



FAO-GEF Project Implementation Report

2023– Revised Template

Period covered: 1 July 2022 to 30 June 2023

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1. Basic Project Data

General Information

Region:	Asia and The Pacific Region
Country (ies):	China
Project Title:	Biodiversity Conservation and Sustainable Land Management in the Soda Saline-alkaline Wetlands and Agropastoral Landscapes in the Western Area of the Jilin Province (Jilin-BCSLM)
FAO Project Symbol:	GCP/CPR/048/GFF
GEF ID:	4632
GEF Focal Area(s):	Biodiversity, Land Degradation,
Project Executing Partners:	The Department of Water Resources of the Jilin Province (DWR Jilin)
Initial project duration (years):	4 years
Project coordinates: <i>This section should be completed ONLY by:</i> a) Projects with 1st PIR; b) In case the geographic coverage of project activities has changed since last reporting period.	

Project Dates

GEF CEO Endorsement Date:	23 June 2015
Project Implementation Start Date/EOD :	18 November 2016
Project Implementation End Date/NTE¹:	18 November 2020
Revised project implementation End date (if approved) ²	30 April 2024

Funding

GEF Grant Amount (USD):	2 627 000
Total Co-financing amount (USD)³:	16 800 000
Total GEF grant delivery (as of June 30, 2023 (USD):	USD 2,557,197
Total GEF grant actual expenditures (excluding commitments) as of June 30, 2023 (USD)⁴:	USD 2,336,035
Total estimated co-financing materialized as of June 30, 2023⁵	16,884,715

¹As per FPMIS

²If NTE extension has been requested and approved by the FAO-GEF Coordination Unit.

³This is the total amount of co-financing as included in the CEO Document/Project Document.

⁴The amount should show the values included in the financial statements generated by IMIS.

⁵ Please refer to the Section 13 of this report where updated co-financing estimates are requested and indicate the total co-financing amount materialized.

M&E Milestones

Date of Last Project Steering Committee(PSC) Meeting:	March, 2023
Expected Mid-term Review date ⁶ :	July, 2021
Actual Mid-term review date (if already completed):	July, 2021
Expected Terminal Evaluation Date ⁷ :	July, 2023
Tracking tools (TT)/Core indicators (CI) updated before MTR or TE stage (provide as Annex)	<i>[It is mandatory for projects to update the TT or CI before Mid-Term or Terminal Evaluation stage. For projects that have a planned MTR or TE in the next fiscal year, please indicate YES here and provide the updated TT or CI as Annex.] Yes</i>

Overall ratings

Overall rating of progress towards achieving objectives/ outcomes (cumulative):	<i>Satisfactory</i>
Overall implementation progress rating:	<i>Satisfactory</i>
Overall risk rating:	<i>Low</i>

ESS risk classification

Current ESS Risk classification:	Low
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Status

Implementation Status (1 st PIR, 2 nd PIR, etc. Final PIR):	5 th PIR
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Project Contacts

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⁶The Mid-Term Review (MTR) should take place after the 2nd PIR, around half-point between EOD and NTE. The MTR report in English should be submitted to the GEF Secretariat within 4 years of the CEO Endorsement date.

⁷The Terminal Evaluation date should be discussed with OED 6 months before the project's NTE date.

2. Progress towards Achieving Project Objective(s) (Development Objective)

(All inputs in this section should be cumulative from project start, not annual)

Please indicate the project's main progress towards achieving its objective(s) and the cumulative level of achievement of each outcome since the start of project implementation.

Project or Development Objective	Outcomes	Outcome indicators ⁸	Baseline	Mid-term Target ⁹	End-of-project Target	Cumulative progress ¹⁰ since project start Level at 30 June 2023	Progress rating ¹¹
The project's global environmental objective is to demonstrate and replicate an integrated	Outcome 1.1: Adoption of integrated SLWM model including biodiversity conservation by local governments and drafting of corresponding policy implementation guidelines.	Adoption of and clear political commitment to the integration of the SLWM model including biodiversity conservation by local governments and relevant line agencies at county level in primary and replicate areas (saline-alkaline landscapes with similar ecosystem throughout West Jilin)	a) No local adoption of integrated SLWM Model in West Jilin b) Theoretical design of model exists based on limited empirical testing and hydrological and ecosystem modelling in		a) Model adopted by Da'an, Qianguo counties and Songyuan prefecture b) SLWM Model for Western Jilin piloted in primary project areas ¹² and adopted for implementation by Qian'an and Zhenlai county governments and Baicheng prefecture, especially in Da'an irrigation district and Qianguo irrigation district	The SLWM model was adopted by Da'an, Qianguo counties and Songyuan prefecture piloted not only in primary project areas ¹² , (Da'an irrigation district and Qianguo irrigation district) but also in Baishatan and Wujiazi irrigated area etc. Completed 100% against project objectives.	HS

⁸This is taken from the approved results framework of the project.

⁹Some indicators may not identify mid-term targets at the design stage (refer to approved results framework) therefore this column should only be filled when relevant.

¹⁰Please report on results obtained in terms of Global Environmental Benefits and Socio-economic Co-benefits as well.

¹¹Use GEF Secretariat required six-point scale system: **Highly Satisfactory (HS)**, **Satisfactory (S)**, **Moderately Satisfactory (MS)**, **Moderately Unsatisfactory (MU)**, **Unsatisfactory (U)**, and **Highly Unsatisfactory (HU)**.

¹²Niuxintaobao, Dagangzipao and Xiaoximipao in Da'an County, Baicheng Prefecture; and Xinmiaopao in Qian'guo County, Songyuan Prefecture.

<p>model for Sustainable Land and Water Management (SLWM) in saline-alkaline productive landscapes including rehabilitation and biodiversity conservation in wetlands.</p> <p>The project's development objective is to</p>			Songyuan irrigation system				
		<p>a)Drafting and approval of county level policy implementation guidelines b)Outlining the details of the rollout of the SLWM model including specific responsibilities of stakeholders</p>	<p>No local implementation of integrated SLWM Model in West Jilin</p>		<p>SLWM Model for Western Jilin piloted in primary project areas and adopted for implementation by Qian'an and Zhenlai county governments and Baicheng prefecture</p>	<p>The SLWM model piloted in different irrigation(the area was more than the primary project areas) and incorporated into the "14th five years plan" of the four counties in Western Jilin (i.e.Da'an, Qian'guo, Qian'an and Zhenlai) and the government project "river and lake connection project in Western Jilin". The outline of the 14th five years plan for the national economic and social development of Baicheng city contains important contents such as water conservancy projects, grassland restoration, wetland protection projects, etc. The outline of the 14th five years plan for national economic and social development of Zhenlai county includes ecological protection and restoration, improvement of water ecological environment and so on. Completed 100% against project objectives.</p>	<p>HS</p>
	<p>Outcome 1.2 :Adjustments of policy plans, legal provisions and regulations to mandate the</p>	<p>Wetlands biodiversity conservation and SLWM model incorporated into policies, plans, and</p>	<p>a) Existing body of laws and regulations on water use</p>	<p>a) incorporated in the "River connection of lakes for rehabilitation</p>	<p>At least a 40% increase in BD-2 TT score; 40-60% in LD PMAT score; incorporation of SLWM and BD conservation</p>	<p>The monitoring of biodiversity indicated an increase in biodiversity by 40% and LD PMAT score of 40%-60% compared to the baseline measurements made at the project design stage.</p>	<p>S</p>

<p>provide long-term sustainable flow of income to farmers' communities from farming systems (crop, livestock and fish) in western Jilin province by building an ecologically resilient productive landscape.</p>	<p>SLWM model implementation and replication (including location-specific environmental standards for salinity and agrochemical levels)</p>	<p>regulations for the agriculture and water resource management sectors (including land and water use planning and management) in western Jilin province</p>	<p>efficiency, water quality in the agricultural sector without clear landscape perspective integrating questions of biodiversity and land degradation in an integrated way b) Individual projects have addressed saline alkaline soil degradation, but no coordinated and sector integrated landscape approach for western Jilin province has been applied</p>	<p>of the western Jilin ecosystem" investment program</p>	<p>recommendations into five years development plans in 4 counties and at least one investment program for western Jilin province</p>	<p>Incorporation of SLWM and BD conservation recommendations into five years development plans in 4 counties and project of "river and lake connection project in Western Jilin" . Completed about 100% against project objectives.</p>	
		<p>Wetlands biodiversity conservation and SLWM model replication in saline</p>	<p>About 2,489,500 ha saline alkaline land under desertification and</p>		<p>About 6,060 ha¹³ of saline alkaline landscapes has managed under the application of wetlands biodiversity conservation</p>	<p>The wetland area was restored about 8728 hectares. 220,000 hectares of Songyuan irrigation area, including partial Da'an irrigation area and Qian'guo</p>	<p>HS</p>

¹³3,060 ha in Xinmiaopao and 3,000 ha in Niuxintaobao.

