leader of PLG 3. Individual meeting with the Deputy Director of Project Steering Committee(PSC)/Director of Altai Mountain Forestry Bureau(AMFB) Host: Head of AMFB 座谈参考内容：UNDP-GEF“阿尔泰山两河源流域有效管理”项目实施以来对地区经济社会的影响
	12:30-12:45	访谈阿勒泰地区发展计划改革委员会领导/相关人员 Interview with Altay Development and Reform Commission
	12:45-13:00	访谈阿勒泰地区环保局领导/相关人员 Individual meeting with Director of Environment Department of Altay/or relevant members
	13:00-13:15	访谈阿勒泰地区旅游局领导/相关人员 Individual meeting with representative of Altay Tourism Department
	13:30-15:30	午餐午休（金都大酒店）Lunch break
	15:30-17:30	走访市区内阿勒泰市三中自然学校和湿地学校及地区二中户外生态体验基地 1、 参观阿勒泰市三中湿地学校；参观阿勒泰地区二中户外体验基地 2、 与两个学校相关人员会面访谈 Visit Outdoor experience base and Wetland School (No.2 Senior High School and No.3 Middle School) and meet relevant school staff
	17:40-19:50	访谈阿尔泰山两河源项目执行办相关人员；查看项目档案等文件 1、 访谈财务主管 2、 访谈管理人员

日期Date	内容Theme	
		3、 查看档案及两河源电教馆 Individual meeting with PMO staff, and review relevant materials 1. Individual meeting with Project Financial Officer 2. Individual meeting with management staff 3. Project materials and visit Publicity and Education Room of Liangheyuan NR
	20:00	返回酒店晚餐 Back to hotel, Dinner
4月5日	10:00-16:00	阿勒泰市驱车前往青河县（路程阿勒泰市-青河县约350千米，大约需4～5小时） Travel to Qinghe County (Altay-Qinghe County, 350KM, 4～5hs by car)
	16:00-20:00	1、 青河县相关部门会面 2、 汇报项目开展社区共管与替代生计活动情况 汇报人：杨曙辉，社区共管专家 3、 访谈青河县查干郭勒乡政府、社区联席会成员单位 4、 与青河县相关部门座谈（发改委、林业、畜牧等） 1. Meeting with members of Qinghe County Government 2. Report on community co-management and alternative livelihood activities of the project (Community co-management expert Ms. Yang Shuhui) 3. Meeting with members of Government and Community co-management group of Chagan Village, Qinghe County 4. Individual meeting with relevant sectors (Development and Reform Commission, Agriculture Department, Animal Husbandry Bureau) 访谈参考内容：GEF阿尔泰山两河源项目开展社区共管与替代生计活动 社区共管工作机制的建立，社区共管组织框架搭建完成，共管委员会章程及管理制度健全；社区共管协议；社区参与的共管工作 ， 参与保护区日常管护，宣传教育，社区参与保护区的生物多样性监测；社区发展基金的设立和实施；以社区共管方式管理草畜平衡补助资金。
4月6日	10:00-11:30	从青河县驱车前往青河县查干郭勒乡 Qinghe County-Chagan Village
	11:30-13:00	现场考察青河县查干郭勒乡妇女合作社，访谈 Field visit to Women Cooperatives and group
	13:00-15:30	在查干乡午餐（家庭旅馆就餐） Lunch in homestay
	15:30-16:30	访谈走访妇女黑肥皂小组 Visit local handmade soap workshop and have meeting with members 考察、访谈参考内容：妇女传统手作黑肥皂；黑肥皂的销售
	16:30-19:35	前往富蕴机场搭乘飞机返回乌鲁木齐 富蕴-乌鲁木齐航班CZ6696 18:25-19:35 Fuyun Airport- Urumqi CZ6696 18:25-19:35
4月7日	10:00-12:00	评估专家内部沟通，准备Debrief的材料
	12:00-1:30	评估专家反馈评估情况 1、 反馈对评估考察的意见建议 2、 反馈需要的相关资料的目录 3、 新疆GEF项目办对评估组反馈意见的反映 Feedback by TE consultant 1. Suggestions on evaluation and field trip 2. List of relevant information needed for further evaluation 3. Response of Xinjiang GEF Project Office on the Feedback of the Terminal Evaluation Team
	14:30-16:50	评估专家返回北京CA1254 16:50-20:35 Back to Beijing CA1254 16:50-20:35

Annex 2: Evaluation Matrix

Evaluation Criteria Questions	Indicators	Sources	Methodology
Relevance: Is the project relevant with respect to the environmental and development priorities at the local, regional and national levels?			
To what extent is the principle of the project in line with national priorities?	Level of participation of the concerned agencies in project activities. Consistency with relevant strategies and policies.	Minutes of meetings, Project progress reports, national and regional strategy and policy documents	Desk review, interviews
To what extent is the project aligned to the main objectives of the GEF focal area?	Consistency with GEF strategic objectives	GEF Strategy documents, PIRs, Tracking Tools	Desk review, interview with UNDP-GEF RTA
To what extent is the project aligned to the strategic objectives of UNDP?	Consistency with UNDP strategic objectives	UNDP Strategic Plan, Country Programme Document	Desk review, interview
Effectiveness: To what extent have the expected outcomes and objectives of the project been achieved?			
Assessment of progress made toward achieving the indicator targets agreed upon in the logical results framework			
Sustainability: To what extent are there financial, institutional, social-economic, and/or environmental risks to sustaining long-term project results?			
What evidence is available showing sufficient funding has been secured to sustain project results?	Financial risks	Progress reports, sectoral plans, budget allocation reports, testimonial evidence	Desk review, interviews
How have individual and institutional capacities been strengthened, and are governance structures capacitated and in place to sustain project results?	Institutional and individual capacities	Progress reports, testimonial evidence, training records	Desk review, interviews
What social or political risks threaten the sustainability of project results?	Socio-economic risks	Socio-economic studies, macroeconomic information	Desk review, interviews
Which ongoing circumstances and/or activities pose threats to the sustainability of project results?	Risks to sustainability	Sectoral plans, progress reports, macroeconomic information	Desk review, interviews, field visits
Have delays affected project outcomes and/or sustainability, and, if so, in what ways and through what causal linkages?	Impact of project delays	Progress reports	Desk review, interviews
Impact: Are there indications that the project has contributed to, or enabled progress toward long lasting desired changes?			
What verifiable environmental improvements have been made?	Verifiable environmental improvements	Progress reports, sectoral plans, municipal development plans	Desk review, interviews, theory of change analysis
What verifiable reductions in stress on environmental systems have been made?	Verifiable reductions in stress on environmental systems	Progress reports, sectoral plans, municipal development plans	Desk review, interviews, theory of change analysis
How has the project demonstrated progress towards these impact achievements?	Progress toward impact achievements	Progress reports, sectoral plans, municipal development plans	Desk review, interviews, theory of change analysis
Efficiency: Was the Project implemented efficiently, in-line with international and national norms and standards?			
How was the project efficient with respect to incremental cost criteria?	Incremental cost	National strategies and plans, progress reports	Desk review, interviews

