



Concept Environmental and Social Review Summary

Concept Stage

(ESRS Concept Stage)

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**I. BASIC INFORMATION****A. Basic Operation Data**

Operation ID	Product	Operation Acronym	Approval Fiscal Year
P510547	Investment Project Financing (IPF)	CRCI	2026
Operation Name	Cambodia Regional Connectivity Improvement		
Country/Region Code	Beneficiary country/countries (borrower, recipient)	Region	Practice Area (Lead)
Cambodia	Cambodia	EAST ASIA AND PACIFIC	Transport
Borrower(s)	Implementing Agency(ies)	Estimated Appraisal Date	Estimated Board Date
Kingdom of Cambodia	Ministry of Public Works and Transport	15-Dec-2025	25-Mar-2026
Estimated Concept Review Date	Total Project Cost		
08-May-2025	235,000,000.00		

Proposed Development Objective

The Project Development Objectives (PDO) are to improve the efficiency and resilience of transport and trade along the selected regional corridor sections in Cambodia.

B. Is the operation being prepared in a Situation of Urgent Need of Assistance or Capacity Constraints, as per Bank IPF Policy, para. 12?

No

C. Summary Description of Proposed Project Activities

The proposed project aims to improve climate-resilient regional connectivity and support trade facilitation between Cambodia and neighboring countries. Investment in infrastructure will focus on improving Cambodia's section of the Asian Highway 21 regional corridor, including improving the existing road infrastructure within its Right of Way (ROW) and improving its climate resilience and safety. This road corridor provides east-west land-based connectivity between Cambodia, Thailand, and Viet Nam. Improvement of the Cambodia section of the corridor is expected to enhance land-based regional connectivity in Southeast Asia and mitigate climate-imposed disruptions to trade and supply chains. The Ministry of Public Works and Transport (MPWT) of Cambodia is an implementing agency for the proposed project.



MPWT's Project Management Unit for the ongoing IDA-financed road projects, led by the Secretary of State, will manage the project. The detailed project scope and components will be confirmed during project preparation. Component 1: Climate-resilient Regional Connectivity Improvement will focus on the improvement and maintenance of the existing road infrastructure and supervision of works. The overall framework for the engineering design will follow the ASEAN Highways Class 2 standards, including 7-meter asphalt paved two traffic lanes (3.5 meters for each direction) and paved road shoulders on each side, which will enhance road safety by allocating the road shoulder for two-wheeler traffic. Design engineers will conduct detailed flood and hydrology assessments and integrate resilient and green engineering solutions for infrastructure improvement. Component 2: Trade facilitation, multimodal transport, and logistics improvements will support institutional and capacity-building activities, including the provision of goods (ICT and equipment) and technical assistance to improve capacity and operational improvement in customs, trade, and logistics. Component 3: Project implementation support will provide resources for the project management, including capacity building and monitoring in fiduciary and audits, technical assistance, and environmental and social monitoring. Component 4: Contingent Emergency Response will provide an immediate response to an Eligible Crisis or Emergency, as needed. The project is closely aligned with the WBG Country Partnership Framework (CPF) with Cambodia for FY2025-2029, which aims to expand and improve infrastructure connectivity (CPF Objective 5) by scaling up support for improving regional connectivity and trade facilitation to support economic diversification and supply chain resilience. The proposed project is also aligned with the Master Plan for ASEAN Connectivity 2025 (MPAC 2025), which prioritizes connectivity-oriented infrastructure projects and RGC's Pentagonal Strategy Phase 1 and Comprehensive Intermodal Transport and System Master Plan 2023-2033.

D. Environmental and Social Overview

D.1 Overview of Environmental and Social Project Settings

The project will finance road improvement and maintenance of about 392 km regional corridor connecting Siem Reap, Preah Vihear, Stung Treng, Ratanakiri, and Mondul Kiri. The road crosses rice fields, crop/agriculture lands, residential areas, and shrubs. A rapid E&S survey and screening found no virgin forests, only settlements, disturbed forests, and agricultural lands. Eighteen Economic Land Concessions (ELCs) border the road across five provinces. The fauna mainly consists of domestic livestock. The road crosses several water bodies, including parts of the Mekong River and its tributaries.

