Executive Summary

1.The National Restoration of Rural Productive Capacity Project – II (NRRPCP-II) aims to enhance all-weather accessibility and the livelihoods of population in selected rural areas of Cambodia. Approximately 400,000 inhabitants of the ten targeted provinces are expected to benefit from improved rural road accessibility to basic services. Building on the achievements of the original NRRPCP (approved in 2020 and to be closed in December 2025), NRRPCP-II will scale up the upgrade and climate proofing of rural roads (approximately 420 km) and the capacity building of rural people and national contractors to improve their employability. The total project cost is approximately USD88 million, of which the Asian Infrastructure Investment Bank (AIIB) will finance RMB569.1 million (approximately USD80 M) through a sovereign-backed loan, and USD8 million will be provided by the Government of the Kingdom of Cambodia. The project will be implemented by the Ministry of Rural Development through the same Project Management Unit that is implementing NRRPCP. The implementation period is 6 years starting from January 2026.

2.NRRPCP-II has been designed to mainstreaming climate resilience and gender equality and social inclusion (GESI) into the Cambodian rural roads planning, construction and operation. Considering the lessons learned from NRRPCP, a comprehensive Climate Risk Assessment was prepared to identify climate risks and propose measures to address them. In addition, the Gender Action Plan followed during NRRPCP implementation was expanded to include other vulnerable groups and transformed into a GESI Plan. A number of concrete actions were proposed to factor GESI aspects into stakeholder engagement, engineering designs, and the construction and operation phases; and two GESI indicators were added to the Results Monitoring Framework.

3.The project overall risk is rated as low, consistent with NRRPCP. The project has been classified as Category B under the AIIB's Environmental and Social Policy, as potential adverse impacts are expected to be limited, site-specific, and reversible. NRRPCP-II implementation will not require (i) involuntary land acquisition; (ii) affecting cultural heritage; (iii) major negative E&S impacts; (iv) impacts to natural water bodies; and (v) significant impacts to priority biodiversity values. Adequate, environmental and social (E&S) instruments have been developed to mitigate potential E&S risks and impacts.

Project No. and Name	P000849 National Restoration of Rural Productive Capacity Project - II		
AIIB Member	Cambodia		
Borrower	Kingdom of Cambodia		
Guarantor	Kingdom of Cambodia		
Project Implementation Entity	Ministry of Rural Development		
Proposed Amount of AIIB Financing (USDm)	USD80.00	**Instrument type (Instrument subtype)**	Loan (Direct Sovereign)
		Currency of financing requested	Yuan Renminbi
Sector (Subsector)	Transport (Roads)	**E&S Category and Comments (if any)**	B
Project Objective	To enhance all-weather accessibility and the livelihoods of population in selected rural areas.		
Project Description	It will support the rehabilitation and climate proofing of approximately 420 km of rural roads in 10 selected provinces and the design and delivery of capacity building programs for rural people and national contractors.		
Implementation Period	Start Date: January 01, 2026 End Date: December 31, 2031	**Expected Loan Closing Date**	December 31, 2031
Co-financing type	Standalone	**Following other Financier's E&S Policy?**	No
Lead financier		**Following other Financier's Procurement Policy?**	No
Financing Plan	The total project cost is USD88 million, with USD80 million (RMB569.1 million) from AIIB and USD8 M from the Government of the Kingdom of Cambodia (GOKC).		

Policy Assurance	The Vice President, Policy and Strategy, confirms an overall assurance that the proposed Bank Financing complies with the applicable Bank operational policies.

Risk	
Key Risks	**Mitigation Measures**
Delay in processing counterpart fund and manual accounting may lead to discrepancies and errors in records and reporting.	* The requirement of GOKC funding is very low (10 percent) and the Ministry of Rural Development is accustomed to the country's system in obtaining funds in time. * The use of Sage50 software will reduce the risk of discrepancies and errors in records and reporting.
Delay in procurement and poor contract management.	* Procurement will follow AIIB and national guidelines and the Project Management Unit (PMU) is experienced with the procedures. * The PMU will be further supported by a firm (SP4) in the preparation of bidding documents. * The packaging strategy was designed to balance competitiveness and manageable contract sizes. * The qualification requirement for civil works packages may be strengthened considering the past performance of the contractors. * To improve the performance of contract management, periodic review and training will be provided, as needed.
Economic Capital (ECap) Consumption	11.94USDm 14.93%

Strategic Alignment				
Alignment with AIIB's thematic priorities		Green infrastructure; Connectivity and Regional Cooperation		
Alignment with AIIB's strategies		Transport Sector Strategy		
Key Outcomes	**Indicator**	**Unit of measure**	**Baseline (Year)**	**Target (Year)**
Roads	Improved all-season accessibility to economic, health, and social facilities	Number	0 (2025)	130 (2031)
Roads	Rural population that benefit from increased employment and	Number	0 (2025)	50000 (2031)

	income generation opportunities			
Roads	Rural roads upgraded with climate resilience measures	Kilometers	0 (2025)	420 (2031)

Other Key Financing Requirements	
Conditions of Effectiveness	Issuance of the legal opinion.
Key Conditions for 1st Disbursement	Payment in full of the front-end fee.
Key Covenants	NA.

President	Liqun Jin
Chief Investment Officer	Kim-See Lim
Director General	Rajat Misra
Project Team Leader	Tomas Herrero Diez, Senior Investment Officer
Project Team Members	Wenchao Cao, Climate Specialist Md Towshikur Rahman, Co-PTL Dale Pham, Environment Specialist David Hartcher, Finance Officer Shodi Nazarov, Financial Management Specialist Chang Tian, IO Core Team Member Andres Pizarro, IO Core Team Member Shiwen Dong, IO Core Team Member Rizal Rivai, Procurement Specialist Kezia Paladina, Project Lawyer Suu Tran Quy, Social Development Specialist

ASIAN INFRASTRUCTURE INVESTMENT BANK

Sovereign-backed Financings

Project Document
P000849 Kingdom of Cambodia
National Restoration of Rural Productive Capacity Project - II (NRRPCP-II)

Currency Equivalents

(As of September 25, 2025)

Currency Unit – Cambodian Riel (KHR)
USD1.00 = KHR4,007.00
KHR100.00=USD0.02

Borrower Fiscal Year

January 1 – December 31

Abbreviations

AADT	Average Annual Daily Traffic
ACP	AIIB Clients Portal
ADB	Asian Development Bank
AFD	Agence Française de Développement
AIIB	Asian Infrastructure Investment Bank
ASEAN	Association of Southeast Asian Nations
ATO	Asian Transport Outlook
AWPB	Annual Work Plan and Budget
BB1	Building Block 1
BB2	Building Block 2
CBA	Cost Benefit Analysis
CBR	California Bearing Ratio
CCCAP-RD	Climate Change Action Plan for Rural Development Sector
CCCSP	Cambodia Climate Change Strategic Plan
CCF	Country Cooperation Framework
CCWC	Commune Committees for Women and Children
C-ESMP	Contractor's Environmental and Social Management Plan
CITLS	Comprehensive Intermodal Transport and Logistics System
CNY	Chinese Yuan
CPI	Consumer Price Index
CRA	Climate Risk and Adaptation Assessment
CRF	Crisis Response Facility
CSAA	Cambodian Standards on Auditing and Assurance
CSO	Civil Society Organization
DA	Designated Account
DBST	Double Bituminous Surface Treatment
DED	Detailed Engineering Design
DRR	Department of Rural Roads
DSA	Daily Subsistence Allowance
E&S	Environmental and Social
ECOSOC	Economic and Social Council
EIRR	Economic Internal Rate of Return
ENPV	Economic Net Present Value
ESMP	Environmental and Social Management Plan
ESMPF	Environmental and Social Management Planning Framework
ESP	Environmental and Social Policy

ESS	Environmental and Social Standard
EXIM	Export Import
FDI	Foreign Direct Investment
FM	Financial Management
FS	Feasibility Study
FY	Fiscal Year
GAP	Gender Action Plan
GBV	Gender Based Violence
GDI	Gender Development Index
GDICDM	General Department of International Cooperation and Debt Management
GDP	Gross Domestic Product
GESI	Gender Equality and Social Inclusion
GESIP	Gender Equality and Social Inclusion Plan
GFDRR	Global Facility for Disaster Reduction and Recovery
GGI	Gender Gap Index
GHG	Greenhouse Gas
GII	Gender Inequality Index
GMS	Greater Mekong Sub-region
GNI	Gross National Income
GOKC	Government of the Kingdom of Cambodia
GRM	Grievance Redress Mechanism
GESIP	Gender Equality and Social Inclusion Plan
HDM-4	Highway Development and Management Model
IDF	Intensity Duration Frequency
IFI	International Financial Institution
IMF	International Monetary Fund
IOCT	International Open Competitive Tendering
IPs	Indigenous People
IPC	Interim Payment Certificate
IPP	Indigenous People Plan
IPPF	Indigenous People Planning Framework
IR	Intermediate Results
IRI	International Roughness Index
ISA	International Standards of Auditing
IUFR	Interim Unaudited Financial Report
KfW	Kreditanstalt für Wiederaufbau
KYC	Know Your Counterparty
LDC	Least Developed Country
LOS	Level of Service
M&E	Monitoring and Evaluation
MDB	Multi-lateral Development Bank
MEF	Ministry of Economy and Finance
MPWT	Ministry of Public Works and Transport
MRD	Ministry of Rural Development
MT	Motorized Transport
MYRP	Multi-Year Rolling Pipeline
NCT	National Competitive Tendering
NDC	Nationally Determined Contribution