Evaluation Criteria Questions	Indicators	Sources	Methodology
To what extent were the project objective and outcomes realized according to the proposed budget and timeline?	Efficient utilization of project resources	Progress reports, financial records	Desk review, interviews
Country Ownership:			
How are project results contributing to national and subnational development plans and priorities?	Development planning	Government approved plans and policies	Desk review, interviews
Which governments policies or regulatory frameworks were approved in line with the project objective?	Policy reform	Government approved plans and policies	Desk review, interviews
How have governmental and other cofinancing partners maintained their financial commitment to the project?	Committed cofinancing realized	Audit reports, project accounting records	Desk review, interviews
Stakeholder Involvement and Partnership Arrangements:			
How has the project consulted with and made use of the skills, experience, and knowledge of the appropriate government entities, NGOs, community groups, private sector entities, local governments, and academic institutions?	Effective stakeholder involvement	Meeting minutes, reports, interview records	Desk review, interviews, field visits
How were partnership arrangements properly identified and roles and responsibilities negotiated prior to project approval?	Partnership arrangements	Memorandums of understanding, agreements	Desk review, interviews
How have partnerships influenced the effectiveness and efficiency of project implementation?	Effective partnerships	Progress reports, interview records	Desk review, interviews, field visits
How have relevant vulnerable groups and powerful supporters and opponents of the processes been properly involved?	Inclusive stakeholder involvement	Meeting minutes, reports, interview records	Desk review, interviews, field visits
How has the project sought participation from stakeholders in (1) project design, (2) implementation, and (3) monitoring & evaluation?	Stakeholder involvement	Plans, reports	Desk review, interviews, field visits
Catalytic Role:			
How has the project had a catalytic or replication effect in the country?	Catalytic effect	Interview records, municipal development plans	Desk review, interviews
Synergy with Other Projects/Programs			
How were synergies with other projects/programs incorporated in the design and/or implementation of the project?	Collaboration with other projects/programs	Plans, reports, meeting minutes	Desk review, interviews
Preparation and Readiness			
Were project objective and components clear, practicable, and feasible within its time frame?	Project coherence	Logical results framework	Desk review, interviews

Evaluation Criteria Questions	Indicators	Sources	Methodology
How were the capacities of the executing institution(s) and its counterparts properly considered when the project was designed?	Execution capacity	Progress reports, audit results	Desk review, interviews
Were counterpart resources, enabling legislation, and adequate project management arrangements in place at Project entry?	Readiness	Interview records, progress reports	Desk review, interviews, field visits
Financial Planning			
Did the project have the appropriate financial controls, including reporting and planning, that allowed management to make informed decisions regarding the budget and allowed for timely flow of funds?	Financial control	Audit reports, project accounting records	Desk review, interviews
Has there been due diligence in the management of funds and financial audits?	Financial management	Audit reports, project accounting records	Desk review, interviews, field visits
Has promised cofinancing materialized?	Realization of cofinancing	Audit reports, project accounting records	Desk review, interviews
Supervision and Backstopping			
How have GEF agency staff members identified problems in a timely fashion and accurately estimate their seriousness?	Supervision effectiveness	Progress reports	Desk review, interviews
How have GEF agency staff members provided quality support, approved modifications in time, and restructured the project when needed?	Project oversight	Progress reports	Desk review, interviews
How has the implementing agency provided the right staffing levels, continuity, skill mix, and frequency of field visits for the project?	Project backstopping	Progress reports, back-to-office reports, internal appraisals	Desk review, interviews, field visits
Monitoring & Evaluation			
Were intended results (outputs, outcomes) adequately defined, appropriate and stated in measurable terms, and were the results verifiable?	Monitoring and evaluation plan at entry	Project document, inception report	Desk review, interviews
How has the project monitoring & evaluation plan been implemented?	Effective monitoring and evaluation	Progress reports, monitoring reports	Desk review, interviews
How has there been focus on results-based management?	Results based management	Progress reports, monitoring reports	Desk review, interviews
Mainstreaming			
How were gender issues integrated in project design and implementation?	Greater consideration of gender aspects.	Project document, progress reports, monitoring reports	Desk review, interviews, field visits
How were effects on local populations considered in project design and implementation?	Positive or negative effects of the project on local populations.	Project document, progress reports, monitoring reports	Desk review, interviews, field visits

Annex 3: List of People Interviewed

Name	Position	Organization	Gender
Mr. Li Dongsheng	Director Deputy of XFGA, Chairperson of PSC, National Project Director	Xinjiang Forestry and Grassland Administration (XFGA)	Male
Dr. Ma Chaode	Program Manager, Energy and Environment	United Nations Development Programme (UNDP) China	Male
Mr. Gabriel Jaramillo	Regional Technical Specialist - Ecosystems and Biodiversity	UNDP, Bangkok Regional Hub	Male
Mr. Xue Dayuan	Chief Technical Advisor	Central University for Nationalities in China	Male
Mr. Yin Yunpeng	Director	Administration of Water Resources in Xinjiang Autonomous Region	Male
Mr. Du Nong	Deputy Director of Project Office	Wetland Department of Administration of Forestry and Grassland in Xinjiang Autonomous Region	Male
Ms. Liang Can	Principal Staff Member	Wild Animal and Plant Protection Department of Administration of Forestry and Grassland in Xinjiang Autonomous Region	Female
Ms. Xiong Ling	Director	Grassland Department of Administration of Forestry and Grassland in Xinjiang Autonomous Region	Female
Mr. Liu Yafeng	Principal Staff Member	Wetland Department of Administration of Forestry and Grassland in Xinjiang Autonomous Region	Male
Ms. Jiao Yu	Principal Staff Member	Legislative Reform Department of Administration of Forestry and Grassland in Xinjiang Autonomous Region	Female
Ms. Mei Lianxiang	Deputy section chief of Project Inspection Office of XFGA, Deputy Project Director	Xinjiang Forestry and Grassland Administration	Female
Mr. Wang Yajun	Representative of Foreign Affairs	Xinjiang Financial Department	Male
Mr. Cao Zehong	Section Chief	Xinjiang Water Resources Department	Male
Mr. Zhao Zhigang	Representative of the Natural Ecology Section	Xinjiang Ecology and Environment Department	Male
Mr. Cui Peiyi	Project Manager	Project Management Office	Male
Mr. Wang Peng	ViceConsultant	Xinjiang Forestry and Grassland Administration (XFGA)	Male
Mr. Li Kebo	chief clerk;	Xinjiang Forestry and Grassland Administration (XFGA)	Male
Ms. Sailike	Deputy Commissioner	District Administration in Altai	Female
Mr. Li Bin	Deputy Director	Food Department of Development and Reform Commission in Altai	Male
Mr. Jia Lin	Director- general	Administration of Ecological Environment in Altai	Male
Ms. Kulixiali	Bureau Chief;	Grassland Supervision Institute in Altai	Female
Mr. Huang Hongjian	Director- general	Administration of Water Resource in Altai	Male
Mr. Tu Yi	Section Chief	Administration of Natural Resources in Altai	Male
Mr. Han Baohong	Secretary	Administration of Forestry and Grassland in Altai	Male
Mr. Lan Wenxu	Director	Administration of Forestry and Grassland in Altai	Male
Mr. Xu Hanliang	Researcher	Institute of Ecology and Geography in Xinjiang, Chinese Academy of Sciences	Male
Mr. Altai	Director- general	Administration of Forestry of Altai Mountain in Xinjiang	Male
Mr. Xu Fujun	Director	Administration of Forestry of Altai Mountain in Xinjiang	Male
Mr. Yang Jianjun	Associated Professor	Xinjiang University	Male
Ms. Yuan Kaiye	PHD	Institute of Ecology and Geography in Xinjiang, Chinese Academy of Sciences	Female
Mr. Ma Ming	Professor	Institute of Ecology and Geography in Xinjiang, Chinese Academy of Sciences	Male
Mr. Li Quansheng	Professor	Xinjiang Agricultural University	Male
Ms. Ye Mao	Professor	Xinjiang Normal University	Female

