



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 Pacific
Country (ies):	China
Project Title:	A New Green Line: Mainstreaming Biodiversity Conservation
	Objectives and Practices into China's Water Resources Management
	Policy and Planning
FAO Project Symbol:	GCP/CPR/057/GEF
GEF ID:	5665
GEF Focal Area(s):	BD (Biodiversity)
Project Executing Partners:	International Economic and Technical Cooperation and Exchange
	Centre of the Ministry of Water Resources, The Nature Conservancy
Project Duration (years):	72 months
Project coordinates:	Submitted online

Project Dates

GEF CEO Endorsement Date:	1 December, 2015
Project Implementation Start	29 September, 2016
Date/EOD:	
Project Implementation End	31 May, 2020
Date/NTE¹:	
Revised project implementation	31 May, 2023
end date (if approved) ²	

Funding

GEF Grant Amount (USD):	USD 2,639,726
Total Co-financing amount as	USD 25,975,000
included in GEF CEO	
Endorsement Request/ProDoc ³ :	
Total GEF grant disbursement as	USD 2,451,628
of June 30, 2022 (USD) ⁴ :	
Total estimated co-financing	USD 32,070,644
materialized as of June 30, 2022 ⁵	

¹ As per FPMIS

 $^{^{\}mathrm{2}}$ If NTE extension has been requested and approved by the FAO-GEF CU.

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

⁴ For 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	16 July, 2021
Steering Committee (PSC)	
Meeting:	
Expected Mid-term Review date ⁶ :	
Actual Mid-term review date	March-June, 2020
(when it is done):	
Expected Terminal Evaluation	August 2022
Date ⁷ :	
Tracking tools/Core indicators	Yes
updated before MTR or TE stage	
(provide as Annex)	

Overall ratings

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

ESS risk classification

Current ESS Risk classification:	Low
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Status

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

Project Contacts

Contact	Name, Title, Division/Institution	E-mail	
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GEF Funding Liaison Officer	Yurie Naito	Yurie.Naito@fao.org	

⁶ The 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.

⁷ The 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
То	Outcome 1.1 Mainstream	Initial gap analysis conducted at national	• Existing water resource	Review; identification of	Review; identification of	Completed. • Gap analysis has	
mainstream biodiversity conservation objectives and practices into China's water resources management policy and	biodiversity objectives and practices into key water resource management policies, planning, and legal stipulations at the national, provincial and prefecture level	level, provincial level for two pilot provinces, and municipal level for four pilot municipalities; renewal of results at a one-year interval.	management policies, plans, regulations and institutional structures do not systematically integrate biodiversity conservation in river ecosystems.	new and additional opportunities	new and additional opportunities	been completed at all levels and is supporting the reform process to mainstream biodiversity (BD) and e-flow protection in the water sector's policy, legal and regulatory framework.	S
planning.	prefectare level	Biodiversity	While	Mainstreaming	Biodiversity	• Completed.	
		mainstreamed into at least 3 important	supportive of ecological	work	mainstreamed into at least 3	 Mainstreaming process is 	HS

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

⁹ Some 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.

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

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

national level WRM policies, plans, or laws	priorities, the existing framework does not provide sufficient support for and guidance to the mainstreaming of biodiversity conservation objectives and practices into water resources management. Existing policy framework provides a solid basis for sound water management with regards to		important national level WRM policies, plans, or laws	advancing in 7 policies (including 3 national level policies), 12 work plans and laws. The Ministry of Water Resources published in December 2021 the Guidance on Rehabilitating the Ecosystem of Rivers and Lakes and the Programme on Rehabilitating the Ecosystem of Rivers and Lakes and the Programme on Rehabilitating the Ecosystem of Rivers and Lakes during the 14th	Exceede d the original targets
	absolute water use			Five-Year Plan Period (2021-25).	
Biodiversity mainstreamed into at least 3 provincial level WRM policies, plans or law for each of the two provinces (min. 6 provincial level improvements in total)	efficiency and water quality from a pollutant perspective (The three red lines) • Political context supportive of improvements of environmental protection in general and for	Mainstreaming work	Biodiversity mainstreamed into at least 3 provincial level WRM policies, plans or law for each of the two provinces (min. 6 provincial level improvements in total)	Completed. • Mainstreaming is advancing through 5 policies, regulations or plans (including 3 at provincial level) in Yunnan and 4 in Chongqing (including 3 at provincial level).	S

¹² 1) The Supervision and Management Measures for Water Function Zones; 2)Technical Guidance Opinions on the Small Hydropower Ecological Flow Supervision Platform; 3)the Notice on Strengthening Ecological Flow Supervision for Small Hydropower Stations in the Yangtze River Economic Belt; 4) 2019 Ecological Flow (Water Volume) Research and Guarantee Work Plan for Key Rivers and Lakes; 5) Guidance on Rivers and Lakes Ecological Flow Identification and Guarantee; 6) Aquatic Biodiversity Conservation Program for Key Watersheds in China; 7) the Guidance on Further Strengthening the Performance on Responsibilities of River and Lake Chiefs.

	Biodiversity mainstreamed into water sector plan as well as river management plan for each of the four pilot sites (prefecture level)	river ecosystems in particular.	Mainstreaming work	Biodiversity mainstreamed into water sector plan as well as river management plan for each of the four pilot sites (prefecture, county/district level)	Completed. Recommendation s on mainstreaming BD and e-flow goals into river management plans in the four pilot sites were made and will be implemented by local water resources departments over the next 2 years.	S
Outcome 1.2 Develop administrative regulations as well as technical guidelines for translating biodiversity objectives into concrete WRM practices (with special emphasis	Biodiversity mainstreamed into 1-2 important national level regulations and 1- 2 important provincial level regulations for each of the two pilot provinces	See Outcome 1.1	Mainstreaming work	Biodiversity mainstreamed into at least 3 important national level regulations and 3 important provincial level regulations for each of the two pilot provinces	Completed. Biodiversity has been mainstreamed into 1 regulation at national level and 3 regulations at provincial level. Fishing ban came into force in Chongqing in July 2021.	S
on E-flow implementation through corresponding adjustment of human-made flow alteration)	Technical guidelines drafted for the national, provincial, prefecture, and county/district level policies (outcome 1.1) and regulations (outcome 1.2); other suitable policies and regulations will be included as far as possible		Mainstreaming work	Technical guidelines drafted for the national, provincial, prefecture and county/district level policies and regulations	Completed. MWR has issued the Technical Guidance on Ecological Flow Supervision Platform for Small Hydropower. National-level Technical Guidelines for River and Lake Health Assessment (RHA)	S

1	T	1	 	
				were developed
				to guide the policy
				and regulation
				development on
				all levels.
				 MWR published the Technical
				Guidelines on
				River and Lake
				Ecosystem
				Conservation and
				Restoration.
				• Greenline
				Scorecard has
				been integrated
				into RHA.
				Guidelines on
				Calculating
				Environmental
				Water Demand in
				Rivers and Lakes
				was revised and
				published by
				Ministry of Water
				Resources in
				October 2021.
				Guidelines on
				Health
				Assessment of
				Rivers, Lakes,
				Reservoirs and
				Canals in Yunnan
				Province (Trial)
				was developed in
				July 2021,
				specifying that
				river and lake
				health should be a
				key criterion for
				the evaluation of
				the evaluation of

