



Environmental Monitoring Report

Project Number: 52025-001
Period: July-December 2021
Document Date: January 2022

People's Republic of China: Yunnan Sayu River Basin Rural Water Pollution Management and Eco- Compensation Demonstration Project

Prepared by Zhaotong Project Management Office for the Asian Development Bank

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Asian Development Bank

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(#2 semi-annual EMR, covering July 2021 to December 2021)

Prepared by Zhaotong City Government (ZCG)
for the Asian Development Bank

(as of January 2022)

CNY1.00 = \$0.1577
\$1.00 = CNY6.343

ABBREVIATIONS

ADB	Asian Development Bank
CSC	Construction Supervision Company
COVID-19	Coronavirus Disease
DEIA	Domestic Environmental Impact Assessment
DI	Domestic Institute
EA	Executing Agency
EHS	Environment, Health and Safety
EIA	Environmental Impact Assessment
EMA	External Environmental Monitoring Agency
EMP	Environmental Management Plan
EMR	Environmental Monitoring Report
EEB	Ecological Environmental Bureau
EMDP	Ethnic Minority Development Plan
ESMS	Environmental and Social Management System
FSR	Feasibility Study Report
GRM	Grievance Redress Mechanism
IA	Implementing Agency
LCG	Ludian County Government
LIEC	Loan Implementation Environmental Consultant
LPMO	Local Project Management Office
MEE	Ministry of Ecological Environmental
PIU	Project Implementing Unit
PMO	Project Management Office
PRC	People's Republic of China
RP	Resettlement Plan
SDAP	Social Development Action Plan
SPS	Safeguards Policy Statement
SSEMP	Site Specific EMP
TOR	Terms of Reference
YWPCO	Yudong Reservoir Water Resources Protection Committee Office
ZCG	Zhongtong City Government
ZDG	Zhaoyang District Government

WEIGHTS AND MEASURES

dB(A)	A-weighted sound pressure level in decibels
ha	hectare

km	kilometer
m	meter
m ²	square meter
m ³	cubic meters
mg/l	milligrams per liter
mg/m ³	milligrams per cubic meter
°C	degrees Celsius

NOTE

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I. INTRODUCTION

A. Report Purpose and Rationale

1. This is the No. 2 Environmental Monitoring Report (EMR) covering the period from July to December 2021, which was prepared by the Start-up Environment Consultant from Beijing Hamoni Engineering Consulting Company Ltd., together with the project management office (PMO), to Asian Development Bank (ADB) for the Yunnan Sayu River Basin Rural Water Pollution Management and Eco-Compensation Demonstration Project (the project), based on the Consultant field survey and the PMO's information.

2. The purpose of EMR is to document the environmental management activities and compliance with the environmental management plan (EMP) of this project. This report presents project implementation progress; institutional arrangements for EMP implementation and supervision; the training; the public consultation and the grievance redress mechanism (GRM), etc.

B. Project Objective and Components

3. ZCG has borrowed \$100 million for the Project from ADB, and the Loan Agreement was signed on 21 September 2020. The loan became effective on 21 April 2021 and the loan closing date is 31 December 2026. The summary of the project information is shown in **Table 1**.

Table 1: Basic Information of the Project

Loan No.	3983-PRC
Project Name	Yunnan Sayu River Basin Rural Water Pollution Management and Eco-Compensation Demonstration Project
Borrower	People's Republic of China (PRC)
Executing Agency	ZCG
Loan Agreement Signing Date	21 September 2020
Loan Effective Date	21 April 2021
Estimated Project Completion Date	30 June 2026
Loan Closing Date	31 December 2026
Last ADB Mission Review Date	-
Project Implementing Agencies	1. Yudong Reservoir Water Resources Protection Committee Office (YWPCO), 2. Zhaoyang District Government (ZDG) 3. Ludian County Government (LCG)
Project Investment and Financing Plans	The total estimated investment is \$234.61 million, of which ADB loans \$100 million and the rest is the counterpart fund.