Name	Position	Organization	Gender
Mr. Zhang Xiaofeng	Engineer	Nanjing University	Male
Ms. Yang Yiyuan	Professor-level senior engineers	Xinjiang Forestry Research Academy	Female
Mr. Han Shangping	Senior Engineer	Administration of Forestry in Aletai Mountain in Xinjiang	Male
Ms. Mina	Deputy project manager	GEF Project Management Office in Xinjiang	Female
Ms. Sheng Yujie	finance officer	GEF Project Management Office in Xinjiang	Female
Mr. Mamuerbieke Makan	Depute Director- general	Administration of Liangheyuan Nature Reserve in Aletai Mountain in Xinjiang	Male
Mr. Cai Yinchao	Project Assistant	GEF Project Management Office in Xinjiang	Male
Mr. Wang Wei	Secretary of the Party committee	Government of Chaganguole Township in Qinghe County of Aletai Mountain	Male
Mr. Peng Tonglin	Director of General Office	Administration of Forestry and Grassland in Aletai Mountain in Xinjiang	Male
Mr. Hasitieer	Deputy Director	Jiangbutasi Village in Chaganguole Township	Male
Ms. Yang Shuhui	Community Expert	Local Non-Government Organization in Xinjiang	Female
Mr. Li Dehuai	Secretary	Administration of Liangheyuan Nature Reserve in Xinjiang	Male
Mr. Chen Chuanfei	Section chief	Business Department of Administration of Liangheyuan Nature Reserve in Xinjiang	Male
Ms. Huatiguli	Villager	Black Soap Group in Jiangbutasi Village	Female
Ms. Alemaguli	Villager	Black Soap Group in Jiangbutasi Village	Female
Ms. Rejiangman	Villager	Black Soap Group in Jiangbutasi Village	Female
Ms. Atila	Villager	Black Soap Group in Jiangbutasi Village	Female
Ms. Kuliqiaxi	Villager	Home Stay in Jiangbutasi Village	Female
Ms. Wunihua	Villager	Home Stay in Jiangbutasi Village	Female
Mr. Aerdake	Villager	Farm Tourism in Jiangbutasi Village	Male
Mr. Watihan	Villager	Factory of Eco-beef and Mutton in Jiangbutasi Village	Male
Mr. Hamaerbieke	Villager	Ranger from Jiangbutasi Village	Male
Mr. Entemake	Villager	Ranger from Jiangbutasi Village	Male
Mr. Hali	Villager	Ranger from Jiangbutasi Village	Male
Mr. Bateer	Villager	Ranger from Jiangbutasi Village	Male
Ms. Xiarebaniguli	Person in charge	Embroidery Cooperative in Jiangbutasi Village	Female
Ms. Haniziyila	Person in charge	Embroidery Cooperative in Jiangbutasi Village	Female
Ms. Reyizha	Person in charge	Representative of Co-Management with Local Community in Jiangbutasi Village	Female
Ms. Salikeguli	Person in charge	Representative of Co-Management with Local Community in Jiangbutasi Village	Female

Annex 4: List of Information Reviewed

1. Project documents

1) GEF Project Identification Form (PIF), Project Document and Log Frame Analysis (LFA)
2) Project Inception report
3) Implementing/executing partner arrangements
4) List and contact details for project staff, key project stakeholders, including Project Boards, and other partners to be consulted
5) Project sites, highlighting suggested visits
6) Midterm review (MTR) and other relevant evaluations and assessments
7) Management response to midterm review recommendations
8) Annual Project Implementation Reports (PIR), APR, QPR
9) Financial audit reports
10) Project budget, broken out by outcomes and outputs
11) Project GEF BD-1 Tracking Tool: baseline, midterm and terminal assessments
12) Financial Data including Combined Delivery Reports (CDR)
13) Actual cofinancing realized by the end of the project
14) Project monitoring reports, e.g., regarding the community level activities
15) Sample of project communications materials, i.e. press releases, brochures, documentaries, etc.
16) Comprehensive reports of subcontracts (even in Chinese for national evaluator's reference).
17) Relevant minutes of project meetings (even in Chinese for national evaluator's reference).

2. UNDP documents

18) Country Programme Document (CPD), 2016-2020
19) Country Programme Action Plan (CPAP), 2016-2020
20) UNDP Strategic Plan, 2014-2017
21) UNDP guidance for conducting Terminal Evaluations of UNDP-supported, GEF-financed projects, 2012
22) Social and Environmental Safeguard Standards, 2014

3. GEF documents

23) GEF focal area strategic Programme Objectives, GEF-5
24) Guidelines for GEF agencies in conducting terminal evaluation for full-sized projects, April 2017
25) GEF Gender Equality Policy and Guidance, 2018
26) GEF Cofinancing Guidelines, 2018

4. Other documents

27) National Biodiversity Strategy and Action Plan
28) National Reports to the Convention on Biological Diversity
29) Second National Wetlands Survey