NGO	Non-Governmental Organization
NMT	Non-Motorized Transport
NRRPCP	National Restoration of Rural Productive Capacity Project
NRRPCP-II	National Restoration of Rural Productive Capacity Project - II
OECD	Organization for Economic Cooperation and Development
OHS	Occupational Health and Safety
KHR	Cambodian Riel
PAA	Paris Agreement Alignment
PD	Project Director
PDRD	Provincial Department of Rural Development
PDS	Project Delivery Strategy
PIM	Project Implementation Manual
PIR	Procurement Instructions for Recipient
PIU	Project Implementation Unit
PM	Project Manager
PMU	Project Management Unit
PP	Procurement Plan
PPM	Project-affected People's Mechanism
PPMS	Project Procurement Management System
PPQ	Project Prioritization and Quality
PPSF	Project Preparation Special Fund
PT	Project Team
PWD	Person with Disability
RC	Reinforced Concrete
RCIP	Road Connectivity Improvement Project
RFP	Request for Proposal
RMB	Renminbi
RMF	Results Monitoring Framework
ROW	Right of Way
RP	Resettlement Plan
RPF	Resettlement Planning Framework
RRAM	Rural Road Asset Management
RRIP	Rural Roads Improvement Projects
SDG	Sustainable Development Goals
SEP	Stakeholder Engagement Plan
SFW	Special Fund Window
SOP	Standard Operating Procedure
SOP-LAR	Standard Operational Procedure on Land Acquisition and Resettlement
UN	United Nations
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
USD	United States Dollar
UXO	Unexploded Ordnance
VO	Variation Order
VOC	Vehicle Operation Cost
WA	Withdrawal Application

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1. Context

1.1 **Country and Macroeconomic Overview.** Cambodia, located in Southeast Asia, has a population of nearly 18 million, almost double the size of three decades ago.[1] During this period, Cambodia has also emerged as a fast-growing economy, with an average annual gross domestic product (GDP) growth of 7.6 percent.[2] The COVID-19 pandemic led to its first economic contraction in that period (-3.6 percent in 2020). The country recovered gradually, ultimately reaching 6.0 percent in 2024, with a total GDP of USD46.35 billion[3] (USD2,627.9 per capita). The recovery heavily relied on external demand, particularly a rebound in garments and agricultural exports.[4] The national unemployment rate is not only very low (0.3 percent in 2024), but also below regional peers.[5] The inflation rate has been reduced from 2.1 percent in 2023 to 0.8 percent in 2024, due to slowing food price increases, lower fuel costs, and a stable exchange rate.[6] In the past seven and a half years, poverty has also declined significantly from 36.7 percent to 16.6 percent.[7] To underpin this growth, the Government of the Kingdom of Cambodia (GOKC) launched in 2023 the "*Pentagonal Strategy – Phase I*" aiming to achieve an upper-middle-income status by 2030 and high-income status by 2050.[8] In December 2024, during the 54th plenary meeting of the United Nations (UN) General Assembly, the UN Economic and Social Council (ECOSOC) endorsed Cambodia's graduation from least developed country (LDC) status by 2029, signaling confidence in the country's development trajectory and institutional progress.[9]

1.2 **Rural Cambodia**. As of 2024, about 74 percent of Cambodia's population lives in rural areas, vis-à-vis 81 percent two decades ago, showing a gradual urbanization process.[10] Agriculture remains the primary livelihood for rural Cambodian households, with roughly 36 percent of the national workforce engaged in agricultural activities in 2022.[11] Key agricultural activities include rice cultivation, crop farming, livestock rearing, and fisheries.[12] The sector contributes significantly to the national economy, accounting for around 22 percent of GDP in 2022.[13] While the national poverty rate has fallen over time, rural areas continue to face disproportionate challenges, with 90 percent of the low-income Cambodians residing there.[14]

1.3 **Cambodian Transport Context.** Roads serve as the backbone of Cambodia's transport system, accounting for 65 percent of freight's and 87 percent of passenger's movement.[15] The country has a total road network of approximately 67,900 km,[16] of which

[1] World Population Review; Cambodia; 2025; (link).
[2] The World Bank; "*The World Bank in Cambodia*"; April 2024; (link).
[3] The World Bank; "*GDP Growth (Annual Percent) – Cambodia*"; 2024; (link); and The World Bank; "*GDP (Current USD) – Cambodia*"; 2024; (link).
[4] International Monetary Fund (IMF); "*Press Release on IMF Executive Board Concludes 2024 Article IV Consultation with Cambodia*"; January 2025; (link).
[5] Viet Nam (1.4 percent), Lao People's Democratic Republic (1.2 percent), Thailand (0.7 percent) or Myanmar (3 percent). Source: The World Bank; "*Unemployment, Total (Percentage of Total Labor Force) - Cambodia*"; 2025; (link).
[6] ADB; "*Member Fact Sheet - Cambodia*"; 2024; (link).
[7] United National Development Programme (UNDP); "*Cambodia Country Programme Document 2024-2028*"; January 30, 2024; (link).
[8] UNDP; "Policy Brief – Cambodia's Graduation from Least Developed Country (LDC) Status: Preparedness and Potential Economic and Social Impacts"; 2024; (link).
[9] UN General Assembly; "*Resolution adopted by the General Assembly on December 19, 2024*"; December 2024; (link).
[10] The World Bank; "*Rural Population (% of total population) – Cambodia*"; 2025; (link).
[11] The Global Economy; "*Cambodia: Employment in Agriculture*"; (link).
[12] International Trade Administration; "*Cambodia Country Commercial Guide*"; 2024; (link).
[13] Food and Agriculture Organization of the United Nations; "*Cambodia Investment Plans and Opportunities*"; 2023; (link).
[14] Action on Poverty; "*Cambodia – Country Profile*"; (link).
[15] PricewaterhouseCoopers (PwC); "*Cambodia's Infrastructure Market Update and Outlook*"; 2022; (link).
[16] This includes (i) expressways (187.05 km, 0.3 percent); (ii) national roads (7,416.09 km, 11.3 percent); (iii) provincial roads (12,380.04 km, 18.3 percent); and (iv) rural roads (47,919.01 km, 70.8 percent).

only half are paved and over 70 percent are rural roads.[17] The railway network remains limited, with approximately 650 km connecting Phnom Penh to Sihanoukville and to Poipet.[18] Cambodia also benefits from 1,750 km of inland waterways,[19] two strategic maritime ports (Phnom Penh and Sihanoukville), and 3 international airports.[20] Public transport remains primarily confined to Phnom Penh, having 230 city buses across 21 routes,[21] while informal modes[22] dominate elsewhere. The motorization rate has grown rapidly, with vehicle ownership increasing from 18 to 54 per 1,000 people from 2000 to 2022.[23] Consequently, the transport sector accounted for approximately 57 percent of Cambodia's fossil CO_2 emissions (2023), with road transport contributing nearly 85 percent of those emissions.[24] Inadequate road safety and insufficient road maintenance are other sectoral concerns.[25] To address these, GOKC approved the Comprehensive Intermodal Transport and Logistics System (CITLS) Master Plan 2023 – 2033, encompassing over 170 projects for USD36 billion.[26]

1.4 **Rural Road Sector in Cambodia.** The country has a rural road network of almost 48,000 km,[27] with over 90 percent of them undrained and unpaved (typically laterite or earth surfaces). This makes the network highly vulnerable to climate change and disruptions.[28] Flooding is the most recurrent natural disaster in Cambodia, with major flood events occurring every five years, on average.[29] According to the INFORM Risk Index, Cambodia ranks as the fourth most flood-exposed country globally. In October 2020, an 80-year flood event disrupted over 1,400 km of rural roads.[30] To address this, the 2020-2030 Rural Road Policy aims to provide all-season access to 75 percent of all villages by 2030.[31] The Ministry of Rural Development (MRD) is responsible for the construction and operation of rural roads, using most of the budget allocated to it (USD341.5 million in 2025).[32] Development partners are contributing to the improvement of rural roads, including the World Bank (Road Connectivity Improvement Project), the Asian Development Bank (ADB) (Rural Roads Improvement Projects I to III), the Agence Française de Développement (AFD), the Kreditanstalt für Wiederaufbau (KfW), the Export-Import (EXIM) Bank of Korea, the Nordic Fund, and the Government of People's Republic of China.[33]

1.5 **NRRPCP.** AIIB also contributed to the enhancement of rural road connectivity in Cambodia. In December 2020, NRRPCP was approved to sustain the rural economy and livelihood of vulnerable rural population and returning migrants affected by the COVID-19

[17] Open Development Cambodia; "*Transport Infrastructure and Facilities*"; March 2025 (accessed on July 25, 2025); (link).
[18] Infrastructure and Regional Integration Technical Working Group (IRITWG); "*Overview of Transport Infrastructure Sector in the Kingdom of Cambodia (7th Edition)*"; 2023; (link).
[19] The Mekong mainstream accounts for 30 percent of the total, the Tonle Sap River 15 percent, the Bassac River 5 percent, and other tributaries 50 percent. Source: IRITWG.
[20] Phnom Penh, Siem Reap, and Sihanoukville International Airport; Source: IRITWG.
[21] The Global Green Growth Institute; "*Proposed Governance Framework for Operationalization of Public Transport Service in Secondary Cities of Cambodia*"; 2024; (link).
[22] This includes bicycles, motorbikes, motorbike trailers and tuk-tuks.
[23] Asian Transport Outlook (ATO); "*Transport and Climate Profile: Cambodia*"; 2024; (link).
[24] ATO; "*Transport and Climate Profile: Cambodia*"; 2024; (link).
[25] ADB; "*Transport Sector in Cambodia – Focusing on Results*"; 2010; (link).
[26] Ministry of Public Works and Transport; "*Comprehensive Intermodal Transport and Logistics System (CITLS) Master Plan 2023 – 2033*"; 2023; (link).
[27] Rural population is 13 million. Source: The World Bank; "*Rural Population - Cambodia*"; 2024; (link).
[28] The World Bank and the Global Facility for Disaster Reduction and Recovery (GFDRR); "*Cambodia: Geospatial Analysis for Resilient Road Accessibility for Human Development and Logistic Supply*"; 2024; (link).
[29] Ministry of Environment; "*Cambodia's Third Nationally Determined Contribution (NDC 3.0)";* August 8, 2025; (link).
[30] The World Bank and GFDRR; "*Cambodia: Geospatial Analysis for Resilient Road Accessibility for Human Development and Logistic Supply*"; 2024; (link).
[31] The World Bank; "*Cambodia Country Climate and Development Report*"; 2023; (link).
[32] B2B Cambodia; "*Overview of the Cambodia Government Budget for 2025*"; December 17, 2024; (link).
[33] MRD; "Rural Road Master Plan"; May 2021.

pandemic. It was supported by the AIIB COVID-19 Crisis Response Facility (CRF). It focuses on the generation of short-term employment opportunities by rural infrastructure (roads and community ponds) improvements and strengthening the capacity of local laborers and contractors. Under that project, a total of 270 km of rural road was rehabilitated. During the implementation, AIIB observed that the completed rural roads are producing significant social and economic benefits to the small, scattered, and under-represented communities in project areas. These benefits, to rural communities, are being generated as these roads provide all-weather physical access to different socio-economic facilities such as markets, health centers and schools, which are crucial for rural populations.[34] This project is performing well[35] and is scheduled to close in December 2025.