Source: PAM

4. The project aims to demonstrate water pollution management in the Sayu River Basin. This will contribute to the PRC's goal of building a harmonious and prosperous society through

environmentally sustainable growth. The project includes 4 components: 1) Wastewater management and pollution control in the Sayu River Basin strengthened; 2) Water resources management in the Sayu River improved; 3) Eco-compensation mechanism for the Sayu River Basin established; and 4) Education, capacity, and public awareness for water pollution management strengthened. They are summarized below.

5. Output 1: Wastewater management and pollution control in the Sayu River Basin strengthened. This output includes (i) development of waste management systems, particularly distributed systems which has advantages over the traditional centralized system (e.g., lower operation cost); (ii) development of solid waste management systems including garbage pyrolysis facilities, with capacity and institutional development for garbage classification and collection; (iii) development of pilot eco-villages to reduce emission through environmental protection activities, education, and publicity; (iv) wetland construction to reduce the NPS pollution, introducing new types of artificial wetlands combined with wastewater treatment facilities; (v) afforestation and establishment of a quantifiable soil and water conservation model to estimate afforestation's effects on soil and water conservation based on tree species, planting density, age of trees, slope degrees, etc.; and (vi) promotion of low-emission agriculture with innovative technologies (ecological drainage ditches, gridded surface source pollution monitoring platform, measures to estimate at least necessary fertilizer volume, etc.) and incentive (establishment of green and organic crop brands). Baseline and endline surveys will be conducted to compare women's time spent for waste and solid waste management before and after the project.

6. Output 2: Water resources management in the Sayu River improved. This output includes (i) establishment of smart water integrated management platform by constructing monitoring facilities and integrating them with the existing irrigation area information system for real-time monitoring and actions in the event of water quality deterioration; and (ii) establishment of a river protection model which links the existing river chief system in the PRC, a real-time water quality monitoring system (a subsystem of the smart water integrated management platform), and facilities to protect rivers from pollution (e.g., ecological embankments).

7. Output 3: Eco-compensation mechanism for the Sayu River Basin established. This output includes (i) implementation of the existing horizontal eco-compensation agreement between the Ludian County Government (LCG) and the Zhaoyang District Government (ZDG) (footnote 11); (ii) establishment and implementation of new town- and township-level horizontal eco-compensation mechanisms; and (iii) establishment and implementation of an eco-compensation fund which will contribute to sustainable water pollution management during and after the project.

8. Output 4: Education, capacity, and public awareness on water pollution management strengthened. This output includes (i) capacity development of government staff for rural water pollution management and eco-compensation, (ii) education of students for rural water pollution management and eco-compensation, (iii) public awareness raising, and (iv) dissemination and replication of project initiatives; with women's participation rate of at least 40%.

C. Project Implementation Progress

9. By 31 December 2021, only 5 consulting packages were engaged. No civil works

contract packages, and equipment procurement have been officially awarded and started construction

Table 2: Classification and Awarding Contract Package financed by ADB

Contract Package Category	Total Quantity	# of contract awarded	Completion Rate
Civil Works	21 ¹	0	0
Good	5 ²	0	0
Consulting	7	5	71%
Total	33	5	15%

Source: Procurement plan.

10. During the reporting period, no civil works were carried out. The following civil works contracts were proposed to be procured and bidden within 2021:

i) C22: Ecological embankment construction in small rivers in Sayu Town and Leju Township in Zhaoyang District

11. The contract package covers 2 contracts, C22-1 (in Sayu Town) and C22-2(in Leju Township). C22-1 construction scope and content are the same as FSR. But some part of C22-2 was constructed by Non-Bank-Fund (NBF), so the contract size was reduced before bidding. The bidding was almost completed during the report period. The individual environment carried out field survey of C22, and prepared site specific EMP (SSEMP).

ii) C18: Ecological embankment in Longshu River tributaries in Longshu Town in Ludian County

The package construction content and scope have no difference from the FSR, and preliminary design was approved. The bidding was carried out during the report period and the notice for winner would be issued soon. The SSEMP was prepared by the consultant.

iii) C9: New wetlands in Zhongheba and Dazhaizi Wetlands in Longshu Town in Ludian County

12. Although the preliminary design was approved, the construction site was involved with farmland occupation, which was restricted by 2 official documents released by State Council in September and November 2020 respectively about restriction of farmland occupation and non-food crops in the farmland³. Currently, the Ludian LPMO is coordinating about the issue. The individual environmental consultant visited the site. The bidding was suspended upon the request of ADB officials.