Annex 5: Matrix of Rating Achievement of Project Objective and Outcomes

Indicator	Baseline	End of Project target	Self-Assessment by PMO	TE comments	TE assessment
Objective: To strengthen the management effectiveness of PAs to respond to existing and emerging threats to the globally significant biodiversity and essential ecosystem services in the Altai Mountains and Wetland Landscapes in Xinjiang Uyghur Autonomous Region				**Achievement of project objective: Satisfactory**	
Provincial Capacity: - Forestry Department - Water Resources Dept. - Environmental Protection	59% 60% 52%	All >70%	85% 87% 73%	Protected area management consolidated to the Department of Forestry and Grasslands.	**Achieved**
Financial sustainability: - Component 1: Legal, regulatory and institutional frameworks - Component 2: Business planning and tools for cost-effective management - Component 3: Tools for revenue generation	24% 20% 11%	40% 50% 40%	Completed By the end of 2018, AMFB had received government funding of $118,158,246, 5.34 times that of project plan. During 2014-2018, Xinjiang wetlands and NNRs received US $90,233.846 in subsidies and the Altay Prefecture received $20,604,615.	63.16% 54.24% 40.85% The terminal assessment of the GEF Financial Sustainability Scorecard (Part II) indicates improvements exceeding the end targets. There are inconsistencies in the baseline and terminal scorecard assessments; the assessments should be re-assessed with multiple stakeholder participation.	**Achieved**
Increase in PA coverage, strengthened resilience and connectivity in the AMWL		Incorporation of AMNFPPA into AMWL PA framework	The expanded PA of land landscape is 257,896ha. 5 new national are wetland reserves and 2 new national protected areas, a total area of 59,896 ha. In Kashan Mountain protected area of Altay Prefecture there's an increase of 198,000 ha of land landscape protection area. In 2014-2017, wetland conservation area in entire Xinjiang region showed an increase of 159,200 ha.	"Landscape Conservation and Sustainable Development Plan" of Altay Mountains and Liangheyuan Wetlands approved by the Altai Prefecture Administrative Office. The plan promotes a landscape approach; incorporation of AMNFPPA into AMWL PA framework not explicitly included in the plan.	**Partially achieved**
		Expansion of PA system in AMWL – with total increase of at least 150,000 ha in coverage		222,699 ha expansion of PA system in the AMWL, including 5 wetland parks and 198,504 ha of new coverage in the reinstated Kalamaili NR.	**Achieved**
		Regional collaboration with neighbouring PAs enhanced		Two memoranda of cooperation signed in 2014 and 2016 between nature reserve management administrations in China and Mongolia. Investigations carried out regarding establishment of wildlife corridors in the border area of the Altay Mountains.	**Achieved**
Outcome 1: The protection of wetland ecosystems through PA planning and management is enhanced in Altai Prefecture and XUAR through systemic, legal and institutional capacity strengthening				**Achievement of Outcome 1: Satisfactory**	

Indicator	Baseline	End of Project target	Self-Assessment by PMO	TE comments	TE assessment
Existence of effective legal framework for the Xinjiang PA system emplaced, enhancing the conservation status of natural wetlands within the 35 PAs in Xinjiang UAR	PA network design not optimized for resilience and connectivity	Provincial regulations for PAs proposed by the XFD, including wetland considerations, greater clarity of different management categories, and new framework for co-managed PA zones	Completed 1. On September 21, 2018, the standing Committee of the people's Congress of the autonomous region adopted an amendment to the regulations on Management of Xinjiang Natural Reserves. 2. Three nature reserves, wetland parks and 2 local counties and cities issued wetland conservation regulations. 3. Xinjiang has issued 11 policies, regulations and industry management measures, such as *the Scheme of Wetland Restoration System in Xinjiang*.。 4. The Technical specifications for Biodiversity Monitoring in Xinjiang Natural Reserves have been formulated, and nine industry standards and technical documents for development planning have been formulated. 5. 13 national wetland parks, 3 natural reserves issued management measures to further improve the management level of the natural reserves. 6. The 11 proposals submitted to the people's congresses and other departments of the autonomous region have affected many different areas such as agriculture, forestry, water, animal husbandry, fishing, tourism, poverty alleviation, environmental assessment and transport facilities, and are widely adopted and applied by the National People's Congress and the CPPCC. 7. Completing the compilation of training materials concerning wetland policy and regulations	An amendment to the "Regulation on Management of XUAR nature reserves" was adopted in Sep 2018. Several wetland PA's issued regulations during 2014-2017. Co-management remains a gap in the PA legislative framework	**Mostly achieved**
		At least two sectoral plans integrate PA objectives and biodiversity considerations, such as water resources and agricultural bureaus		The "Implementation plan for wetland conservation and restoration" issued by the XUAR government in 2017 is an important framework for cross-sectoral departments. Wetland issues addressed in several sector plans, including ecology and environment, tourism, mining and poverty alleviation.	**Achieved**
Improved capacity scorecard (SC) scores of Forestry Department for participatory approaches in PA planning and management (Q8 in SC), PA staff competencies (Q9 & 16-19 in SC), and public awareness and support (Q21 in SC)	Average score for Q8,9, 16-19 and 21 is 1.43. Most PA management plans not designed in participatory ways, and not comprehensive; and most PAs not managed collaboratively	Average score for Q8,9, 16-19 and 21 is 2.4 at minimum, through inter alia the following improvements: Majority of PAs in AMWL with updated and participatorially prepared management plans, including co-management components	Completed 1. Five PA management plans (4 excess) have been completed, all of which have been approved by the higher management department and applied in the PAs, including the Management Plan of the Altai Mountains and Liangheyuan NR Altay.	Average score: 2.29	**Mostly achieved**

Indicator	Baseline	End of Project target	Self-Assessment by PMO	TE comments	TE assessment
	Many Forestry and PA staff with inadequate skills for their jobs Systematic monitoring and reporting systems not established, limited availability or access to information necessary for PA operations, incl. biodiversity and socio-economic development situations in/near PAs	More systematic staff training program designed and initiated	2. During the lifespan of the project more than 30 training session had been held, training about 915 related personnel. The training course improved the professional skills and the management level of PA personnel. 3. An annual training seminar on the mainstreaming of ecological protection in Altay Prefecture is held in order to improve the awareness of the relevant departments to protect and promote the mainstreaming of ecological reserves of relevant departments, including the 4 sets of relevant leaders in Altay Prefecture as well as water conservancy, environmental protection, animal husbandry department and others. 4. A biodiversity monitoring system for protected areas has been established to continuously carry out field monitoring and investigation work. The biodiversity monitoring system has been expanded from Liangheyuan NR to five PAs, forming a PA monitoring network in all Altai Mountains . 5. *The Strategic Plan for the Altai Mountains and Liangheyuan Wetland Landscape Protection and Sustainable Development* and *Altai Ecotourism Guide* in the Altai Mountains had been approved by Altay Prefectureal Administration and forwarded to all relevant units in the area for implementation. 6. Big data system for ecological monitoring and management of PNRs and wetlands has been established, and the subsystem construction of 10 natural reserves and national wetland reserve has been completed. The construction of 48 sites of Xinjiang wetland reserves has been completed, which has sped up the construction of natural reserves and wetland informatization.	Updated management plans were developed for 5 protected areas. Management plans were not made for some of the nature reserves in the AMWL, including Jingtasi Rangeland PNR and Kalamaili Mountains PNR, or for wetland parks.	**Achieved**
		Accessible data and information sharing platform developed under supervision of XFD in support of PA management operationalised		The project delivered a substantive number of trainings; however, a systematic training program was not established as envisaged.	**Not achieved**
		Data sharing platform includes 'freeform' categories for observations or information (incl. complaints) submitted anonymously or by the public		A comprehensive information management system (big data) has been developed. As of April 2019, baseline data has been updated for 22 protected areas. Nature reserve websites have contact forms for submitting information, including complaints.	**Achieved**
Existence of operational safeguard measures to protect wetland habitat and biodiversity from infrastructure placement and mining	EIA procedures are not adequately followed leading to undesirable impacts from infrastructure construction and mining.	EIA law is strictly enforced for construction and mining projects affecting wetland PAs, with full participation of the wetland and PA management authorities.	Completed 1. The land degradation situation in the Altai Mountains has been evaluated, and 39 kinds of ecological restoration measures and models for the land in Altai Mountains and Ecological Restoration area have been	Wetland conservation has been addressed in EIA's in recent years.	**Achieved**