1.6 **NRRPCP-II to Address Development Challenges.** Built on the success of NRRPCP and to contribute to achieving the above-mentioned rural roads targets, in January 2022, GOKC requested to scale up the project through NRRPCP-II (USD80 million). This will be focused on the rehabilitation and climate proofing of approximately 420 km of rural roads in three out of the five NRRPCP provinces[36] (Kampong Chhnang {KCH}, Tbuong Khmum {TKM}, Prey Veng {PVG}) and seven new provinces (Battambang {BAT}, Kampong Thom {KPT}, Kandal {KDL}, Takeo {TAK}, Svay Rieng {SVR}, Kampot {KAM} and Kep {KEP}). NRRPCP-II is strongly aligned with Cambodia's Pentagonal Strategy Phase I as it will support resilient connectivity improvement (Pentagon 2, Side 2; and Pentagon 4, Side 5) to reduce poverty and create jobs in rural areas (Pentagon 3, Side 1). NRRPCP-II will also contribute to achieve the goals set under the Industrial Development Policy (2015–2025)[37] by strengthening transport systems for enhanced access to markets, services, and employment opportunities in rural areas.

2. Rationale

2.1 **Project Objective.** The objective of the project is to enhance all-weather accessibility and the livelihoods of population in selected rural areas.

2.2 **Expected Beneficiaries.** Approximately 400,000 inhabitants[38] of the ten targeted provinces are expected to benefit directly from improved rural road connectivity and accessibility to basic facilities and services. The nearby vulnerable households in these provinces are also expected to benefit from short-term employment opportunities generated through civil works. In addition, rural communities and national contractors will benefit from re-skilling programs aimed at enhancing technical capacity and employability in climate-resilient infrastructure development. Indirect beneficiaries will include rural farmers and small business owners who are not living in the project's area but will experience improved market access and connectivity due to better road infrastructure. Lastly, the enhanced project management capacity of central and provincial-level agencies (Project Management Unit {PMU} and Project Implementation Units {PIUs}) will lead to more efficient and accountable project management and delivery, ultimately benefiting the broader rural population in the future.

[34] The World Bank; "*World Bank Approves Additional Financing to Improve Road Climate Resilience*"; 2024; (link)
[35] As of October 2025, the disbursement ratio is 90.2 percent.
[36] The other two provinces supported under NRRPCP are: Pailin (PLN), and Koh Kong (KKG).
[37] GOKC; "*Cambodia Industrial Development Policy 2015 - 2025*"; 2015; (link).
[38] This has been calculated considering the inhabitants of the villages (using 2023 census data) through which the roads are passing and 30 to 40 percent of the population of villages that are located within approximately 500 meters of the road alignment.

2.3 **Expected Results.** The following indicators will be monitored to assess the achievement of the **project's objective**[39]:

- *Improved all-season accessibility to economic, health, and social facilities* (number of facilities).
- *Rural population that benefits from increased employment and income generation opportunities (women)* (number of people).

2.4 In addition, to verify that the project is progressing in accordance with the implementation plan, the following project **intermediate results (IR) indicator** will be measured periodically[40]:

- *Rural roads upgraded with climate resilience measures* (km).
- *Percentage of rural road segments with universal access features in areas serving key socio-economic facilities* (percentage).
- *National contractors that benefit from capacity building to deliver high-quality and resilient rural roads* (number of contractors[41]).

The Results Monitoring Framework (RMF) is provided in Annex 1.

2.5 **Strategic Fit for AIIB.** The project is highly aligned with the AIIB's (i) Corporate Strategy, (ii) Thematic Priorities, and (iii) Transport Strategy**;** and it will contribute to the achievement of several Sustainable Development Goals (SDG).

- *Corporate Strategy.* NRRPCP-II is closely aligned with AIIB's vision of a prosperous Asia built on sustainable development and mission of "*Financing Infrastructure for Tomorrow*" (i4t) because it will contribute to enhance rural connectivity and strengthen climate resilience of rural roads in Cambodia, which will lead to reduced poverty.
- *Thematic Priorities.* The project is aligned with two AIIB's thematic priorities: *(i) Green Infrastructure*; and *(ii) Connectivity and Regional Cooperation*. The project will strengthen climate adaptation of rural roads by delivering climate resilient infrastructure. In addition, NRRPCP-II will improve connectivity and regional cooperation by enhancing accessibility to economic, health, and social facilities not only at community level, but also at provincial level.
- *Transport Sector Strategy*. The project will contribute to rehabilitate the damaged rural roads, embankments, and unstable bridges to restore year around connectivity in the selected provinces. Additionally, it will further contribute to decreasing the cost and duration of travel, enhance safety, reduce long-term operations and maintenance (O&M) expenses, and promote environmental and social sustainability.
- *Project Contribution to Relevant SDGs*. It will contribute to achieve the following SDGs:
    - SDG 1 (No Poverty). It will improve the access of poor and vulnerable rural communities to basic services, such as markets, schools, and hospitals.
    - SDG 5 (Gender Equality). Building on NRRPCP's achievements, where women accounted for over 28 percent of the workforce, 51 percent of road safety campaign participants, and 38 percent of consultation attendees, NRRPCP-II will further strengthen women's participation, equal pay, and gender-based violence (GBV) safeguards.

[39] To aggregate the results achieved by NRRPCP and NRRPCP-II, the proposed indicators are very similar for both but excluding the NRRPCP water-related indicators and with some minor revisions.
[40] The monitoring frequency for each indicator is provided in Annex 1
[41] They will be the contractors selected for the implementation of the civil works under this project.

- SDG 9 (Industry, Innovation and Infrastructure). It will support the rehabilitation of rural roads to make them reliable, sustainable, and resilient.
- SDG 13 (Climate Action). It will strengthen the resilience and adaptative capacity to climate-related hazards of rural roads.

2.6 **Paris Agreement Alignment (PAA).** The project is aligned with the mitigation (building block {BB}1) and adaptation (BB2)[42] of the Paris Agreement as justified below. Please refer to Annex 3A for further information.

- *BB1.* The upgrade and rehabilitation of rural roads with low traffic volumes providing access to communities which currently do not have all-weather access, without capacity expansion, are considered activities universally aligned with climate mitigation goals of the Paris Agreement.
- *BB2.* The project is also aligned with BB2 as (i) the climate risk and vulnerability context is established in the Climate Risk and Adaptation Assessment (CRA); (ii) climate adaptation and resilience measures to address the identified material physical climate risks were proposed in the CRA and will be integrated into the forthcoming detailed engineering designs (DEDs); and (iii) the project is not inconsistent with the national context for climate resilience.

2.7 **Climate Finance**. It has been estimated that USD11.4 million (14.25 percent of the AIIB financing) will contribute to climate adaptation. Please refer to Annex 3B for further details.

2.8 **Value Addition by AIIB.** Beyond the provision of financing, the Bank will bring insights from NRRPCP and its accumulated experience on preparing and implementing similar rural road projects in other members. AIIB will contribute to:

- enable the project to be scaled up to achieve a greater impact.
- improve project design by considering lessons learned from NRRPCP.
- continue to build MRD's technical and project management capacity consistent with international standards.
- strengthen competition and achieve greater value for money following AIIB's Procurement Policy.
- promote the adoption of good international practices in environmental and social (E&S) risk management and continue to support MRD to build its own E&S expertise.
- strengthen climate resilience of rural roads by promoting the adoption of climate adaptation measures to address the risks identified in the CRA.
- leverage AIIB's expertise in designing and delivering complex capacity building programs addressed to vulnerable groups.

2.9 **Value Addition to AIIB.** This project marks AIIB's first experience with a follow-on/ repeat project in Cambodia, which will provide AIIB with insightful knowledge on how to effectively scale up initiatives in the country. The project also provides AIIB with an opportunity to deepen its operational understanding of addressing rural challenges with several related projects and could be helpful to design more programmatic interventions in the future, not only

[42] The assessment was conducted using: AIIB; "*Methodology for Assessing the Alignment of AIIB Investment Operations with the Paris Agreement*"; July 2023; (link).

in Cambodia, but also in other AIIB members. In addition, the successful preparation and implementation of the project will demonstrate AIIB's commitment to support GOKC in meeting its development needs, which could be helpful to identify other relevant investments to be included under the multi-year rolling pipeline (MYRP), which is being updated.