¹ C22 (Ecological embankment construction in small rivers in Sayu Town and Leju Township in Zhaoyang District) include 2 packages

² G2 (Equipment for garbage pyrolysis facility and collection, compression, and transfer in Ludian County) contracts include 2 packages

³ "Notice to implement the strictest farmland protection to prevent non-agricultural activities on farmlands" and "Notice to avoid using farmland for purposes other than growing grain" issued by the General Office of the State Council a circular on Sept 15 and Nov. 17 respectively.

iv) C5: Solid waste transfer stations and garbage pyrolysis facility in Ludian County

13. The preliminary design has no difference from FSR. But it was not approved yet because some land property must be transferred from farmland to construction land before the approval.

v) C4: Wastewater management systems and manure collection tanks in Longshu Town in Ludian County (area 2)

14. The preliminary design has no difference from FSR. The preliminary design was not approved either, because the design is combined with the above-mentioned solid waste component.

vi) C12: Basic infrastructure for low-emission agriculture promotion in Longshu Town in Ludian County.

15. The package is combined of original C12 and C13. The preliminary design has no difference from FSR. The bidding will be carried out in 2022. The SEMP was prepared by the consultant.

II. INSTITUTIONAL ARRANGEMENTS FOR EMP IMPLEMENTATION

16. **Executive Agency. The Zhaotong City Government (ZCG) is the executing agency.** A project leading group was established in ZCG and is responsible for providing policy guidance and direction during project implementation. The EA is responsible for communication with ADB, loan on-lending and repayment, as well as supervision and guidance of the PMO and IAs during project implementation. The PMO is responsible for daily management of the project implementation on behalf of the EA and under the guidance of the EA.

17. **Implementing Agency.** The implementing agencies are the YWPCO, the ZDG, and the LCG. In each of the ZDG and the LCG, a district- or county-level local PLG has been established, under which a local PMO has also been established. The local PMOs are located in water resources bureaus in both the ZDG and the LCG.

18. **Project Implementing Agency.** ZDG and LCG have 4 PIUs respectively: 1) Zhaotong Ecology & Environment Bureau Zhaoyang Branch - wastewater management and animal feces management in Zhaoyang District; 2) Zhaoyang Housing & Construction Bureau - solid waste management in Zhaoyang District; 3) Zhaoyang Agriculture & Rural Bureau - promotion of low-emission agriculture in Zhaoyang District; 4) Zhaoyang Water Resources Bureau - wetland construction and ecological restoration of rivers; 5) Ludian Forestry and Grassland Bureau - Ludian County soil and water conservation & afforestation 6) Ludian Housing & Construction Bureau - solid waste management and wastewater management and animal feces management in Ludian County; 7) Ludian Agriculture & Rural Bureau - promotion of low-emission agriculture in Ludian County; 8) Ludian Water Resources Bureau - wetland construction and ecological restoration of rivers.

19. **Environmental Management Staff.** The PMO and LPMO have designated an environmental management officer who is responsible for the implementation of the EMP. The environmental management officer's specific responsibilities include: (i) overall coordination of the EMP implementation; (ii) supervising the implementation of mitigation measures during project construction and operation; (iii) supervising contractors and construction supervision companies (CSCs) on internal monitoring, and coordinating the external and compliance monitoring; (iv) ensuring that environmental management, monitoring, and mitigation measures are incorporated into bidding documents, construction contracts and operation management manuals; (v) reporting the EMP performance to the PMO; (vi) coordinating the GRM, together with the PMO social officer; and (vii) responding to any unforeseen adverse environmental impact beyond those mentioned in the domestic environmental impact assessment (DEIA), the project environmental impact assessment and EMP. The PMO environment officer is supported by the loan implementation environmental consultant (LIEC) and supervised by EEB.

20. **Loan Implementation Environment Consultant (LIEC).** LIECs are members of the consulting team (T4 Package). The LIECs advise the PMO, contractors and the CSCs on all aspects of EMP implementation and environmental monitoring for the project. The LIECs will (i) assist the PMO to update the EMP and environmental monitoring program as necessary; (ii) verify the implementation of the mitigation measures specified in the EMP; (iii) review internal and compliance monitoring reports and prepare semi-annual environment performance/monitoring report to be submitted to ADB; (iv) provide training to PMO, IAs, CSCs, contractors on environmental laws, regulations and policies, ADB SPS, EMP implementation, GRM, etc.; (v) identify any environment-related implementation issues, propose necessary

corrective actions, and reflect these in a corrective action plan; and (vi) undertake site visits to check EMP implementation.

21. **Construction Contractors.** Construction contractors are responsible for implementing relevant mitigation measures and internal monitoring during construction with the help of CSCs and under the supervision of the EEB. Each contractor must appoint an environment, health and safety (EHS) officer to supervise the implementation of the on-site environment, health and safety management plan.

22. **Construction Supervision Companies.** CSCs were contracted to conduct stand-by internal environmental supervision on contractor's mitigation measures implementation. The CSCs are responsible for supervising construction progress and quality, and EMP implementation on construction sites. Each CSC must have at least one environmental engineer on each construction site to: (i) supervise contractor's EMP and EHS management plan implementation performance; (ii) conduct internal environmental inspection and monitoring; (iii) complete monthly environmental performance forms to be submitted to the PMO.

23. **External Environmental Monitoring Agency (EMA).** External environmental monitoring is required by ADB for projects which are Category "A" for environment. The external environmental monitoring will be conducted by a certified agency, that will be engaged through a public tendering process. The PMO selected a EMA to conduct periodic environmental monitoring during construction and operation in accordance with the monitoring plan, and the EMA will report the monitoring results to the PMO, the LPMO and ADB.

III. COMPLIANCE WITH ENVIRONMENT RELATED PROJECT COVENANTS AND EMP IMPLEMENTATION

A. Compliance with environment related project covenants

24. Compliance with covenants defined in the Loan Agreement and Project Agreement that directly or indirectly refer to EHS is assessed. The project complies with most covenants. A list of loan covenants and compliance status is shown in **Table 3**.

Table 3: Compliance with Environment Related Project Covenants

Agreement/Covenant	Section	Status of Compliance
PROJECT AGREEMENT		
YPG shall cause the Project Executing Agency to, and the Project Executing Agency shall, ensure that the Fund (or, of the Fund does not have capacity to contract, YWCPO on behalf of the Fund) enters into a grant agreement with each grant recipient from the Fund wherein the recipient undertakes (a) to use the grant exclusively for a specified Qualified Activity; (b) to prepare, design, and implement the Qualified Activity in accordance with (i) all applicable laws and regulations of the Borrower relating to environment, health and safety, (ii) the ESMS, (iii) all measures and requirements set forth in the EIA, and (iv) any corrective or preventative actions set forth in Safeguards Monitoring Reports with respect to the Qualified Activity; (c) to provide all necessary budget and human resources to fully comply with the ESMS and to avoid, reduce and/or mitigate environmental and/or social impacts in the Qualified Activity; and (d) promptly to minimize or mitigate any adverse impacts on the environment that arise from the Qualified Activity and to report such impacts to the Fund.	Schedule (para 9).	In compliance.
YPG and the Project Executing Agency shall not, and shall cause the Project Implementing Agencies not to, award any Works contract which involves environmental impacts until: (a) the Project Executing Agency has prepared and submitted to ADB the final EMP based on the Project's detailed design, and obtained ADB's clearance of such EMP; and (b) the relevant provisions from the EMP have been incorporated into the Works contract.	Schedule (para 25).	In compliance.
YPG and the Project Executing Agency shall, and shall cause the Project Implementing Agencies to, ensure that the preparation, design, construction, implementation, operation and decommissioning of the Project and all Project facilities comply with (a) all applicable laws and regulations of the Borrower relating to environment, health and safety; (b) the Environmental Safeguards; and (c) all measures and requirements set forth in the EIA, the EMP, and any corrective or preventative actions (i) set forth in a Safeguards Monitoring Report, or (ii) which are subsequently agreed between ADB and the Project Executing Agency.	Schedule (para 27).	In compliance.
YPG and the Project Executing Agency shall, and shall	Schedule (para	In compliance.

Agreement/Covenant	Section	Status of Compliance
<p>cause the Project Implementing Agencies to, ensure that all bidding documents and contracts for Works contain provisions that require contractors to:</p> <p>(a) comply with the measures relevant to the contractor set forth in the EIA, the EMP, the RP and the EMDP (to the extent they concern impacts on the respective affected people under the Environmental Safeguards, the Involuntary Resettlement Safeguards and the Indigenous Peoples Safeguards during construction), and any corrective or preventative actions set forth in (i) a Safeguards Monitoring Report, or (ii) subsequently agreed between ADB and the Project Executing Agency;</p> <p>(b) make available a budget for all such environmental and social measures;</p> <p>(c) provide the Project Executing Agency with a written notice of any unanticipated environmental, resettlement or indigenous peoples risks or impacts that arise during construction, implementation or operation of the Project that were not considered in the EIA, the EMP, the RP and the EMDP;</p> <p>(d) adequately record the condition of roads, agricultural land and other infrastructure prior to starting to transport materials and construction; and</p> <p>(e) reinstate pathways, other local infrastructure, and agricultural land to at least their pre-project condition upon the completion of construction.</p>	32).	
<p>The Project Executing Agency shall:</p> <p>(a) submit Safeguards Monitoring Reports to ADB</p> <p>(i) in respect of implementation of and compliance with Environmental Safeguards and the EMP, semiannually during construction of the Project, and thereafter annually during operation, until the issuance of ADB's Project completion report unless a longer period is agreed in the EMP; and</p> <p>(ii) in respect of implementation of and compliance with Involuntary Resettlement Safeguards and Indigenous Peoples Safeguards and of the RP and EMDP, semiannually during the implementation of the RP and the EMDP, and thereafter annually during operation, until the issuance of ADB's Project completion report unless a longer period is agreed in the EMDP and/or RP, and disclose relevant information from such reports to the respective affected people under the Environmental Safeguards, the Involuntary Resettlement Safeguards and the Indigenous Peoples Safeguards promptly upon submission;</p> <p>(b) if any unanticipated environmental and/or social risks and impacts arise during construction, implementation or operation of the Project that were not considered in the EIA, the EMP, the RP and the EMDP, promptly inform ADB of the occurrence of such risks or impacts, with detailed description of the event and proposed corrective action plan;</p>	Schedule (para 33).	<p>In compliance. (EMA was selected and the contract was awarded)</p>

Agreement/Covenant	Section	Status of Compliance
<p>(c) no later than 30 June 2021, engage a qualified and experienced external monitoring agency, and no later than 30 September 2020 engage a qualified an experienced external resettlement and social development monitoring agency, in each case under a selection process and terms of reference acceptable to ADB, to conduct Project monitoring as provided in the PAM, EMP, EMDP and RP; and</p> <p>(d) report any actual or potential breach of compliance with the measures and requirements set forth in the EMP, the RP or the EMDP promptly after becoming aware of the breach.</p>		
<p>YPG and the Project Executing Agency shall, and shall cause the Project Implementing Agencies to, ensure that a safeguards grievance redress mechanism acceptable to ADB is established and maintained in accordance with the provisions of the EIA, the EMP, the RP, the EMDP and the PAM, to consider safeguards complaints.</p>	<p>Schedule (para 39).</p>	<p>In compliance.</p>

Source: based on the consultants' review and assessment.

B. Assessment of Project Readiness and EMP Implementation

25. The project's readiness in terms of environmental management was assessed based on the indicators listed in **Table 4**, which are derived from the project EIA.

Table 4: Project Readiness Assessment Indicators

Indicators	Criteria	Assessment
Designate Environment Officer	Designate a well-trained environment officer in the PMO. IAs will each assign one full-time, qualified environment officer	Yes
Update EMP	In case of any changes in the project detailed design, the EMP will be updated as needed, including the mitigation measures and monitoring plan. This will be the responsibility of the ZPMO, PIUs, and LIEC.	Yes
EMP training	The LIEC and personnel from Zhaotong municipal EPB will give training in implementation and supervision of environmental mitigation measures to contractors and the construction supervision companies (CSCs)	Yes
Establish GRM	Establish GRM in PMO.	Yes.
Bidding and contract documents	EMP will be included in all the bidding documents and contracts for procurement of civil works, goods and services. All contractors and subcontractors will be required to comply with the EMP.	Yes.
Contractor obligations	All contractors, in their bids, will respond to the environmental clauses in the bidding documents for EMP requirements. Prior to construction, each contractor will develop its SSEMP, based on the project EMP, and assign at least a specific person responsible for the environment, health and safety (EHS).	Not applicable
Environmental management on construction sites	Ensure that during construction, the PMO and LPMO environment officers, together with environmental supervision engineers from construction supervision companies (CSCs), will be responsible for enhancing site supervision, management and appraisal, for timely identification and resolving of any issues. Intermittent follow-up training during construction will be conducted	Not applicable

Source: based on the consultants' review and assessment.

26. A detailed assessment of the project's compliance with the EMP for the pre-construction is presented in **Table 5**.

27. In November 2020, ADB asked PMO to conduct a project-level COVID-19 risk assessment and prepare a health and safety (H&S) plan. In these regarded, COVID-19 Risk Assessment and H&S was developed and submitted to ADB before 28 February 2021. The Assessment concludes Zhaotong have sound capabilities, nucleic acid test services and fever clinics are well equipped, and there are sufficient material reserves. During the report period, there was no any COIV-19 cases in the project area.

Table 5: EMP Mitigation Measures Implementation (Pre-construction Phase)

Potential Impacts and Issues	Mitigation Measures defined in the EMP	Compliance with EMP assessment
Institutional strengthening for EMP Implementation and supervision	<ol style="list-style-type: none"> 1) At least 1 month before construction: (i) reconfirm the full-time status of the ZPMO Environmental Officer for the project; (ii) appoint at least one Environment Officer in each of the PIUs. 2) At least 2 months before any construction, ZPMO engages LIEC. 3) At least 2 months before any construction, provide training to all environmental staff for EMP implementation and supervision. 4) Confirm that at least one certified environmental monitoring agency has been recruited for the project at least 2 months before any construction. 5) Organize and conduct training on the project EMP for appropriate staffs of the ZPMO, IAs, PIUs, contractors, and CSCs. 	In compliance (Consulting company with LIEC is bidding)
Updating EMP	<ul style="list-style-type: none"> • Update mitigation measures defined in this EMP based on final detailed design; • Submit the updated EMP to ADB for review; • In case of major changes of project location and/or additional physical components, form a DEIA team to conduct additional DEIA and public consultation. The revised DEIA should be submitted to Zhaotong and district/county EPBs and ADB for approval and disclosure. To determine whether the change is minor or major under assistance of LIEC, ZPMO and PMOs should consult with ADB. 	In compliance
Environmental monitoring plan	<ul style="list-style-type: none"> • Prior to construction, the ZPMO and/or PIUs will hire an EMA, to conduct environment monitoring in accordance with the EMP monitoring plan; • Prepare detailed monitoring plan in accordance with the monitoring plan in this EMP. 	Not applicable
Detailed Design	<ul style="list-style-type: none"> • The ecological dredging and embankment will be designed and identified in detail, to avoid impacts to local and downstream ecosystems. 	In compliance
Bidding and contract documents	<ul style="list-style-type: none"> • Mitigation measures in the EMP are incorporated in all bidding documents; • Bidding documents are sent to ADB for review; • Prepare environmental contract clauses for contractors. 	In compliance
EMP training	<ul style="list-style-type: none"> • LIEC, or invited environment specialists and/or officials from EPBs provide training on construction environmental management, implementation, supervision, to contractors and CSCs, in accordance with the training plan in this EMP 	Not applicable
Establish GRM	<ul style="list-style-type: none"> • Responsibility for GRM implementation is assigned to the ZPMO and PIU Environmental Officers and Social Officers and is included in their terms of reference; • The ZPMO and PIUs personnel will be aware of, and trained in, the GRM, and will help support the environmental and social officers when necessary; 	In compliance

Potential Impacts and Issues	Mitigation Measures defined in the EMP	Compliance with EMP assessment
	<ul style="list-style-type: none"> • Key contact details for the GRM (phone number, WeChat, address, email) will be provided on the ZPMO, IA and/or EPB public websites and information boards at construction sites. 	
Land acquisition and resettlement	<ul style="list-style-type: none"> • Update LARP after detail design • Establish resettlement office of government officials to manage LARP; • Conduct information dissemination and community consultation programs in accordance with the PRC Land Administration Law (1999) and ADB SPS; • Ensure that all resettlement is reasonably completed before construction starts. 	In compliance

Source: based on the consultants' review and assessment.