Indicator	Baseline	End of Project target	Self-Assessment by PMO	TE comments	TE assessment
	No legal obligation for post-mining rehabilitation. No system for reporting malfeasance, or through which to submit formal concerns or to make suggestions	Clear standards are officially set up and enforced with minimum requirements for post-extraction site restoration of mining sites.	summarized, which have been popularized and applied in areas with similar conditions. 2. A set of teaching materials about technical achievements on ecological restoration of mining areas and degraded land and training on complete technical skills had been developed, and land restoration training work has been carried out in protected areas. 3. A demonstration base for restoration and reconstruction of the mining area has been built. 4. A multidisciplinary research team for ecological management of mining area has been established.	Demonstration scale reclamation of abandoned mining sites has been completed; setting up and enforcing standards will require longer timeframes.	**Partially achieved**
		Hotline contact number operationalized – also see the information platform above – with referral system (i.e., to other sectors) in place		A specific hotline was not established, but there is an existing hotline service managed by China Post (No. 118114). And websites of the nature reserves contain contact forms that are actively being used.	**Achieved**
Outcome 2: The biodiversity of the Altai Mountains and Wetland Landscape is effectively conserved with a strengthened PA network and enhanced operational budget through adoption of a landscape level approach to conservation planning and environmental management				**Achievement of Outcome 2: Satisfactory**	
Increase in management effectiveness of AMWL PA complex, as per the average METT scores of individual Pas	METT scores: - Liangheyuan NR = 65 Kekesu Wetland NR = 71 - Buergen Beaver NR = 47 - Kanas NR = 64 - Ertix Keketuohai NR =28 Average = 55	METT scores: - Liangheyuan NR > 80 - Kekesu Wetland NR > 80 - Buergen Beaver NR > 65 - Kanas NR > 75 - Ertix Keketuohai NR > 60 Average = 72	- Liangheyuan NR 81 - Kekesu Wetland NR 77 - Buergen Beaver NR 70 - Kanas NR 77 -Ertix Keketuohai NR 67 Average=69	Liangheyuan NR = 81 Kekesu Wetland NR = 73 Buergen Beaver NR = 70 Kanas NR = 77 Ertix Keketuohai NR = 43 Average = 69 Several inconsistencies observed in baseline and terminal METT assessments. It would be advisable to redo these assessments.	**Achieved**
Improved ecological conditions of PAs, as per Ecosystem Health Index (EHI)	EHI scores: - Liangheyuan NR = 67 - Kekesu Wetland NR = 67 - Buergen Beaver NR = 57	EHI Scores: - Liangheyuan NR > 75 - Kekesu Wetland NR > 75 - Buergen Beaver NR > 70	- Liangheyuan NR 87 - Kekesu Wetland NR 78 - Buergen Beaver NR 71	Liangheyuan NR = 72.2 Kekesu Wetland NR = 72.2 Buergen Beaver NR = 83.3	**Achieved**
Reduction in incidence of new mining contracts in PAs in AMWL region	Gold mining still occurs in some PAs, despite current regulations (but no specific baseline figures available)	No mining occurs inside PAs in AMWL region	Completed Through many measures, such as propaganda, education and training, public awareness of wetland and biodiversity conservation has been improved, and the threat to biodiversity of AMWL has been reduced noticeably. In 2016, environmental protection supervision was carried out throughout Xinjiang and the problems found were rectified in all directions, and outstanding results have been achieved. Since the project was launched, the management and control of the mining has increased, and the protected areas have	Mining rights revoked from 78 sites within the Liangheyuan NR. No evidence that similar measures have been implemented in other PA's in the AMWL region.	**Achieved**

Indicator	Baseline	End of Project target	Self-Assessment by PMO	TE comments	TE assessment
			abolished 78 prospecting rights which had been previously approved by Altai Mountains and Liangheyuan NR , which were then legally written off and cleaned up to ensure there's no mining in the protected areas.		
Viable alternative options are developed for herding communities, that offset economic dependency on grazing inside Pas	No assistance available from PA system to help local communities with economic opportunities	New co-management structures are in place, which support and strengthen alternative livelihood options for Kazakh herders (and other forms of collaboration)	Completed 1. Established local community co-management system in Liangheyuan NR and three-level community co-management organizations at county, township and village levels, developed herdsmen's alternative livelihoods. 2. The demonstration villages conduct thematic training on community co-management, community alternative livelihoods. 18 sessions of training and educational activities have been held, with the direct participation of 447 people and indirect participation of 9,100 people. 3. Establish small funds for community development, which is used to support the development of alternative industries for herdsmen. The foundation has provided $26,154 loans to 10 households Rural government provides labor training and organizes labor transfer to gradually reduce grazing population in pastoral areas, a total of 1,842labour force have been removed.	Co-management committees set up for several communities near the Liangheyuan NR under Component 3. The committees are functioning but have not been formalized.	**Mostly achieved**
Cooperation between Altai-Sayan Ecoregion countries is enhanced	No conservation action plan for Chinese beaver	Beaver conservation action plan developed and adopted (agreed) by Altai Prefecture and the local government in Mongolia	Completed During the implementation of the project, China and Mongolia exchanged four visits and signed two memorandums of understanding on cooperation in biodiversity conservation in the Altai-Sayan eco-region between China and Mongolia and worked out the Beaver Protection Action Plan. This work has been supported by the Xinjiang government, and has promoted international cooperation in wildlife cross-border protection through cooperation in habitat protection, species conservation, community co-management, scientific research, and so on. The project supports beaver protection work between the Altai Beaver NR and Mongolia's Tawang NR, Monhk Khairkhan National Park,	Memorandum of cooperation signed in 2014 and 2016 between nature reserve management administrations in China and Mongolia. Agreement is at the site level, not the local government level.	**Mostly achieved**
	No relationship between two adjacent NRs in Altai Mtns	Tavan Bogd NP – Liangheyuan NR partnership MOU is reached		Memorandum of cooperation signed in 2014 between Tavan Bogd NP (Mongolia) and Liangheyuan NR.	**Achieved**