		alkaline landscapes in western Jilin province	degradation process and wetlands drying up in western Jilin province		and SLWM practices at the end of the project and 319,253 ha ¹⁴ years after the end of the project	irrigation area, were managed under the application of wetlands biodiversity the SLWM practices was applied in different irrigation about 319,253 ha ¹⁵ at the end of the project	
Outcome 1.3 Training of decision makers, government and technical staff as well as local communities, extension workers and individual farmers (training in SLWM agricultural practices)		Decision makers and technicians from water resource, agriculture, forestry, environmental protection bureau at prefecture and county level and Chagan Lake Administration are trained	About 80 decision makers and technical staffs have participated in similar training; training needs to be complemented and extended		a) 60 technicians and decision makers from relevant line agencies of Da'an, Qian'guo, Qian'an and Zhenlai Counties are trained in procedures and technologies included in SLWM and BDC models b) 80 decision makers from provincial, prefecture and county levels attended the SLWM and BDC related policy consultation workshop and built agreement on how to replicate the primary areas	There are nearly 400 people more than 120 technicians and 80 decision makers from relevant line agencies of Da'an, Qian'guo, Qian'an and Zhenlai Counties are trained Completed 100% against total progress.	HS
		Extension workers and farmers trained in application of SLWM practices including green/ecological, conservation, water saving and grassland restoration practices	About 120 farmers have participated in similar training; training needs to be complemented		a) 400 farmers and 70 extension workers trained	There are more than 400 people participated in the meeting from relevant line agencies of Da'an, Qian'guo, Qian'an and Zhenlai Counties are trained More than 450 wetland professionals and front-line employees from 103 wetland management departments,	HS

¹⁴ Composed of 220,000 ha for Songyuan Irrigation Area and 99,253 ha for Zhenlai and Da'an (Tao'erhe) irrigation areas.

¹⁵ Composed of 220,000 ha for Songyuan Irrigation Area and 99,253 ha for Zhenlai and Da'an (Tao'erhe) irrigation areas.

			d and extended			universities and scientific research institutions participated in the training, and some units organized offline special learning activities around the training. Completed about 100% against total progress.	
Outcome 2.1: Water management guidelines for agricultural use (based on and adjustable to the information gathered by the comprehensive water monitoring system)		Water management guidelines for agricultural water use as well as use of chemicals and pesticides formulated and implemented in all project sites	No water management guidelines		Water management guidelines for agricultural water use as well as use of chemicals and pesticides formulated and implemented in all project sites	Developed the guidelines for "agricultural irrigation water and agricultural water saving", "the technical model and operation guidelines for returning straw to full coverage and no tillage sowing", and "technical guidelines for the restoration and treatment of soda saline-alkali land". The number of guideline was more than the indicator in project document. Completed about 100% against total progress.	HS
		Ground water levels stabilized in the project area and positive demonstration effects for the wider irrigation area	Current ground water 7~10m; Groundwater level declining		Groundwater level no lower than 7 meter in the project area, which is the minimum required eco-indicator for sustaining the underground water reserve	Groundwater level monitoring in different phases have been carried out in Niuxintaobao wetland. Groundwater fluctuated periodically. In September, the buried depth of groundwater was between 6-7m. Completed about 100% against total progress.	S
	Outcome 2.2	Degradation and desertification processes stopped	a)101,360 ha saline alkaline land under		Degradation and desertification processes reversed in 47,690 ha ¹⁶	Degradation and desertification processes reversed in 47,690 ha rehabilitated saline-alkaline land	HS

¹⁶ Composed of 45,490 ha from existing Qian'guo irrigated area and 2,200 ha in Niuxintaobao.

Design, testing and adoption of sustainable agricultural practices for water and land use in coherence with the overarching SLWM model including the development of technical guide-lines for implementation	and reversed in saline-alkaline land with improved vegetation cover resulting in increased productivity and reduced vulnerability to climate variability	desertification and degradation process in Songyuan irrigation area. b)69,420 ha low-yield farmland		rehabilitated saline-alkaline land by the end of the project, and 125,290 ha ¹⁷ will be improved by 2025 depending on the construction process of the relevant irrigation projects	and 125,290 ha ¹⁸ will be improved by 2024 depending on the construction process of the relevant irrigation projects.	
	SLWM agricultural practices adopted in Qian'an, Da'an and Qian'guo pilot sites and scaled to the total Songyuan irrigation area of integrated production landscape contributing to the conservation of wetlands biodiversity	Some experiments have been done with different SLWM practices in the Matsubara experimental station located in the Songyuan irrigation area, but no adoption by farmers irrigation area 5 years after the project		SLWM practices adopted in 47,690 ha ¹⁹ at end of the project, and scaled to 170,780 ha covering the total saline-alkaline land in the Songyuan especially in Da'an irrigation district and Qian'guo irrigation district	Qian'guo irrigation about 47,690 ha adopted the SLWM and covered the most saline-alkaline land in the Songyuan and Baicheng (about 175,115ha)especially in Da'an irrigation district and Qian'guo irrigation district Completed about 100% against total progress.	HS
	Develop technical guidelines	No technical guidelines	a) Technical guidelines developed	Technical guidelines in i) salinity management for irrigated fields (including 'green/ecological' paddy production, irrigation area	Completed the 13 technical guidelines . Formulated pilot work plan, written technical guidelines (green ecological	HS

¹⁷ Total of 170,780 ha of saline-alkaline land in the Songyuan irrigation area minus 45,490 ha from Qian'guo.

¹⁸ Total of 170,780 ha of saline-alkaline land in the Songyuan irrigation area minus 45,490 ha from Qian'guo.

¹⁹ Composed of 45,490 ha from existing Qian'guo irrigated area and 2,200 ha in Niuxintaobao.

					conservation agriculture and reducing agrochemicals, ii) reclaiming saline irrigation areas (reclaiming saline alkaline wastelands by washing out the salt), iii) rain-fed farmland (conservation agriculture), and iv) rehabilitation of native grassland (irrigation and enclosure)	agriculture, conservation tillage, water-saving irrigation, pasture recovery, saline-alkali land restoration and governance) . Completed about 100% against total progress.	
		Farmer’s households adopt SLWM practices and benefit from increased land productivity in the pilot sites and project landscape	No farmer’s households have adopted SLWM practices and land and other input productivity are.i) 4,590 kg/ha and 12,400 CNY/ha for paddy fields ii) 5,625 kg/ha and xx11,000 CNY/ha for corn in rain-fed land iii) 800 kg/ha and 640 CNY/ha for grassland iv) 300kg/ha		27,000 farmer’s households (4,000 in Da’an, Qian’an and 23,000 in Qian’guo) adopt SLWM practices and Land productivity increased to: <ul style="list-style-type: none"> • 9,750 kg/ha for ca. 200ha of paddy rice fields (scaled to 45,000ha²⁰ in PY4 to PY4+5) •8,500 kg/ha and 9500 CNY/ha for ca. 200ha of corn in rain-fed land (scaled to 45,000ha²¹ in PY4to PY4+5) • 1500 kg/ha and 1200 CNY/ha for 2,000ha rehabilitated grassland • Fish: 350kg/ha and 800 Yuan/ha net income for 3,060 ha in Xinmiaopao,3,000 ha in 	Mostfarmer households adopt SLWM practices The rice yield was 9800kg / hafor ca. 300ha of paddy rice fields, which has become a demonstration model of paddy field ecological agriculture. ShenjingziPasture has200 ha of conservation tillage, with a yield of 13,000kg / ha. 3,500 hectares of saline-alkali land were improved. 1,500 kg/ha and 1,200 CNY/ha for 2,000ha in Shenjingzi Pasture rehabilitated grassland The fishery income of Niuxintaobao and Xinmiaopao wetlands has on average more than 800 yuan / ha.	S

²⁰45,000 ha is the existing Qian’guo irrigation area.

²¹45,000 ha is the existing Qian’guo irrigation area.

			of fish and 75kg/ha of river crabs in Niuxintaobao		Niuxintaobao and 2,668hain Dagangzipao and Xiaoximipao		
Outcome 2.3: Establish and gain local agreement on Integrated Land and Water Management Plans (ILWMP) for agricultural use in coherence with the overarching SLWM model	Prepare comprehensive and dynamic ILWMP for the project area that integrate agriculture, pasture management, biodiversity conservation and ecosystem service preservation with salinity and water management		No ILWMP		One Integrated land and water management plan (ILWMP) for Songyuan area covering 220,000 ha agreed with stakeholders	The model of Sustainable Land and Water Management(SLWM) was built in Da'an irrigation area with Integrated Land and Water Management Plans(ILWMP). One Integrated land and water management plan (ILWMP) for Songyuan area agreed with stakeholders Completed about100% against total progress.	S
	Integrated land and water management plan (ILWMP) for the entire Songyuan Area consulted, validated and agreed with relevant stakeholders				One Integrated land and water management plan (ILWMP) for Songyuan area covering 220,000 ha agreed with stakeholders	Completedthe Integrated Land and Water Management Plans(ILWMP) and agreed with most stakeholders. Completed about100% against total progress.	S
	Integration of the ILWMP guidelines and principles into the training programs of the WRB and CAD (measured by the number of training packages updated)			Action plan for implementation of the ILWMP through replication of SLWM practices prepared		Implementation of ILWMP in 167,000 ha ²² by the end of the project and 220,000 ha 5 years after the end of the project	The project teamsurveyed and mapped the ditch system of Da'an Irrigation District, refined the version 2.0 of the sustainable land and water resources management model (SWLM), The salt balance model was used to quantitatively predict the total amount of salt in farmland irrigation recession in Da'an irrigation area and the

²²167,000 ha represents the Songyuan Irrigation Area minus the area of grassland.