The road crosses a short disturbed-sections of Prey Lang Wildlife Sanctuary (WS) (360 m) and Lomphat WS (500 m) and borders the Kulen Brahmedeb WS. Additionally, there are two national parks, a key biodiversity area, two WSs, a Ramsar site, and a multiple-use area at varying distances. Initial screening suggests no evidence of species of conservation concern within the project area due to prior land conversion. One ELC is located within Lomphat WS, near the road. Three cultural heritage sites are near the road and while no disturbances are expected, close coordination with responsible authorities is required.

The road spans 35 communes (Siem Reap: 3, Preah Vihear: 12, Stung Treng: 10, Ratanakiri: 10), made up of 246,688 people (59,795 households), including 23,806 Indigenous Peoples (9.65%). It also crosses Roya Commune (Mondul Kiri) with 4,975 people, where there are also IPs. Khmer is the dominant language (96%). The MPWT is conducting socioeconomic surveys to refine population data. The main livelihoods include agriculture, business, services, and livestock farming. Sensitive receptors (schools, health centers, pagodas) are a safe distance from the road. Most of the ROW is clear, with houses and shops set back. No relocation is anticipated, though minor adjustments may be needed for small structures, fences, roofs, or trees near the Corridor of Impact (COI).

D.2 Overview of Borrower's Institutional Capacity for Managing Environmental and Social Risks and Impacts



MPWT has extensive experience applying the World Bank's safeguard policies and Environmental and Social Framework (ESF) through multiple IDA-financed projects, including the Road Connectivity Improvement Project (RCIP) and Road Asset Management Project II (RAMP II & AF). The E&S performance of these projects are currently rated Moderately Satisfactory. MPWT has strengthened its E&S risk management track record, improving internal capacities within the Environmental and Social Office (ESO) through enhanced staffing and qualifications. Many staff have backgrounds in engineering, environment, and public administration and have worked on donor-supported projects.

MPWT receives ongoing support from international Design and Supervision Consultants under RCIP and E&S consultants working within MPWT to build capacity. In addition, International Environmental and Social Consultants have been hired to support the project preparation. Staff continue to enhance expertise through WB-supported ESF training and lessons from current projects. While MPWT has the expertise to screen, assess, and manage E&S risk, additional ESO staff/consultants will be needed to support project implementation. The ESIA will identify the necessary expertise, number of personnel, and E&S capacity-strengthening measures needed to ensure effective implementation.

Challenges persist, particularly with contractors' labor management, worker camps, and traffic safety (which is a challenge in the country as whole). Experience from RCIP and RAMP II & AF highlights traffic safety risks during construction and maintenance due to contractor deficiencies in road safety management, lack of qualified E&S staff (including for OHS), poor driving behavior and reckless driving (e.g., speeding, alcohol influence). The proposed project will need to pay attention to address these risks, among others, and reinforce contractor obligations for construction risk management and E&S supervision.

II. SCREENING OF POTENTIAL ENVIRONMENTAL AND SOCIAL RISKS AND IMPACTS

A. Environmental and Social Risk Classification (ESRC)

Substantial

A.1 Environmental Risk Rating

Substantial

The environmental risk is rated Substantial due to the project's wide spatial coverage and proximity to protected areas (PAs). The project will rehabilitate 392 km of a two-lane regional road corridor, with most work confined to the existing ROW. Although the road runs near several PAs, settlement and agricultural lands dominate the corridor. The route remains distant from core PA zones but intersects two short sections of wildlife sanctuaries already impacted by settlements and plantations. Initial surveys and E&S screening conducted by MPWT found no evidence of species of conservation concern within the project study area. This absence is attributed to human activities such as agriculture, land concessions, and urbanization. Direct environmental risks are typical of brownfield road improvements in mixed-use landscapes, including roadside tree cutting, erosion, runoff from earthworks, occupational and traffic safety risks, construction-related pollution, UXO clearance, and potential disruptions to irrigation and drainage systems.

Biodiversity risks may arise from poorly managed borrow pits, worker camps, equipment storage areas, and asphalt plants. These risks are largely predictable, avoidable, and manageable through mitigation and compensatory measures aligned with ESF requirements and international best practices. Potential long-term risks and induced impacts-such as habitat loss- could arise from increased human access to protected areas following road improvements. An Environmental and Social Impact Assessment (ESIA) will assess these risks and identify management measures. The project design will incorporate avoidance strategies and nature-based solutions. No adverse impacts are expected for three cultural heritage sites near the road; however, close coordination with relevant authorities is essential. While MPWT has experience with Bank-financed projects, additional staff and consultants will be required for effective implementation.