Indicator	Baseline	End of Project target	Self-Assessment by PMO	TE comments	TE assessment
			and as a result of mutual visits in 2015 and 2016, two memorandums on Biodiversity Conservation Cooperation in Altay-Sayan Ecoregion had been signed. . More intense exchange and cooperation between AMWL protected areas exchange and cooperation		
Operational budgets for PAs in AMWL increase	Operational budget for AMWL PA network is US$ 1,515,594 per year	Operational budget is increased by 40%, with new contributions from local, prefecture and provincial government	The annual operating cost of the mid-term review was $2,600,000, an increase of over 70 percent, 30 percent from the final target of 40 percent.	Baseline figures are questionable, with one PA (Kanas NR) making up 93% of the operational budget for the AMWL PA system. No evidence of new contributions from local, prefecture and autonomous region governments.	**Achieved**
Outcome 3: The adoption and development of a 'community co-management' approach to conservation in Liangheyuan Nature Reserve demonstrates improved management effectiveness for a wetland PA in the Altai Mountains and Wetland Landscape					
Reduction in biodiversity pressure from overgrazing	7,000 herding families graze livestock in the NR in summer, incl. 170 families (approx. 40,000 stock) in ecologically sensitive Sandaohaizi wetland	Livestock numbers reduced by 20% in Sandaohaizi wetland, with economic burden to local people offset with alternative (complementary) livelihoods	1. The co-management committee has formulated the village rules and regulations, participates in the development of community development plan, methods to use grassland resources and other related policies. 2. The community tours the entire Liangheyuan NR as a jointly managed zone to prevent poaching, repairs degraded pastures, cleans up garbage, and protects wetlands and wildlife habitats. 3. Up to 2018, 620 households registered as poverty - stricken have been trained to become ecological rangers in the reserve, playing an important role in protecting and monitoring, and adding to the family income. Attempts to develop PA-friendly products, community ecotourism, etc., to help local herdsmen find new sources of income have paid off.	Project progress reports indicate livestock numbers of 15,372 sheep-equivalent in 2017 and 11,763 sheep-equivalent in 2018 in Jiangbutas Village. Uncertain if the baseline figure was only for this village; Sandaohaizi wetland indicated as baseline.	**Mostly achieved**
	Management zones in Liangheyuan NR not rationalized	Zoning of Liangheyuan NR re-assessed and modified based on EHI surveys with illegal mining banned in core/buffer zones and grazing banned in core zones		Management zoning of the NR is reassessed in the updated master plan (2019-2028); the master plan is pending approval by the XUAR government.	**Partially achieved**
Enhanced socio-economic options to compensate for lost opportunities improving local economic situation	Community ecotourism not present in project area (Liangheyuan NR)	At least 3 community tourism ventures established, bringing benefit to at least 30 families serving as a model for up-scaling	Completed Two embroidery cooperatives have been set up in Jiangbutas Village, which employ a total of 21 people, 6 ecotourism families, 6 eco-farming families, 1 black soap production team, 1 handicraft family, and 1 youth entrepreneurship team. There have been 18 training sessions with 447 participants in alternative livelihood training. A total of 58	Ecotourism ventures strengthened for 6 households in Jiangbutas Village, Chaganguole Township, Qinghe County.	**Achieved**
	Avg. household income is 1,980 CNY/year in Sandaohaizi community	Average household income for park residents increased by at least 20%, as a result of new livelihood opportunities		At a demonstration scale, household income increased for those households that participated in the alternative livelihood activities. The number of participating households is _% of the	**Partially achieved**

Indicator	Baseline	End of Project target	Self-Assessment by PMO	TE comments	TE assessment
			families have switched from traditional occupations to new occupations, and 12 herdsmen have reduced their livestock loads according to their pasture capacity. With the increase of cooperative projects, sales channels / ways to broaden, families in the community enjoy steady growth in their income. In 2018, the chief of the women' s embroidery cooperative earned an average of $2,308 per month, and the cooperative members earned $1,077-2,308 per year.	total population of local communities near the NR.	
Reduction in biodiversity pressure from mining	6,800 ha of PA land in NR is still threatened by mining activities	Illegal gold mining activities stopped in NR, & restoration of 800 ha of land previously degraded by mining	Completed A large-scale restoration of abandoned mining areas has been carried out in the NRs. During the project period, 898 hectares of abandoned mining areas have been restored. The survey shows it has been well-restored.	Mining rights have been revoked for 78 sites within the NR, effectively stopping gold mining activities in the NR. Reclamation of abandoned mining sites completed in 415 ha in the Liangheyuan NR, 227 ha in the Kalamaili NR and 167 ha elsewhere in Fuyun County.	**Achieved**
Populations of threatened species (beavers, moose, wolverine) are stable	Wildlife populations: Beaver = 300-400 Moose = tbd Wolverine = tbd	All select wildlife populations are stable or increasing	In the reporting stage, the community participated in the management and monitoring work, and set up a leading group for monitoring Liangheyuan NR, in which the staff of each station and community took part in the monitoring work. A large number of wild animal activity traces were spotted, and a large number of active images of more than 10 wild animals, such as snow leopard, mink bear, ferret, northern goat, lynx, brown bear, red deer, snow rabbit and wolf, were recorded. The basic knowledge of the survival status of wild animals in Liangheyuan NR became available.	Beaver populations regularly monitored at the Buergen Beaver NR; there are limited beaver in the Liangheyuan NR. Populations of beaver families at the Buergen Beaver NR were 32 in 2014 and 38 in 2018. Moose not a relevant species for the Liangheyuan NR and no data available regarding wolverine.	**Partially achieved**

Annex 6: Cofinancing Table

Cofinancing Source	Type	GEF Agency		Government		Other		Total Cofinancing	
		Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual
GEF Agency:									
United Nations Development Programme (TRAC funds)	Cash	1,000,000	0					1,000,000	
UNDP-CICETE -Coca Cola Partnership on Water Governance	In-kind		100,000						100,000
Sub-total, UNDP		**1,000,000**	**100,000**					**1,000,000**	**100,000**
Government:									
National Government	Cash			16,500,000				16,500,000	
Provincial (XUAR) government, operating funds	Cash				10,499,308				10,499,308
Sub-total, Government (cash)				**16,500,000**	**10,499,308**			**16,500,000**	**10,499,308**
Government:									
National Government	In-kind			4,500,000				4,500,000	
National government, public welfare forest funds	In-kind				16,285,908				16,285,908
Sub-total, Government (in-kind):	**In-kind**			**4,500,000**	**16,285,908**			**4,500,000**	**16,285,908**
Total Cofinancing for Project Implementation:		**1,000,000**	**100,000**	**21,000,000**	**26,785,215**			**22,000,000**	**26,885,215**

Note: cost figures in United States dollars (USD)

Annex 7: Evaluation Consultant Code of Conduct Agreement Form

Evaluators / Consultants:

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

TE Consultant Agreement Form

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

Name of Consultants: James Lenoci, Liu Shuo

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

Signatures:

Budapest, 15 March 2019  James Lenoci, International Consultant / Team Leader	Beijing, 15 March 2019  Liu Shuo, National Consultant

Annex 8: Rating Scales

Outcome Ratings

The overall ratings on the outcomes of the project are based on performance on the following criteria:

a. Relevance
b. Effectiveness
c. Efficiency

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:

- 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.