						<p>carrying capacity of reed wetland in the drainage area. Implementation of ILWMP in Qianguo and Da'an irrigation area and Qian'an irrigation about 217,326ha Completed about 100% against total progress.</p>	
Outcome 3.1 Rehabilitation of wetlands in project sites 1&2 and improved biodiversity conservation leveraging the baseline irrigation infrastructure ; water flow management in-formed by monitoring system (see 3.2)	Rehabilitation and conservation of wetlands managed as an integrated part of the freshwater fishery and irrigated crop and grassland production landscape providing important habitats for endangered migratory birds			b) 2,668 ha Dagangzipao and Xiaoximipao	Rehabilitation and conservation of 8,728 ha wetland (direct impact pilot area) and replication measures underway for entire 49,883 ha of wetlands in the project landscape	<p>A total of 8728 hectares of wetlands were restored and conserved including Niuxintaobao,Dagangzi, xiaoximi,and Xinmiao wetland and wetland restoration was carried out smoothly and replication measures underway for entire wetland in west Jilin province which was more than 49,883 ha of wetlands especially in the internationally important wetlands. Completed about 100% against total progress.</p>	HS
	Improved biodiversity indicators for: population and number of IUCN red listed Crane species (Siberian, Hooded, White-naped, and Red crowned)				Population and number of IUCN red listed Crane species (Siberian, Hooded, White-naped, and Red crowned), plus other migratory species mentioned in the baseline table4, maintained or increased in the project landscape by the end of the project (<5% variance)	<p>Through the implementation of the project, the breeding bird population in the project area has increased by 9 species, and the breeding record of waterfowl has increased by 4 species. The increase in the species and number of breeding waterfowl is the performance of improving the function of the region to provide breeding habitat for birds. During migration, rare bird species are scattered in the marshes around the project area. In autumn, there are 410 white cranes and 322 oriental white storks inhabiting</p>	HS

						around the small sago bubble. In autumn, the white crane used the regional habitat for 37 days. Completed about 100% against total progress.	
Outcome 3.2 Design and establishment of a comprehensive monitoring system to monitor salinity as well as pollutant levels, water flow quantities, and biodiversity development (early warning system to inform adjustments of water management and farming practices throughout the project)	Establish comprehensive monitoring system measuring pollutants and salinity across the project area	Theoretical model for water management exist for the Songyuan irrigation system. Equipment for the control and measurement system are partly purchased, but need to be installed. Guidelines need to be developed according to the analyzed data from the system	a) Water quality and quantity measurement system in Niuxintaobao functioning	Water quality and quantity measurement system (including protocols, databases and reporting formats) installed in pilot areas of Xinmiaopao and Niuxintaobao, will be functioning by the end of PY1 and PY2 respectively and information will be incorporated into the ILWMP by the beginning of PY4	Monitoring points were set at the water inlet, wetland and water outlet of the project sites. Monitored the surface water quality including pH, COD, BOD, DO, TP, TN, TK, total salt, typical pesticides, etc. the information has been incorporated into the ILWMP Completed about 100% against total progress.	S	
		Agricultural non-point source pollution controlled and monitored within the project area	a) Indicators for agriculture non-point source below required	Measurements for agriculture non-point source below required values	Combined with farming phenology, it can regulate the hydraulic retention time, and vegetation management, separately treat the drainage water and rain flood, and allocate the water resources of the paddy field-wetland system more effectively. the dynamic	S	

						monitoring results show that the project wetland runs continuously and healthily, and the removal efficiency of salinity, nutrients and other non-point source pollutants in the drainage water reaches more than 40% when the load is high in May, and decreases when the load is low in July and August, but it can still effectively improve the quality of the drainage water. Completed about 100% against total progress.	
		Model for water quality requirements and ecological water demand for rehabilitation of wetlands developed based on the data collected from buffer zone inflow and outflow water quality and quantity measurement			One model developed and will be incorporated into the SLWM Model by the end of Y4	The ecological water demand in Niuxintaobao had been included in the model of SWLM Completed about 100% against total progress	S
		Buffer zone inflow and outflow water quality and quantity systematically monitored and analyzed, and pollution risk early warning system and inflow and outflow		Providing monitoring information and data	Buffer zone inflow and outflow water quality and quantity systematically monitored and analyzed, and pollution risk early warning system and inflow and outflow management strategy implemented	Systematic monitoring, early warning system in Xinmiaopao wetland and inflow and outflow operation strategy in place in 2020 and providing monitoring information and data in 2021 and 2022. Completed about 100% against total progress.	S

		management strategy implemented			Systematic monitoring, early warning system and inflow and outflow operation strategy in place by Y2 and providing monitoring information and data in Y2, Y4 and Y5		
		Establish comprehensive monitoring system measuring biodiversity across the project area	Initial BD monitoring in Chagan Lake Nature Reserve, no monitoring in surrounding areas (i.e. project area)	Data collected and analyzed periodically	Biodiversity monitoring system operating monitoring at least the species mentioned in outcome 3.1.2 and providing data on aquatic organism biodiversity changes in four wetland pilot areas (Xinmiao, Niuxintao, DagangziandXiaoximi) and giving monitoring feedback information and suggestions to modifying the irrigation and water supply strategy	Since the implementation of the project, there has been a significant increase in the species 13 species were found in the Niuxintao moisturizing area, including 12 indigenous species. 21 fish species were found in the Dagangzi Pao wetland, including 12 indigenous species. 18 fish species were found in the Xinmiao Pao wetland, including 12 indigenous species, The degree of soil salinization and alkalization in Dagangzi Pao significantly decreased; The diversity of planktonic organisms in water bodies has significantly increased; Along different water salt gradients, salt-tolerant plants (such as soda ash and soda ash) and weakly salt-tolerant plants (such as reed and cattail) are planted in sequence, forming a wetland plant community with high spatial heterogeneity and complex structure in the salt alkali bare land water land ecotone water body,	HS

						<p>The cumulative number of bird species recorded is 131, which is significantly higher than the historical record of 73 species. The number of individuals has increased from 13,202 in the autumn of 2020 to 34,223 in the autumn of 2022. A total of 5 species of national first level protected birds and 19 species of national second level protected birds have been recorded. Completed about 100% against total progress.</p>	
<p>Outcome 3.3: Long-term management system to protect rehabilitated wetlands and conserve wetland biodiversity; includes a wetland co-management approach for local communities as well as awareness raising efforts wetland biodiversity conservation</p>	<p>Wetlands co-management committees with local communities and county reed administration and biodiversity co-management plan for the wetlands and buffer zone prepared and under implementation</p>		<p>a) 1 wetland co-management committees established b) 3 biodiversity co-management plans for the wetlands and buffer zone developed</p>	<p>a) 3 wetlands co-management committees established, 3 biodiversity co-management plans for the wetlands and buffer zone developed and under implementation</p>	<p>From 2020 to 2022, there are three wetland management committees that have been established with biodiversity co-management plan. Completed about 100% against total progress.</p>	S	
	<p>Awareness raising campaign on wetlands biodiversity conservation implemented in</p>		<p>a) Campaign implemented reaching</p>	<p>a) Campaign implemented reaching 6 communities and at least 40% of the families were aware of the wetlands biodiversity and</p>	<p>Developed the plan of wetland community co-management. Six community activities totally had been carried out. Completed</p>	S	

		rehabilitated and existing wetlands in the area of influence of the Songyuan irrigation area		2 communities	habitat conservation needs (evaluated through campaign impact survey)	about 100% against total progress.	
Outcome 4.1: Monitoring and evaluation of project activities, dissemination of knowledge and information and public awareness raising		Project monitoring system is set up and operated for ensuring the effective implementation of the planned project activities and providing six-monthly reports on progress in achieving project outputs and outcomes		a) 4 six-monthly progress reports and financial reports; regular monitoring missions conducted by PMO M&E staff	8 six-monthly progress reports and financial reports; regular monitoring missions conducted by PMO M&E staff	Completed the progress reports and financial reports for four periods. Completed about 100% against total progress.	S
		Annual review and planning workshop carried out to ensure the achievements of the intended outputs and outcomes; Midterm and final evaluation reports		a) Mid-Term Evaluation	2 Evaluations conducted	Overall rating of the project performance and achievement of outcomes was "Moderately Satisfactory". Completed about 100% against total progress.	S
		Project results and best practices disseminated		a) 1 up-to-date project website and 4 six-monthly project newsletters	1 up-to-date project website and 8 six-monthly project newsletters	During the implementation of the project, the summary of the project results has been publicized and disseminated in local government, and publicized by media. Science and Technology Daily reported that "Protect the black land and firmly grasp the initiative of food security". "The Lishu pattern that	S

						conservation tillage with straw returning to the field helps to achieve high grain yield in Jilin province”, CCTV net reported. Jilin TV news reported “For the earth's harvest, Da'an, the fragrance of rice on saline alkali land”.	
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Measures taken to address MS, MU, U and HU ratings on Section 2

Outcome	Action(s) to be taken	By whom?	By when?