			Beautiful Rivers and Lake Initiative. Guidance on Improving Lake Campaign was published in Yunnan in October	
Regulations for dam construction and operation drafted or improved at national and provincial level (for both pilot provinces)	Mainstreaming work	Regulations for dam construction and operation drafted or improved at national and provincial level (for both pilot provinces)	2021. Completed. MWR published Technical Guidelines on the Control of Downstream Flow Reduction at Small Hydropower Stations. Standards are published on the assessment of green small hydropower. Regulation on E-Flow Management for Small Hydropower Stations was published by Yunnan Department of Water Resources in December 2021. Regulations and standards on small hydropower removal and e-flow management were published by	S

					including "Notice on strict control of new hydropower project construction" in 2019 and "Supervision on eflow of small hydropower in Chongqing (draft)" in 2022.	
Outcome 1.3 Establish new institutional partnerships for WRM between government and CSOs	New collaborative partnerships operational at national level, provincial level for 2 pilot provinces; Working group/Stakeholder network established and operational at prefecture/municipal level as well as county/district level for 4 pilot areas.	Inclusion of CSOs including academic/research institutions underdeveloped.	Partnerships established	Partnerships contribute to mainstreaming (C-I) and implementation (C-II)	Completed. New partnerships have been established among departments for water, environment, agriculture, forest and judicial system in the pilot provinces, counties and districts. River Chief System is working well at provincial, municipal, district/county and village levels supported by creation of civil chiefs selected from civil society. Volunteers are engaged in river monitoring. TNC has provided technical support to the project as	S

Outcome 1.4 Develop system of principles and corresponding standards to systematically	River/lake health assessment (RHA) system developed and ready to be tested in the pilot sites (see component II)	No certification system for river biodiversity protection in place	-	-	an important partner. Completed. • Green Line Scorecard (GLS) has been integrated with RHA.	S	
measure and certify biodiversity conservation in China's water bodies	RHA created with input from and endorsed by all relevant stakeholders		Testing of RHA in pilot rivers	Recommendations for RHA replication and upscaling	Completed. • RHA has been tested in the 4 pilot rivers.	S	
Outcome 1.5 Increase levels of government investments into biodiversity conservation for	Investment opportunity assessments conducted at national level as well as for both pilot provinces	Corresponding government investments are increasing, put targeting on most effective BD	-	-	Completed. • An evaluation on investment opportunities for river biodiversity conservation has been completed.	S	
river eco-systems	Increase in relevant government investment of at least US\$20 million) in value	conservation can be improved		Investment monitoring and support for implementation of recommendation s	Investment monitoring and support for implementation of recommendations	Completed. Government investment in river management which focuses on biodiversity increased at least US\$12 million. The central and provincial governments invested hundreds of millions of USD in projects to improve the water environment of the whole country.	HS Exceede d the original targets
	At least 5 additional major water		Support for targeted	Support for targeted	Completed.	S	

Outco			investment increases in 5 WRM programs	investment increases in 5 WRM programs	 Five major water management programs (1 in Yunnan, 1 in Pu'er, 2 in Chongqing and 1 in Banan District) include biodiversity conservation. Yunnan plans to invest a total of 27.9 billion yuan in the "Beautiful Rivers and Lakes" Initiative which includes biodiversity objectives. A programme with a total investment of around 4.5 million USD is ongoing in Pu'er. About 0.9 million USD was invested in initiatives related to biodiversity conservation in the Wubu and Tang Rivers. 	
clarify of resp	n the partnership operational at provincial level for 2 pilot provinces (supporting mainstreaming under output 1.1.3 as well as	Inclusion of CSOs including academic/research institutions underdeveloped.	Partnerships established	Partnerships contribute to mainstreaming (C- I) and implementation (C-II)	Completed. New partnerships among various government departments and with civil society have been established in Yunnan and	S

1			T		
partners involved	implementation			Chongqing. This is	
in the	capacity for pilot			raising awareness	
implementation	activities); Working			of the importance	
of biodiversity	group/Stakeholder			of BD	
conservation	network established			conservation and	
measures	and operational at			e-flow protection	
illeasures				as well as allowing	
	prefecture/municipality			dialogue on	
	level as well as			managing other	
	county/district level for			related interests.	
	the 4 pilot areas			 Chongqing and 	
	·			Sichuan Province	
				have established a	
				joint river chiefs	
				office and a joint	
				mechanism to	
				prevent and	
				control water	
				pollution. Yunnan	
				and Tibet have	
				signed an	
				agreement to	
				collaborate on	
				transboundary	
				river protection.	
				Yunnan and four	
				neighboring	
				provinces have	
				established	
				collaborative	
				mechanisms on	
				transboundary	
				river protection.	
				Stakeholders at	
				pilot counties and	
				districts in Yunnan	
				and Chongqing	
				are partnering	
				with their	
				counterparts to	
				protect cross-	
				boundary rivers.	

	Clear biodiversity- related responsibilities for stakeholders in river management established, effectively addressing fragmentation of competences and coordination of tasks across geographical borders as well as across institutions	As river ecosystems stretch across different administrative boundaries, coordination and cooperation is often highly difficult, river management responsibilities unclear.	Support for implementation of recommendation s	Support for implementation of recommendations	Completed. Both Chongqing and Yunnan have established River Chief Systems with clear responsibilities of different stakeholders related to biodiversity protection in river management.	S
Outcome 2.2 Pilot counties in Yunnan demonstrate successful implementation of local-level biodiversity conservation activities, implementing E- flows	Biodiversity mainstreaming under component I explicitly mentions pilot activities.	Clear political will overcome the misperception that traditional water resources management concerns such as flood control, hydropower, and irrigation systems are in essence always contradictory to the ecological concerns of improving ecosystem vitality and sustaining biodiversity. Extensive work by TNC and other CSOs demonstrating a higher level of compatibility	Mainstreaming work	-	 98% completed. Yunnan has issued a five-year plan to promote aquatic BD monitoring, RHA and habitat restoration. Pu'er is advancing local initiatives under the guidance of the provincial plan. Pu'er is advancing local initiatives under the guidance of the provincial plan, including the development of river and lake management plans. Recommendation s were made on the development and application of 	S

		between development goals and environmental concerns Initial work at MWR and DWRs at provincial level to introduce a different balance into river management		aquatic biodiversity monitoring system in pilot rivers.	
str and rel we go sta (in exp red the	rategy determined agreed upon by all alevant prefectures as ell as county level overnment akeholders acorporating apertise and acommendations from the "new artnerships", see pove).	No clear basis for decision-making; no E-flow analysis and corresponding recommendations (to be provided through C-III); no experience in applying this advanced information as part of an informed decision-making process on E-flow implementation		Completed. An Analysis on E-Flow in Yunnan Province for Biodiversity Conservation was developed. A provincial plan to implement e-flow of major rivers and lakes has been developed in Yunnan. E-flow design principles and standards for pilot areas were proposed in Yunnan. Concept plans and recommendations were developed on ecological restoration for the Enle and Buma Rivers.	S

E-flow successfully implemented within Buma/Enle river; habitat not blocked to upstream migration by inadequate culvert, small reservoir and other water infrastructure design, resulting in improved habitat connectivity (Area directly covered by BD mainstreaming: 14 400 ha)	Existing human- made alterations change natural flow cycle creating negative BD effects; no E-flow	Implementation of agreed adjustments	Implementation of agreed adjustments	95% completed. • The area directly covered by BD mainstreaming reached 17706 ha. • E-flow analysis is progressing and e-flow targets are determined for Enle and Buma Rivers. Pu'er has also identified gaps in conducting effective e-flow (such as the need to regulate sand mining in rivers and river demarcation).	S
Increased ecosystem ability to sustain globally significant biodiversity (e.g. potamodromous fish species such as: Tor sinensis; Clupisoma sinense; Largemouth Bronze Gudgeon (Coreius guichenoti) & Royal Clown Loach (leptobotia elongate) (Area of improved habitats: 9.3 ha)	Habitats threatened by flow alterations and other human- made environmental pressures	Implementation of agreed habitat improvements	• Implementation of agreed habitat improvements	Completed. Area of improved habitats along Enle river reached 14.6 ha. Water ecological surveys and river health assessments were conducted in pilot rivers. Data shows that the listed species in pilot areas have been increasing in the decade. About 100,000 local fish fingerlings were released into the Enle River. Major sections of Enle	HS Exceede d the original targets

	BD monitoring system established with two monitoring stations per river and used for improvement of BD conservation measures; ca. 80km of river with newly certified RHA water management practices (Area covered by RHA in Yunnan: 21 900 ha)	No BD monitoring system in place No BD certification system in place	Implementation of systems	• Implementation of systems	Completed. The area covered by RHA in Yunnan reached 389 670 ha. Water ecological survey and RHA were carried out in pilot rivers in light of RHA methodology. Pu'er has developed a monitoring and assessment plan and an early warning system on water quality.	HS Exceede d the original targets
Outcome 2.3 Pilot districts in Chongqing demonstrate successful implementation of local-level biodiversity conservation activities, implementing E- flows	Biodiversity mainstreaming under component I explicitly mentions pilot activities.	Clear political will overcome the misperception that traditional water resources management concerns such as flood control, hydropower, and irrigation systems are in essence always contradictory to the ecological concerns of improving ecosystem vitality and sustaining biodiversity. Extensive work by TNC and other CSOs			Completed. • E-flow control has been included in the priority work of Chongqing municipality to protect biodiversity. Small hydropower stations are being renovated with e-flow control and biodiversity conservation taken into consideration. • An analysis on WRM policy framework is completed to identify gaps.	S

	demonstrating a higher level of compatibility between development goals and environmental concerns Initial work at MWR and DWRs at provincial level to introduce a different balance into river management		 TNC produced a report to introduce the US experience in the assessment of priority areas for freshwater ecological protection. A plan on the management of the Wubu River is under development. The e-flow implementation plan for the Wubu and Tang Rivers was developed. The riverine protection and utilization plans of Wubu river and Tang river were updated, aiming to cover a wider range of habitats restoration areas. 	
E-flow implementation strategy determined and agreed upon by all relevant municipal and district level government stakeholders (incorporating expertise and recommendations from	No clear basis for decision-making; no E-flow analysis and corresponding recommendations (to be provided through C-III); no experience in applying this advanced in-	 	Completed. • E-flow analysis is progressing in Chongqing and targets was determined in 2020. • GIS datasets are being developed to aid decisionmaking on	S

the "new partnerships", see above). E-flow successfully implemented within Wubu river; habitat not blocked to upstream migration resulting in improved habitat connectivity (Area directly covered by BD mainstreaming: 1043 ha; Area of habitats improved and restored: 4.4 ha)	formation as part of an informed decision-making process on E-flow implementation Existing humanmade alterations change natural flow cycle creating negative BD effects; no E-flow	Implementation of agreed adjustments	Implementation of agreed adjustments	ecological needs of e-flow. 98% completed. • Good progress has been made in dealing with dam barriers on Tang River, including measures in place to conserve old dams with heritage characteristics and tourist potential. • Area directly covered by BD mainstreaming reached 43000 ha. • Chongqing is carrying out removal of Jianqiao dam and Yangjiadong dam (both with hydropower stations) on Wubu river to recover a total of 35 ha habitat	HS Exceede d the original targets
Retain population of aquatic species through strict application of fish protection and fisheries regulation; assess biodiversity impact of several sewage water treatment options	 River comparably pristine; ecosystem still largely functioning Environmental pressures increasing; 	Enforcement of BD conservation measures (defined and mandated under C-I)	Enforcement of BD conservation measures (defined and mandated under C-I)	conservation area. 98% completed. • BD conservation measures are being taken, including the removal of 900 tons of garbage from the Tang River, release of	HS Exceede d the original targets

T T	т	г	T	Т	500.000 % 1 5	
	along the river; avoid	protection			600,000 fish fry	
	unnecessary	necessary			and the	
	obstructions in the				construction of a	
	future and improve few				sewage treatment	
	existing obstructions				plant.	
	through fish migration				Area covered	
	approaches (river				directly by BD	
	length ca. 31.2 km)				mainstreaming	
					reached 18100 ha.	
	(Area directly covered				• A total of 58 ha of	
	by BD mainstreaming:				ecological	
	18 000 ha; Area of				conservation	
	habitats improved and				areas have been	
	restored: 57.6 ha)				restored in the	
					Tang River.	
					• Chongqing is	
					building a fish	
					passage on the	
					Xiaojiatan	
					Barrier(weir)on	
					Tang River to	
					recover a total of	
					58.8 ha habitat	
					conservation area.	
	BD monitoring system	• No BD	Implementation	Implementation of	Completed.	
	established with two	monitoring	of systems	systems	 Water ecological 	
	monitoring stations per	system in place			survey and RHA	
	river and used for	• No BD			were carried out	
	improvement of BD	certification			in pilot rivers in	
	conservation	system in place			light of RHA	
					methodology. The	HS
	measures; ca. 57.46 km				covered length of	Exceede
	of river with newly				main stream	d the
	certified "Green Line"				reached 115 km	
	water management				and covered area	original
	practices (Area				reached 95530 ha.	targets
	covered by RHG in				Chongqing aquatic	
	Chongqing: 31 043 ha)				biological	
					monitoring system	
					on pilot rivers has	
					been preliminarily	
					established.	

Outcome 2.4 Compilation and internal as well as external dissemination of information and best practices gained from the project	All relevant information documented; project results reports synchronized with M&E reporting schedule (see section 4)	Identification of best practices plus targeted dissemination very limited; needs improvement	Collection and documentation of project information; Mid-Term Report	Collection and documentation of project information; Final Report	Guidelines on monitoring and information system operation are developed. 95% completed. • Project documents, reports and records are collected and filed • Project best practice is being summarized by PMOs • A handbook on river/lake chief system has been developed in Yunnan, incorporating information on biodiversity conservation. • A summary report on pilots in Yunnan was developed.	S
	Project results shared with project team and relevant stakeholders	Identification of best practices plus targeted dissemination very limited; needs improvement	Internal project communication (based on output 2.4.1) incl. corresponding visits and workshops	Internal project communication incl. corresponding visits and workshops	98% completed. Communication and discussion meetings were carried out regularly within the team and among stakeholders. MWR, PMO and TNC developed a project	S

	Project result briefings compiled and distributed to decision-makers; public dissemination campaign including project report, DVD	Identification of best practices plus targeted dissemination very limited; needs improvement	Continuous communication with decision-makers also in the context of C-I activities; Targeted dissemination of mid-term report results (based on output 2.4.1)	Continuous communication with decision-makers also in the context of C-I activities. Targeted dissemination of final report results	communication strategy. Connections between local departments of water, ecology and environment have been established under the river chiefs system, and will be further enhanced in the next two years. Publicity events were carried out in Pu'er in March, 2022. 98% completed. More than 23 newsletters were developed and published online to disseminate information and insight in progress, lessons and good practices. Public awareness raising activities have been organized in Yunnan and Chongqing and reached 30,000 villagers. Pilot counties in Yunnan provided	S
					 Pilot counties in Yunnan provided project information 	

					thur wale looflate	
					through leaflets	
					and displaying	
					panels to the	
					public.	
					Project	
					achievements	
					were reported at	
					a local journal,	
					Chongqing Water.	
					• Four newsletters	
					on the project	
					were developed	
					and distributed at	
					different levels in	
					the reporting	
					period.	
					The national PMO	
					shared experience	
					at the summary	
					meeting of	
					another GEF	
					project in March,	
					2022.	
					• A video on the	
					project is under	
					development by	
					PMO, and	
					brochures are also	
					developed by TNC	
					and pilot projects	
					in Chongqing and	
					Yunnan	
	Best practices report	Identification of	Continuous	Continuous	95% completed.	
	compiled and	best practices plus	communication	communication	• The	
	distributed to other	targeted	with potential	with potential	communication	
	provinces, prefectures	dissemination very	replication areas;	replication areas.	strategy has been	S
	and counties/districts	limited; needs	Targeted	Targeted	refined.	
	suitable for replication	improvement	dissemination of	dissemination of	Best practices	
	Saltable for replication	improvement	mid-term report		were shared with	

Outcome 3			results (based on output 2.4.1)	final report results	participants from non-pilot areas in the project provinces. • Guidelines on Health Assessment of Rivers, Lakes, Reservoirs and Canals in Yunnan Province (Trial) was developed in July 2021, specifies that river and lake health should be a key criteria for the evaluation of beautiful rivers and lakes. • Books on water management and international cooperation were shared with non-pilot provinces and counties.	
Outcome 3.1 Design and implement additional information systems to provide comprehensive river biodiversity analysis (including mappings,	Mappings conducted in Chongqing and Yunnan with particularly detailed mappings in the four pilot sites	• Information to serve as basis for BD related WRM and corresponding decision-making very limited; needs improvement No BD specific mappings existent	Finalize mappings		Completed. • At the national level, the preliminary study on the framework of the aquatic ecology monitoring system was conducted, and the Baseline Survey Report on River Ecological Zone completed.	S

environmental flow analysis, river health assessments, and water accounting)				 Aquatic ecology survey was conducted in Chuan, Buma, Enle and Tang Rivers in 2020. Monitoring of benthic fauna was conducted in pilot rivers in 2021. 	
	E-flow analysis conducted; natural cycle as well as impact of flow alterations identified; recommendations for measures to achieve E- flow provided (implementation under component II)	 Information to serve as basis for BD related WRM and corresponding decision-making very limited; needs improvement No E-flow analysis existent 	Finalize comprehensive E- flow analysis	Completed. E-flow analysis is done on all pilot rivers in 2020 with the support of RHA and hydrological stations. The impact of e-flow discharge of the Wubu River was monitored and evaluated. Recommendation s were made on e-flow design principles and standards for pilot rivers in Yunnan.	S
	River health assessment conducted for all project counties	 Information to serve as basis for BD related WRM and corresponding decision-making very limited; needs improvement No E-flow analysis existent 	Finalize assessments	 Completed. RHAs were conducted in all pilot rivers in 2020. A study of RHA standards, methods and application was completed.	S

	Water accounting system operational, utilizing global scale public domain datasets (WA+)	 Information to serve as basis for BD related WRM and corresponding decision-making very limited; needs improvement No comprehensive water accounting system existent 	Finalize and implement water accounting system		Completed. The Preliminary Report on Standard, Methodology of Water Resources Accounting and Application in Pilot Rivers was completed at the national level.	S
Outcome 3.2 Establish a comprehensive biodiversity monitoring system for	Strategy document formulated for both provinces and all four project sites after 6 months of project start date.	No strategy existent	Implement strategy	Implement strategy	Completed. • Strategy documents for both provinces and all four project sites are developed.	S
aquatic biodiversity and piloting of the system in the	GIS database designed and operational.	No BD database existent	Utilize database	Utilize database	Completed. • GIS database designed and operational.	S
project areas	Aquatic biodiversity monitoring system designed and operational.	No dedicated and continuous BD monitoring existent	-	-	95% completed. • Aquatic biodiversity monitoring system designed and operational. • Guidelines were developed on aquatic ecosystem monitoring and information system in Chongqing and Yunnan.	S

		Monitoring system successfully piloted in project areas.	No dedicated and continuous BD monitoring existent	Implement monitoring system	Implement monitoring system	 Aquatic biodiversity monitoring system was developed in pilot rivers in Yunnan. Smart river chief information system started operation in Chongqing in April 2022, using remote sensing, drones, Al and AR to monitor ecosystem and water resources. Completed. Pilot river monitoring systems have been developed to monitor the water quantity, quality, and plants, fish and large benthic animals in the target reaches at regular intervals. Water ecosystem surveys were carried out in the pilot rivers. Training on monitoring was conducted in Yunnan and 	S
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Outcome 3.3 Develop and implement system of multi-level and multifaceted biodiversity mainstreaming training program targeting government officials and water management partners from local communities and civil society organizations	At least 30 MWR officials as well as 60 officials at provincial level plus the same number of stakeholder from CSOs trained in the mainstreaming BD conservation objectives into water resources management planning and programming; at least four workshops/symposia organized.	Capacity and knowledge on BD mainstreaming low No corresponding trainings existent Capacity and	Implement trainings	Implement	monitoring on benthic fauna conducted in 2021. 120% completed. Trainings were provided to 90 officials and 60 civil society members. Up to 8000 river/lake chiefs, technicians and volunteers have been trained in Yunnan since the project started, including 20% of ethnic minorities and 30% of women. Training on aquatic biodiversity conservation were held in pilot counties in Yunnan, with over 100 participants, including people from relevant government agencies, civil river chiefs and rangers. 110% completed.	HS Exceede d the original targets
	management professionals trained in	knowledge on BD	trainings	trainings	 More than 400 officials and stakeholders 	Exceede d the

biodiversity mainstreaming practices relevant to their area of expertise.	mainstreaming low No corresponding trainings existent			participated in training in BD mainstreaming trainings. • A workshop was organized in Yunnan in September 2020 to train over 130 technicians on the application of river/lake health assessment guidelines and the use of information system.	original targets
At least 400 water management professionals trained in BD monitoring system implementation, processing and analysis	 Capacity and knowledge on BD mainstreaming low No corresponding trainings existent 	Implement trainings	Implement trainings	Completed. About 430 people have been trained on various topics of BD. • .	HS Exceede d the original target
At least 400 water management professionals trained in RHA implementation	 Capacity and knowledge on BD mainstreaming low No corresponding trainings existent 	Implement trainings	Implement trainings	175% completed. • About 700 people have been trained in RHA implementation	HS Exceede d the original targets
Provision of training on river biodiversity to local population with a special focus on empowering and educating women and ethnic minorities.	 Capacity and knowledge on BD mainstreaming low No corresponding 	Implement trainings	Implement trainings	Completed. • Events were held during World Water Day, China Water Week and World Environment Day to raise awareness	S

		trainings			of local	
		existent			communities on	
		existerit			the functions and	
					benefits of BD	
					conservation and	
					their roles in	
					supporting conservation and	
					protection of e- flow.	
					Biodiversity	
					-	
					promotion events were held in	
					Jingdong and Zhenyuan in the	
					first half of 2021.	
					Publicity events	
					were held in Pu'er	
					on 22 March,	
					2022 to improve	
					public awareness	
					of water	
					conservation.	
Outcome 3.4	M&E plan	No project, no	Implement	Implement project	90% completed.	
Project	implemented	project M&E	project M&E	M&E	 Mid-term review 	
Monitoring and	(according to criteria		project maz		was completed	
Evaluation	and reporting				and self-	
Evaluation					evaluation	
	requirements				conducted.	
	described in section				 M&E system was 	
	4.5)				established.	
					A total of 10 PPRs	
					and 4 PIRs were	
					submitted.	S

Action Plan to address MS, MU, U and HU ratings

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 ¹³	Indicators (as per the Logical Framework)	Annual Target (as per the annual Work Plan)	Main achievements ¹⁴ (please avoid repeating results reported in previous year PIR)	Describe any variance ¹⁵ in delivering outputs
Outcome 1.1 Mainstream biodiversity objectives and practices into key water resource management policies, planning, and legal stipulations at the national, provincial, prefecture and county/district levels.				
Output 1.1.1 Gap analysis conducted at national, provincial and municipal level to identify entry points and suitable targets for mainstreaming of biodiversity (policies, development plans, laws) including a regular review of new entry points throughout the project duration	Initial gap analysis conducted at national level, provincial level for two pilot provinces, and municipal level for four pilot municipalities; renewal of results at a 6-months interval.	Review; identification of new and additional opportunities	Target achieved The 2021 annual gap analysis was completed at all levels and is supporting the reform process to mainstream biodiversity (BD) and e-flow protection in the water sector's policy, legal and regulatory framework.	

 $^{^{\}rm 13}$ Outputs as described in the project Logframe or in any approved project revision.

¹⁴ Please 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)

¹⁵ Variance refers to the difference between the expected and actual progress at the time of reporting.

Output 1.1.2 Biodiversity mainstreaming objectives and priorities incorporated into key water sector policies and plans at national level (including e.g. National Comprehensive Water Resources Plan; incl. Five Year Development Plan and Sectoral Development Plans)	Biodiversity mainstreamed into at least 3 important national level WRM policies, plans, or laws	Biodiversity mainstreamed into at least 3 important national level WRM policies, plans, or laws	Target achieved (see Section 2) The Ministry of Water Resources published in December, 2021, the Guidance on Rehabilitating the Ecosystem of Rivers and Lakes and the Programme on Rehabilitating the Ecosystem of Rivers and Lakes during the 14 th Five-
Output 1.1.3 Biodiversity mainstreaming objectives and priorities incorporated into key water sector policies and plans at provincial level in Chongqing and Yunnan (including e.g. Provincial Water Resources Protection Plans).	Biodiversity mainstreamed into water sector plan as well as river management plan for each of the four pilot sites (prefecture level)	Biodiversity mainstreamed into at least 3 provincial level WRM policies, plans or law for each of the two provinces (min. 6 provincial level improvements in total)	Year Plan Period (2021-25). Target achieved (see Section 2)
Output 1.1.4 Biodiversity mainstreaming objectives and priorities incorporated into the water sector development plan and the river management plan at prefecture level (Pu'er prefecture & Chongqing municipality) as well as county/district level in all four pilot sites (including e.g. prefecture/municipality and county/district level water resource management etc.; River Basin Master Plans for pilot rivers)		Biodiversity mainstreamed into water sector plan as well as river management plan for each of the four pilot sites (prefecture, county/district level)	Target achieved Recommendations on mainstreaming biodiversity and e-flow goals into river management plans have been provided for the four pilot sites.
Outcome 1.2 Develop administrative regulations as well as technical guidelines for translating biodiversity objectives into concrete WRM practices (with special emphasis on e-			

flow implementation through corresponding adjustment of human-				
made flow alteration)				
Output 1.2.1 Biodiversity considerations, with specific focus on systematically establishing and implementing e-flows, mainstreamed into WRM regulations at national and provincial level (amendment of existing regulation or development of additional regulation).	Biodiversity mainstreamed into at least 3 important national level regulations and 3 important provincial level regulations for each of the two pilot provinces	Biodiversity mainstreamed into at least 1 important national level regulations and 1 important provincial level regulations for each of the two pilot provinces	Target achieved at the National-level The Yangtze River Protection Law came into effect in 2021. Target achieved at the provincial level Fishing ban came into force in Chongqing in July 2021. Yunnan issued the Measures for Ecological Flow Management of Small Hydropower Stations in Yunnan Province (Trial).	
Output 1.2.2 Technical guidelines formulated and implemented, providing advice to river managers on translating biodiversity objectives into concrete action at the local level.	Technical guidelines drafted for the national, provincial, prefecture, and county/district level policies (outcome 1.1) and regulations (outcome 1.2); other suitable policies and regulations will be included as far as possible	Technical guidelines drafted for the national, provincial, prefecture and county/district level policies (outcome 1.1) and regulations (outcome 1.2)	Target achieved. Guidelines on Calculating Environmental Water Demand in Rivers and Lakes was revised and published by Ministry of Water Resources in October 2021. Guidelines on Health Assessment of Rivers, Lakes, Reservoirs and Canals in Yunnan Province (Trial) was developed in July 2021, specifying that river and lake health should be a key criterion for the evaluation of beautiful rivers and lake.	

Output 1.2.3 Regulations on dams and dam cascades expanded and improved to include considerations on the implementation of e-flow into both construction and operation of small and medium river dams.	Regulations for dam construction and operation drafted or improved at national and provincial level (for both pilot provinces)	Regulations for dam construction and operation drafted or improved at national and provincial level (for both pilot provinces)	Guidance on Improving Lake Campaign was published in Yunnan in October, 2021. Regulation on E-Flow Management for Small Hydropower Stations was published by Yunnan Department of Water Resources in December, 2021.	
Outcome 1.3 Establish new institutional partnerships for WRM between government and CSOs				
Output 1.3.1 New partnerships among government and civil society organizations established to mainstream biodiversity into water resources management.	New collaborative partnerships operational at national level, provincial level for 2 pilot provinces; Working group/Stakeholder network established and operational at prefecture/municipal level as well as county/district level for 4 pilot areas.	Partnerships contribute to mainstreaming (C-I) and implementation (C- II)	The water department work with agricultural, forestry, environmental departments as well as judicial system and volunteers to implement river chief system and monitor river health jointly.	
Outcome 1.4 Develop system of principles and corresponding standards to systematically measure and certify biodiversity conservation in China's water bodies				
Output 1.4.1 Create river/lake health assessment system for measurement and certification of advanced ecosystem based river management and achievement of biodiversity conservation objectives	River/lake health assessment system developed and ready to be tested in the pilot sites.	-	Professionals at pilot sites were trained to conduct river/lake health assessment.	
Output 1.4.2 River/lake health assessment system widely discussed, amended and lastly agreed upon by relevant stakeholders at national (e.g. across MWR Departments), provincial	River/lake health assessment system created with input from and endorsed by all relevant stakeholders	Recommendations for replication and upscaling	The system is being rolled out in Yunnan and Chongqing.	

and local levels in pilot provinces and				
sites				
Outcome 1.5 Increase levels of				
government investments into				
biodiversity conservation for river eco-				
systems				
Output 1.5.1 Expert assessments to identify suitable opportunities for river biodiversity investments maximizing effectiveness as well as efficiency of investments implemented	Investment opportunity assessments conducted at national level as well as for both pilot provinces	-	Target achieved.	
Output 1.5.2 Government investments in aquatic biodiversity related water management practices significantly and measurably increased	Increase in relevant government investment of at least US\$20 million) in value	Investment monitoring and support for implementation of recommendations	Target achieved.	
Output 1.5.3 Expansion of number of water management programs and related budgets that include biodiversity conservation as an objective	At least 5 additional major water management programs (all government levels combined with at least one national level initiative) and related budgets include biodiversity conservation	Support for targeted investment increases in 5 WRM programs	Target achieved.	
Outcome 2.1 Broaden the alliance of stakeholders and clarify distribution of responsibilities to strengthen the networks of partners involved in the implementation of biodiversity conservation measures				
Output 2.1.1 Pilot provinces/municipalities, prefectures and counties/districts establish new partnerships among government and civil society organizations to mainstream biodiversity into water resources management; includes corresponding prefecture and	New collaborative partnership operational at provincial level for 2 pilot provinces (supporting mainstreaming under 1.1.3 as well as strengthening implementation capacity for pilot activities; Working group/Stakeholder network established and operational at	Partnerships contribute to mainstreaming (C-I) and implementation (C- II)	See Output 1.3.1	

county/district level stake-holder groups	prefecture/municipality level as well as county/district level for the 4 pilot areas			
Output 2.1.2 Clarify responsibilities and tasks for all stakeholders involved in river biodiversity conservation (e.g. appointment of dedicated river managers) at provincial, prefecture and county/district level.	olders involved in responsibilities for stakeholders in river management established, effectively addressing fragmentation of competences and coordination of		Regular coordination mechanism is in place with roles of each government department clarified.	
Outcome 2.2 Pilot counties in Yunnan demonstrate successful implementation of local-level biodiversity conservation activities, implementing e-flows				
Output 2.2.1 Ensure that pilot activities at county level are also included and embedded in the WRM planning processes at provincial and prefecture level under component I.	tput 2.2.1 Ensure that pilot Biodiversity mainstreaming under component I explicitly mentions pilot activities.		Recommendations were made on the development and application of aquatic biodiversity monitoring system in pilot rivers.	
Output 2.2.2 Support the decision-making process on how to best balance e-flow implementation with development objectives based on the information and recommendations provided by the e-flow analysis under component III.	E-flow implementation strategy determined and agreed upon by all relevant prefectures as well as county level government stakeholders (incorporating expertise and recommendations from the "new partnerships", see above).	-	 E-flow design principles and standards for pilot areas were proposed in Yunnan. Concept plans and Recommendations were developed on ecological restoration for the Enle and Buma Rivers. 	
Output 2.2.3 Review and adjustment of existing river flow alteration (especially dam structures, embankments and abstraction pattern) along Buma and Enle River (Zhenyuan County) to establish e-flow, enhance habitats and increase connectivity (based on recommendations from e-	E-flow successfully implemented within Buma/Enle river; habitat not blocked to upstream migration by inadequate culvert, small reservoir and other water infra-structure design, resulting in improved habitat connectivity	Implementation of agreed adjustments	E-flow of Buma river is implemented by ensuring the minimum discharge of Wuyi Reservoir, which located upstream.	

flow analysis, river health assessment and water accounting.)			
Output 2.2.4 Habitat improvements along Buma and Enle River (Zhenyuan County) including swamp restoration and the creation of wetlands (along the Enle river banks).	Increased ecosystem ability to sustain globally significant biodiversity (e.g. potamodromous fish species such as: Tor sinensis; Clupisoma sinense; Largemouth Bronze Gudgeon (Coreius guichenoti) & Royal Clown Loach (leptobotia elongate)	Implementation of agreed habitat improvements	A total of 290,000 endemic fish fries were released to the Chuan, Buma and Enle River from October to December, 2021.
Output 2.2.5 Wetland rehabilitation and tree restoration along Chuan River (Jingdong County) to revive habitat for fish and especially aquatic bird species	Enhanced habitat for and increasing population of aquatic birds as measured by bird monitoring system (monitoring stations in two towns); ca. 35 km of minimal disturbance of key habitats Area of improved habitats and restored wetlands: 25 ha	Implementation of agreed habitat improvements	665.82 ha of wetlands along Chuanhe river was included in ecological protection areas. An area of 8156.7 ha along Chuanhe river was included in natural forest protection area. The habitats were improved and wetlands were restored.
Output 2.2.6 Improvements to existing dam structures along Chuan River to a) implement e-flow (based on recommendations from e-flow assessment; see 2.2.3) and b) facilitate fish migration	E-flow successfully implemented within Buma/Enle river; Installation of fish migration channels and/or ladders or other suitable migration instruments Area directly covered by BD mainstreaming: 7500 ha	Implementation of e- flow; establishment of fish migration instruments	E-flow monitoring system was installed in all small hydropower stations.
Output 2.2.7 Application of aquatic biodiversity monitoring system as well as river/lake health assessment system in project area	BD monitoring system established with two monitoring stations per river and used for improvement of BD conservation measures; ca. 80km of river with newly certified "Green Line" water management practices Area covered by GLS in Yunnan: 21 900 ha	Implementation of systems	A monitoring and assessment plan was developed.
Outcome 2.3 Pilot districts in Chongqing demonstrate successful			

implementation of local-level bio- diversity conservation activities, implementing e-flows				
Output 2.3.1 Ensure that pilot activities are included and embedded in the WRM planning processes at provincial/municipal level under component I.	Biodiversity mainstreaming under component I explicitly mentions pilot activities.		 The e-flow implementation plan for the Wubu and Tang Rivers was proposed and implemented. The riverine protection and utilization plans of Wubu river and Tang river were updated, aiming to cover a wider range of habitats restoration area. 	
Output 2.3.2 Support the decision-making process on how to best balance e-flow implementation with development objectives based on the information and recommendations provided by the e-flow analysis under component III.	E-flow implementation strategy determined and agreed upon by all relevant municipal and district level government stakeholders (incorporating expertise and recommendations from the "new partnerships", see above).		 Technical support for decision-making process on e-flow implementation was provided for Chongqing. Monitoring and assessment of e-flow in Wubu river and Tang river was conducted. 	
Output 2.3.3 Review and adjustment of existing river flow alteration (especially dam structures, embankments and abstraction pattern) along Wubu River (Banan District) to establish e-flow, enhance habitats and increase connectivity (based on recommendations from e-flow analysis, river health assessment and water accounting.)	E-flow successfully implemented within Wubu river; habitat not blocked to upstream migration (e.g. by inadequate culvert, small reservoir and other water infrastructure design) resulting in improved habitat connectivity Area directly covered by BD mainstreaming: 1043 ha;; Area of habitats improved and restored: 4.4 ha	Implementation of agreed adjustments	 Aquatic ecosystem survey was conducted in Wubu river. Technical support was provided for the design of fishway facilities. Chongqing is carrying out removal of Jianqiao dam and Yangjiadong dam (both with hydropower stations) on Wubu river to recover a total of 35 ha habitat conservation area. 	
Output 2.3.4 Implement strict biodiversity conservation measures along Tang River (Jiangjin County) to protect its still relatively pristine conditions.	Retain population of aquatic species through strict application of fish protection and fisheries regulation; assess biodiversity impact of several sewage water treatment options	Enforcement of BD conservation measures (defined and mandated under C-I)	 Aquatic ecosystem survey was conducted in Tang river. Chongqing is building a fish passage on the Xiaojiatan Barrier (weir) on Tang river 	

	along the river; avoid unnecessary obstructions in the future and improve few existing obstructions through fish migration approaches (river length ca. 75 km) Area directly covered by BD mainstreaming: 18,000 ha Area of habitats improved and restored: 57.6 ha		to recover a total of 58.8 ha habitat conservation area.	
Output 2.3.5 Application of aquatic biodiversity monitoring system as well as river/lake health assessment system in project area	BD monitoring system established with two monitoring stations per river and used for improvement of BD conservation measures; ca. 95km of river with newly certified "Green Line" water management practices Area covered by GLS in Chongqing: 31 043 ha	Implementation of systems	Aquatic biodiversity monitoring system applied in Chongqing.	
Outcome 2.4 Compilation and internal				
as well as external dissemination of				
information and best practices gained				
from the project				
Output 2.4.1 Thorough documentation of information on project activities and results, experiences gathered, best practices identified	All relevant information documented; project results reports synchronized with M&E reporting schedule (see section 4)	Collection and documentation of project information; Final Report	 A summary report on pilots in Yunnan was developed. 	
Output 2.4.2 Communication of this information within the project, ensuring the mutually reinforcing interaction between project components	Project results shared with project team and relevant stakeholders	Internal project communication (based on 2.4.1) incl. corresponding visits and workshops	 Steering Committee meeting was held in July 2021. Internal communication operational and effective. 	
Output 2.4.3 Dissemination of project information and examples of successful biodiversity conservation achieved by	Project result briefings compiled and distributed to decision-makers; public dissemination campaign including project report, DVD	Continuous communication with decisionmakers also in the context of C-I	Policy studies were shared with policy makers regularly through Steering Committee	

the project to decision-makers as well as the broader public		activities Targeted dissemination of final report results (based on 2.4.1)	meetings and project workshops. Publicity events were carried out in Pu'er in March, 2022. A video on the project is under developing by PMO, and brochures are also developed by TNC and pilot projects in Chongqing and Yunnan.	
Output 2.4.4 Targeted provision of best practice information and lessons learned to potential replication and scaling-up areas	Best practices report compiled and distributed to other provinces, prefectures and counties/districts suitable for replication	Continuous communication with potential replication areas Targeted dissemination of final report results (based on 2.4.1)	 Four newsletters on the project were developed and distributed at different levels in the reporting period. The national PMO shared experience at the summary meeting of another GEF project in March, 2022. 	
Outcome 3.1 Design and implement additional information systems to provide comprehensive river biodiversity analysis (including mappings, environmental flow analysis, river health assessments, and water accounting)				
Output 3.1.1 Mapping of critical river ecotopes including existing as well as planned obstruction and flow alterations as well as species' populations along life cycle and corresponding BD threat assessment/hotspot identification conducted in four pilot areas as well as at province level (with appropriate level of detail)	Mappings conducted in Chongqing and Yunnan with particularly detailed mappings in the four pilot sites	-	Monitoring on benthic fauna was conducted in pilot rivers in September, 2021.	

Output 3.1.2 E-flow analysis conducted in all four project areas and corresponding rivers to a) determine adequate quantity, timing, and quality of water flows to sustain BD; b) develop recommendations to achieve a corresponding flow regime (to be used as basis for pilot activities under component II)	E-flow analysis conducted; natural cycle as well as impact of flow alterations identified; recommendations for measures to achieve e-flow provided (implementation und component II)	-	 The impact of e-flow discharge of the Wubu River was monitored and evaluated. Recommendations were made on e-flow design principles and standards for pilot rivers in Yunnan.
Output 3.1.3 River health assessment, based on mapping results, conducted including water infra-structure assessment (small dam, culvert) for impacts on biodiversity and ecosystem vitality for all four project sites (see also outcome 3.2).	River health assessment conducted for all project counties	-	Researches on river health assessment were conducted.
Output 3.1.4 Design and implementation of comprehensive water account system for pilot rivers including all natural and man-made factors for abstractions, discharges and consumption	Water accounting system operational, utilizing global scale public domain datasets (WA+)	-	Completed
Outcome 3.2 Establish a comprehensive biodiversity monitoring system for aquatic biodiversity and piloting of the system in the project areas			
Output 3.2.1 Formulate a strategy for systematically feeding biodiversity information (combined from outcomes 3.1 and 3.2) into the mainstreaming activities under component I.	Strategy document formulated for both provinces and all four project sites after 6 months of project start date.	Implement strategy	Completed.
Output 3.2.2 Establish GIS-based aquatic biodiversity database linking species and ecosystem lists to rivers to enable robust biodiversity-oriented	GIS database designed and operational	Utilize database	Completed.

review of water development projects; partially using the information gathered under outcome 3.1.				
Output 3.2.3 Design comprehensive aquatic biodiversity monitoring program in two pilot provinces using traditional instruments as well as modern "environmental DNA" approaches where possible.	Aquatic biodiversity monitoring system designed and operational	-	 Guidelines were developed on aquatic ecosystem monitoring and information system in Chongqing and Yunnan. Aquatic biodiversity monitoring system was developed in pilot rivers in Yunnan. Smart river chief information system started operation in Chongqing in April 2022, using remote sensing, drones, Al and AR to monitor ecosystem and water resources. 	
Output 3.2.4 Pilot monitoring system in project areas: Aquatic biodiversity conservation targets (species number and condition; habitat condition; related amount of investment) established and monitored.	Monitoring system successfully piloted in project areas	Implement monitoring system	Training on monitoring was conducted in Yunnan and monitoring on benthic fauna conducted in July, 2021.	
Outcome 3.3 Develop and implement system of multi-level and multifaceted biodiversity main-streaming training program targeting government officials and water management partners from local communities and civil society organizations				
Output 3.3.1 Training for government officials and CSO stakeholders of the new partnerships for WRM on principles and policies related to biodiversity	At least 30 MWR officials as well as 60 officials at provincial level plus the same number of stakeholder from CSOs trained in the	Implement trainings	A training on aquatic biodiversity conservation were held in Jingdong in September, 2021, with 50 participants.	

mainstreaming (incl. national and international workshops/symposia to bring together project stakeholders as well as national and international river ecosystem experts) Output 3.3.2 Training for government officials and other relevant stakeholder at the national, provincial, prefecture, and county/district level to improve capacity for the implementation and utilization of advanced BD information systems (river health assessment, e-flow analysis, advanced water accounting)	mainstreaming BD conservation objectives into water resources management planning and programming; at least four workshops/symposia organized. At least 400 water management professionals trained in biodiversity mainstreaming practices relevant to their area of expertise.	Implement trainings	Completed
Output 3.3.3 Training for government officials and other relevant stakeholder on the use of the aquatic biodiversity monitoring system, processing of data and translation into biodiversity conservation measures at all levels	At least 400 water management professionals trained in BD monitoring system implementation, processing and analysis	Implement trainings	 A training on aquatic biodiversity was held in Zhenyuan 14-16 March, 2022, with 50 participants from relevant government agencies, civil river chiefs and rangers. About 50 water management professionals attended training on biodiversity monitoring and conservation of pilot rivers in Chongqing 19-21 January, 2022. A similar training was held in Jiangjin on 4 January, 2022, with 50 participants. A training on biodiversity monitoring system and river/lake ecosystem protection and restoration was held in Pu'er 29-31 May, 2022, with 50 participants from relevant government agencies, civil river chiefs and rangers.

Output 3.3.4 Training for government officials and other relevant stakeholder on the use of the river/lake health assessment system	At least 400 water management professionals trained in river/lake health assessment	Implement trainings	 A training on water ecological management and protection was held in Jingdong 25-27 April, 2022, with 50 participants from relevant government agencies, civil river chiefs and rangers. Two online lectures on the protection and restoration of river and lake ecosystem was organized by TNC and INTCE on 27 April and 11 May 2022 with about 260 participants.
Output 3.3.5 Training for local community level to improve understanding of biodiversity conservation objectives and practices and strengthen capacity for implementation	Provision of training on river biodiversity to local population with a special focus on empowering and educating women and ethnic minorities.	Implement trainings	Publicity events were held in Pu'er on 22 March, 2022 to improve public awareness of water saving and conservation.
Outcome 3.4			
Project Monitoring and Evaluation			
Output 3.4.1 Implementation of project monitoring and evaluation	M&E plan implemented (according to criteria and reporting requirements described in section 4.5)	Implement project M&E	• A total of 10 PPRs and 4 PIRs were submitted.

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.

In the past 12 months, the project has achieved a number of outcomes, including:

- the publishing of six national and provincial plans, regulations and guidelines with biodiversity mainstreamed, topics ranging from rehabilitating river ecosystem and river/lake health assessment to e-flow management of small hydropower.
- About 810 participants were trained on biodiversity conservation, monitoring and river health assessment.
- As the project is coming to an end, efforts were made to summarize and share knowledge and experiences. A video on the project is under developing by PMO, and brochures are also developed by TNC and pilot projects in Chongqing and Yunnan.
- A sustainability/exit strategy was also developed to guide the smooth closure of the project.

Major challenges experienced during this reporting period:

-	Due to COVID-19, some field missions were either delayed or cancelled and some meetings, such as the Steering Committee meeting, wer	e
	held online.	

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 rating ¹⁶	FY2022 Implementation Progress rating ¹⁷	Comments/reasons ¹⁸ justifying the ratings for FY2022 and any changes (positive or negative) in the ratings since the previous reporting period
Project Manager / Coordinator	S	S	The project is in the end of implementation and has completed most of the outcomes.
Budget Holder	HS	S	The project is in the end of implementation and has completed most of the outputs/outcomes. Some results have exceeded the original targets.
GEF Operational Focal Point ¹⁹	HS	S	
Lead Technical Officer ²⁰	S	S	Project implementation is on track. The outputs are being delivered, such as the technical guideline, capacity building, information system etc.
FAO-GEF Funding Liaison Officer	S	S	The project team continued to make progress and surpassed original targets for a number of outputs. The ongoing final evaluation will help consolidate the good practices and lessons learned that will feed into the sustainability plan.

¹⁶ **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.

¹⁷ **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.

¹⁸ Please ensure that the ratings are based on evidence

¹⁹ In case the GEF OFP didn't provide his/her comments, please explain the reason.

²⁰ The 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 <u>moderate</u> or <u>high</u> Environmental and Social Risk, approved from June 2015 should have submitted an ESM plan/table at CEO endorsement. This does not apply to <u>low</u> 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				
ESS 2: Biodiversity, Ecosystems and Natural Habita	ts			
ESS 3: Plant Genetic Resources for Food and Agricu	lture			
ESS 4: Animal - Livestock and Aquatic - Genetic Res	ources for Food and Agricultur	e		
ESS 5: Pest and Pesticide Management				
ESS 6: Involuntary Resettlement and Displacement				
ESS 7: Decent Work				
ESS 8: Gender Equality	I			
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 if the initial Environmental and Social (ESS) Risk classification is still valid; if not, what is the new classification and explain.

Initial ESS Risk classification	Current ESS risk classification
(At project submission)	Please indicate if the Environmental and Social Risk classification is still valid ²¹ . If not, what is the new
	classification and explain.
Low	Low

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.

²¹ **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 ²²	Identified in the ProDoc Y/N	Mitigation Actions	Progress on mitigation actions	Notes from the Budget Holder in consultation with Project Management Unit
-	Provincial water department level to support	Low	Y	To communicate more often through field visit, meetings, calls, and capacity building events.	Capacity at the provincial level is being improved through trainings and project implementation activities.	
2	or regularity of temperature	Low	Y	To address the effects of climate change in work planning.	The work schedule is carefully arranged and adjusted to avoid impacts of flood or drought.	

²² 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 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 ²²	Identified in the ProDoc Y/N	Mitigation Actions	Progress on mitigation actions	Notes from the Budget Holder in consultation with Project Management Unit
3	Continuation of COVID-19 will further delay the project delivery.	Moderate	N	To review the work plan and make adjustment where needed and explore alternatives to deliver activities where appropriate.	Some meetings were changed to virtual meetings.	The risk was identified by the mid-term review. Field missions and budget delivery experienced delays.
4	Economic pressure may increase, intensifying the inclination for infrastructure development in rivers, altering aquatic habitats at unsustainable rates.	Moderate	Y	To mainstream BD into long- term policies and plans; and to establish e-flows.	Biodiversity protection has been prioritised at all levels.	
5	Coordination between the national and provincial level actors is a potential risk, as it is not unusual for different interests and views to come to the surface.	Low	Y	To establish regular communication between national and provincial level partners.	Two-way communication is regular through Wechat, newsletters, workshops and PSC meetings.	

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

FY2021	FY2022	Comments/reason for the rating for FY2022 and any changes (positive or negative) in the rating since the
rating	rating	previous reporting period
Low	Low	Environmental protection, include aquatic biodiversity conservation, remains as a priority of national, provincial
		and local governments. The impacts of COVID-19 persists and the project keeps mitigating the impacts, e.g.
		holding the Project Steering Committee meeting through teleconferences.

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.

MTR or supervision mission recommendations	Measures implemented during this Fiscal Year
Recommendation 1: Grant an extension of two years (accounting for the impact of COVID-19), with three conditions: (i) adopt the theory of change to clarify vision and mission of the project and its exit strategy; (ii) update the Results Matrix and; (iii) develop an internal M&E system geared to learning.	Extension has been approved and the project is ending in September 2022. The theory of change was revised and adopted by the PSC, and an exit strategy has been drafted. The results matrix has been updated and approved by the Steering Committee.
Recommendation 2: Establish an intra and inter-institutional coordination mechanism to establish effective decision-making on WRM in areas of mutual interest, particularly at the provincial level (ensuring it has a secretariat to implement decisions and monitor progress).	The coordination mechanism has been established cross-boundary and cross-institutional in pilot provinces, districts and prefectures, covering forestry, fishery, environment protection and judicial system.
Recommendation 3: Identify and apply an effective communication strategy guided by an expert in communications	A communication strategy has been updated. Communication has been tailored to target different stakeholders, e.g. journal articles targeting policy makers and professionals, brochures and billboards for dissemination and display at market days targeting local community, and lectures targeting schoolchildren. C. PMOs have regularly collected and synthesized information on project implementation and disseminated it through newsletter and progress reports.
Recommendation 4: Establish a communication mechanism within FAO to ensure all key services are brought together to ensure all GEF-funded projects	Internal audit has been organized on OPIM and a survey has been organized on the GEF fee allocation, but no results were announced yet.

are correctly designed, funded	
and implemented in accordance	
with MS-701/OPIM (November	
2016) and resolve outstanding	
funding gaps.	

Has the project developed an Exit Strategy? If yes, please describe

Yes. The exit strategy was developed and submitted in 2021. It includes objectives, achievements and a sustainability plan.

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 Guidelines²³. 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	Minor changes to the description of 10 outputs/indicators as reflected in the previous PIR	2020	
Components and cost			
Institutional and implementation			
arrangements			
Financial management			
Implementation schedule	Extended until May, 2023	2022	FAO
Executing Entity			
Executing Entity Category			
Minor project objective change			
Safeguards			
Risk analysis			
Increase of GEF project financing up to 5%			
Co-financing			
Location of project activity			
Other			

²³ Source: https://www.thegef.org/council-meeting-documents/guidelines-project-and-program-cycle-policy-2020-update

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 <u>during this reporting period</u>.

Stakeholder name	Role in project Progress and results on execution Stakeholders' Engagement		Challenges on stakeholder engagement
Government Institutio	ns		
Ministry of Finance	GEF focal point	Attended the Project Steering Committee meeting	
Ministry of Ecology and Environment	Partner	Attended the Project Steering Committee meeting	
Department of Ecology and Environment at provincial and county/district level	Partner	Monitored water quality jointly	
Department of Forestry at county/district level	Partner	Attended project meetings and carried out project activities	
Department of Agriculture at county/district level	Partner	Attended project meetings and carried out project activities	
Courts and procuratorates at provincial and county/district level	Partner	Provided judiciary support	
Non-Government orga	inizations (NGOs)		
TNC	Partner	Provided technical support	
Volunteer service agency	Partner	Joined river monitoring activities	
Women's association	Partner	Joined river monitoring activities	
Private sector entities			
-			

Others[1]			
Research institutes and universities	Technical service providers	Carried out activities including policy studies, ecotop surveys, e-flow monitoring and capacity building.	
New stakeholders ide	ntified/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) <u>during this reporting period.</u>

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.	Yes	Gender strategy and action plan were developed.
Any gender-responsive measures to address gender gaps or promote gender equality and women's empowerment?	Yes	Women volunteers are encouraged to participate in river monitoring.
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	Yes	Women volunteers are encouraged to participate in river monitoring.
c) generating socio-economic benefits or services for women	-	-
M&E system with gender-disaggregated data?	Yes	Information on women beneficiaries is collected during project activities
Staff with gender expertise	Yes	National expert in project management with gender knowledge was engaged in the development of gender strategy and action plan.
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.	It is incorporated into the project communication strategy. Good practice: The project work plan includes activities to summarise and synthesise project achievements.
Does the project have a communication strategy? Please provide a brief overview of the communications successes and challenges this year.	Yes. The project has an effective internal communication network to ensure that project progress and achievements are updated, documented and exchanged. Such information is shared with external audience through bilingual newsletters. The project team participated in other GEF project meetings to share experience. The pilot project teams organised regular publicity events to reach out to local communities and raise their awareness of biodiversity conservation. Meetings were arranged between policy-makers and technical service providers to encourage two-way exchange of information. A project video is under develepment.
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.	
Please provide links to related website, social media account	http://intce.mwr.cn/swdyx/
Please provide a list of publications, leaflets, video materials, newsletters, or other communications assets published on the web.	Newsletter No. 11 Newsletter No. 12
Please indicate the Communication and/or knowledge management focal point's Name and contact details	Hu Wenjun, wenjun.hu@263.net

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.

In Yunnan Province, minority groups have been engaged in ecotope mapping and public awareness activities. They were consulted about their view of local aquatic biodiversity and received project promotion leaflets. Local young people were also trained as volunteers to support river protection.

13. Co-Financing Table

Sources of Co- financing ²⁴	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
FAO	FAO	In-kind and cash	75,000	107,141		107,141
Ministry of Water Resources	Ministry of Water Resources	In-kind and cash	19,300,000	21,589,000	14,089,000	21,589,000
Yunnan Dep. of Water Resources	Yunnan Dep. of Water Resources	In-kind and cash	3,100,000	4,126,485	1,932,956	4,126,485
Chongqing Dep. of Water Resources	Chongqing Dep. of Water Resources	In-kind and cash	3,000,000	5,414,409	2,179,000	5,414,409
The Nature Conservancy	The Nature Conservancy	In-kind	500,000	833,609		833,609
		TOTAL	25,975,000	32,070,644		32,070,644

²⁴ 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.

Annex 1. – GEF Performance Ratings Definitions

<u>Development Objectives Rating</u> . 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	Project is expected to achieve of its major global environmental objectives with major shortcomings or is expected to achieve only some of	
(MU)	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 access 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.	