



Project Summary Information

Date of Document Updated: July 21, 2026	
Project Name	Climate Adaptive Irrigation and Sustainable Agriculture for Resilience Project (CAISAR)
Project Number	P000452
AIIB member	Cambodia
Sector/Subsector	Water Irrigation and drainage
Alignment with AIIB's thematic priorities	Green infrastructure; Technology-enabled Infrastructure
Status of Financing	Approved
Objective	The Project objective is to increase irrigation efficiency, strengthen climate resilience, and improve the livelihoods of smallholder farmers and vulnerable rural communities in selected provinces of Cambodia.
Project Description	The Project, led by Cambodia's Ministry of Water Resources and Meteorology (MoWRAM), aims to strengthen climate resilience in the country's agriculture sector by improving irrigation, promoting sustainable farming, and building institutional capacity. The Project will (i) apply climate adaptation solutions and sustainable water-use practices to increase irrigation efficiency at the farm and scheme level; (ii) rehabilitate and upgrade irrigation facilities to increase water availability in the dry season, improve flood-protection and drainage to reduce flood risks in the wet season; and (iii) facilitating project management activities to ensure high-quality project implementation. The Project is co-financed in parallel by Asian Infrastructure Investment Bank (AIIB), the International Fund for Agricultural Development (IFAD), and the Green Climate Fund (GCF), with AIIB serving as the lead co-financier and IFAD administering GCF-financed components. Counterpart funding will be provided by the Government of Cambodia (GoC). The Project components are: • Component 1. Farm-level Climate Adaptation and Resilience • Component 2. Upgrading and Climate-proofing Water Infrastructure for Increased Resilience • Component 3. Strengthened Institutional and Regulatory Capacity for Low-emission Climate-resilient Development Pathways The Project is implemented in the selected provinces of Cambodia (Kampong Speu, Kampong Chhnang, Kandal, and Pursat provinces). It is anticipated that the Project would directly benefit about 562,000 rural people by enhancing the resilience of smallholder farmers to climate change. In this Project, AIIB finances the following: (i) subcomponent 2.1: Rehabilitate and upgrade irrigation systems, including gravity-fed and solar-powered solutions, to enhance water availability and improve efficiency; and (ii) subcomponent 3.3: Project management and monitoring with a focus on strengthening PMU capacity and undertaking monitoring and evaluation activities.

Expected Results	The Project is expected to generate the following results: • Improved farm-level climate adaptation, resilience, and water use efficiency • Upgraded and Climate-proofed Water Infrastructure for Increased Resilience • Strengthened Institutional and Regulatory Capacity for Low-emission Climate-resilient Development Pathways
Environmental and Social Category	B

Environmental and Social Information	Applicable Policy and Standards. The Project will be governed by different ES policies. AIIB's Environmental and Social Policy (ESP), including the Environment and Social Standards (ESSs) and the Environmental and Social Exclusion List (ESEL), will apply to the AIIB parallel financed Subcomponent 2.1 and to the joint co-financed Component 3.4 in which AIIB is the lead financing agency. The ESS 1 (Environmental and Social Assessment and Management) and ESS 2 (Involuntary Resettlement) of AIIB's ESP are the applicable ESSs as construction activities will cause environmental risks, land acquisition, and resettlement of local people. The Project is not situated in the areas where ethnic minorities are present; therefore, the policies relating to ethnic minority/indigenous peoples of the co-financiers are not triggered. The Project has adopted a common approach on alignment of the application of the environmental and social (ES) policies of AIIB, International Fund for Agricultural Development (IFAD), and Green Climate Fund (GCF). Agreements among development partners emphasize a client-first approach, reducing complexity for the government while upholding ES requirements and standards of the financiers. ES Categorization and Instruments. The Project is proposed to be Category B, as it has a limited number of potentially adverse ES impacts that are not unprecedented, few of which are irreversible or cumulative, and all of which can be successfully managed using good operational practices. The Project will focus solely on upgrading, rehabilitating, and modernizing existing irrigation infrastructure to enhance water productivity; therefore, ES risks and impacts by the Project are not significant. The alignment of the application of the ES policies of AIIB, IFAD, and GCF is applied to the Project's ES instruments. Framework instruments were developed, i.e., the Environmental, Social and Climate Management Planning Framework (ESCMPPF), Land Acquisition and Resettlement Planning Framework (LARPF), and Indigenous Peoples Planning Framework (IPPF). The draft Environmental, Social, and Climate Impact Assessment (ESCIA), including the Environmental, Social, and Climate Management Plans (ESCMs) for irrigation subprojects and a Biodiversity Action Plan (BAP) have been prepared and are being finalized by the PMU. Environmental Aspect. The Project is expected to have negative environmental impacts during construction which include air emissions; noise generation; contamination of surface water, soil environment and groundwater; impacts to flora and fauna; spoil disposal and use of borrow sites; soil erosion; solid waste generation; wastewater discharge; and other unanticipated impacts. During operations, potential risks and impacts may include, but not limited to local ecohydrology, on patterns of flow in terms of water volume and water quality, particularly changes in sediments and/or contamination by pollutants; degradation of soils (physical and chemical such as soil erosion, waterlogging and salinization); nutrient management; use and management of pesticides and fertilizers; crop residue and solid waste
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management; and impacts on long-term sustainability of the water management system in terms of potential water use conflicts, and unsustainable irrigation practices. Further on biodiversity, there are no internationally recognized areas (Key Biodiversity Areas, Ramsar Sites, World Heritage) and no legally protected areas within 10km of all subprojects, however, further mitigation measures are in place in the Biodiversity Action Plan (BAP) within the ESCIA. All potential impacts are manageable with the implementation of ES instruments and the good international industry practices, standards, procedures, guidelines, and design criteria.