3. Implementation Progress (IP)

(Please indicate progress achieved during this FY as per the Implementation Plan/Annual Workplan)

Outcomes and Outputs 23	Indicators (as per the Logical Framework)	Annual Target (as per the annual Work Plan)	Main achievements ²⁴ (please avoid repeating results reported in previous year PIR)	Describe any variance ²⁵ in delivering outputs
Output 1.1.1	Adoption of and clear political commitment to the integration of the SLWM model including biodiversity conservation by local governments and relevant line agencies at county level in primary and replication areas (saline-alkaline landscapes with similar ecosystem throughout West Jilin).	Model adopted by Da'an and Qian'guo counties and Songyuan prefecture	The sustainable land and water management (SLWM) model has been incorporated into the demonstration area and promotion area of local government and relevant county-level departments.	
Output 1.1.2	Drafting and approval of county level policy implementation guidelines outlining the details of the roll-out of the SLWM model including specific responsibilities of stakeholders.	Stakeholders adopt the SLWM model. Complete the implementation guidelines.	SLWM Model for Western Jilin piloted in primary project areas and adopted for implementation by Songyuan (include Qian'an) and Zhenlai county governments and Baicheng prefecture.	
Output 1.2.1:	Wetlands biodiversity conservation and SLWM model incorporated into policies, plans, and regulations for the agriculture and water resource	Incorporated the SLWM and BD conservation recommendations	The concept of SLWM model and biodiversity protection were incorporated into the government project "river and lake connection project in Western Jilin" and five years development plans in 4 counties for western Jilin province	

²³Outputs as described in the project Logframe or in any approved project revision.

²⁴Please use the same unit of measurement of the project indicators as per the approved Implementation Plan or Annual Workplan. Please be concise (max one or two short sentences with main achievements)

²⁵Variance refers to the difference between the expected and actual progress at the time of reporting.

	management sectors (including land and water use planning and management) in western Jilin province	into five years development plans in 4 counties.	BD-2 TT score and LD PMAT score improved more 40% increase in BD-2 TT score; 40-60% in LD PMAT score.	
Output 1.2.2:	Wetlands biodiversity conservation and SLWM model replicated in saline alkaline landscapes in western Jilin province	Taking Da'an irrigation district as a comprehensive demonstration area, the SLWM model was quantified.	Reconstruction and conservation of 6060 hectares of soil conservation (directly affecting the experimental area), and replicated in the Songyuan Irrigation Area and Da'an Irrigation Area.	
Output 1.3.1:	Decision makers and technicians from water resource, agriculture, forestry, environmental protection bureau at prefecture and county level and Chagan Lake Administration are trained	Training courses.	During the implementation of the project, there are about 500 decision makers and technicians had been trained about the ecological agriculture, Saline alkali land treatment and conservation of biodiversity.	
Output 1.3.2:	Extension workers and Farmers trained in application of SLWM practices including green/ecological, conservation, water saving and grassland rehabilitation practices.	Training courses.	According to incomplete statistics, through training classes, on-site meetings and academic conferences etc, the extension workers and farmers has been trained about 500 peoples	
Output 2.1.1:	Water management guidelines for agricultural water use as well as use of chemicals and pesticides formulated and implemented in all project sites	Develop the guidelines	6 sets of implementation plans, "Agricultural Management Model of Dry Field Conservation Tillage", "Technical Model of Water Saving, Weight Loss and Efficiency Enhancement", "Paddy Field Green Ecological Agriculture Management Model" and "Technical Model of Soil Improvement and Efficiency Enhancement of Paddy Fields in Saline-sodic Wasteland Reclamation", "Technical Model of Fencing and Enclosing Natural Grassland Restoration" and "Technical Model of Artificial Restoration of Grassland". All these guidelines were implemented in all project sites	
Output 2.1.2:	Groundwater levels stabilized in the project area and positive demonstration effects for the wider irrigation area	Groundwater levels stabilized.	Different phases of groundwater level monitoring have been carried out in wetland. Groundwater fluctuated periodically. In September, the buried depth of groundwater was between 6-7m.	

Output 2.2.1:	Degradation and desertification processes stopped and reversed in saline-alkaline land with improved vegetation cover resulting in increased productivity and reduced vulnerability to climate variability	Degradation and desertification processes stopped and reversed.	Through conservation tillage and ecological agriculture, the Qian'guo irrigated area and Niuxintaobao had been reversed. The technology had been applied in relevant irrigation projects.	
Output 2.2.2:	SLWM agricultural practices adopted in Qian'an, Da'an and Qian'guo pilot sites and scaled to the total Songyuan irrigation area of integrated production landscape contributing to the conservation of wetlands biodiversity	SLWM agricultural practices adopted in Qian'an, Da'an and Qian'guo pilot sites.	SLWM practices adopted in Qian'guo irrigated area and Niuxintaobao. The model had been agreed to promote in the Songyuan irrigation area(Qian'an, Da'an and Qian'guo).	
Output 2.2.3:	Developed technical guidelines.	Develop technical guidelines.	The technical guidelines had been completed including "Guide to Irrigated Agriculture and Water-saving Irrigation", "Guide to Irrigated Farmland Saline Management Technology", "Guide to Conservation Tillage in Dry Field", "Technical Guide to Restoration and Treatment of Soda Saline-sodic Land", etc.	
Output 2.2.4	Farmer's households adopted SLWM practices and benefited from increased land productivity in the pilot sites and project landscape.	Farmer's households benefited from increased land productivity in the pilot sites and project landscape.	The number of people in Da'an, Qian'an and Qian'guo was more than 27,000 who distributed in irrigation area and the SLWM practices was adopted. The paddy rice yield can reach 9800kg/hectare for ca. 200ha ; protected cultivation were treated with saline alkali land conditioner "Dealkaline No. 3" at a rate of 13000kg/hectare. grassland were restored 2000ha with 8,500 kg/ha, The fishing revenue of NiuxinTaobao, Dagangzipao and Xinmiaopao Wetland has reached 800 yuan/hectare.	
Output 2.3.1:	Prepare comprehensive and dynamic ILWMP for the project area that integrate agriculture, pasture management, biodiversity conservation and ecosystem service preservation with salinity and water management.	Complete comprehensive and dynamic ILWMP.	The Integrated Land and Water Management Plans(ILWMP) has been agreed to applied in Songyuan area covering 220,000 ha	
Output 2.3.2:	Integrated land and water management plan (ILWMP) for the entire Songyuan Area consulted,	Held a seminar to modify, argument and improve the ILWMP	The Integrated land and water management plan (ILWMP) for Songyuan area covering 220,000 ha was agreed with local stakeholders.	

	validated and agreed with relevant stakeholders			
Output 2.3.3:	Integration of the ILWMP guidelines and principles into the training programs of the WRB and CAD (measured by the number of training packages updated).	Prepare training programs including ILWMP guidelines.	Held meeting to train members of WRB and CAD and the ILWMP was applied in Songyuan area and will be used in 220,000 ha in 5 years after the end of the project.	
Output 3.1.1:	Rehabilitation and conservation of wetlands managed as an integrated part of the freshwater fishery and irrigated crop and grassland production landscape providing important habitats for endangered migratory birds resting and feeding in these wetlands.	Rehabilitation and conservation of 8,728 ha wetland (direct impact pilot area) and replication measures underway for entire 49,883 ha of wetlands in the project landscape.	The area of wetland restoration had been reached the target of the project including Niuxintaobao, Dagangzi, Xiaoximi, and Xinmiao wetland and wetland restoration was carried out smoothly and replication measures underway for entire 49,883 ha of wetlands in the project landscape especially in the internationally important wetlands.	
Output 3.1.2	Improved biodiversity indicators for: population and number of IUCN red listed Crane species (Siberian, Hooded, White-naped, and Red crowned)	Biodiversity indicators for: population and number of IUCN red listed Crane species (Siberian, Hooded, White-naped, and Red crowned)	Through the implementation of the project, the breeding bird population in the project area has increased by 9 species, and the breeding record of waterfowl has increased by 4 species. The increase in the species and number of breeding waterfowl is the performance of improving the function of the region to provide breeding habitat for birds. During migration, rare bird species are scattered in the marshes around the project area. In autumn, there are 410 white cranes and 322 oriental white storks inhabiting around the small sago bubble. In autumn, the white crane used the regional habitat for 37 days.	
Output 3.2.1:	Establish comprehensive monitoring system measuring pollutants and salinity across the project area.	Measure pollutants and salinity across the project areas.	Monitoring points were set at the water inlet, wetland and water outlet of the project sites. Monitored the surface water quality including pH, COD, BOD, DO, TP, TN, TK, total salt, typical pesticides, etc. the information had been incorporated into the ILWMP in 2022	
Output 3.2.2:	Agricultural non-point source pollution controlled and monitored within the project area.	Agricultural non-point source pollution controlled.	Combined with farming phenology, it can regulate the hydraulic retention time, vegetation management, separately treat the drainage water and rain flood, and allocate the water resources of the paddy field-wetland system more effectively. the dynamic monitoring results show that the project wetland runs continuously and healthily, and the removal efficiency of salinity, nutrients and other non-point source pollutants in the drainage water reaches more than 40% when the load is high in May, and decreases when the load is low in July and August, but it can still effectively improve the quality of the drainage water.	
Output 3.2.3:	Model for water quality requirements and ecological water demand for	Water quality requirements model	The ecological water demand in Niuxintaobao had been included in the model of SWLM	

	rehabilitation of wetlands developed based on the data collected from buffer zone inflow and outflow water quality and quantity measurement.	developed and be incorporated into the SLWM Model		
Output 3.2.4:	Buffer zone inflow and outflow water quality and quantity systematically monitored and analyzed, and pollution risk early warning system and inflow and outflow management strategy implemented.	Completed the pollution risk early warning system and inflow and outflow management strategy.	Systematic monitoring, early warning system in Xinmiaopao wetland and inflow and outflow operation strategy in place by 2020 and providing monitoring information and data in 2021 to 2022.	
Output 3.2.5:	Establish comprehensive monitoring system measuring biodiversity across the project area.	Measure biodiversity across the project area.	Since the implementation of the project, there has been a significant increase in the species and quantity of birds in the region, as well as the number of threatened and protected bird species. The cumulative number of bird species recorded is 131, which is significantly higher than the historical record of 73 species. The number of individuals has increased from 13202 in the autumn of 2020 to 34223 in the autumn of 2022. A total of 5 species of national first level protected birds and 19 species of national second level protected birds have been recorded,	
Output 3.3.1:	Wetlands co-management committees with local communities and county reed administration and biodiversity co-management plan for the wetlands and buffer zone prepared and under implementation.	Establish the wetlands co-management committees with local communities and county.	Two wetland management committees have been established to formulate a joint biodiversity management plan for wetlands and buffer zones.	
Output 3.3.2:	Awareness raising campaign on wetlands biodiversity conservation implemented in rehabilitated and existing wetlands in the area of influence of the Songyuan irrigation area	Awareness raising campaign on wetlands biodiversity conservation implemented in rehabilitated and existing wetlands	Four community promotion activities were carried out	

4. Summary on Progress and Ratings

Please provide a summary paragraph on progress, challenges and outcomes of project implementation consistent with the information reported in sections 2 and 3 of the PIR (max 400 words)

During this reporting period, the COVID-19 pandemic broke out in Jilin province, and the project progress was severely affected. However, a series of achievements have been made. Firstly, the area of the project demonstration and promotion such as Songyuan irrigation and Daan irrigation had been included in the project of <100 billion jin(0.5kg) grain project of Jilin Province> and the <scientific and technological battle of "black soil granary" project of Chinese Academy of Sciences>. The team drafted the document of <combine ecological resources to promote the integrated development of Niuxintaobao National Wetland Park> and replied from the leader of Da'an City. The technology of artificial planting technology of *Leymus chinensis* in saline alkali land had been included in the 《Notice on Issuing the Provincial Leading Agricultural Varieties and Main Promotion Technologies in 2023》 (JNKF [2022] No. 14) which was issued by the Agriculture and Rural Affairs Department of Jilin Province. The sustainable land and water management (SLWM) model has been Incorporate into the demonstration area and promotion area of local government and relevant county-level departments in Songyuan(include Qian'an) and Baicheng prefecture.

From November 5 to 13, 2022, the 14th Conference of the Parties to the Convention on Wetlands (COP14) was held simultaneously in Wuhan, Hubei Province, China and Geneva, Switzerland. At a series of activities and side meetings in the host country such as "Research on Peat Land Conservation and Restoration and the Release of Important Achievements of Wetlands in China", "Conservation, Restoration and Management of National Important Wetlands", LvXianguo, the leader of project technical expert, introduced the basic characteristics and restoration cases of small and micro wetlands in the Songnen Plain and the conservation and restoration of saline alkali wetlands in Songnen Plain, shared the achievements of FAO-GEF project wetland conservation and restoration.

In view of the characteristics of local soil salinization and severe contradiction between supply and demand of water resources in Da'an Irrigation Area, the dynamic management of agricultural land and water resources was developed. First, according to the water-saving irrigation table designed during the growing season of Da'an Irrigation Area through long-term observation, the local irrigation efficiency was improved,

and the local water resources were saved. Then, through the dynamic analysis of the changes in local precipitation water yield and demand in different months of crop growth cycle and under different precipitation conditions, we can explore the fluctuation of ecological and agricultural production water demand in different months, calculate the monthly water demand in the irrigation area, and achieve accurate water transfer to avoid waste of water resources. It not only meets the ecological water demand of local wetland restoration to protect local biodiversity, but also meets the large-scale production demand of local agriculture, so as to effectively combine ecological protection with agricultural production.

Completed 6 sets of implementation plans, "Agricultural Management Model of Dry Field Conservation Tillage", "Technical Model of Water Saving, Weight Loss and Efficiency Enhancement", "Paddy Field Green Ecological Agriculture Management Model" and "Technical Model of Soil Improvement and Efficiency Enhancement of Paddy Fields in Saline-sodic Wasteland Reclamation" , "Technical Model of Fencing and Enclosing Natural Grassland Restoration" and "Technical Model of Artificial Restoration of Grassland";

One SCI research papers was published during the secondly half year of 2022.The cumulative progress of the project has reached100%. At the same time, the team promoted the demonstration of saline-alkali land improvement, and promoted the demonstration of comprehensive utilization technology of soda saline-alkali land; optimized and demonstrated the breeding technology system of soda saline water crab species; carried out the regional test of "alkali rice green" soil conditioner for reducing alkali and promoting rejuvenation; cooperated with a local company in wetland ecological products to assist in the efficient and sustainable utilization of water and soil resources and biodiversity protection in saline-alkali land. Monitored wetland water quality and biodiversity.

Development Objective (DO) Ratings, Implementation Progress (IP) Ratings and Overall Assessment

Please note that the overall DO and IP ratings should be substantiated by evidence and progress reported in the Section 2 and Section 3 of the PIR. For DO, the ratings and comments should reflect the overall progress of project results.

	FY2023 Development Objective rating²⁶	FY2023 Implementation Progress rating²⁷	Comments/reasons²⁸ justifying the ratings for FY2023 and any changes (positive or negative) in the ratings since the previous reporting period
Project Manager / Coordinator	S	S	<i>The cumulative progress of the project has reached 100%, which increased by 20% comparing with last reporting period in 2022. The PMO will accelerate the disbursement and reimbursement of funds.</i>
Budget Holder	HS	HS	<i>The project has achieved the objectives with many indicators exceeded the targets, such as the number of trainees, the land area restored etc. Supported by the government, the project results will be replicated in western part of Jilin. The project will conduct the terminal evaluation during July to Sep. and be completed by Oct. 31st.</i>
GEF Operational Focal Point²⁹	S	S	<i>The project is on track and is expected to achieve the project objectives.</i>
Lead Technical Officer³⁰	S	S	<i>The implementation of the project is going to be completed soon. All the requested project outputs have either been delivered or are underway.</i>
GEF Technical Officer, GTO (ex Technical FLO)	S	S	<i>Despite initial delays to start up the project, the PMO and the Jilin government were able to deliver the outputs and scheduled to finish the project in Q4 2023. Good practices and lessons learned have been documented and will be disseminated.</i>

²⁶**Development Objectives Rating** – A rating of the extent to which a project is expected to achieve or exceed its major objectives. For more information on ratings and definitions, please refer to Annex 1.

²⁷**Implementation Progress Rating** – A rating of the extent to which the implementation of a project's components and activities is in compliance with the projects approved implementation plan. For more information on ratings and definitions, please refer to Annex 1.

²⁸Please ensure that the ratings are based on evidence

²⁹In case the GEF OFP didn't provide his/her comments, please explain the reason.

³⁰The LTO will consult the HQ technical officer and all other supporting technical Units.

5. Environmental and Social Safeguards (ESS)

This section is under the responsibility of the LTO (PMU to draft)

Please describe the progress made to comply with the approved ESM plan. Note that only projects with **moderate** or **high** Environmental and Social Risk, approved from June 2015 should have submitted an ESM plan/table at CEO endorsement. This does not apply to **low** risk projects. Please indicate if new risks have emerged during this FY.

Social & Environmental Risk Impacts identified at CEO Endorsement	Expected mitigation measures	Actions taken during this FY	Remaining measures to be taken	Responsibility
ESS 1: Natural Resource Management				
Impacts of climate change: The area of western Jilin is located in a semi-arid region with a low precipitation and a high evaporation. Therefore, the water replenishment mechanism shortage and climate drought could undermine the biodiversity conservation and sustainable land management Risk rating: M	The project will introduce water saving irrigation technologies and facilities in rain-fed farmlands. Under the coordination of the PMO and the DWRJP, the project transfer the water resources through Chaersen Reservoir into the project area to replenish the ecological water and mitigate the climate change risk. The project will adopt straw mulching technology to stop the degradation and desertification processes and improve the vegetation cover in saline-alkaline land.	The project introduce water saving irrigation technologies and facilities in rain-fed farmlands. Under the coordination of the PMO and the DWRJP, the project transferred the water resources through Chaersen Reservoir into the project area to replenish the ecological water and mitigate the climate change risk.	None	PMO, DWRJP, Water environment and wetland ecological experts, field stations for piloting and monitoring activities.

	These activities can increase productivity and reduce vulnerability to climate change.			
ESS 2: Biodiversity, Ecosystems and Natural Habitats				
ESS 3: Plant Genetic Resources for Food and Agriculture				
ESS 4: Animal - Livestock and Aquatic - Genetic Resources for Food and Agriculture				
ESS 5: Pest and Pesticide Management				
ESS 6: Involuntary Resettlement and Displacement				
ESS 7: Decent Work				
ESS 8: Gender Equality				
ESS 9: Indigenous Peoples and Cultural Heritage				
New ESS risks that have emerged during this FY				

In case the project did not include an ESM Plan at CEO endorsement stage, please indicate:

Initial ESS Risk classification (At project submission)	Current ESS risk classification
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	Please indicate if the Environmental and Social Risk classification is still valid ³¹ . If not, what is the new classification and explain.
L	L

<i>Please report if any grievance was received as per FAO and GEF ESS policies. If yes, please indicate how it is being/has been addressed.</i>

³¹**Important:** please note that if the Environmental and Social Risk classification has changed, the ESM Unit (Esm-unit@fao.org) should be contacted. The project shall prepare or amend an Environmental and Social Management Plan(ESMP) or other ESS instruments and management tools based on the new risk classification(please refer to page 13 <https://www.fao.org/3/cb9870en/cb9870en.pdf>)

6. Risks

The following table summarizes risks identified in the Project Document and reflects also any new risks identified during the project implementation (including COVID-19 related risks). The last column should be used to provide additional details concerning manifestation of the risk in the project, as relevant.

	Type of risk	Risk rating ³²	Identified in the ProDoc Y/N	Mitigation Actions	Progress on mitigation actions	Notes from the Budget Holder in consultation with Project Management Unit
1	Ecological risks					
1.1	Impacts of climate change: The area of western Jilin is located in a semi-arid region with a low precipitation and a high evaporation. Therefore, the water replenishment mechanism shortage and climate drought could undermine the biodiversity conservation and sustainable land management	M	Y	<ul style="list-style-type: none"> The project introduced water saving irrigation technologies and facilities in rain-fed farmlands. Under the coordination of the PMO and the DWRJP, the project transferred the water resources through Chaersen Reservoir into the project area to replenish the ecological water and mitigate the climate change risk. 	None	

³² Risk ratings means a rating of the overall risk of factors internal or external to the project which may affect implementation or prospects for achieving project objectives. Risk of projects should be rated on the following scale: Low, Moderate, Substantial or High. For more information on ratings and definitions please refer to Annex 1.

	Type of risk	Risk rating ³²	Identified in the ProDoc Y/N	Mitigation Actions	Progress on mitigation actions	Notes from the Budget Holder in consultation with Project Management Unit
				<ul style="list-style-type: none"> The project adopted straw mulching technology to stop the degradation and desertification processes and improve the vegetation cover in saline-alkaline land. <p>These activities can increase productivity and reduce vulnerability to climate change.</p>		
1.2	Salt moving to the upper layers of the soil	L	Y	<ul style="list-style-type: none"> Introduce integrated saline soil improvement technologies, such as physical engineering, chemical absorption, planting salt resistant crops, etc. 	Completed	
2	Social economic risks					
2.1	Farmers lack of capacity to adopt water saving agriculture practice and technologies	L	Y	<ul style="list-style-type: none"> The risk can be mitigated through farmer's training and field demonstration. Conservation tillage and ecological agriculture models can be 	Completed	

	Type of risk	Risk rating ³²	Identified in the ProDoc Y/N	Mitigation Actions	Progress on mitigation actions	Notes from the Budget Holder in consultation with Project Management Unit
				demonstrated in the pilot areas.		
2.2	Market risks for green food products	L	Y	<ul style="list-style-type: none"> • Support to farmer's cooperatives. • Promote the agro-company plus households marketing modality. 	Completed	
3	Institutional risks					
3.1	Interests conflicts between different sectors and line agencies	L	Y	<ul style="list-style-type: none"> • Set up multi-institutional consultation mechanism at prefecture and county levels during planning and implementation. • Incorporate the SLWM and biodiversity conservation models into local government development planning by different sectors. • Hold multi-stakeholder policy consultation conference at Y4 . 	Completed Local project office had made good communication with the local government.	
3.2	Local government is not able to pay the eco-service compensation to farmers	L	Y	<ul style="list-style-type: none"> • Consult with and formulate 	Completed Ecological water shortage of Dagangzi and	

	Type of risk	Risk rating ³²	Identified in the ProDoc Y/N	Mitigation Actions	Progress on mitigation actions	Notes from the Budget Holder in consultation with Project Management Unit
				recommendations to local government.	Niuxintaobao was solved through the water diversion from Chaersen Reservoir.	
3.3	Lack of water in Dagangzipao and Xiaoximipao Pilot Area	L	Y	Jilin Department of Water Resources, PMO will coordinate with the SIA. Project implementation unit to give priority to the Dagangzipao.	Completed Ecological water replenishment	

Project overall risk rating (Low, Moderate, Substantial or High):

FY2022rating	FY2023rating	Comments/reason for the rating for FY2023and any changes (positive or negative) in the rating since the previous reporting period
L	L	Except the Impacts of climate change, the mostly risk were reduced through the policy of government and cooperation between company and management department.

7. Follow-up on Mid-term review or supervision mission(only for projects that have conducted an MTR)

If the project had an MTR or a supervision mission, please report on how the recommendations were implemented during this fiscal year as indicated in the Management Response or in the supervision mission report.

Management response to the [Title]						Date
Evaluation Recommendation (a)	Management response (b) Accepted, Partially Accepted or Rejected	Management plan				Further funding required (Y or N) (g)
		Actions to be taken, and/or comments about partial acceptance or rejection (c)	Responsible unit (d)	Status (e) By June 30 th 2023	Time Frame (f)	
<p>Recommendation 1:</p> <p>The site selected earlier overlooked information like availability of water storage, existence of the cultural relics within the site and uncertainty of the boundaries due to government policy. Due to this, the project had to spend one and half year to find a new sites for piloting its activities. The PMO should immediately (October 2021) conduct thorough study</p>	Accepted	The PMO will conduct a comprehensive survey of the project demonstration and promotion area in the near future to make statistics of the project achievement promotion and demonstration area.	PMO	Completed. The PMO conducted a comprehensive survey of the project demonstration and promotion area.	December 2022	N

of the sites before replicating the good practices in the second half of the project.						
<p>Recommendation 2:</p> <p>As the SLWM model needs to be agreed with the stakeholders before implementation, the PMO should give priority to complete the model, and associated guidelines and manual. Work should be initiated immediately after the MTE i.e. October 2021.</p>	Accepted	The model and associated guidelines and manual will be completed in December 2021. The PMO will give priority to complete the SWLM model, guidelines and manual.	PMO Northeast Institute of geography and Agroecology, Chinese Academy of Sciences	Completed The sustainable land and water management (SLWM) model has been Incorporated into the demonstration area and promotion area of local government and relevant county-level departments.	December 2022	N
<p>Recommendation 3:</p> <p>The project implementation was affected due to having only part-time staffs. The project has large amount works which has to be complemented within limited time. Large number of activities are to be completed by October 2022. It is challenging to complete all</p>	Partially Accepted	The PMO will arrange required number of staffs to support the project implementation. Affected by the climate, the mostly activities about agriculture and wetland are mainly in growing season. The activities about policy	PMO Northeast Institute of geography and Agroecology, Chinese Academy of Sciences PMO	Completed The PMO arranged four number of staffs to support the project. The activities about policy formulation, meetings, training, guidelines formulation and other activities can be held after growing season.	December 2022	N

<p>activities within the remaining time. An implementation in rush may affect the quality of the work. Number of person trained will not confirm knowledge gained.</p>		<p>formulation, meetings, training, guidelines formulation and other activities can be held after growing season. So, there will be no problem with the quality of project. The PMO will test the knowledge growth of the trainee through questionnaire.</p>				
<p>Recommendation 4:</p> <p>The PMO should assign responsibility to conduct assessment of the potential support from different sector to make project results sustainable after the project end. Based on the thorough assessment they should develop an exit strategy with provisions for making project results sustainable even after the project end date. The development of</p>	<p>Partially Accepted</p>	<p>In the context of China's major policies, such as the protection of black land can effectively ensure the sustainability of project results. The policy makers and planners training will be held in fourth quarter of 2021 and before spring ploughing in 2022.</p>	<p>PMO Northeast Institute of geography and Agroecology, Chinese Academy of Sciences</p>	<p>Completed Four training sessions for local people and decision makers in 2022 and 2023.</p>	<p>Another training will be held before autumn in 2022.</p>	<p>N</p>

<p>exit strategy should begin from January 2022.</p> <p>The project has trained relevant government's technical staffs. Also farmers and communities were training on wetland management and eco-agriculture. This makes the project results sustainable socio-economically and institutionally to some level. But training for policy makers and planners are yet to be completed. No written commitment for financial support for project results beyond the project life is available. Even for technical assistance only verbal assurance available. This does not ensure sustainability of the project results beyond the project life.</p>						
<p>Recommendation 5:</p> <p>The project document didn't have Theory of Change. It is now developed by the MTE team. The</p>	<p>Accepted</p>	<p>The change of indicators was derived from long time field investigation. In the project, the regular monitoring was</p>	<p>PMO</p>	<p>Completed</p>		<p>N</p>

<p>indicators in the RF was not gender disaggregated. Also some indicators were not realistic so need to correct.</p> <p>It is necessary to make regular monitoring of the results of the project to analyze the dynamism of the results. Yield from the improved practices need to be monitored in regular basis beyond the project life and analyse if any changes are observed. This helps to further improve the results of this project. Similarly, the project reinstated several wetlands and some initial benefits are observed. It will take some years for the wetlands to offer its complete ecological functions</p> <p>Due to difference of financial reporting time of FAO and PMO, the disbursement of money was</p>		<p>implemented by the Northeast Institute of geography and Agroecology, Chinese Academy of Sciences, in different wetland and agriculture through three growing seasons.</p>				
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<p>affected. As per contract FAO disburse money only after it receives financial report of the earlier installment. But late financial closing time of PMO caused late submission of financial report which delayed disbursement of money from FAO to PMO and that has affected the project activities.</p>					
<p>Recommendation 6:</p> <p>Some indicators need change e.g. IUCN red-listed Eurasian otter is not found in the project sites so it should be removed. The baseline yield from degraded rangeland is much exaggerated (1,500kg/ha) so need to make realistic (800kg/ha). The annual yield target from the improved agriculture practices together with irrigation is also very ambitious (10,500kg/ha), so need to make it</p>	<p>Accepted</p>	<p>This section should be changed.</p>	<p>PMO</p>	<p>Completed. The indicators had been changed.</p>	<p>N</p>

<p>8,500kg/ha. Hence, it is recommended that PMO should take initiation to get GEF approval to change these indicators to make them realistic. This should be done immediately i.e. in October 2021.</p>						
<p>Recommendation 7: The PMO should communicate and negotiate with the relevant departments of the University (province based) to arrange regular monitoring of effect of agricultural practices and wetland functions. Discussions should be immediately initiated i.e. from October 2021 to initiate the negotiation for M&E arrangements.</p>	<p>Rejected</p>	<p>The Northeast Institute of geography and Agroecology, Chinese Academy of Sciences, has professors in different disciplines, such as wetland, agriculture, biodiversity and etc. Therefore, it is enough for the project and not necessary to communicate or negotiate with the relevant departments of the university.</p>	<p>PMO</p>	<p>Completed. The team of expert was included the wetland expert, biodiversity expert, hydrology expert etc .</p>		<p>No</p>
<p>Recommendation 8: The project has not met its mid-term level targets (as per work-plan) and completing all</p>	<p>Accepted</p>	<p>Because it will take nearly half a year to prepare the project closing materials. The project is planned to be</p>	<p>PMO</p>	<p>Agreed by PSC member units. An extension of one year is recommended by PMO.</p>		<p>No</p>

<p>remaining activities within a year (October 2022) is not possible. Hence a 1-year no cost extension is recommended. The PMO and FAO should discuss this with the relevant executing partners and recommend to GEF for no cost extension immediately i.e. in October 2021.</p>		<p>closed in October 2022, so the time to complete the project is obviously not enough. However, the project can achieve the project objectives within one year through the monitoring and evaluation for three growing seasons. Therefore, an extension of one year is recommended by PMO.</p>				
<p>Recommendation 9: Women play key role in agriculture sector so their role need to be strengthened from all aspects. Women's role in decision making was not observed in this project. Program me should include leadership building training for women and also should give priority to women headed household while selecting the beneficiary household. The</p>	<p>Accepted</p>	<p>The PMO will employ Gender experts to carry out training for women and give priority to women headed household while selecting the beneficiary household.</p>	<p>PMO</p>	<p>Completed. The PMO had employed a Gender experts to investigate the priority of women.</p>	<p>October 2022</p>	<p>No</p>

PMO & FAO should initiate planning and implementing leadership programme immediately (October 2021)						
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Has the project developed an Exit Strategy? If yes, please summarize	NO
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8. Minor project amendments

Minor amendments are changes to the project design or implementation that do not have significant impact on the project objectives or scope, or an increase of the GEF project financing up to 5% as described in Annex 9 of the GEF Project and Program Cycle Policy Guidelines³³. Please describe any minor changes that the project has made under the relevant category or categories and provide supporting documents as an annex to this report if available.

Category of change	Provide a description of the change	Indicate the timing of the change	Approved by
Results framework			
Components and cost			
Institutional and implementation arrangements			
Financial management			
Implementation schedule			
Executing Entity			
Executing Entity Category			
Minor project objective change	<p>(1) Corn yield of 10500kg/ha in 200 ha is a little bit higher with the alternative agricultural management practices. The yield of corn is expected to reach 8500kg/ha.</p> <p>(2)The baseline hay yield of 1,500 kg/ha is too high for the depredated grassland. For the baseline, the hay yield of 800kg/ha and 640 yuan/ha are reasonable. The aim of hay is 1500kg/ha in 2000ha and benefit of 1200yuan/ha are expected.</p> <p>(3)Through field investigation and consult literature, the IUCN red-listed Eurasian otter is not exist in pilot sites, so it should be deleted.</p> <p>(4)The baseline: only a few rare birds distributed in the project area, the habitat of water birds in the project</p>	03,2021	PMO,PSC,FAO

33 Source: <https://www.thegef.org/council-meeting-documents/guidelines-project-and-program-cycle-policy-2020-update>

	areahad been seriously damaged, so the wetland restoration is necessary.		
Safeguards			
Risk analysis			
Increase of GEF project financing up to 5%			
Co-financing			
Location of project activity	Change of Pilot Sites:Hua'aopao and Dakouzipao were replaced by Niuxintaobao, Xiaoximipao and Dagangzipao	06,2019	PMO,PSC,FAO
Other minor project amendment (define)			

9. Stakeholders' Engagement

Please report on progress and results and challenges on stakeholder engagement (based on the description of the Stakeholder engagement plan) included at CEO Endorsement/Approval during this reporting period.

Stakeholder name	Type of partnership	Progress and results on Stakeholders' Engagement	Challenges on stakeholder engagement
Government institutions			
The Jilin Department of Water Resources	Project execution department	Overall management	
Songyuan Municipal Government	Implementation cooperation	Cooperation	
Qian'guo county government	Implementation cooperation	Cooperation	
Da'an Municipal government	Implementation cooperation	Cooperation	
Hadashan Hydro Program Administration (HHPA)	Water resources management department	Water resources allocation	
NGOs³⁴			
Private sector entities			
Huaqing agriculture company	Cooperation company	Project demonstration	
Shenjingzi village	demonstration area	Project demonstration	
Others³⁵			
New stakeholders identified			

³⁴Non-government organizations

³⁵They can include, among others, community-based organizations (CBOs), Indigenous Peoples organizations, women's groups, private sector companies, farmers, universities, research institutions, and all major groups as identified, for example, in Agenda 21 of the 1992 Rio Earth Summit and many times again since then

10. Gender Mainstreaming

Information on Progress on Gender-responsive measures as documented at CEO Endorsement/Approval in the gender action plan or equivalent (when applicable) during this reporting period.		
Category	Yes/No	Briefly describe progress and results achieved during this reporting period.
Gender analysis or an equivalent socio-economic assessment made at formulation or during execution stages.	N	
Any gender-responsive measures to address gender gaps or promote gender equality and women's empowerment?	N	
Indicate in which results area(s) the project is expected to contribute to gender equality (as identified at project design stage):		
a) closing gender gaps in access to and control over natural resources		
b) improving women's participation and decision making	Y	More and more women participate in social activities
c) generating socio-economic benefits or services for women	Y	Women's family status has been effectively improved
M&E system with gender-disaggregated data?	N	<i>Please provide progress on gender sensitive indicators of the project results framework.</i>
Staff with gender expertise	Y	Wanglin: Biodiversity expert Zhang Dan: Project Secretary Zhang Wenjie: Financial expert
Any other good practices on gender		

11. Knowledge Management Activities

Knowledge activities / products (when applicable), as outlined in Knowledge Management Approach approved at CEO Endorsement / Approval, <u>during this reporting period.</u>	
Does the project have a knowledge management strategy? If not, how does the project collect and document good practices? Please list relevant good practices that can be learned and shared from the project thus far.	Yes, all the guidance were evaluated and signed by PMO.
Does the project have a communication strategy? Please provide a brief overview of the communications successes and challenges this year .	Yes, PMO hired a publicity expert who was responsible for reporting the project by various media. Now, the project had been reported by CCTV, China Science Daily etc.
Please share a human-interest story from your project, focusing on how the project has helped to improve people's livelihoods while contributing to achieving the expected Global Environmental Benefits. Please indicate any Socio-economic Co-benefits that were generated by the project. Include at least one beneficiary quote and perspective, and please also include related photos and photo credits.	In order to quantify the key parameters and evaluate the technical effects, field observation trials and greenhouse simulation trials were conducted. The results showed that: (1) feeding preference: young ducks preferred fish, worms, and rice grains, grass seeds were second, and almost did not feed on crushed straw, crushed grass stalks and stubble; (2) amount of organic fertilizer: young ducks weighed about 1.25 kg/individual with a feed requirement of 150 g/day generated manure of 150 g/day (51% water content), which is equivalent to 74g/day of dry manure. Field observation test results show that: (1) applicable conditions: full-feeding supporting thrower combine is needed, crushing length of no more than 20cm is appropriate, stubble height of 20-30cm is appropriate, lasting period of 25-30 days is appropriate in western Jilin Province; (2) duck herding strategy: irrigation should be conducted first, followed by a high-density concentrated and field by field advancement strategy of duck herding; (3) technical effect: ducks like fish insects, rice, grass seeds, so as to save feed, reducing the insect and grass damage in the following year; duck trampling to achieve the average thickness of straw layer reduced by more than 80%, almost all the straw was trampled into the mud or covered with mud (stubble), reducing the difficulty of returning straw to the field; duck manure fertilizes the ground at the same time with natural regulation of the carbon to nitrogen ratio, improving the rate of straw decomposition, so as to reduce the next year to return to the marsh hazard; greatly reduce the next year spring harrowing floating straw problem; and (4) save economic benefits: with the harvesting process dropped over the amount of rice fluctuations, each hectare of autumn fields can feed more than 5,000 ducks, which is equivalent to a economic benefit of 1540 yuan/hm ² .
Please provide links to related website, social media account	http://www.iga.ac.cn/news/cmsm/202211/t20221110_6546716.html http://www.iga.ac.cn/news/cmsm/202210/t20221019_6533799.html
Please provide a list of publications, leaflets, video materials, newsletters, or	http://www.iga.ac.cn/news/cmsm/202207/t20220729_6495140.html http://www.neigae.ac.cn/news/big/202211/t20221113_6547892.html

other communications assets published on the web.	
Please indicate theCommunication and/or knowledge management focal point's name and contact details	Zhibin Ren, Tel:18686689357, Emial:45602675@qq.com

12. Indigenous Peoples and Local Communities Involvement

Are Indigenous Peoples and local communities involved in the project (as per the approved Project Document)? If yes, please briefly explain.

If applicable, please describe the process and current status of on-going/completed, legitimate consultations to obtain Free, Prior and Informed Consent (FPIC) with the indigenous communities.

Do indigenous peoples and or local communities have an active participation in the project activities? If yes, briefly describe how.

Yes, in the project area, ecological agriculture, conservation tillage and reed-fish-crab ecological industry mode have been widely applied and demonstrated by indigenous people. The local people have gained obvious economic benefits for the new tillage methods.

13.Co-Financing Table

Sources of Co-financing ³⁶	Name of Co-financer	Type of Co-financing ³⁷	Amount Confirmed at CEO endorsement / approval	Actual Amount Materialized at 30 June 2023	Actual Amount Materialized at Midterm or closure (confirmed by the review/evaluation team)	Expected total disbursement by the end of the project
Hadashan water conservancy project	Jilin Provincial Department of water resources	In-kind and cash	14,800,000	11,398,651	11,398,651	11,398,651
Sustainable soil and water practice	Jilin Provincial Department of water resources	In-kind and cash	300,000	58,038	58,038	58,038
Water quality and quantity analysis and monitoring	Jilin Provincial Department of water resources	In-kind and cash	1,500,000	5,228,026	5,228,026	5,228,026
FAO		In-kind	200,000	200,000	120,000	200,000
		TOTAL	16,800,000	16,884,715	16,804,715	16,884,715

³⁶Sources of Co-financing may include: GEF Agency, Donor Agency, Recipient Country Government, Private Sector, Civil Society Organization, Beneficiaries, Other.

³⁷Grant, Loan, Equity Investment, Guarantee, In-Kind, Public Investment, Other (please refer to the *Guidelines on co-financing* for definitions)

https://www.thegef.org/sites/default/files/documents/GEF_FI_GN_01_Cofinancing_Guidelines_2018.pdf

Please explain any significant changes in project co-financing since Project Document signature, or differences between the anticipated and actual rates of disbursement?

The changes in project co-financing is mainly due to the changes of water replenishment fund.

Annex 1. – GEF Performance Ratings Definitions

Development Objectives Rating. A rating of the extent to which a project is expected to achieve or exceed its major objectives.	
Highly Satisfactory (HS)	Project is expected to achieve or exceed all its major global environmental objectives, and yield substantial global environmental benefits, without major shortcomings. The project can be presented as “good practice”
Satisfactory (S)	Project is expected to achieve most of its major global environmental objectives, and yield satisfactory global environmental benefits, with only minor shortcomings
Moderately Satisfactory (MS)	Project is expected to achieve most of its major relevant objectives but with either significant shortcomings or modest overall relevance. Project is expected not to achieve some of its major global environmental objectives or yield some of the expected global environment benefits
Moderately Unsatisfactory (MU)	Project is expected to achieve its major global environmental objectives with major shortcomings or is expected to achieve only some of its major global environmental objectives
Unsatisfactory (U)	Project is expected not to achieve most of its major global environment objectives or to yield any satisfactory global environmental benefits
Highly Unsatisfactory (HU)	The project has failed to achieve, and is not expected to achieve, any of its major global environment objectives with no worthwhile benefits

Implementation Progress Rating. A rating of the extent to which the implementation of a project’s components and activities is in compliance with the project’s approved implementation plan.	
Highly Satisfactory (HS)	Implementation of all components is in substantial compliance with the original/formally revised implementation plan for the project. The project can be resented as “good practice”
Satisfactory (S)	Implementation of most components is in substantial compliance with the original/formally revised plan except for only a few that are subject to remedial action
Moderately Satisfactory (MS)	Implementation of some components is in substantial compliance with the original/formally revised plan with some components requiring remedial action
Moderately Unsatisfactory (MU)	Implementation of some components is not in substantial compliance with the original/formally revised plan with most components requiring remedial action.
Unsatisfactory (U)	Implementation of most components is not in substantial compliance with the original/formally revised plan
Highly Unsatisfactory (HU)	Implementation of none of the components is in substantial compliance with the original/formally revised plan.

Risk rating will assess the overall risk of factors internal or external to the project which may affect implementation or prospects for achieving project objectives. Risk of projects should be rated on the following scale:	
High Risk (H)	There is a probability of greater than 75% that assumptions may fail to hold or materialize, and/or the project may face high risks.
Substantial Risk (S)	There is a probability of between 51% and 75% that assumptions may fail to hold or materialize, and/or the project may face substantial risks
Moderate Risk (M)	There is a probability of between 26% and 50% that assumptions may fail to hold or materialize, and/or the project may face only moderate risk
Low Risk (L)	There is a probability of up to 25% that assumptions may fail to hold or materialize, and/or the project may face only low risks

Annex 2.

GEO LOCATION INFORMATION

The Location Name, Latitude and Longitude are required fields insofar as an Agency chooses to enter a project location under the set format. The Geo Name ID is required in instances where the location is not exact, such as in the case of a city, as opposed to the exact site of a physical infrastructure. The Location & Activity Description fields are optional. Project longitude and latitude must follow the Decimal Degrees WGS84 format and Agencies are encouraged to use at least four decimal points for greater accuracy. Users may add as many locations as appropriate. Web mapping applications such as [OpenStreetMap](#) or [GeoNames](#) use this format. Consider using a conversion tool as needed, such as: <https://coordinates-converter.com> Please see the Geocoding User Guide by clicking [here](#)

Location Name	Latitude	Longitude	Geo Name ID	Location & Activity Description

Please provide any further geo-referenced information and map where the project interventions is taking place as appropriate.