The calculation of the overall outcomes rating of projects considers all the three criteria, of which relevance and effectiveness are critical. The rating on relevance determines whether the overall outcome rating will be in the unsatisfactory range (MU to HU = unsatisfactory range). If the relevance rating is in the unsatisfactory range then the overall outcome is in the unsatisfactory range as well. However, where the relevance rating is in the satisfactory range (HS to MS), the overall outcome rating could, depending on its effectiveness and efficiency rating, be either in the satisfactory range or in the unsatisfactory range.

The second constraint applied is that the overall outcome achievement rating may not be higher than the effectiveness rating.

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.

Sustainability Ratings

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

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

Project M&E Ratings

Quality of project M&E is assessed in terms of:

- Design
- Implementation

Quality of M&E on these two dimensions is assessed on a six point scale:

- Highly satisfactory (HS): There were no short comings and quality of M&E design / implementation exceeded expectations.
- Satisfactory (S): There were no or minor short comings and quality of M&E design / implementation meets expectations.
- Moderately Satisfactory (MS): There were some short comings and quality of M&E design/implementation more or less meets expectations.
- Moderately Unsatisfactory (MU): There were significant shortcomings and quality of M&E design / implementation somewhat lower than expected.
- Unsatisfactory (U): There were major short comings and quality of M&E design/implementation substantially lower than expected.
- Highly Unsatisfactory (HU): There were severe short comings in M&E design/ implementation.
- Unable to Assess (UA): The available information does not allow an assessment of the quality of M&E design / implementation.

Implementation and Execution Rating

Quality of implementation and of execution is 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 is rated on a six-point scale.

- Highly satisfactory (HS): There were no short comings and quality of implementation / execution exceeded expectations.
- Satisfactory (S): There were no or minor short comings and quality of implementation / execution meets expectations.
- Moderately Satisfactory (MS): There were some short comings and quality of implementation / execution more or less meets expectations.
- Moderately Unsatisfactory (MU): There were significant shortcomings and quality of implementation / execution somewhat lower than expected.
- Unsatisfactory (U): There were major short comings and quality of implementation / execution substantially lower than expected.
- Highly Unsatisfactory (HU): There were severe short comings in quality of implementation / execution.
- Unable to Assess (UA): The available information does not allow an assessment of the quality of implementation / execution.

Annex 9: Terms of Reference for Terminal Evaluation

TERMINAL EVALUATION TERMS OF REFERENCE

INTRODUCTION

In accordance with UNDP and GEF M&E policies and procedures, all full and medium-sized UNDP support GEF financed projects are required to undergo a terminal evaluation upon completion of implementation. These terms of reference (TOR) sets out the expectations for a *Terminal Evaluation (TE) of the two sister projects under the same CBPF-MSL (China Biodiversity Partnership Framework-Mainstream of Life) programme, they are: Project 1 (National Project, PIMS 4391),* Strengthening the Management Effectiveness of the Sub-System of Wetland Protected Areas for Conservation of Globally Significant Biodiversity*; Project 2 (Xinjiang Project, PIMS* 4596), Strengthening the Management Effectiveness of the Protected Area Landscape in Altai Mountains and Wetlands.

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

PROJECT SUMMARY TABLE

Project 1:

Project Title:	*Strengthening the Management Effectiveness of the Sub-System of Wetland Protected Areas for Conservation of Globally Significant Biodiversity*			
GEF Project ID: UNDP GEF Project ID:	4655 4391		*at endorsement (US$)*	*at completion (US$)*
Atlas award ID: Atlas project ID:	00069198 00083911	GEF financing:	2,654,771	2,654,771
Country:	China	IA/EA own:	N/A	N/A
Region:	Asia and Pacific	Government:	in-cash: 11,920,000 in-kind: 3,980,000	in-cash: 11,920,000 in-kind: 3,980,000
Focal Area:	Biodiversity	Other:	(UNDP) 900,000	(UNDP) 900,000
FA Objectives, (OP/SP):	BD1	Total co-financing:	16,800,000	16,800,000
Executing Agency:	State Forest Administration (SFA) (Reformed as NFGA--National Forestry and Grassland Administration in March 2018)	Total Project Cost:	19,454,771	19,454,771
Other Partners involved:	N/A	ProDoc Signature (date project began):		September 25, 2013
		(Operational) Closing Date:	Original: September 24, 2018	Actual: September 24, 2019

Project 2: PIMS 4596

Project Title:	Strengthening the Management Effectiveness of the Protected Area Landscape in Altai Mountains and Wetlands			
GEF Project ID: UNDP GEF Project ID:	4653 4596		*at endorsement (US$)*	*at completion (US$)*
Atlas award ID: Atlas project ID:	00070004 00084238	GEF financing:	3,544,679	3,544,679
Country:	China	IA/EA own:	N/A	N/A
Region:	Asia and Pacific	Government:	in-cash: 16,500,000 in-kind: 4,500,000	in-cash: 16,500,000 in-kind: 4,500,000
Focal Area:	Biodiversity	Other:	(UNDP) 1,000,000	(UNDP) 1,000,000
FA Objectives, (OP/SP):	BD1	Total co-financing:	22,000,000	22,000,000
Executing Agency:	Xinjiang Forestry Department	Total Project Cost:	25,544,679	25,544,679
Other Partners involved:	Liangheyuan Provincial Nature Reserve Management Bureau, Altai Mountains Forestry Bureau	ProDoc Signature (date project began):		February. 27, 2014
		(Operational) Closing Date:	Original: February 26, 2019	Actual: February 26, 2019

OBJECTIVE AND SCOPE

The project was designed to:

Project 1: The project goal is to deliver global biodiversity benefits by conserving China's wetlands through the strengthening of the sub-system of wetland PAs, thus enhancing conservation and management of these globally significant ecosystems. The project objective is to strengthen the sub-system of wetland protected areas to respond to the existing and accelerating threats to their globally significant biodiversity.

Three outcomes including:

Outcome 1: Wetland PA Sub-System Strengthened through Better Ecological Representation and Enhanced Management Capacity.
Outcome 2: External threats to Wetland PAs reduced through mainstreaming wetland PA considerations in sector planning.
Outcome 3: Increased knowledge management, lessons sharing, and awareness for wetland PAs.

Project 2*:* The project Goal is to enhance the effectiveness of XUAR's PA system to conserve globally significant biodiversity and to maintain healthy and resilient ecosystems with strategic emphasis on the regional PA wetland sub-system.

The project objective is to strengthen the management effectiveness of PAs to respond to existing and emerging threats to the globally significant biodiversity and essential ecosystem services in AMWL in northern XUAR, People's Republic of China.

The objective will be achieved through three outcomes:
Outcome 1: The protection of wetland ecosystems with PA planning and management is enhanced in XUAR through systemic, legal and institutional capacity strengthening;
Outcome 2: The biodiversity of AMWL is effectively conserved with a strengthened PA network and enhanced operational budget through adoption of a landscape approach to conservation planning and environmental management;
Outcome 3: The adoption and development of a 'community co-management' approach to conservation in Liangheyuan NR demonstrates improved management effectiveness for a wetland PA in the Altai Mountains and Wetland Landscape.