2.10 **Lessons Learned.** The project's design is informed by experiences from implementing NRRPCP and similar rural road projects financed by AIIB.[43] Lessons are also drawn from MRD's experience in designing and implementing similar rural roads projects. Relevant lessons incorporated into project preparation include:

- *Procurement*. The procurement timeline will be adjusted to avoid awarding contracts immediately before the rainy season to prevent major disruptions in the construction schedule. The implementation period will be extended from 12 months in NRRPCP to 18-24 months to avoid subsequent variation orders (VOs) and the related administrative burden. Cost escalation clauses may also be introduced, as needed. The qualification requirement on the performance of past contracts utilized for NRRPCP may be strengthened.
- *Contract Management*. Additional staff will be engaged in the PMU to expedite the preparation of interim payment certificates (IPCs) to avoid cash flow issues for the contractors and implementation delays. Stricter limits on subcontracting will be enforced, and the deployment of the subcontractor will be closely monitored to improve supervision and E&S safeguard compliance.
- *Design*. During the early implementation stage, the design and supervision firm will conduct comprehensive surveys to prepare better designs and reduce the need for VOs in the future. Adequate climate adaptation measures will be integrated into DEDs, especially sufficient drainage infrastructure. Culvert requirements to provide road accessibility will be integrated into designs and support to cover the related cost may be provided to low-income households, in coordination with commune councils.
- *E&S.* A penalty mechanism (e.g., suspension of payments) may be introduced to enforce corrective action by contractors in cases of non-compliance with E&S obligations and the relevant E&S instruments, especially the Construction Environmental and Social Management Plan (C-ESMP). The monitoring of the implementation of the Gender Action Plan (GAP) will be integrated into E&S monitoring for a faster identification and resolution of potential issues. In addition, to address the needs of other vulnerable groups, the GAP scope has been expanded, and a Gender Equality and Social Inclusion Plan (GESIP) has been developed.

3. Project Description

3.1 **Overview.** NRRPCP-II will continue contributing to sustain the rural economy and livelihood of vulnerable rural population by scaling up most of the NRRPCP activities. In particular, NRRPCP-II will support the rehabilitation and climate proofing of an additional 420 km (approximately) of rural roads in the 10 provinces listed above and the design and delivery of capacity building programs for rural people and national contractors.

[43] The design of the project was informed by the following AIIB-funded projects: (i) Andhra Pradesh Rural Roads (India), (ii) Gujarat Rural Roads (India), (iii) Inclusive Connectivity and Rural Infrastructure Project (Côte d'Ivoire), (iv) Rural Infrastructure Development Project (Uzbekistan), and (v) Karakalpakstan and Khorezm Local Roads Network Reconstruction Project (Uzbekistan).

3.2 **Components.** The project comprises three components as indicated below. AIIB will finance part of components 1 and 2. Component 3 will be financed with funds from GOKC.

- **Component 1.** Rural Roads Rehabilitation and Climate-proofing. This will support upgrading and climate proofing of approximately 420 kilometers of existing rural roads in 10 provinces, including either double bituminous surface treatment (DBST) or reinforced concrete (RC) surfacing44, the construction and improvement of drainage infrastructure, strengthening of unstable bridges, and greening of the embankments using nature-based solutions and indigenous materials. These activities will generate additional short-term employment opportunities for vulnerable households.
- **Component 2. Implementation Support and Capacity Building.** This will support the procurement of firms and/or individual consultants to strengthen the project management capacity of the PMU, prepare technical documents (e.g., DEDs, E&S, bidding documents) and provide construction supervision. Consultants may also be engaged to design and deliver capacity building programs for rural people (focus on occupational health and safety {OHS} and road safety) and national contractors (focus on delivering high-quality and climate resilient rural roads).[45] Costs pertaining to the arrangement of capacity building actions may also be covered under this component.
- **Component 3. Goods.** This will support the procurement of goods for the PMU and PIUs and may include equipment, furniture, software, vehicles, and motorcycles.

3.3 **Cost and Financing Plan.** The estimated cost of the project is USD88 million, with a loan from AIIB of USD80 million, and a GOKC contribution of USD8 million. AIIB provided a grant of USD1.65 million from the Project Preparation Special Fund (PPSF) to prepare the feasibility study (FS) and part of the DEDs. The loan will be used to cover 92.5 percent of the civil works (Component 1) and 100 percent of the consultancy services (Component 2). Apart from funding the remaining amount of Component 1, the funding from GOKC will be used for Component 3, to cover the incremental operation cost (IOC)[46] of the PMU, and potential contingencies (e.g., land acquisition or resettlement costs[47]). The front-end fee, commitment charge, and interest during construction will be paid by GOKC separately, and as such, those were not included in the Financing Plan. GOKC has selected Chinese Yuan (CNY)/Renminbi (RMB) as the loan's currency and requested the use of the AIIB Special Fund Window (SFW) to buy-down the interest rate up to 100 basis points. The loan amount is CNY569.1 million; and considering the proposed amortization profile,[48] the SFW amount is approximately USD9 million.[49]

[44] Depending on the site-specific conditions.
[45] The objective is not only to improve the performance of the contractors during the implementation of this project, but also to enhance their capacity and employability in the future.
[46] This may include (i) office operating cost, (ii) vehicle and motorcycle operating expense, (iii) daily subsistence allowance (DSA) for PMU and PIU staff and individual consultants, (v) administrative and office support staff, and (vi) drivers.
[47] In principle, land acquisition and resettlements are not expected. Other potential contingencies are cost escalation and foreign exchange volatility.
[48] A final maturity of 21 years and a 7-year grace period.
[49] This is subject to change in the future, and the numbers provided should solely be viewed as estimates only.

Table 1. Project Financing Plan *(USD million)*

Item	Total	AIIB	GOKC
Component 1 (Rural Roads Rehabilitation and Climate-proofing)	80.00	74.00	6.00
Component 2 (Implementation Support and Capacity Building)	6.00	6.00	0.00
Component 3 (Goods)	0.60	0.00	0.60
IOC	0.80	0.00	0.80
Contingency	0.60	0.00	0.60
Grand Total	**88.00**	**80.00**	**8.00**

3.4 **Implementation period.** Considering that NRRPCP was under implementation for 5 years and that the cost and scope of NRRPCP-II are larger (USD80 M and 420 km, vis-à-vis USD60 M and 270 km[50]), the project implementation period will be 6 years from January 2026 to December 2031.

3.5 **Implementation Arrangements.** The NRRPCP implementation approach will be followed. The Kingdom of Cambodia, represented by its Ministry of Economy and Finance (MEF), will act as the borrower, and following its mandate, will be responsible for the effective management and overall administration of the AIIB loan. MRD will be responsible for implementing the project. GOKC's Standard Operating Procedures (SOPs) for project management, procurement, and financial management (FM), which are in line with the AIIB's relevant policies, will be followed.

- *PMU***.** The existing PMU under MRD, led by the Secretary of State as Project Director (PD), has been retained, as formalized through the Prakas[51] No. 057/25 MRD.PK dated June 4, 2025. That Prakas confirmed that the PD will provide executive-level oversight and strategic guidance on broader project management, while the Project Manager (PM) will be responsible for day-to-day operations. The Prakas also deputes staff from MRD's administration, procurement, technical, financial, monitoring and evaluation (M&E), E&S, and geographical planning units to support the project. Ten provincial level PIUs have been established and formalized through the same Prakas, each comprising a Project Implementation Manager and two technical officers. Apart from this internal MRD setup, the contracts of selected individual consultants engaged during NRRPCP implementation may be extended to support NRRPCP-II. [52] Furthermore, a consulting firm (SP4[53] package) will help the PMU and PIUs in the DEDs and construction supervision activities.
- *Procurement Arrangements***.** The PMU under MRD will be responsible for procuring all the packages under the project. MRD has deputed the same procurement officer engaged during NRRPCP implementation who will be supported by SP4.
- *FM Arrangement***.** The PMU will be responsible for the overall project FM and disbursements. The FM team is comprised of five members: four MRD staff deputed from its Accounting Finance Unit (they will continue working for their unit and helping

[50] NRRPCP also supports the construction/rehabilitation of 110 community ponds.
[51] Ministerial decision.
[52] New individual consultants may be also recruited, if needed.
[53] Under NRRPCP, three consultancy contracts were implemented (SP1 to 3).

the PMU) and one FM Consultant (currently engaged under NRRPCP and whose contract will be extended). The cash-basis accounting system will be followed for project accounting. The PMU will maintain project accounts and have custody of supporting documents.

- *E&S Arrangements.* The PMU will be responsible for overall plan, implementation, supervision, and monitoring of the project's E&S aspects. The E&S team is comprised of four members: three MRD staff and one E&S Consultant (currently engaged under NRRPCP and whose contract will be extended). An external E&S auditor will monitor the E&S compliance during the last two years of the project implementation period.
- *Project Implementation Manual (PIM)***.** It has been developed by the PMU to guide project execution considering the lessons learned during NRRPCP implementation. The PIM outlines the roles and responsibilities of PMU officials, procurement procedures, financial and E&S management, monitoring, and reporting requirements for the implementation period.
- *M&E***.** The project results will be monitored by the PMU based on the RMF provided in Annex 1. The contract of the M&E Consultant engaged during NRRPCP implementation will be extended. This Consultant will continue being supported by three MRD staff. The PMU will continue preparing quarterly progress reports (QPRs) to be submitted to AIIB within 30 days after the respective reporting period.

3.6 **AIIB's Implementation Support.** AIIB will (i) undertake semi-annual review missions to assess implementation progress and identify and address key issues; (ii) convene periodic review meetings to monitor progress; and (iii) carry out technical site visits as necessary.

3.7 **Implementation Readiness.** As above-mentioned, this project is a continuation of NRRPCP, which is being successfully implemented and will be closed in December 2025. The main stakeholders that will support its implementation, including the PMU, are the same as NRRPCP. During NRRPCP implementation, the PMU (using loan savings) prepared the documentation needed to appraise NRRPCP-II, covering technical, procurement, FM, E&S, and climate change aspects.[54] Advance procurement is being conducted for SP4. Given that the rehabilitation works will be undertaken within the existing right-of-way (ROW) of the roads, land acquisition is not required.

4. Project Assessment

A. Technical

4.1 **Project Design.** The technical design of the project is aligned with NRRPCP and based on the road design standards issued by MRD[55] and the Ministry of Public Works and Transport (MPWT).[56] The assessment of the main technical aspects of NRRPCP-II is provided below.

- *Road Selection Criteria*. The Provincial Department of Rural Developments (PDRDs) proposed a set of roads (approximately 1,000 km) to MRD to be supported under NRRPCP-II considering the current physical condition, their needs, and the feedback received from local communities. The PMU screened that list based on several criteria,

[54] The same team is expected to support the preparation of the first batch of rural roads to be supported under the NRRPCP-II.
[55] MRD; "*Rural Road Standards";* (in Khmer only) (third edition); 2024.
[56] MPWT; "Road Design Specification Part 1A Geometry"; 2025.

including accessibility to basic facilities,[57] the current physical condition, E&S impacts,[58] and potential climate risk exposure; and also conducted field visits and consultations. The road list was further finetuned in line with AIIB's recommendations to identify 420 km distributed into 38 road sections to be supported by the project.[59]

- *Existing Road Category, Condition and Traffic*. MRD classifies rural roads into four administrative tiers (T1–T4) based on their connectivity function.[60] For design purposes, roads are further categorized into four classes (RR1/RRU1–RR4/RRU4) based on traffic volume (annual average daily traffic {AADT}).[61] NRRPCP-II will support all categories of rural roads, which are predominantly earth or laterite surfaced. Many of them traverse low-lying and flood-prone regions. Common deficiencies include substandard geometry, inadequate drainage systems, poor or non-existent pavement, missing or damaged culverts and bridges, and substandard road safety provisions. AADT surveys across the 38 road sections[62] revealed relatively low traffic volumes with substantial variation, consistent with differences in local accessibility, population density, economic activity, and road hierarchy. Observed AADT values range from approximately 460 vehicles/day up to over 4,700 vehicles/day.
- *Geometric Design*. The geometric design of NRRPCP-II roads will adhere the above-mentioned MRD and MPWT road design specifications (geometry), which are overall aligned with good international practices. These standards outline parameters such as the design speeds (30 to 60 km/h, depending on the terrain {flat, rolling, mountainous}), carriageway width (5.0–7.0 m, varies by class), shoulders width (1.0–2.5 m), as well as requirements for stopping and passing sight distances, horizontal curve radii, superelevation, curve widening and vertical alignment to accommodate turning movements and ensure visibility and ride comfort. Standard cross-sections developed by MRD for both DBST and RC treatment, across flat, flood-prone, and mountainous terrain, will be applied as appropriate.
- *Pavement Design*. Like above, the pavement design will also follow both MRD and MPWT's prevailing guidelines. The design options will include: (i) flexible pavements with DBST surfacing, constructed over graded base and sub-base layers, and (ii) rigid pavements (RC) at locations with high shear stress (e.g., markets and junctions) and frequent water exposure. The pavement design will integrate traffic loading estimates, local material characteristics, and subgrade strength (California Bearing Ratio {CBR}). Pavement thickness will be determined based on traffic loading (in equivalent standard axles) and base course/subgrade CBR.
- *Drainage System Design*. To protect the road structure from water-induced damage (e.g., subgrade softening, pavement deterioration, erosion), ensure traffic safety during rainfall events, and minimize environmental impact, adequate drainage infrastructure is crucial. The design of the drainage system will be based on (i) the CRA findings; (ii) a rainfall analysis using intensity-duration-frequency (IDF) curves; and (iii) the peak

[57] Markets, hospitals, schools, borders, factories, religious sites, public transport stations, jetties, agricultural production areas, tourist sites, commune/district center, and villages.
[58] During the E&S screening, all the roads that met one of the following criteria were excluded from the project: (i) involuntary land acquisition required; (ii) cultural heritage affected; (iii) major long-lasting negative E&S impacts; (iv) impact to natural water bodies; and (v) significant impacts to priority biodiversity values.
[59] The list is still preliminary and subject to changes based on the studies to be conducted during early implementation.
[60] T1 (connecting national/provincial roads to province capital/city); T2 (connecting province capital/city to district/Khan and/or commune/Sangkat); T3 (connecting commune/Sangkat to commune/Sangkat); and T4 (connecting commune/Sangkat to village).
[61] RR1/RRU1 (AADT >500); RR2/RRU2 (AADT: 250-500); RR3/RRU3 (AADT: 100-250); and RR4/RRU4 (ADDT<100).
[62] Traffic surveys were conducted by MRD in April-June 2025.

runoff estimation.[63] Based on the analysis, appropriate hydraulic structures will be constructed, such as pipe culverts, box culverts, bridges, and side drains (e.g., U-drains, V-ditches). Design return periods range from 10 to 50 years, depending on the structure type. Standard cross-sections and dimensions are available in MRD guidelines, though adjustments may be made to reflect local site conditions.

4.2 **Operational Sustainability.** MRD is responsible for rural roads O&M, including planning, budgeting, execution, and capacity building. For NRRPCP-II, the PMU prepared a preliminary O&M Plan, including routine, periodic, and potential emergency treatments.[64] Below is a summary of the proposed O&M activities and practices.

- *Design Considerations*. To enhance operational sustainability, key maintenance requirements will be integrated during the design and construction phases. These will include, among others, (i) providing adequate camber or slope to facilitate effective drainage, (ii) using good-quality sub-base materials to reduce the risk of premature cracking, and (iii) maximizing the use of locally available materials to ensure ease of access for future maintenance. A one-year defect liability/warranty period will be included in all the civil works contracts to quickly identify and address issues arising during the early post-construction phase and minimize long-term maintenance costs.
- *Rural Road Asset Management (RRAM) and Budgeting*. RRAM is handled by a dedicated unit under the MRD's Department of Rural Roads (DRR). Upon completion of construction, the roads will be registered in the RRAM system and PDRDs will be responsible for conducting regular field inspections, preparing annual maintenance plans and estimating budget needs. MRD submits the budget request for O&M of rural roads to MEF in November. MEF reviews it, and MRD-MEF bilateral meetings are conducted to finalize the list of priority O&M interventions. MEF approval is conducted in December for the O&M works to be implemented during the next calendar year. RRAM is regularly updated and utilized to track the O&M budget approved by MEF.
- *Community and Local-level Engagement*. The commune councils and their road maintenance committees will play a supporting role in monitoring and reporting the condition of the roads within their jurisdictions using the established formal channels (structured scorecards and a mobile app). In addition, PDRDs convene bi-annual road review meetings with users to validate the needs and agree maintenance priorities. This community-based approach will contribute to early identification of issues and promote ownership and accountability at the grassroots level.
- *Manuals and Capacity Building*. MRD will update and expand the above-mentioned O&M Plan (with support from SP4). The document will provide practical O&M guidance for provincial and commune-level stakeholders. Capacity building initiatives will also be undertaken to strengthen the skills of PDRD staff and commune officials in effective O&M planning, supervision and implementation.

[63] Peak runoff estimation will be conducted using the rational method for small catchments (≤10 km²), the generalized tropical flood model (GTFM) for larger areas, and slope-area runoff analysis (using Manning's equation), particularly in flood-prone zones.
[64] Routine maintenance includes regular cleaning, vegetation control, minor repairs (potholes, drainage) and will be conducted monthly/quarterly; periodic maintenance includes surface resealing (for DBST), joint/sealant repair (for RC), shoulder re-grading and will be conducted every 3 to 5 years; and emergency maintenance may be conducted for post-flood or disaster repairs.

B. Economic and Financial Analysis

4.3 **Economic Analysis.** NRRPCP-II is deemed economically viable, with the economic internal rate of return (EIRR) and economic net present value (ENPV) estimated to be 22.83 percent and USD111.94 million, respectively.[65] The economic analysis was prepared by the PMU (with support of an individual consultant) and conducted using the Highway Development and Management Model (HDM-4). It took into account both the "*without project*" and "*with project*" scenarios over a 30-year period (6 years of construction and 24 years of operation). The project's quantifiable benefits will accrue from: (i) reduction in vehicle operation cost (VOC) (77.58 percent), (ii) travel time savings (16.04 percent), (iii) savings from accident reductions (0.94 percent); (iv) savings from emission reduction (3.90 percent); and (v) the residual value (1.54 percent). The economic costs include infrastructure capital costs and O&M costs.[66] A sensitivity analysis has been conducted by (i) a 25 percent increase in costs; (ii) a 25 percent decrease in benefits; and (iii) a combined 25 percent increase in costs and 25 percent decrease in benefits. In all the scenarios, the project is still economically viable. For further details, see Annex 2.

C. Fiduciary and Governance

4.4 **Procurement.** Based on the procurement assessment conducted during the appraisal stage, the procurement risk has been rated as medium. This is because, as mentioned above, the NRRPCP procurement team will be retained (they are very knowledgeable on AIIB procurement policies and procedures), but procurement delays and inadequate contract quality control and monitoring may happen. To mitigate these risks, the PMU will be further supported by SP4, advance procurement is ongoing for SP4 and the qualification requirements for civil works contracts will be strengthened (e.g., taking into consideration the past performance of the contractors). All the packages that will receive AIIB's financing shall be conducted in accordance with AIIB's Procurement Policy[67] and Directive on Procurement Instructions for Recipients (PIR).[68] A Project Delivery Strategy (PDS), including a Procurement Plan (PP), has been prepared by MRD. The PDS and PP will be updated, as necessary, during implementation. The large contracts (i.e., civil works and major consultancy service) shall be procured following international open competitive tendering {IOCT} and for small contracts (e.g., most of the individual consultants), national competitive tendering (NCT) shall be followed.[69] As mentioned above, the contracts of selected individual consultants engaged in NRRPCP implementation may be extended. AIIB's Project Procurement Management System (PPMS) will be utilized for this project.

4.5 **FM.** Based on the FM assessment,[70] the residual FM risk has been rated as medium. This is because, while some minor FM risks were identified (e.g., delays in processing GOKC funding or discrepancies and errors in recording and reporting expenses), the retention of NRRPCP FM team will mitigate those risks. In addition, NRRPCP FM Manual will be updated and strengthened within three months after the signature of the Loan Agreement, considering

[65] Considering a discount rate of 10 percent.
[66] Routine maintenance cost and periodic maintenance cost.
[67] AIIB; "*Procurement Policy*"; June 26, 2024; (link).
[68] AIIB; "*Directive on Procurement Instructions for Recipients*"; July 26, 2024; (link).
[69] The package size and geographical distribution for the civil works packages were selected to attract a high number of qualified contractors (following the approach adopted during NRRPCP implementation).
[70] It covered the PMU's accounting system, budgeting, fund flow, financial reporting, auditing, and internal controls.

the lessons learned from NRRPCP implementation. The NRRPCP-II PMU will continue with the following practices:

- *Budgeting*. The PMU will prepare the Annual Work Plan and Budget (AWPB) and submit it for approval to the General Department of International Cooperation and Debt Management (GDICDM) under MEF by November 30 each year.[71] Based on the approved AWPB, the PMU will prepare a detailed annual budget (by month) for monitoring purposes, which shall be shared with AIIB by December 31 of each year.
- *Accounting*. The accounting software (Sage50) utilized to track NRRPCP transactions will be also utilized for NRRPCP accounting and financial reporting. In compliance with MEF's guidance,[72] the PMU shall adopt the cash basis method for budgeting, accounting, and reporting and record the financial transactions and maintain the main project accounts and records in USD. All prime financial reports must be in USD.
- *Reporting*. To monitor the project progress and financial performance, quarterly interim unaudited financial reports (IUFRs) will be prepared for the AF. IUFRs should be submitted to the Bank within 45 days of the end of each quarter.
- *Audits*. MEF is responsible for appointing external auditors for all donor-financed projects. The audits are conducted following the Cambodian Standards on Auditing and Assurance (CSAA), which conforms with the International Standards of Auditing (ISA). An independent auditor will conduct the external audit of the project financial statements, and the terms of reference (TORs) will have to be accepted by AIIB. The audit costs will be covered by MEF. The PMU will furnish audited financial statements (and an accompanying Management Letter) to AIIB, no later than six months after the end of each fiscal year. The auditor engaged in NRRPCP (BDO Cambodia Limited) always issued unqualified opinions on the project's financial statements.

4.6 **Disbursements.** The disbursement arrangements will follow the same approach utilized during NRRPCP implementation and are likely to withdraw the loan proceeds in advance mode.[73] A new Designated Account (DA) will be established by the PMU to receive the loan proceeds from AIIB. The withdrawal applications (WAs) will be submitted by the PMU to MEF based on the approved AWPB and expenditure forecasts. The WA format and the list of the requested supporting documentation will be provided in the DL.[74] In parallel, a separate project account will be created to receive the GOKC counterpart funds.

4.7 **Governance and Anti-corruption.** AIIB is committed to preventing fraud and corruption in its funded initiatives. It gives the utmost importance to ensuring that AIIB-funded projects are carried out in precise accordance with the 2016 Policy on Prohibited Practices.[75] Staff from the AIIB will regularly oversee its implementation. AIIB reserves the right to investigate, directly or indirectly through its agents, any alleged corrupt, fraudulent, collusive, coercive or obstructive practices, and misuse of resources and theft relating to the project and to take necessary measures to prevent and address any issues in a timely manner, as appropriate. AIIB will also oversee activities related to the preparation of tender documents and the

[71] The draft AWPB will be shared with the Bank for review and comments.
[72] National Accounting Committee (MEF); "Guidance on Implementing the Cambodia Public Sector Accounting Standards Cash Basis of Accounting for Externally Financed Projects"; October 2020.
[73] Provisions for direct payment and reimbursement methods will be also provided in the Disbursement Letter (DL).
[74] The WAs will be submitted to the Bank by post until the AIIB Clients Portal (ACP) is operationalized in Cambodia.
[75] Accordingly, the Policy on Prohibited Practices applies to the project.

evaluation of tenders/proposals under AIIB financing. The specific requirements pertaining to these measures will be outlined in the Loan Agreement and the project's tender documents.

4.8 AIIB's Know Your Counterparty (KYC) initial assessment revealed that neither MRD nor GOKC was subject to any adverse news reports. Cambodia's score on the 2024 Transparency International Corruption Perception Index scale is 21 out of 100, with lower scores denoting greater levels of corruption.[76] In the World Bank's Worldwide Governance Indicators on Control of Corruption scale, Cambodia's Governance between 2019 and 2023 has ranged between -1.3 and -1.2, with the scale ranging from -2.5 (weak) to +2.5 (stable).[77]

4.9 **Cybersecurity.** The infrastructure financed under this project is not considered as Critical Infrastructure.

D. E&S

4.10 **E&S Policy and Categorization.** The AIIB's E&S Policy (ESP), June 2024, including the Environmental and Social Exclusion List, the Environmental and Social Standard (ESS) 1, ESS1, (E&S Assessment and Management), ESS2 (Involuntary Resettlement), and ESS3 (Indigenous Peoples) will apply to this project. The project has been categorized as "B" because it is expected to have limited adverse E&S impacts that will be site-specific, largely reversible, and can be managed using good practice in an operational setting.

4.11 **E&S Instruments.** A framework approach has been adopted, which is consistent with NRRPCP. This is justified considering (i) the phased nature of the rehabilitation of rural roads across ten provinces; (ii) the need to have flexibility to finalize the list and designs of the road sections to be included under batches 2 and 3 of the project; (iii) that the roads to be supported under the project will not have high/significant impact;[78] and (iv) that the updated E&S Management Planning Framework (ESMPF) clearly outlines the principles, guidelines, and procedures to be followed to assess and address the E&S risks and impacts and prepare the Environmental and Social Management Plan (ESMPs). That ESMPF has been updated to strengthen the E&S risk screening, assessment, management, consultation, information disclosure, and monitoring, considering lessons learned from NRRPCP implementation, especially the recommendations of the third-party E&S auditor. Similarly, the Resettlement Planning Framework (RPF)[79] and the Indigenous People Planning Framework (IPPF)[80] have also been updated and strengthened. The contractor's ESMPs (C-ESMPs) will be developed, implemented, and monitored following the provisions of the updated ESMPF.

4.12 **Environment Aspects.** Construction phase impacts may include noise generation and air emissions from, but not limited to, the hauling of earth materials from borrow sites to the project areas, operation of concrete batching facilities, and operation of construction vehicles

[76] Transparency International; "*Corruption Perceptions Index; Cambodia*"; 2024; (link).
[77] The World Bank; "*Worldwide Governance Indicator*"; 2023; (link).
[78] For further details, see the selection criteria followed, summarized in above.
[79] Key improvements include (i) clearer criteria and procedures for voluntary land donation; (ii) enhanced provisions for grievance redress; and (iii) more robust measures for stakeholder consultation and information disclosure.
[80] Key updates include (i) clearer and more systematic guidance on screening, impact assessment, and categorization of sub-projects involving indigenous people (IPs); (ii) enhanced procedures for conducting culturally appropriate consultations, including early engagement and use of local languages; (iii) more explicit requirements for timely and accessible information disclosure; (iv) improved articulation of benefit enhancement measures, going beyond mitigation of negative impacts; and (v) clarification of institutional responsibilities, including capacity-building measures to support effective implementation

and machinery. There is also potential risk of contamination of surface water and groundwater from construction stockpiles and materials (especially during the rainy season), inappropriate discharge of domestic wastewater (from construction workers or worker camps), and/or construction wastewater. Solid and hazardous waste generation is similarly expected, including the use of hazardous materials, such as fuel and oil. There is also potential risk and impact of stormwater during the construction and operation phases. The upgrade of roads increases the amount of impermeable surface area, which increases the rate of surface water runoff, and high stormwater flow rates can lead to stream erosion and flooding. These potential risks and impacts are typically localized, short-term, and low in magnitude, and mitigation measures are to be covered in the ESMPs.

4.13 **Social Aspects.** As road rehabilitation will be undertaken within the existing ROW, involuntary land acquisition is not required for the main carriageway. However, for the construction and improvement of drainage and climate-proofing infrastructure, some roadside households could face minor impacts, such as cutting back driveways and roofs, shifting temporary kiosks, or trimming of a few trees. For those cases, following the GOKC's policy on land acquisition and resettlement, and the approach adopted for NRRPCP, a voluntary donation mechanism will be applied. The donation eligibility criteria, involved agencies, and planning, implementation, and monitoring arrangements are specified in the updated RPF. The established procedure aims to promote that land donation will be voluntary, transparent, conducted after meaningful consultations, and the livelihoods of the affected households will not be adversely impacted. However, if the affected households are not willing to voluntarily donate, compensation shall be made following the entitlement matrix of the updated RPF. While there are some ethnic minority groups residing in the project areas, no land acquisition, loss of cultural heritage, or social disruption are anticipated impacting them. As specified in the updated IPPF, even without any adverse impacts, an Indigenous People Plan (IPP) will be prepared for those road sections where ethnic minority group(s) are residing to properly monitor the beneficial impacts on them.

4.14 **Occupational Health and Safety (OHS), Labor and Employment Conditions.** During the construction phase, potential OHS risks include, among others, unexploded ordnance (UXO) for operating vehicles and heavy equipment, collisions with moving machinery, prolonged exposure to dust, noise, and vibration, working at heights (e.g., slopes or bridges), electrical safety, and OHS issues in worker camps.[81] Some potential risks to communities include unauthorized access to work areas (which may result in injuries and accidents from contact with machinery and heavy equipment) and issues pertaining to labor influx.[82] The corresponding mitigation measures will be included in the ESMPs and their compliance will be strictly requested to the contractors. NRRPCP-II will build upon the experience from NRRPCP in maximizing local employment and equal opportunities and promoting non-discrimination, anti-sexual harassment, and anti-gender-based violence. The contractors will continue developing an enforceable code of conduct applicable to all workers (including within the workers' camps). While the rehabilitated roads will be generally safer, these can also pose additional safety risks, especially due to over speeding. Apart from the mitigation measures to be included in the ESMP, the road safety awareness training to educate the road users for safe commuting will continue.

[81] E.g., lack of provision of drinking water, poorly maintained latrines, and non-sanitary living quarters.
[82] E.g., negative interactions between workers and local community and transmission of sexual diseases.