Substantial

A.2 Social Risk Rating

The social risk is rated Substantial. Direct social risks associated with the works are expected to be mostly temporary, predictable and manageable during the construction period. The WB, MPWT and consultants conducted E&S screening of the proposed road section in November, 2024. The potential risks and impacts are likely to result from (i) occupational and health and safety (OHS) risks to project workers during the construction; (ii) management of worker's camps; (iii) discrimination of female workers for jobs in construction; (iv) harassment or sexual violence of female workers; (v) traffic safety for communities, road users and workers; (vi) potential impacts from labour influx, including spread of communicable diseases, and sexual violence; (vii) impacts to structures (fences, stalls, roofs, pavement) or trees within or too close to the COI; (viii) impacts to livelihoods during construction e.g. rice fields, shops located within or close to the road which may be impacted by civil works, and (ix) impacts, positive or negative, to Indigenous peoples living on, or close to, the road, including indirect impacts from road connectivity. The ESIA will explore these potential/risk and impacts. If CERC is activated, risks would be assessed based on the CERC-ESMF. Most of the ROW is free of encumbrances as such rehabilitation, and potential expansion works, in the project COI will not result in significant land acquisition impacts. The project is not expected to acquire new land as all works will be within the ROW. However, there may be minimal impacts to structures that have encroached the ROW, or instances where minimal land acquisition may be needed (e.g. for temporary road diversions or stockpile). These will be assessed by the Resettlement Plan. While unlikely, it is possible the project might cause potential cumulative adverse impacts to Indigenous Peoples by improving the corridor and this shall form part of the assessment work done before project appraisal.

B. Relevance of Standards and Policies at Concept Stage

B.1 Relevance of Environmental and Social Standards

ESS1 - Assessment and Management of Environmental and Social Risks and Impacts

Relevant

The project will be designed based on a mitigation hierarchy approach to minimize E&S risks and impacts. The road design will integrate green design and require a major focus on traffic safety. During project preparation, the following ESF instruments will be prepared, consulted upon, and disclosed to assess and manage the risks and impacts in accordance with relevant ESSs including to assess cumulative impacts and concerns about increased access to protected areas: An Environmental and Social Impact Assessment (ESIA) for the entire road corridor; three section-specific Environmental and Social Management Plans (ESMPs) and Biodiversity Management Plan (BMP) (if required); Stakeholder Engagement Plan (SEP); Resettlement Plans (RP); Indigenous Peoples Plan (IPP); and Environmental and Social Commitment Plan (ESCP) will be prepared and disclosed before appraisal. A brief CERC-ESMF will also be prepared during project implementation and included in the Project Operation Manual.

ESS10 - Stakeholder Engagement and Information Disclosure

Relevant

MPWT will prepare a Stakeholder Engagement Plan (SEP) and disclose before the appraisal stage. At this early stage, various affected and interested stakeholders have been identified including government authorities, Indigenous groups, Community Based Organizations (CBOs), roadside vendors, school and hospital staff, and communities living on the road side, in particular those impacted by construction and/or land acquisition, including vulnerable groups such as people with disabilities. The SEP will ensure that beneficiaries and affected communities will be engaged



including regarding project design options, schedule and potential E&S impacts. The approach to engagement activities will consider the needs of Indigenous Peoples and, vulnerability. The SEP will also include a project Grievance Redress Mechanism (GRM). As part of the information disclosure arrangement, the ESIA, ESMPs, RP, SEP, IPP and ESCP will be disclosed publicly in the MPWT website and in local offices as relevant.

ESS2 - Labor and Working Conditions

Relevant

The ESIA and ESMPs will develop Labor Management Procedures (LMP) in line with ESS2 to address any gaps between the national law and the ESF. The LMP will be annexed to the ESIA and apply to all project workers. In addition, the LMP shall be included in the bidding documents. Risks related to labor and working conditions are expected to be related to occupational, health and safety (OHS) aspects, management of worker's camps, and non-discrimination of female workers. Whilst child labor is not expected to be a significant risk, the LMP shall adopt a minimum hiring age of 18 years.. The LMP will also include a dedicated labor grievance mechanism for workers and a Code of Conduct. Project workers are expected to include direct workers, contracted workers and primary suppliers. Community workers are not expected to be engaged. The project will strive to hire local labor as much as possible, in particular for unskilled workers, in order to minimize labor influx.