As the national project played key role for coordinate programme level functions for umbrella impact to all the seven child projects, UNDP would like the team to provide a synthesis report at program level to capture the program successes and impact. It will provide an overview of the findings and recommendations from the six individual TE reports within 2 weeks of the finalization of all six TE reports, which may need some Skype interview meetings for clarifications with 7 PMOs staff and FAO China, as well as NPD from programme level.
An example program synthesis report is available from the mid-term to provide guidance to the TE team.

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

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

EVALUATION APPROACH AND METHOD

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

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

to amend, complete and submit this matrix as part of an evaluation inception report, and shall include it as an annex to the final report.

The evaluation must provide evidence-based information that is credible, reliable and useful. The evaluator is expected to follow a participatory and consultative approach ensuring close engagement with government counterparts, in particular the GEF operational focal point, UNDP Country Office, project team, UNDP GEF Technical Adviser based in the region and key stakeholders. The evaluator is expected to conduct a field mission to **China,** including the following project sites **including Beijing, Xinjiang Uyghur Autonomous Region**. About 4 days for project 1, 12 days for project 2. All related travel expenses will be covered. Interviews will be held with the following organizations and individuals at a minimum: **(UNDP, NFGA, Xinjiang Forestry Department and related sub-contractors and consultants, Skype with other 5 PMOs and FAO China).**

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

EVALUATION CRITERIA & RATINGS

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

Evaluation Ratings:			
1. Monitoring and Evaluation	***rating***	**2. IA& EA Execution**	***rating***
M&E design at entry		Quality of UNDP Implementation	
M&E Plan Implementation		Quality of Execution - Executing Agency	
Overall quality of M&E		Overall quality of Implementation / Execution	
3. Assessment of Outcomes	**rating**	**4. Sustainability**	**rating**
Relevance		Financial resources:	
Effectiveness		Socio-political:	
Efficiency		Institutional framework and governance:	
Overall Project Outcome Rating		Environmental:	
		Overall likelihood of sustainability:	

PROJECT FINANCE / COFINANCE

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

Co-financing (type/source)	UNDP own financing (mill. US$)		Government (mill. US$)		Partner Agency (mill. US$)		Total (mill. US$)	
	Planned	Actual	Planned	Actual	Planned	Actual	Actual	Actual
Grants								
Loans/Concessions								
• In-kind support								
• Other								
Totals								

MAINSTREAMING

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

IMPACT

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

CONCLUSIONS, RECOMMENDATIONS & LESSONS

The evaluation report must include a chapter providing a set of **conclusions**, **recommendations** and **lessons**. Conclusions should build on findings and be based in evidence. Recommendations should be prioritized, specific, relevant, and targeted, with suggested implementers of the recommendations. Lessons should have wider applicability to other initiatives across the region, the area of intervention, and for the future.

IMPLEMENTATION ARRANGEMENTS

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

EVALUATION TIMEFRAME

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

Activity	Timing	Completion Date
Preparation	5 days	February 1, 2019
Evaluation Mission	16 days	March 25, 2019
Draft Evaluation Report	24 days	April 25, 2019
Final Report	10 days	May 15, 2019

EVALUATION DELIVERABLES

The evaluation team is expected to deliver the following:

Deliverable	Content	Timing	Responsibilities
Inception Report	Evaluator provides clarifications on timing and method	No later than 2 weeks before the evaluation mission.	Evaluator submits to UNDP CO
Presentation	Initial Findings by PPT	End of evaluation mission	To project management, UNDP CO
Draft Final Report	Full report, (per annexed template) with annexes	Within 3 weeks of the evaluation mission	Sent to CO, reviewed by RTA, PCU
Final Report*	Revised report	Within 1 week of receiving UNDP comments on draft	Sent to CO for uploading to UNDP ERC.
Synthesis Report	Only one synthesis report will be created, which will provide an overview of the findings from the six individual MTR reports	Within 2 weeks of the finalization of all six TE reports	Sent to the Commissioning Unit

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

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

TEAM COMPOSITION

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

The Team members must present the following qualifications:

Competencies

- Strategic technical and intellectual skills in the substantive area with global dynamic perspectives;
- Leadership, innovation, facilitation, advocacy and coordination skills;
- Ability to manage technical teams and engage in long term strategic partnership;
- Entrepreneurial abilities and ability to work in an independent manner;
- Ability to work effectively in a team, with good relationship management skills
- Strong managerial and coordination skills, including ability to coordinate the development of large, complex projects;
- Demonstrated ability to operate effectively in a highly complex organizational context;
- Ability to maintain high standards despite pressing deadlines;
- Excellent communication (both oral and written) and partnership building skills with multi-dimension partners and people, skill for conflict resolution and negotiation;
- Excellent writing skills, especially in the preparation of official documents and reports;
- Good knowledge of China's environmental and socio-economic context.

Required Skills and Experience

Education

- An advanced degree in conservation, natural resources management, environmental science or related fields, preferably in PA conservation and management.

Experience

- Minimum 3 years of relevant professional experience including Project development, implementation and evaluation
- Knowledge of UNDP and GEF, such as GEF policy and practices, GEF project requirements;
- Previous experience with results-based monitoring and evaluation methodologies;
- Technical knowledge in the targeted focal area(s) including biodiversity conservation, agriculture, natural resources co-management, integrated planning, etc.
- Expertise in economic and social development issues
- Good communications and writing skills in English
- Professional experiences in working in China and with Chinese counterparts would be an advantage.
- Working experiences in high altitude areas

Language

- Fluency in written and spoken English is required;
- Good knowledge of Chinese is an asset.

IT Skills:

- Good IT skills.

EVALUATOR ETHICS

Evaluation consultants will be held to the highest ethical standards and are required to sign a Code of Conduct (Annex E) upon acceptance of the assignment. UNDP evaluations are conducted in accordance with the principles outlined in the UNEG 'Ethical Guidelines for Evaluations'

PAYMENT MODALITIES AND SPECIFICATIONS

(*this payment schedule is indicative, to be filled in by the CO and UNDP GEF Technical Adviser based on their standard procurement procedures)*

%	Milestone
10%	At contract signing
40%	Following submission and approval of the 1ST draft terminal evaluation report
50%	Following submission and approval (UNDP-CO and UNDP RTA) of the final terminal evaluation report

APPLICATION PROCESS

Applicants are requested to apply online (http://jobs.undp.org etc.) by **Oct. 8, 2018.** Individual consultants are invited to submit applications together with their CV for these positions. The application should contain a current and complete C.V. in English with indication of the e-mail and phone contact. Shortlisted candidates will be requested to submit a price offer indicating the cost of the assignment (mainly the daily fee).

UNDP applies a fair and transparent selection process that will take into account the competencies/skills of the applicants as well as their financial proposals. Qualified women and members of social minorities are encouraged to apply.

Annex 10: Signed TE Final Report Clearance Form

Terminal Evaluation Report Reviewed and Cleared By:	
UNDP Country Office	
Name:	
Signature:	Date:
UNDP GEF Regional Technical Advisor	
Name:	
Signature:	Date: