



FAO-GEF Project Implementation Report 2022– Revised Template

Period covered: 1 July 2021 to 30 June 2022

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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)
Project Duration (years):	4 years
Project coordinates:	Project coordinates were submitted through an online form

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	31 October 2023

Funding

GEF Grant Amount (USD):	2 627 000
Total Co-financing amount as included in GEF CEO Endorsement Request/ProDoc³:	16 800 000
Total GEF grant disbursement as of June 30, 2022 (USD)⁴:	2,521,575
Total estimated co-financing materialized as of June 30, 2022⁵	16,834,715

¹As per FPMIS

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

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

⁴For DEX projects, the GEF Coordination Unit will confirm the final amount with the Finance Division in HQ. For OPIM projects, the disbursement amount should be provided by Execution Partners.

⁵ Please refer to the section 12 of this report where updated co-financing estimates are requested and indicate the total co-financing amount materialized.

M&E Milestones

Date of Most Recent Project Steering Committee(PSC) Meeting:	April, 2021
Expected Mid-term Review date⁶:	July, 2021
Actual Mid-term review date (when it is done):	July, 2021
Expected Terminal Evaluation Date⁷:	April, 2023
Tracking tools/Core indicators updated before MTR or TE stage (provide as Annex)	Yes

Overall ratings

Overall rating of progress towards achieving objectives/ outcomes (cumulative):	S
Overall implementation progress rating:	S
Overall risk rating:	L

ESS risk classification

Current ESS Risk classification:	L
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Status

Implementation Status (1st PIR, 2nd PIR, etc. Final PIR):	4 th PIR
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Project Contacts

Contact	Name, Title, Division/Institution	E-mail
Project Manager / Coordinator	Liu Zhixin, Project Director	24913785@qq.com
Budget Holder	Carlos Watson, FAO Representative to China and DPR Korea	Carlos.Watson@fao.org
Lead Technical Officer	Li He, Natural Resources Officer, FAO RAP	He.Li@fao.org
GEF Funding Liaison Officer	Yurie Naito, Technical Officer, FAO HQ	Yurie.Naito@fao.org

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 2022	Progress rating ¹¹
The project's global environmental objective is to demonstrate and replicate an integrated model for Sustainable Land and Water Management	Outcome 1.1:	Adoption of integrated SLWM model including biodiversity conservation by local governments and drafting of corresponding policy implementation guidelines.	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		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 concept was adopted by Da'an, Qianguo counties and Songyuan prefecture and was incorporated into Chagan Lake management and protection plan (2018-2030) about water ecological restoration task. The opinions of the CPC Jilin Provincial Committee and Jilin Provincial People's Government on supporting Qian'guo county to build an ecological priority green	S

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>(SLWM) in saline-alkaline productive landscapes including rehabilitation and biodiversity conservation in wetlands.</p> <p>The project's development objective is to provide long-term sustainable flow of income to farmer's communities from farming systems (crop, livestock and fish) in western Jilin province by building an ecologically resilient productive landscape.</p>			<p>modelling in Songyuan irrigation system</p>			<p>development demonstration zone> was issued as government documents.<The opinions of the CPC Jilin Provincial Committee and the people's Government of Jilin Province on supporting the construction of ecological economy innovation and development demonstration zone in Da'an City>was issued as Jifa 2020 [35].</p> <p>Completed about 80% against project objectives.</p>	
		<p>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)</p> <p>a)Drafting and approval of county level policy implementation guidelines b)Outlining the details of the rollout of the SLWM</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 concept of SLWM model and biodiversity protection were 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.It will continue until Q4 of 2022.</p>	<p>S</p>

		model including specific responsibilities of stakeholders				Completed about 80% against project objectives.	
	Outcome 1.2 :	Wetlands biodiversity conservation and SLWM model incorporated into policies, plans, and regulations for the agriculture and water resource management sectors (including land and water use planning and management) in western Jilin province	<p>a) Existing body of laws and regulations on water use efficiency, water quality in the agricultural sector without clear landscape perspective integrating questions of biodiversity and land degradation in an integrated way</p> <p>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>		At least a 40% increase in BD-2 TT score; 40-60% in LD PMAT score; incorporation of SLWM and BD conservation recommendations into five years development plans in 4 counties and at least one investment program for western Jilin province	The monitoring of biodiversity indicated an increase in biodiversity by 30% and LD PMAT score of 40% compare to the baseline measurements made at the project design stage. Completed about 80% against project objectives.	S
		Wetlands biodiversity conservation and	About 2,489,500 ha saline alkaline		About 6,060 ha ¹³ of saline alkaline landscapes has	The wetland area was restored about 6,060 hectares. 220,000	S

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

		SLWM model replication in saline alkaline landscapes in western Jilin province	land under desertification and degradation process and wetlands drying up in western Jilin province		managed under the application of wetlands biodiversity conservation and SLWM practices at the end of the project and 319,253 ha ¹⁴⁵ years after the end of the project	hectares of Songyuan irrigation area, including partial Da'an irrigation area and Qian'guo irrigation area, were managed under the application of wetlands biodiversity conservation and the concept of SLWM.	
	Outcome 1.3	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	On October 23, 2021, "Songyuan black soil protection: conservation tillage on-site promotion training meeting was held in Qian'an country (organized by Jilin GEF Project Office). There are nearly 400 people participated in the meeting including 120 technicians and 80 decision makers from relevant line agencies of Da'an, Qian'guo, Qian'an and Zhenlai Counties are trained From July 30 to August 2, "The First International Federation of Soil Sciences Saline Alkali Soil Improvement Conference and 2021 Annual Academic Meeting of Saline Alkali Soil Professional Committee of Chinese Soil Society" were successfully held in Changchun. More than 260 experts and managers from more than 20 countries and regions participated in the conference. Completed about 100% against total progress.	S

¹⁴ Composed of 220,00 ha for Songyuan Irrigation Area and 99,253 ha for Zhenlai and Da'an (Tao'erhe) irrigation areas.

		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 and extended		a) 400 farmers and 70 extension workers trained	On October 23, 2021, "Songyuan black soil protection:conservation tillage on-site promotion training meeting was held in Qian'an country(organized by Jilin GEF Project Office). There are nearly 400 people participated in the meeting including 200 farmers from relevant line agencies of Da'an, Qian'guo, Qian'an and Zhenlai Counties are trained From November 23 to 25, 2021, "The Advanced Seminar on Improving the Transfer and Transformation Ability of Wetland Ecology Professional Technology" was successfully held online. More than 450 wetland professionals and front-line employees from 103 wetland management departments, 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.	S
Outcome 2.1:		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 drafts of 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".	S

						Completed about 85% against total progress.	
		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 85% against total progress.	S
		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	a)101,360 ha saline alkaline land under desertification and degradation process in Songyuan irrigation area. b)69,420 ha low-yield farmland		Degradation and desertification processes reversed in 47,690 ha ¹⁵ rehabilitated saline-alkaline land by the end of the project, and 125,290 ha ¹⁶ will be improved by 2025 depending on the construction process of the relevant irrigation projects	Degradation and desertification processes reversed in 47,690 ha rehabilitated saline-alkaline land. The new compound conditioner "Desodium-no. 3" can significantly improve saline-alkali land by reducing soil exchangeable sodium content (ESP), increasing soil organic matter, and improving soil structure and soil quality. Grassland restoration demonstration area was 1000 hectares. Agricultural demonstration area was 1,385 hectares, including 185 hectares of Shenjingzi Pasture, 1,000 hectares of Beixian Rice Industry, and 200 hectares of paddy fields on newly reclaimed saline-alkali land.	S
	Outcome 2.2	SLWM agricultural practices adopted in Qian'an, Da'an and	Some experiments have been done with		SLWM practices adopted in 47,690 ha ¹⁷ at end of the project, and scaled to 170,780	Carried out alternative agriculture practices in dry farming land and paddy land and monitored in Da'an	S

¹⁵ Composed of 45,490 ha from existing Qian'guo irrigated area and 2,200 ha in Niuxintaobao.

¹⁶ Total of 170,780 ha of saline-alkaline land in the Songyuan irrigation area minus 45,490 ha from Qian'guo.

¹⁷ Composed of 45,490 ha from existing Qian'guo irrigated area and 2,200 ha in Niuxintaobao.

		Qian'guo pilot sites and scaled to the total Songyuan irrigation area of integrated production landscape contributing to the conservation of wetlands biodiversity	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		ha covering the total saline-alkaline land in the Songyuan especially in Da'an irrigation district and Qianguo irrigation district	and Qian'guo pilots. Qian'guo irrigation about 47,690 ha adopted the theory of SLWM and covered the most saline-alkaline land in the Songyuan especially in Da'an irrigation district and Qian'guo irrigation district Completed about 85% against total progress.	
		Develop technical guidelines	No technical guidelines		Technical guidelines in i) salinity management for irrigated fields (including 'green/ecological' paddy production, irrigation area 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)	Completed the draft of technical guidelines. Formulated pilot work plan, written technical guidelines (green ecological agriculture, conservation tillage, water-saving irrigation, pasture recovery, saline-alkali land restoration and governance) . Completed about 85% against total progress.	S
		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		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: • 9,750 kg/ha for ca. 200ha of paddy rice fields (scaled to	Most farmer's households adopt SLWM practices In Beixian Rice Industry demonstration, the rice yield was 9600kg / ha for ca. 300ha of paddy rice fields, which has become a demonstration model of paddy field ecological agriculture. Shenjingzi Pasture has 100 hectares of conservation tillage, with a yield of	S

			and xx11,000 CNY/ha for corn in rain-fed land iii) 800 kg/ha and 640 CNY/ha for grassland iv) 300kg/ha of fish and 75kg/ha of river crabs in Niuxintaobao		45,000ha ¹⁸ in PY4 to PY4+5) •8,500 kg/ha and 9500 CNY/ha for ca. 200ha of corn in rain-fed land (scaled to 45,000ha ¹⁹ 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 Niuxintaobao and 2,668hain Dagangzipao and Xiaoximipao	13,000kg / ha. 3,500 hectares of saline-alkali land were improved. 1500 kg/ha and 1200 CNY/ha for 2,000ha in Shenjingzi Pasture rehabilitated grassland The fishery income of Niuxintaobao and Xinmiaopao wetlands has reached to800 yuan / ha.	
Outcome 2.3:	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 about 80% 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	Completed the Integrated Land and Water Management Plans(ILWMP) and agreed with most stakeholders. Completed about 80% against total progress.	M S

¹⁸45,000 ha is the existing Qian'guo irrigation area.

¹⁹45,000 ha is the existing Qian'guo irrigation area.

		Integration of the ILWMP guidelines and principles into the training programs of the WRB and CAD (measured by the number of training packages updated)			Implementation of ILWMP in 167,000 ha ²⁰ by the end of the project and 220,000 ha 5 years after the end of the project	The project team surveyed and mapped the ditch system of Da'an Irrigation District, refined the version 1.0 of the sustainable land and water resources management model (SWLM), and calculated the average annual total ecological water demand of the irrigation district is $9.2 \times 10^7 \text{m}^3$, the average annual water yield of the irrigation area is $1.14 \times 10^8 \text{m}^3$, farmland irrigation water demand $7.7 \times 10^7 \text{m}^3$, with an average annual water demand of $5.5 \times 10^7 \text{m}^3$. 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 carrying capacity of reed wetland in the drainage area. Implementation of ILWMP in Qianguo and Da'an irrigation area. Completed about 70% against total progress.	S
	Outcome 3.1	Rehabilitation and conservation of wetlands managed as an integrated part of the freshwater fishery and irrigated crop and grassland production landscape providing			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	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 49,883 ha of wetlands in the project landscape	S

²⁰167,000 ha represents the Songyuan Irrigation Area minus the area of grassland.

		important habitats for endangered migratory birds				especially in the internationally important wetlands. Completed about 85% against total progress.	
		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)	After the spring migration period in 2021, a large number of flagship bird species such as White Crane, Red Crowned Crane, Oriental White Stork, White Headed Crane and Grey Crane stopped in the project areas. There were 5 species of national first-class protected birds and 19 species of national second-class protected birds. Completed about 90% against total progress.	S
		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		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 80% against total progress.	S
	Outcome 3.2	Agricultural non-point source pollution controlled and			Measurements for agriculture non-point source below required values	The results showed that the engineering wetland runs continuously and healthily, and the removal efficiency of salinity,	S

		monitored within the project area				nutrients and other non-point pollutants of drainage water was more than 30%, which reduced the environmental constraints of rice planting in saline-alkali areas, and effectively ensured the ecological health of natural marsh wetlands. Completed about 80% 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	According to the geomorphic characteristics of Da'an irrigation area and the national survey results of wetland resources, combined with the water balance equation. One model about total annual average ecological water demand of Da'an irrigation area was estimated. It was about 1.03×10^8 m ³ . Completed about 85% 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 management strategy implemented			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 and inflow and outflow operation strategy in place by Y2 and providing monitoring	Monitored the water inflow and outflow of buffer zone. Drafted the risk warning manual. Completed about 80% against total progress.	S

					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)		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, Dagangzi and Xiaoximi) and giving monitoring feedback information and suggestions to modifying the irrigation and water supply strategy	Investigated the biodiversity indifferent time across the project areas and provided the monitoring feedback information and suggestions to modify the irrigation and water supply strategy Completed about 80% against total progress.	S
	Outcome 3.3: :	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			a) 3 wetlands co-management committees established, 3 biodiversity co-management plans for the wetlands and buffer zone developed and under implementation	The co-management agreement and implementation plan in Niuxintaobao and Dagangzi were established on the basis of the "wetland co-management community" established with the local government. Completed about 75% against total progress.	S
		Awareness raising campaign on wetlands biodiversity conservation implemented in rehabilitated and existing wetlands in the area of influence of the Songyuan irrigation area			a) Campaign implemented reaching 6 communities and at least 40% of the families were aware of the wetlands biodiversity and habitat conservation needs (evaluated through campaign impact survey)	Three community activities were carried out. Completed about 50% against total progress.	M S

	Outcome 4.1:	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			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 75% against total progress.	S
	Outcome 4.2:	Annual review and planning workshop carried out to ensure the achievements of the intended outputs and outcomes; Midterm and final evaluation reports			3 Evaluations conducted	Overall rating of the project performance and achievement of outcomes was "Moderately Satisfactory". Completed about 75% against total progress.	S
	Outcome 4.3:	Project results and best practices disseminated			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 the society, and publicity and education has been carried out. On September 10, 2021, CCTV-9 documentary reported the results of crab breeding in saline-alkali wetlands. On October 25, 2021, CCTV-4 reported the restoration of saline-alkali degraded wetlands and the treatment of drainage water by engineering wetlands. On November 1, 2021, Jilin Province News Network	S

						reported the work of environment-friendly agriculture in saline-alkali paddy wetlands.	
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Action Plan to address MS, MU, U and HU ratings

Outcome	Action(s) to be taken	By whom?	By when?
Outcome 2.3.2: Integrated land and water management plan (ILWMP) for the entire Songyuan Area consulted, validated and agreed with relevant stakeholders	Held several meetings to validate and reach agreement with relevant stakeholders.	Policy and Regulatory Expert, Technical Cooperation Unit, PMO	3 rd and 4 th quarters of 2022 and 1 st and 2 nd quarters of 2023
Outcome 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	Organize publicity activities to raise awareness on wetland biodiversity conservation.	Technical Cooperation Unit Wetland Expert, Biodiversity Expert, PMO	3 rd and 4 th quarters of 2022 and 1 st and 2 nd quarters of 2023

3. Implementation Progress (IP)

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

Outcomes and Outputs ²¹	Indicators (as per the Logical Framework)	Annual Target (as per the annual Work Plan)	Main achievements ²² (please avoid repeating results reported in previous year PIR)	Describe any variance ²³ in delivering outputs
Output 1.1.1	Draft SLWM model . Provide constructive suggestions to adopt the SLWM management policy	Bulid the model and adopt it to the policy	The version 1.0 of the SLWM model had been builtand incorporated into the development plan of Songyuan and Da’an government. The SLWM concept was incorporated into “Chagan Lake management and protection plan (2018-2030)”. <The opinions of the CPC Jilin Provincial Committee and Jilin Provincial People's Government on supporting Qian'guo county to build an ecological priority green development demonstration area> was issued as a government document.	
Output 1.1.2	Stakeholders reached intent to adopt SLWM model and Preparation of "SLWM" policy implementation guidelines	Stakeholders adopt the theory of SLWM model. Prepare the implementation guidelines.	The guidelines for the implementation of the project model which was promoted by the county government in Western Jilin Province. <The opinions of the CPC Jilin Provincial Committee and the people's Government of Jilin Province on supporting the construction of ecological economy innovation and development demonstration zone in Da'an City> was issued as Jifa 2020 [35].The theory of SWLM model had been adopted by local people.	
Output 1.2.1:	Wetlands biodiversity conservation and SLWM model incorporated into policies, plans, and regulations for the agriculture and water resource management sectors (including land and water use planning and management) in western Jilin province	Incorporatethe SLWM and BD conservation recommendations into five years development plans in 4 counties.	The concept of SLWM model and biodiversity protection were incorporated into the "14th five years plan" of the four counties in Western Jilin (i.e. Da'an, Qian'guo, Qian'an and Zhenlai)	

²¹Outputs as described in the project Logframe or in any approved project revision.

²²Please 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 sentence with main achievements)

²³Variance refers to the difference between the expected and actual progress at the time of reporting.

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.	Taking Da'an irrigation area as an example, according to the area of different land use types, the annual average ecological water demand of Da'an irrigation area was 1.03×10^8 m ³ calculated by water balance equation. According to the relationship between soil conductivity and soil salt content in Songliao plain, the soil salt balance equation of Da'an irrigation area was established, and the total amount of salt from rice irrigation was 157.92g/m ² . The average drainage in the first three years of reclamation was 1500-2000 m ³ / hm ² . The salt content of the retreated water was 515.33 mg / L, combined with the attenuation effect of ditch organisms and soil on salt, the salt removal efficiency of wetland on the retreated water was 30% - 50%.	
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.	On October 23, 2021, "Songyuan black soil protection-conservation tillage on-site promotion training meeting" was held in Qian'an county (organized by GEF Project Management Office). The content was "Resource efficiency and Integrated Ecological Health of Saline Alkali Paddy Field and Wetland System". Nearly 400 people participated in the meeting. From July 30 to August 2, "The First International Federation of Soil Sciences Saline Alkali Soil Improvement Conference and 2021 Annual Academic Meeting of Saline Alkali Soil Professional Committee of Chinese Soil Society" was successfully held in Changchun. More than 260 experts including 1/3 women and managers from more than 20 countries and regions participated in the conference. From November 23 to 25, 2021, "The Advanced Seminar on Improving the Transfer and Transformation Ability of Wetland Ecology Professional Technology" was successfully held online. More than 450 wetland professionals and front-line employees including 1/3 women from 103 wetland management departments, universities and scientific research institutions participated in the training, and some units organized offline special learning activities around the training.	
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.	Total of 300 farmers in 2021 (30% of whom are women) and more than 70 extension workers received training in ecological agriculture through the form of expert lectures in Dagangzi and Shenjingzi.	

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	Completed six sets of implementation manuals, including "Management of conservation tillage in dry fields", "Technical model of saving water, reducing fertilizer and increasing efficiency", "Management for green ecological agriculture in paddy field", "Technical model of soil improvement and increasing efficiency in newly reclaimed paddy field in saline-alkali wasteland", "Technical model of natural grassland restoration by fencing" and "Technical model of artificial grassland restoration". Completed "Guidelines for Agricultural Irrigation Water and Agricultural Water Saving" on soda saline alkaline land treatment and conservation tillage technology.	
Output 2.1.2:	Groundwater levels stabilized in the project area and positive demonstration effects for the wider irrigation area	Groundwater levels stabilized.	The groundwater monitoring data showed that the groundwater depth was mainly affected by the water consumption of paddy field and dryland agriculture. 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.	New compound conditioner "Desodium-no. 3" can significantly improve saline-alkali land by reducing soil exchangeable sodium content (ESP), increasing soil organic matter, and improving soil structure and soil quality. At present, the process of land degradation and desertification in Niuxintaobao and Qian'guo irrigation areas has been reversed. The grassland restoration demonstration area was 2,000 hectares. In grassland restoration, the natural grassland restoration by fencing continued at Shenjingzi Pasture of Qian'guo County, Songyuan City. The grassland plant species belonged to 21 families, 52 genera and 54 species. The dry weight' of fenced grass was significantly higher than that of control by 265.6%. Coverage has also increased to 85%. Experimental research on artificial grassland restoration, including improving saline-alkali soil by sanding and planting alfalfa artificially, showed that sanding significantly reduced the soil salinity and alkalinity, and the yield of alfalfa was as high as 1.01kg/m ² .	
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	SLWM agricultural practices adopted in Qian'an, Da'an and Qian'guo pilot sites.	SLWM agricultural practices adopted in most area of Qian'an, Da'an and Qian'guo pilot sites.	

	of integrated production landscape contributing to the conservation of wetlands biodiversity			
Output 2.2.3:	Developed technical guidelines.	Develop technical guidelines.	Completed the professional evaluation of 9 technical guidelines including comprehensive agriculture and animal husbandry management outline, biodiversity management outline, ecosystem services management outline, water management outline, saline-alkali land management outline, 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.	In the second year of saline-alkali land improvement, the rice yield with new compound conditioner has reached to 5715 kg / ha. In Beixian Rice Industry demonstration area, the yield of rice was 9600kg / ha, which has become a demonstration area of paddy field ecological agriculture. The conservation tillage in Shenjingzi Pasture, after applying saline-alkali soil conditioner "Desodium-no. 3", the yield has reached to 13000kg/ ha. A total of 3500 hectares of saline-alkali land were improved in Niuxintaobao. The fishery income of Niuxintaobao and Xinmiaopao wetlands has reached to 800 yuan / ha.	
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.	Prepare comprehensive and dynamic ILWMP.	Integrated Land and Water Management Plans (ILWMP) in different months of the crop growing season was prepared. Under Windows environment, an independently software of "irrigation area soil salt washing calculator. Exe" had been developed using the C language. Taking paddy field area, cultivation years, soil depth, soil bulk density, channel length and other parameters as variables, the annual total amount of salt washing can be calculated. According to the area of reed wetland in the receiving area, it can be estimated whether the annual total amount of salt washing of cultivated land in irrigation area exceeds the acceptable threshold of wetland.	
Output 2.3.2:	Integrated land and water management plan (ILWMP) for the entire Songyuan Area consulted, validated and agreed with relevant stakeholders	Held a seminar to modify, argument and improve the ILWMP	Meeting will be Held in August to validate and reached an agreement 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.	
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.	Endangered migratory birds resting and feeding in these wetlands.	According to the survey results, a total of 122 species of bird were recorded in spring, with more than 32,630 individuals. Xiaoximipao and its surrounding wetlands were the hot spots for regional bird distribution. A total of 270 Siberian Cranes inhabited in Xiaoximipao and stayed for 38 days, the red-crowned crane was recorded in Niuxintaobao, and the Oriental White Storks were recorded in Niuxintaobao and Xiaoximipao.	
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)	The 122 species including one species of IUCN Red List Critically Endangered species, Siberian Cranes, two species of IUCN Red List Endangered species, Oriental White Stork and Red Crowned Crane, one specie of IUCN Red List Vulnerable Species White Headed Crane, and Grey Crane stopped. After the spring migration period in 2021, a large number of flagship bird species such as White crane, Red Crowned Crane, Oriental White Stork, White Headed Crane and Grey Crane stopped in the project areas. There were 5 species of national first-class protected birds and 19 species of national second-class protected birds. The species and number of bird species and protected bird species have increased, from 60 species and 7260 to 112 species and 32630.	
Output 3.2.1:	Establish comprehensive monitoring system measuring pollutants and salinity across the project area.	Measure pollutants and salinity across the project areas.	The water monitoring system is still working in Niuxintaobao wetland, Xiaoximi wetland, Dagangzi wetland and Xinmiao wetland. Water level was monitored by HOB0 instruments. Changes of water level and temperature of streams, lakes, wetlands, tidal areas and groundwater were monitored. The water qualities were monitored by field investigation in different time and the surface water quality indicators included pH, COD, BOD, DO, TP, TN, TK, total salt, typical pesticides, etc.	

Output 3.2.2:	Agricultural non-point source pollution controlled and monitored within the project area.	Agricultural non-point source pollution controlled.	<p>Water quality sample of 46 fixed dynamic monitoring points were collected under different treatments of rice field which inside engineering wetland and the whole marsh wetland area, and monitored in different times (after freezing and thawing, before water replenishment, after ecological water replenishment, after rice transplanting drainage and after rice seedling slowing down). The main pollutant indexes were pH, COD, DO, TP, TN, TK and salinity. Meanwhile, the water, soil and vegetation monitoring of the project wetland was also carried out.</p> <p>Treated drainage water from paddy field with engineering wetland, the dynamic monitoring results showed that the engineering wetland operated continuously and healthily, and the removal efficiency of salinity, nutrients and other non-point pollutants of drainage water was more than 30%, which reduced the environmental constraints of rice planting in saline-alkali areas, and effectively ensured the ecological health of natural marsh wetlands.</p>	
Output 3.2.3:	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.	Water quality requirements and ecological water demand for rehabilitation of wetlands were developed based on the data collected from buffer zone inflow and outflow water quality and quantity measurement.	According to the geomorphic characteristics of Da'an irrigation area and the national survey results of wetland resources, combined with the water balance equation, the total annual average ecological water demand of Da'an irrigation area was estimated to be $1.03 \times 10^8 \text{ m}^3$.	
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.	Establish the pollution risk early warning system and inflow and outflow management strategy.	The significant environmental factors on phytoplankton abundance in Xinmiaopao wetland were COD, Cr, TK, TP, Sal, water temperature and TN. The significant environmental factors in biomass analysis were Sal, TK, BOD5 and TP.	

Output 3.2.5:	Establish comprehensive monitoring system measuring biodiversity across the project area.	Measure biodiversity across the project area.	The experts Investigated the biodiversity in different time across the project areas about plant, fish and bird.	
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	Two community promotion activities were carried out in Niuxintaobao and Dagangzi.	

4. Summary on Progress and Ratings

Please provide a summary paragraph on progress, challenges and outcome of project implementation consistent with the information reported in sections 2 and 3 of the PIR.

During this year, though the COVID 19 pandemic has been well controlled in China, the project progress was still affected, especially in the first half of 2022. However, the project team also carried out sustainable water and soil resources management, agricultural conservation practices, wetland restoration and biodiversity investigation. Guidelines for agricultural water management and environment-friendly ecological agriculture development were developed to promote sustainable and efficient water use, and to avoid water pollution caused by pesticides and fertilizers. The model of Sustainable Land and Water Management (SLWM) was built in Da'an irrigation area with Integrated Land and Water Management Plans. Under Windows environment, an independent software of "irrigation area soil salt washing calculator.Exe" had been developed using C language. The software will be trained to the manager of water conservancy department and agricultural department. It will be improved the water efficiency. Taking paddy field area, cultivation years, soil depth, soil bulk density, channel length and other parameters as variables, the annual total amount of salt washing can be calculated, and it can be estimated when the annual total amount of salt washing of cultivated land in irrigation area exceeds the acceptable threshold of wetland. The cumulative progress of the project has reached 80%, which increased by 30% comparing with last reporting period in 2021.

The most outcome mainly were as follows: Firstly, the SLWM concept was incorporated into "Chagan Lake management and protection plan (2018-2030)" such as wetland and agricultural management, water supply and rural construction. The main tasks include water ecosystem restoration, meadow grassland restoration and protection, soil erosion mitigation, wetland restoration, and the improvement of management capacity of the reserve. Secondly, <the opinions of the CPC Jilin Provincial Committee and Jilin Provincial People's Government on supporting Qian'guo county to build an ecological priority green development demonstration area> was issued as a government document. The purpose is to create a county model that guides the whole province's ecological protection and green development. Thirdly, the ecological agriculture and conservation tillage technology had been applied in Qian'guo and Da'an county. The biodiversity of bird and plant increased with the improvement of water quality. In July 2021, the MTR gave overall ratings on achievements including the progress towards achieving the project's development objective: Moderately Satisfactory. Overall progress on implementation: Moderate Satisfactory. Overall risk rating: Moderately likely to achieve Sustainability. In terms of project management, the Project Year-end Meeting and Project Task Force Meeting were held in Changchun on December 20-21, 2021. Deputy director Liu Zhixin of the project office recommended that the office should pay more attention to the orderly development of training, publishing, exchange and other activities, encourage the communication between experts and project management office to ensure the smooth completion of the project.

In 2022, with the outbreak of COVID 19 in Changchun, a lot of field investigation work and workshop had been stopped. Some work have to be entrusted to the local management department to complete. Due to the climate, farming in Northeast China mostly starts in May, which has little impact on the overall progress of the project. However, the workshop and training meeting need to be carried out rapidly.

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.

	FY2022 Development Objective rating²⁴	FY2022 Implementation Progress rating²⁵	Comments/reasons²⁶ justifying the ratings for FY2022 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 80%, which increased by 30% comparing with last reporting period in 2021. The PMO will accelerate the disbursement and reimbursement of funds.</i>
Budget Holder	S	S	<i>The Project has achieved around 80% towards the project objectives thanks to the great efforts made by PMO, especially after the MTR in 2021. Due to the negative impact of Covid-19, PMO has to speed up the implementation of training and capacity building activities and the disbursement of funding so as to complete this project by October 2023.</i>
GEF Operational Focal Point²⁷	S	S	
Lead Technical Officer²⁸	S	S	<i>Project implementation is on track. For example, SLWM model has been formulated. Wetland restoration and capacity building are being implemented as planned.</i>
FAO-GEF Funding Liaison Officer	S	S	<i>The PMO has been making robust progress, though the low disbursement is a serious concern, considering the project completion fast approaching in April 2023. A realistic projection should be prepared and discussed with the project task force in Aug/Sept 2022.</i>

²⁴**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.

²⁵**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.

²⁶Please ensure that the ratings are based on evidence

²⁷In case the GEF OFP didn't provide his/her comments, please explain the reason.

²⁸The LTO will consult the HQ technical officer and all other supporting technical Units.

5. Environmental and Social Safeguards (ESS)

Under the responsibility of the LTO (PMU to draft)

Please describe the progress made complying 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. Add new ESS risks if any 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. These activities can increase productivity and reduce vulnerability to climate change.	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 transferred the water resources through Chaersen Reservoir into the project area to replenish the ecological water and mitigate the climate change risk.	None	PMO, CTA, DWRJP, Water environment and wetland ecological experts, field stations for piloting and monitoring activities.

<p>Salt moving to the upper layers of the soil. Risk rating: L</p>	<p>The project will introduce integrated saline soil improvement technologies to mitigate the risk, such as physical engineering, chemical absorption, plant salt resistant crops, etc. The technologies include: i) salinity management for irrigated fields (including 'green/ecological' paddy production, irrigation area 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).</p>	<p>The project introduced integrated saline soil improvement technologies to mitigate the risk, such as physical engineering, chemical absorption, plant salt resistant crops, etc.</p>	<p>The technologies include: i) salinity management for irrigated fields (including water quality monitoring 'green/ecological' paddy production, irrigation area 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). SLWM agricultural practices adopted in Qian'an, Da'an and Qian'guo pilot sites and scaled to the total Songyuan irrigation area</p>	<p>PMO, CTA, Agricultural saline-alkali soil control and good agricultural experts.</p>
<p>ESS 2: Biodiversity, Ecosystems and Natural Habitats</p>				
<p> </p>				
<p>ESS 3: Plant Genetic Resources for Food and Agriculture</p>				
<p> </p>				
<p>ESS 4: Animal - Livestock and Aquatic - Genetic Resources for Food and Agriculture</p>				
<p> </p>				
<p>ESS 5: Pest and Pesticide Management</p>				
<p> </p>				
<p>ESS 6: Involuntary Resettlement and Displacement</p>				

ESS 7: Decent Work				
ESS 8: Gender Equality				
ESS 9: Indigenous Peoples and Cultural Heritage				
Farmers lack of capacity to adopt water saving agriculture practice and technologies Risk rating: L	The risk can be mitigated through farmer's training and field demonstration. Conservation tillage and ecological agriculture models can be demonstrated in the pilot areas.	The training and field demonstration had been held in 2020, 2021. The farmers adopt the technology.	The training and field demonstration will be held in 2022	PMO, CTA, Agricultural saline-alkali soil control and good agricultural experts, Capacity building and socio-economic experts.
Market risks for green food products Risk rating: L	Support to the farmer's cooperatives. Promote the agro-company plus households marketing modality.	The market of green food products had been accepted by people in China through the report of media.		PMO, CTA, Socio-economic expert.
Interests conflicts between different sectors and line agencies Risk rating: L	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 sector Hold multi-stakeholder policy consultation conference at Y3-Y4 Local project office will make good communication with the local government	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 sector. Hold multi-stakeholder policy consultation conference at Y4. Local project office will make good communication with the local government.	PMO, CTA, DWRJP, Water environment and wetland ecological experts.

Local government is not able to pay the eco-service compensation to farmers Risk rating: L	Consult with and formulate recommendations to local government. Ecological water shortage of Dagangzi and Niuxintaobao will be solved through the water diversion from Chaersen Reservoir.	Ecological water shortage of Dagangzi and Niuxintaobao had been solved through the water diversion from Chaersen Reservoir.	Consult with and formulate recommendations to local government.	PMO, CTA, DWRJP, Water environment expert, Wetland ecological expert, Capacity building expert.
Lack of water in Dagangzipao and Xiaoximipao Pilot Area Risk rating: M	Jilin Department of Water Resources, PMO will coordinate with the SIA . Project implementation unit to give priority to the Dagangzipao.	Ecological water shortage of Dagangzi had been solved through the water diversion from Chaersen Reservoir.	Continue to supply the ecological water to Dagangzi	PMO, CTA, DWRJP, Water environment expert, Wetland ecological expert, Capacity building expert.
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 if the initial Environmental and Social (ESS) Riskclassification is still valid; if not, what is the new classification and explain.

Initial ESS Risk classification (At project submission)	Current ESS risk classification Please indicate if the Environmental and Social Risk classification is still valid ²⁹ . If not, what is the new classification and explain.
L	L

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.

²⁹**Important:** please note that if the Environmental and Social Risk classification has changed, the ESM Unit should be contacted and an updated Social and Environmental Management Plan addressing new risks should be prepared.

6. Risks

The following table summarizes risks identified in the Project Document and reflects also any new risks identified in the course of 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 ³⁰	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					

³⁰ Risk ratings means a rating of accesses the overall risk of factors internal or external to the project which may affect implementation or prospects for achieving project objectives. Risk of projectsshould 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 ³⁰	Identified in the ProDoc Y/N	Mitigation Actions	Progress on mitigation actions	Notes from the Budget Holder in consultation with Project Management Unit
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 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. <p>These activities can increase productivity and reduce vulnerability to climate change.</p>	Water diversion through Chaersen Reservoir to replenish the ecological water into the project area.	

	Type of risk	Risk rating ³⁰	Identified in the ProDoc Y/N	Mitigation Actions	Progress on mitigation actions	Notes from the Budget Holder in consultation with Project Management Unit
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. 	Mitigate soil salinization degree by conservation tillage technique.	
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 demonstrated in the pilot areas. 	Conservation tillage and ecological agriculture models demonstrated in 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. 	Cooperated with agricultural companies and good results achieved.	
3	Institutional risks					

	Type of risk	Risk rating ³⁰	Identified in the ProDoc Y/N	Mitigation Actions	Progress on mitigation actions	Notes from the Budget Holder in consultation with Project Management Unit
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 . 	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 recommendations to local government. 	Ecological water shortage of Dagangzi and 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.	Ecological water replenishment	

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

FY2021rating	FY2022rating	Comments/reason for the rating for FY2022and 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				
		Actions to be taken, and/or comments about partial acceptance or rejection (c)	Responsible unit (d)	Status (e)	Time Frame (f)	Further funding required (Y or N) (g)
<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 of the sites before replicating the good practices in the second half of the project.</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.		N

<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	The SLWM model and related guidelines and manuals have been preliminarily completed.	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 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>	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 formulation, meetings, training, guidelines formulation and other activities can be held after growing	PMO Northeast Institute of geography and Agroecology, Chinese Academy of Sciences PMO	The PMO arranged more required 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>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 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</p>	Partially Accepted	<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</p> <p>Northeast Institute of geography and Agroecology, Chinese Academy of Sciences</p>	Completed two training sessions.	Another training will be held before autumn in 2022.	N

<p>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 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</p>	<p>Accepted</p>	<p>The change of indicators was derived from long time field investigation. In the project, the regular monitoring was implemented by the Northeast Institute of geography and Agroecology, Chinese Academy of Sciences, in different wetland and agriculture through three growing seasons.</p>	<p>PMO</p>	<p>Completed</p>	<p>N</p>

<p>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 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</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>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 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</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</p>	<p>PMO</p>	<p>Completed. The team of expert was included the wetland expert, biodiversity expert, hydrology expert etc.</p>		<p>No</p>

negotiation for M&E arrangements.		necessary to communicate or negotiate with the relevant departments of the university.				
<p>Recommendation 8: The project has not met its mid-term level targets (as per work-plan) and completing all 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>	Accepted	Because it will take nearly half a year to prepare the project closing materials. The project is planned to be 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.	PMO	Agreed by PSC member units. An extension of one year is recommended by PMO.		N
<p>Recommendation 9: Women play key role in agriculture sector so their role need to be strengthened from</p>	Accepted	The PMO will employ Gender experts to carry out training for women and	PMO	Ongoing	October 2022	N

<p>all aspects. Women’s role in decision making was not observed in this project. Programme should include leadership building training for women and also should give priority to women headed household while selecting the beneficiary household. The PMO & FAO should initiate planning and implementing leadership programme immediately (October 2021)</p>		<p>give priority to women headed household while selecting the beneficiary household.</p>				
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<p>Has the project developed an Exit Strategy? If yes, please describe</p>	<p>No</p>
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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 Guidelines³¹. 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	Change of Pilot Sites: Hua'aopao and Dakouzipao were replaced by Niuxintaobao, Xiaoximipao and Dagangzipao	06,2019	PMO,PSC,FAO
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 area had been seriously damaged, so the wetland restoration is necessary.</p>	03,2021	PMO,PSC,FAO

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

Safeguards			
Risk analysis			
Increase of GEF project financing up to 5%			
Co-financing	The cofinancing funds was changed to 16,684,715 USD		
Location of project activity			
Other			

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	Role in project execution	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	
Non-Government organizations (NGOs)			
Private sector entities			
Company of Beixian rice	demonstration area	Project demonstration	
Huaqing agriculture company	Cooperation company	Project demonstration	
Shenjingzi village	demonstration area	Project demonstration	
Others[1]			
New stakeholders identified/engaged			

[1] They 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	
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.	A new variety paddy rice has greatly increased the production in the typical soda saline alkali rice region. The new type paddy rice, " Dongdao 122 " was cultivated by the technical supporter-IGA. CAS in 2021, and the average yield of "Dongdao 122"was 9480 kg/ha, an increase of 10.6% over the local varieties, and the yield of high-yield plots had reached to 1080 kg /ha.
Please provide links to related website, social media account	http://grain.jl.gov.cn/lcj2015/mtjj/202110/t20211014_8246502.html
Please provide a list of publications, leaflets, video materials, newsletters, or other communications assets published on the web.	http://www.neigae.ac.cn/news/cmsm/202111/t20211101_6239008.html http://www.jl.chinanews.com.cn/kjww/2021-10-14/173453.html
Please indicate the Communication and/or knowledge management focal point's Name and contact details	Zhibin Ren, Tel:18686689357, Email: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 ³²	Name of Co-financer	Type of Co-financing	Amount Confirmed at CEO endorsement / approval	Actual Amount Materialized at 30 June 2022	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	Material	14800000	11398651		14,800,000
Sustainable soil and water practice	Jilin Provincial Department of water resources	Material	300000	58038		300,000
Water quality and quantity analysis and monitoring	Jilin Provincial Department of water resources	Material	1500000	5228026		5,300,000
FAO	FAO	In-kind	200,000	150,000		200,000
		TOTAL	16,800,000	16,834,715		20,600,000

³² Sources of Co-financing may include: Bilateral Aid Agency(ies), Foundation, GEF Agency, Local Government, National Government, Civil Society Organization, Other Multi-lateral Agency(ies), Private Sector, Beneficiaries, Other.

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

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 of 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. It should 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.