4.15 **Stakeholder Engagement, Consultation, and Information Disclosure.** MRD has conducted several consultations with the key stakeholders during the preparation.[83] The consulted issues included (i) the potential risks and impacts of the project to the local communities; (ii) the measures to manage the impacts (avoid, if not, minimize/mitigate and compensate for the impacts); (iii) the project-specific grievance redress mechanisms (GRM); (iv) the project implementation schedule; and (v) the mechanism for consultation with the local communities. Furthermore, a Stakeholder Engagement Plan (SEP) has been prepared that outlines, among others, the activities and communications to be undertaken and the distribution of responsibilities among the involved agencies. The updated E&S frameworks (ESMPF, RPF, IPPF), SEP, and GESIP will be disclosed on the MRD and AIIB websites. Summaries of the documents in the Khmer language will be disclosed in easily accessible public places for the local communities. The applicable E&S instruments (ESMPs, IPPs, RPs), once prepared, will also be disclosed in the same manner.

4.16 **GRM.** Given that the project-level GRM established for NRRPCP works effectively, it will be replicated for NRRPCP-II. GRM was presented and discussed during the stakeholders' consultations and included in the SEP and updated ESMPF. The procedure for grievance redressal is culturally appropriate and gender sensitive and includes steps for complainants to lodge their grievances verbally and/or in writing. GRM provides the contact details of the focal person (who is assigned to receive and file the complaint/grievance), and a timeframe for the case to be reviewed and responded. The records of grievances received, corrective actions taken, and outcomes shall be adequately maintained and shared with the Bank. Training will be provided to the local authorities and contractors to receive, record, and resolve grievances. GRM for the workers to cover workplace-related complaints has been proposed in the ESMPF and will be in place before the contractors' mobilization.

4.17 **Bank's Project-Affected People's Mechanism.** AIIB's Policy on the Project-affected People's Mechanism (PPM) applies to this project. 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 where their concerns cannot be addressed satisfactorily through the project-level GRM or the processes of AIIB's Management. For information on how to make submissions to the PPM, please visit the PPM website.[84]

4.18 **Monitoring and Supervision Arrangements.** As mentioned above, the NRRPCP PMU E&S team will be retained. This will facilitate the E&S monitoring and supervision, as the capacity and experience of that team with AIIB ESP is significant. The Bank will also follow up with them on the implementation of the E&S frameworks and instruments. Utmost attention will be paid to following key E&S aspects: (i) allocation of adequate E&S staff to ensure that E&S risks and impacts are assessed and managed properly; (ii) establishment of the worker's GRM before mobilization of the contractors; (iii) development and implementation of C-ESMPs; (iv) implementation of GESIP; and (v) implementation and monitoring of voluntary donation.

[83] They include local authorities, beneficiaries, civil society organizations (CSOs), non-governmental organizations (NGOs), construction contractors, and affected persons. Consultations were mainly conducted in Khmer.
[84] https://www.aiib.org/en/about-aiib/who-we-are/project-affected-peoples-mechanism/how-we-assist-you/index.html

E. Climate Change

4.19 As mentioned above, the project is aligned with the Paris Agreement's climate mitigation and adaptation goals. The PMU, with support from an individual climate consultant and under AIIB's guidance, prepared a comprehensive CRA, which confirmed that the physical climate risks are material, with medium to high ratings depending on the province and road segment. The main climate hazards identified included flash, riverine and coastal floodings, localized landslides, heatwaves and droughts that are projected to intensify due to climate change impact. A set of adaptation measures to address these risks, with a focus on the design of the roads, embankments, culverts and bridges were proposed in the CRA and will be factored into the DEDs. For further details, see Annex 3.

F. Gender Equality and Social Inclusion (GESI) Aspects

4.20 **GESI Assessment in the Transport Sector in Cambodia**. Over the last years, Cambodia has made gradual progress in GESI aspects, but gaps persist. The Gender Development Index (GDI) has been steadily increasing in the country from 0.889 in 2003 to 0.939 in 2023.[85] Persons with disabilities (PWDs) were not left behind as most of the well-being indicators have improved at a similar path for both persons with and without disabilities.[86] The transport sector leadership is still heavily dominated by men (only 21-27 percent of the deputy office chiefs to director generals positions are women).[87] In rural areas, women and disadvantaged groups face significant mobility and safety challenges due to the absence of universal design features and adequate lighting. These limitations hinder access to basic services, perpetuating cycles of exclusion and poverty.

4.21 **NRRPCP GESI Practices.** NRRPCP notably contributed to bridge the GESI gap in rural areas of the provinces supported by the project by (i) achieving a relatively high participation of women in capacity building programs and awareness campaigns (e.g., 51 percent of the participants in road safety campaigns were women); (ii) adopting GESI-sensitive designs (e.g., the inclusion of sealed bituminous shoulders made it easier for carts with wheels to travel, reducing the physical burden on women and girls tasked with collecting and transporting water); (iii) deploying a dedicated Gender Specialist during implementation to reinforce gender-sensitive practices; and (iv) improving the access to health care services facilitating a more regular access of women, especially pregnant ones, to pre- and post-natal services and child immunizations.

4.22 **GESI Strategy for NRRPCP-II**. The PMU, with support of its GESI Consultant, prepared a comprehensive GESI assessment[88] to identify challenges and opportunities to further strengthen GESI integration in NRRPCP-II across four key areas:

[85] GDI is measured based on the (i) life expectancy at birth; (ii) expected years of schooling; and (iii) estimated earned income. A high GDI value indicates low inequality between men and women, and vice-versa. Source: United Nations Development Program (UNDP); "*Human Development Reports: Gender Development Index – Cambodia"*; 2023; (link).
[86] Ministry of Social Affairs, Veterans and Youth Rehabilitation (Disability Action Council) and Ministry of Planning (National Institute of Statistics); "*Persons with Disabilities in Cambodia: Findings from the Cambodia Demographic and Health Survey, 2014 & 2021-22*"; September 2023; (link).
[87] Ministry of Civil Service (MCS), "Report on Civil Service Official Statistics, 2024-2028".
[88] Field consultations with PDRDs, local authorities, including Commune Committees for Women and Children (CCWC), community members, and civil society organizations were conducted as part of the preparation of the GESI assessment.

- *Stakeholder Engagement*. Participation of women and disadvantaged groups will be promoted at all stages with a target to achieve 40+ percent.
- *Engineering Design*. Road designs will consider the needs of women and marginalized groups, and their feedback will be collected during consultations.
- *Construction Phase*. The contractors will (i) conduct awareness activities on the employment opportunities for women in both skilled and unskilled roles, (ii) ensure equal pay, and (iii) create and maintain inclusive work environments.
- *Operation Phase*. Capacity-building support will be provided to PDRDs to promote the engagement of women and disadvantaged groups in road O&M.

4.23 The following two GESI indicators have been included in the RMF:

- Rural women that benefit from increased employment and income generation opportunities (target: 25,000); and
- Percentage of rural road segments with universal access features in areas serving key socio-economic facilities (target: 100 percent).

4.24 For further details, see Annex 4.

G. Risks and Mitigants

4.25 Based on the assessment, an overall "low" risk rating has been assigned to the project. There is a slight risk related to potential delays in procurement, low capacity of new PIUs, the timely processing of GOKC fund, and potential time and cost overruns. The identified risks and the proposed mitigation measures are presented in the table below.

Table 2: Summary of Risks and Mitigating Measures

Risk Description	Assessment (H/M/L)	Mitigation Measures
Project Preparation Risks		
Technical Designs		
▪ Delay in completion of DEDs. ▪ Lack of quality assurance mechanism for designs and works.	Low	▪ A qualified consultancy firm (SP4) is being procured to support the PMU with both DEDs preparation and construction supervision. ▪ Technical officials have been included as part of the PMU and PIUs to strengthen design quality and civil works supervision. ▪ AIIB will be actively engaging with the PMU and SP4 to ensure adequate designs and civil works. ▪ MRD/MPWT standard design guidelines are considered robust and will be followed.
Project Implementation Risks		
Implementation Capacity		
▪ Implementation capacity at new provincial PIUs may affect timely execution, coordination, and monitoring.	Low	▪ The NRRPCP PMU will be retained and will guide and train the PIU officials for timely execution, and supervision. ▪ The PMU and PIUs will be further supported by SP4 and selected individual consultants.

Risk Description	Assessment (H/M/L)	Mitigation Measures
Land Acquisition and Resettlement		
▪ Potential land acquisition or resettlement issues due to realignment, shoulder construction.	Low	▪ The roads to be supported will follow the existing alignments and land acquisition and resettlements are not envisaged. ▪ However, if land acquisition and/or minor resettlements are needed, they could be handled based on the updated ESMPF and RPF.
FM		
▪ Delay in processing counterpart fund. ▪ Manual accounting may lead to discrepancies and errors in records and reporting.	Medium	▪ The requirement of GOKC funding is very low (10 percent) and MRD is accustomed to the country's system in obtaining funds in time. ▪ The use of Sage50 FM software will reduce the risk of discrepancies and errors in records and reporting.
Procurement		
▪ Delay in procurement and poor contract management.	Low	▪ Procurement will follow AIIB and national guidelines and the PMU is experienced with the procedures. ▪ The PMU will be further supported by SP4 in the preparation of bidding documents. ▪ The packaging strategy was designed to balance competitiveness and manageable contract sizes. ▪ The qualification requirement for civil works packages may be strengthened considering the past performance of the contractors. ▪ To improve the performance of contract management, periodic review and training will be provided, as needed.
Time and Cost Overrun		
▪ Delay in implementation due to unforeseen reasons.	Low	▪ The PMU prepared a very detailed work plan and implementation schedule. ▪ The PMU has sufficient experience from NRRPCP to anticipate and address potential delays. ▪ The PMU will receive further support from SP4 and selected individual consultants.
E&S Risks and Impacts during Construction and Operation		
▪ Construction activities will be temporary and limited to project alignment; however, there could be site specific E&S impacts. ▪ The roads may be damaged by climate hazards/disasters.	Low	▪ An ESMPF is in place and provides mitigation and monitoring measures. ▪ Site-specific ESMPs will be prepared. ▪ MRD has included E&S officials in the PMU, that will also support the E&S monitoring and supervision activities. ▪ The E&S team under the PMU will be further strengthened by SP4 and selected individual consultants. ▪ CRA has been prepared, and a set of adaptation measures were identified, and they will be integrated into DEDs.