Social and Gender Aspects. The Project implementation would require land acquisition from local households; however, the scope of land acquisition by the Project is insignificant. The conducted ESCIA for the Project shows that a total of 71 households would have their lands acquired by the Project; of which, 63 households would be partially affected, and eight (8) households would be fully affected (physically displaced). Land acquisition and resettlement will be carried out following the relevant laws and regulations of the Government and the requirement of agreed LARPF for the Project. Voluntary land donation is proposed for the minor land acquisition impact for upgrading and rehabilitation of tertiary and quarter canals. The eligible criteria for voluntary donation, the procedure of implementing donation, the Grievance Redress Mechanism (GRM) and monitoring arrangements (internal and external) for planning and implementation of voluntary donation have been reflected in the approved LARPF of the Project. In addition, the Project would bring various benefits to local women, especially for improvements of their skills and business, livelihoods, and community participation. Furthermore, the Project will address gender inequality for those who are affected by climate change vulnerability such as floods and droughts. A Gender Action Plan (GAP) has been developed with various measures to be implemented to provide project's benefits as well as to manage the potential negative risks and impacts of the Project to local women.

Occupational Health and Safety (OHS), Labor and Working Conditions. During construction phase, there is a risk of injuries or fatalities among workers or members of the public from Unexploded Ordnance (UXO). Other potential OHS risks and impacts include collision with moving machinery and vehicle, prolonged exposure to dust and exceeding levels of noise and vibration, working at heights, risk of fall and drowning, electrical safety, and issues in worker camps. During operations phase, poor and inadequate operations and maintenance of irrigation schemes could cause impacts. Other potential risks and impacts are, but are not limited to, falls and drowning into the canals, especially for vulnerable groups such as children, and infrastructure safety such as unauthorized access to offtake structures. Further potential OHS risks and impacts include physical hazards such as working at height, falls, drowning, and chemical hazards from exposure to pesticide/chemical fertilizers), among others. The ESCMP outlines the corresponding mitigation measures.

Stakeholder Engagement, Consultation, and Information Disclosure. The Project implementing agency has conducted three rounds of consultations with the main stakeholders in different stages of project preparation. A Stakeholder Engagement Plan (SEP) has been prepared and consulted with the stakeholders. The SEP will be implemented and monitored to ensure the achievement of the objectives mentioned. The prepared ES instruments (ESCMPI, LARPF, IPPF, draft ESCIA, draft ESCMPs) and SEP have been disclosed on the website of MoWRAM in December 2024. Summaries of the documents in Khmer language have been disclosed in the easily accessible public places of the project communities in January 2025. The ES instruments of the Project have also been posted on AIIB's

	website in January 2025. The finalized ESCIA and ESCMPs, once available, will also be disclosed in the same manner. Project Grievance Redress Mechanism (GRM). A Project-level GRM has been proposed in consultations with the stakeholders and included in the ES instruments as well as the SEP. Summaries of the ES instruments and SEP with the GRM in Khmer language were placed in the easily accessible public places of the project communities in January 2025. The documents with the GRM included have been disclosed on the websites of MoWRAM and AIIB. The procedure for grievance redressal is culturally appropriate and gender sensitive. The project-level GRM will be established and functional once the Project is approved by the financiers and the Government. Monitoring and Reporting Arrangement. MoWRAM will be responsible for the overall coordination of Project monitoring. The Project Management and Implementation Consultants (PMICs) will be recruited to support the PMU in establishing or confirming baselines, monitoring the implementation process, checking the progress of the Project's results indicators, and assessing achievements towards the Project's objectives. MoWRAM will prepare consolidated reports for the co-financiers based on agreed format. AIIB, IFAD and GCF will jointly monitor the status of the Project implementation and result indicators through biannual implementation support missions. As the lead co-financier, AIIB will proactively plan and coordinate with other partners on mission timing, objectives, and the key skills required for joint missions with IFAD and GCF, ensuring sufficient resources are allocated to the missions and reviews.
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Cost and Financing Plan	Total Project Investment Cost: USD240 Million - AIIB Loan: USD100 Million - GCF Loan: USD40 Million - GCF Grant: USD40 Million - IFAD Loan: USD45 Million - Government: USD15 Million
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Borrower	Kingdom of Cambodia		
Guarantor	Not Applicable		
Implementing Entity/Sponsor	Ministry of Water Resources and Meteorology; National Committee for Sub-national Democratic Development		
Estimated date of loan closing	December 31, 2032		
Contact Points:	AIIB	Borrower	Implementation Organization/Sponsor
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Date of Concept Decision	May 3, 2023
Date of Appraisal Decision	March 27, 2025
Date of Financing Approval	June 11, 2025
Independent Accountability Mechanism	The Independent Accountability Mechanism (IAM) of corresponding financiers apply to financed components where their ES policies apply. AIIB's Policy on Project-affected People's Mechanism (PPM) is only applicable to Component 2.1 and Component 3.4 where AIIB's ESP apply. The PPM has been established by AIIB to provide an opportunity for an independent and impartial review of submissions from Project-affected people who believe they have been or are likely to be adversely affected by AIIB's failure to implement the ESP in situations when their concerns cannot be addressed satisfactorily through the project-level GRM or the processes of AIIB's Management. Information on AIIB's PPM is available at: How We Assist You - Project-Affected People's Mechanism (aiib.org).