IV. SUMMARY OF ENVIRONMENTAL AND SOCIAL MANAGEMENT SYSTEM

28. During the reporting period, the Output 3 (Eco-compensation mechanism for the Sayu River Basin established) was not implemented yet.

29. According to TOR, the Start-up Environment Consultant carried out the initial ESMS training for PMO and LPMO on 18-20 July 2021. The training covered the institutional framework, six steps to implement ESMS and GRM.

V. PUBLIC CONSULTATION AND GRIEVANCE REDRESS MECHANISM

30. **Public consultation.** The project carried out public consultations during preparation of the domestic EIA and the EIA in accordance with the PRC public consultation requirement for EIA (2019) and ADB's SPS (2009). Information disclosure and public consultation includes: (i) three rounds of internet, newspaper, and on-site disclosure; (ii) numerous meetings with key stakeholders, including representatives of the affected public, local authorities and sector specific organizations; (iii) informal visits to communities and households in the project areas; (iv) two questionnaire surveys. There is no additional public consultation activity during this reporting period.

31. **A grievance redress mechanism (GRM)** was established in compliance with ADB's SPS (2009) requirements to prevent and address community concerns and assist the project to maximize environmental and social benefits. The GRM was presented and discussed with potentially affected persons during public consultation.

- i) The PMO has established a Project Public Complaint Unit (PPCU);
- ii) The contact details for the entry points (e.g., phone numbers, addresses, e-mail addresses, etc.) are shown in **Table 6** below and will be publicly disseminated on information boards at construction sites and on the website of the local government. Clear redress procedures have been established, based on the GRM defined in the EIA; and
- iii) The PPCU has established GRM tracking and documentation system.

32. During the reporting period, no complaint was received from any of the entry points during the reporting period.

Table 6: Contact Information for the Project Public Complaint Unit

Agency/ Institution	Person in charge	Unit	Telephone	Email
PMO	<i>Ms. Xiong Yongying</i>	Environmental official/. YWPCO	0870-3188824	ztydsbb@163.com
Zhaoyang LPMO	<i>Mr. Huang Kaiyuan</i>	Zhaoyang District WRB	0870-2132896	157647024@qq.com
Ludian LPMO	<i>Ms. Zhu Xuemei</i>	Ludian County EEB	0870-3195266	ldxyhb@126.com
Zhaotong EEB	-	-	0870-3187881	-

Source: PMO and IAs.

VI. INSTITUTIONAL STRENGTHENING AND TRAINING

33. The project EMP defines the capacity building and training plan, which adapts to the training needs of environmental management during the project implementation period to ensure that the contractors, the CSCs and the PMO take appropriate environmental protection measures to protect the environment.

34. **Training:** On 20 November 2020, the start-up individual environmental consultant held a training on the implementation of the environmental management plan for PMO, IAs, and other stakeholders.

35. During the report period, PMO participated the Environmental safety guard training organized by ADB in August 2021.

VII. CONCLUSIONS

36. During the report period, no civil work contracts were awarded. For the civil work contract package to be bidden, 4 SSEMPs was prepared and would be integrated into the bid document. For other packages, the SSEMP would be prepared once the preliminary designs are approval or the existing problem is settled.

37. The GRM has been setup. So far, no complaint was received from any entry point.

38. The reviews and assessments of compliance with relevant requirements in the ADB loan and project agreements were carried out by the consultant. The project readiness, and the mitigation measures implementation are all in compliance.

39. About COVID-19, an Health and Safety Pan was prepare. No new outbreaks of COVID-19 occurred in Zhaotong during the reporting period, and Zhaotong was listed as a low-risk area. It is concluded that the ADB project implementation process has not impacted by COVID-19.