ESS3 - Resource Efficiency and Pollution Prevention and Management

Relevant

Water consumption is required for dust control, mixing plants, and campsites, while energy use and raw material demand is likely moderate. Pollution risks include air pollution from asphalt plants and transport, noise, vibration, and waste from construction and campsites. An E&S screening identified 11 facilities for sand, gravel, and stones, and 6 borrow pits. Poorly managed borrow pits and material storage can cause soil erosion and runoff, blocking drainage systems. These temporary, site-specific impacts are manageable through mitigation measures. Vegetation clearance may cause erosion. ESIA/ESMP will outline measures for efficient resource use, waste and emissions control, sourcing from licensed suppliers, minimal tree clearance, replantation, soil protection, and integration of green engineering in the design. The project activities are not expected to generate significant GHG emissions for both construction and operation. This will be confirmed during project preparation.

ESS4 - Community Health and Safety

Relevant

Road safety is a significant issue in Cambodia. Experience from other WB road-financed projects shows that road safety will need significant attention during construction and maintenance activities, but also during the life of the project. To address road safety risks, the project's ESIA and ESMP will include road traffic safety assessment and consider the different types of risks related to traffic safety depending on the stage of the project. It is likely that temporary workers' camps will need to be installed. The ESIA and ESMP will include assessment of project induced labor influx and Gender Based Violence (GBV), with clear procedures and institutional responsibilities to help minimize community conflicts, misunderstandings, and exposure to communicable diseases. Among others, it will include provisions to promote local recruitment of workforce plus mitigation measures such as a worker code of conduct (as part of the LMP) as well as an assessment of risks from UXO and measures.

ESS5 - Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

Relevant

Road works will be confined to the existing ROW for most parts within the 20-30m from the centerline. As such no land acquisition is expected except where minimal land may be needed for road alignment or temporary diversions.



Initial screening suggests the ROW is mostly clear from encumbrances. Project design will take an avoidance strategy where possible. For instance, widening the road shoulders in areas free of encumbrances in order to avoid or reduce the impacts. Based on screening, no relocation of people or structures is expected. During project preparation, Resettlement Plans (RPs) will be prepared to assess the impacts on people with assets close to the roadside who may be impacted by the project. RPs would be updated during project implementation, once final design is confirmed. The ESIA will include an assessment of potential temporary impacts to livelihoods during construction. As needed, mitigation measures will be included in the RPs and/or ESMPs.

ESS6 - Biodiversity Conservation and Sustainable Management of Living Natural Resources

Relevant

The project road runs near several protected areas (PAs) but primarily passes through settlements, agricultural lands, and disturbed forests. It crosses two short sections of wildlife sanctuaries already affected by settlements and plantations, remaining distant from core PA zones. Initial screening found no species of conservation concern within the study area. However, biodiversity risks may arise from roadside tree cutting, poorly located borrow pits, worker camps, lay down areas. Potential long-term risks and induced impacts—such as habitat loss—could arise from increased human access to PAs following road improvements. ESIA will assess these risks and include biodiversity assessments and management plan, aligned with ESS6. The road design will follow the mitigation hierarchy and incorporate green solutions, aiming to minimize impacts and promote environmental benefits where possible. MPWT continues to work closely with the Ministry of Environment on biodiversity-related matters.

ESS7 - Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities

Relevant

In general, the project is not expected to result in adverse impacts on Indigenous Peoples, but there is a need to ensure that groups are not excluded from consultations. Based on the field visits carried out during the pre-identification mission, and the E&S screening conducted by MPWT consultants, IPs in the area are largely integrated into Khmer society and have been living together for 20 years or more, with IP people in positions of authority such as village chiefs or commune officials. Nevertheless, the increased connectivity could potentially impact IPs, which needs to be assessed. A stand-alone Indigenous Peoples Development Plan (IPP) will be prepared prior to project appraisal. The IPP shall be prepared in line with ESS7 and include required measures for consultations, Free Prior and Informed Consent (FPIC) in the unlikely event it will be needed, and grievance redress.

ESS8 - Cultural Heritage

Relevant

Three cultural heritage sites have been identified along the proposed project road: Beng Mealea National Cultural Heritage Site (Angkor period), bordering the road for less than 1 km in Siem Reap Province; Koh Ker Temple, located about 1.5 km from the road in Preah Vihear Province; and Preah Ko Temple, approximately 1.75 km from the road in Stung Treng Province. E&S Screening conducted by MPWT indicate no disturbances to these sites from the proposed works. However, close consultation with relevant authorities, particularly APSARA in Siem Reap, is essential. The ESIA and ESMPs will identify cultural heritage and assess its significance—both tangible and intangible—in consultation with affected stakeholders, including the Ministry of Culture and Fine Arts (MoCFA), APSARA, and, when necessary, religious leaders and Indigenous village chiefs. The plans will also incorporate Chance Find Procedures to address any unexpected cultural discoveries during project implementation,



ESS9 - Financial Intermediaries

Not Currently Relevant

This ESS is not relevant.

B.2 Legal Operational Policies that Apply

OP 7.50 Operations on International Waterways

No

OP 7.60 Operations in Disputed Areas

No

B.3 Other Salient Features

Use of Borrower Framework

No

The use of Borrower framework is not envisioned for this project. Experiences from past and on-going projects indicated that E&S assessments and plans required under national law, are insufficient to comply with the relevant ESSs and all such assessments and plans will therefore be prepared separately by the project.

Use of Common Approach

No

Based on information at the concept stage, the project will be financed by the World Bank, and no other joint co-financing is confirmed. Therefore, the use of a common approach is not relevant.

C. Overview of Required Environmental and Social Risk Management Activities

C.1 What Borrower environmental and social analyses, instruments, plans and/or frameworks are planned or required by Appraisal?

At the concept stage, MPWT and consultants have conducted E&S screening to describe the project area and identify potential E&S risks and mitigation measures. By Project Appraisal, an Environment and Social Impact Assessment (ESIA) will need to be prepared covering the whole proposed project; Environment and Social Management Plans (ESMP), potentially divided into corridors for ease of bidding; a Stakeholder Engagement Plan (SEP) including a Grievance Redress Mechanism (GRM) for the project; Resettlement Plans (RPs), or an abbreviated version; an Indigenous Peoples Plan (IPP) prepared in consultations with IP groups or their representatives, and an Environmental and Social Commitment Plan (ESCP).

The ESIA and ESMP will consider, in an integrated way, all relevant direct, indirect and cumulative environmental and social risks and impacts of the project including those arising from potential increased access to protected areas and the impacts of enhanced connectivity on ethnic minorities living in the wider project area. These document will include specific provisions for UXO screening; Labor-Management Procedures (ESS2); pollution management (air, noise, solid and liquid wastes, etc.) and use of resources (sand, gravel, water and energy usage) (ESS3); community health and road traffic safety assessment and plan during construction and operation phases (ESS4); labor influx and Gender Based Violence assessments and plans (ESS4); biodiversity conservation and sustainable management of living natural resources including biodiversity management plan, if needed (ESS6); and Cultural Heritage aspects including Chance Find Procedures (ESS8).



The RPs will assess impacts due to expansion of the carriageway, that while within the ROW, may affect structures, trees or temporary vendors. Impacts to livelihoods as a result of construction works will be part of the ESIA, with mitigation measures included in the RPs or ESMPs as appropriate. RPs would be updated during project implementation, once final design is confirmed.

A CERC-ESMF will be prepared during project implementation phase as part of the Project Operation Manual.

III. CONTACT POINT

World Bank

Task Team Leader: Sadig Aliyev Title: Lead Transport Specialist

Email: saliyev@worldbank.org

TTL Contact: Veasna Bun Job Title: Senior Infrastructure Specialist

Email: vbun@worldbank.org

TTL Contact: Victor Elliott Guy Marie Frebault Job Title: Transport Specialist

Email: vfrebault@worldbank.org

IV. FOR MORE INFORMATION CONTACT

The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 473-1000
Web: <http://www.worldbank.org/projects>

V. APPROVAL

Task Team Leader(s): Sadig Aliyev, Veasna Bun, Victor Elliott Guy Marie Frebault

ADM Environmental Specialist: Wasittee Udchachone

ADM Social Specialist: Alexandra Annabelle Niesslein