Annex 1: Results Monitoring Framework

Project Objective (PO):	To enhance all-weather accessibility and the livelihoods of population in selected rural areas.									
Indicator Name	**Unit of measure**	**Base-line Data 2025**	**Cumulative Target Values**						**End Target 2031**	**Frequency**	**Responsibility**
			2026	**2027**	**2028**	**2029**	**2030**	**2031**			
Project Objective Indicators											
1. Improved all-season accessibility to economic, health, and social facilities[89]	*Number of Facilities*	0	0	0	20	50	80	130	130	Quarterly	PMU
a. Economic	*Number of Markets*	0	0	0	5	10	20	30	30	Quarterly	PMU
b. Health	*Number of Health Centers*	0	0	0	5	10	20	30	30	Quarterly	PMU
c. Social	*Number of School*	0	0	0	10	30	40	70	70	Quarterly	PMU
2. Rural population that benefit from increased employment and income generation opportunities (women)	*Number of People*	0	500 (250)	2,000 (1,000)	8,000 (4,000)	20,000 (10,000)	40,000 (20,000)	50,000 (25,000)	50,000 (25,000)	Quarterly	PMU
Intermediate Results Indicators											
1. Rural roads upgraded with climate resilience measures	*Km*	0	0	50	100	250	350	420	420	Quarterly	PMU
2. Percentage of rural road segments with universal access features in areas serving key socio-economic facilities	*Percentage*	0	0	10	20	60	80	100	100	Quarterly	PMU
3. National contractors that benefit from capacity building to deliver high-quality and resilient rural roads	*Number of Contractors*	0	0	5	10	20	25	30	30	Quarterly	PMU

[89] The actual values for the following indicators: “improved all-season accessibility to economic, health, and social facilities”, “rural roads upgraded with climate resilience measures” and “percentage of rural road segments with universal access and safety features in areas serving key social and economic facilities” will be only updated after the full completion of the civil works in the respective road section.

Annex 2: Economic Analysis

1. **Methodology.** The economic analysis was conducted using HDM-4, which is currently widely used for road sector projects. A cost benefit analysis (CBA) was conducted to compare the outcomes of the "*with-project*" and "*without-project*" scenarios, measuring costs and benefits over a 30-year evaluation horizon (2026–2055). The evaluation period includes a six-year construction phase (2026–2031) followed by 24 years of operation. The base year for the analysis is 2026, and a 10 percent discount rate was applied. Under CBA, traffic count and projection were the most important factors that formed the basis for all benefits. As above-mentioned, first-hand traffic surveys were conducted across the ten project provinces supported by the project between April and June 2025 to establish a reliable baseline. These included manual traffic counts for the preliminary selected subprojects (412 km of rural roads). The counts were disaggregated by vehicle type and then further classified into light and heavy vehicles[90] as well as non-motorized transport (NMT) and motorized transport (MT) modes.[91] Observed AADT values ranged from 460 to 4,200 vehicles/day, highlighting heterogeneity across road classes and functions. The traffic mix is dominated by light vehicles (86.2 percent), with heavy vehicles accounting for 13.8 percent. A significant share of non-motorized traffic (17.8 percent) was also observed. Following a conservative approach, no additional traffic (diverted and induced traffic) was considered in the traffic forecast. These values were then projected forward using GDP-linked graduated adjustment factors[92] and then multiplied by growth elasticities that reflect Cambodia's transition path.[93]

2. **Economic Costs**. These include the capital cost of infrastructure and the O&M cost of the rural roads and are described below:

- *Capital Expenditure*. The financial capital investment for NRRPCP-II is estimated at USD88 million (as captured in the Financial Plan in Table 1). The final economic cost was derived as USD78.32 million after converting the financial cost to economic cost using a conversion factor.[94] Based on the experience of NRRPCP, a preliminary disbursement plan was also proposed.
- *O&M Costs*. The analysis accounted for O&M costs over the life of the project, including:
    - *Routine Maintenance*. Annual costs for vegetation clearing, pothole patching, drain cleaning, and other minor repairs.

[90] Light vehicles cover bicycle, ox and horse cart, bicycle trailer, motorbike, motorbike trailer/tuktuk, passenger car, two-wheeler tractor; the heavy vehicles include minibus, large bus, small truck, medium truck, heavy truck, and tractor.
[91] NMT mode includes bicycle, ox and horse cart, and bicycle trailer; rest of the light and all of the heavy vehicles were classified under MT mode.
[92] Given the absence of long-term country-specific GDP forecasts, a proxy approach was adopted, and Cambodia's growth outlook was projected using IMF data up to 2030 (link) and then was aligned with the Organization for Economic Cooperation and Development (OECD) trends for benchmark economies (China and Indonesia - link). Following this approach, GDP is expected to grow at 4.4 percent annually during 2025–2035, slowing to 2.8 percent in 2036–2045 and 2.1 percent in 2046–2055, with GDP per capita following a similar trend. This reflects the global pattern of moderating growth as economies mature.
[93] High elasticity (1.15 passenger/0.9 freight) during the early motorization phase (2025–2035), moderating (1.05 passenger/0.75 freight) in the transition period (2036–2045), and converging toward developed-country levels (0.85 passenger /0.67 freight) thereafter (2046-2055). The values were estimated considering the local context and international experience (transport elasticities typically range from 1.1-1.4 in developing phases to 0.7-0.9 in mature economies).
[94] The factor was 0.89. This was derived by calculating the weighted composite average of (i) supplies (adjusted for VAT) {80 percent}, (ii) unskilled labor (adjusted for effective income tax and minimal unemployment) {13 percent}, and (iii) skilled labor (adjusted for effective income tax and VAT) {7 percent}. This factor is consistent with those utilized for similar rural road projects in Cambodia by other MDBs. In addition, a sensitivity analysis was carried out using factors of 0.85, 0.87, 0.89, 0.91, 0.93 and 0.95, and the project is still viable under all of them.

- *Periodic Maintenance.* Resurfacing and overlays for DBST and RC pavements, re-gravelling for laterite surfaces, and replacement of culverts and small structures.

Maintenance operations were determined within the HDM-4 framework according to road conditions, assumed intervention standards, and/or specified time intervals. Routine and periodic maintenance profiles were considered under both the "*with-project*" and "*without-project*" cases. Without the project, maintenance costs are higher due to frequent grading and patching required on unpaved laterite roads.[95] With the project, maintenance becomes more predictable and cost-efficient, ensuring longer service life and reduced life-cycle costs. Like capital expenditure, HDM-4 also converted O&M costs into economic costs.

3. **Economic Benefits**. The project will generate benefits from multiple channels. The main benefit will be in the form of savings in VOC and travel time. Furthermore, the economic returns considered accident reduction, greenhouse gas (GHG) reduction, and the residual value.[96] HDM-4 simulates pavement performance and maintenance strategies and evaluates their impact on VOCs, travel times, and accident rates under prevailing traffic conditions. Regarding the benefits from reduced GHG emissions, HDM-4 estimates the tons of emissions with and without the project but does not assign monetary value to the savings, that was calculated separately.

- *VOC Savings.* By upgrading laterite and earth roads to DBST and RC, smoother road surfaces will reduce rolling resistance, fuel consumption, tire wear, and maintenance costs for vehicles. These savings are especially significant for motorbikes and light vehicles, which dominate rural traffic. VOC estimation was carried out within the HDM-4 framework,[97] which calculates operating costs for each vehicle category and for each year of the analysis horizon, considering different parameters of vehicle fleet characteristics and fleet unit costs. Costs are determined based on the evolving road condition, particularly the IRI, and the timing of maintenance interventions designed to keep the pavement within acceptable serviceability standards over its design life.
- *Travel Time Savings.* Road rehabilitation increases travel speeds and reliability, producing time savings for both working and non-working trips.[98] The value of time was estimated based on the average rural wage rate.[99]
- *Accident Cost Reduction.* Safer road surfaces, improved drainage, better geometry, and clearer signage are expected to reduce the frequency and severity of crashes. Road accident savings were estimated using accident rates expressed per 100 million

[95] Following MRD practice, for the laterite roads (without project scenario), re-gravelling is usually done every 4 years (periodic, USD22,060/km), and grading as well as spot re-gravelling is done every year (routine, USD1,940/km); for the DBST roads, patch potholes, crack sealing, edge – break repairs are done every year (routine, USD1,170/km) and overlay of 25 mm surface is done periodically once international roughness index (IRI)>6 (periodic, USD90,440/km); for RC roads, cleaning of drainage and joint cleaning activities are done every year (routine, USD730/km) and joint resealing every 7 years (periodic, USD3,000/ km).
[96] The same conversion factor was considered by HDM-4 while converting the financial benefits to economic benefits.
[97] HDM-4 estimates VOCs by simulating the consumption of resources (e.g., fuel, oil, tires, parts, labor) under varying road and traffic conditions.
[98] As per standard practice, the value of non-work travel time was set at 33 percent of the work travel time value; source: ADB; "*Economic Analysis of Road Network Improvement Project*"; 2017; (link).
[99] National Institute of Statistics, Ministry of Planning of Cambodia; "*Cambodia Socio-Economic Survey*"; 2023. Updated to 2025 values, the average rural wage rate of Cambodia is USD293.

vehicle-km, derived from available national data, including fatalities by road categories.[100] The analysis assumed a 20 percent reduction in accident rates.[101]

- *Environmental Benefits.* Reduced congestion and smoother traffic flow will lower GHG emissions and local pollutants. The GHG savings were obtained as the sum of the differences between the without project and with project scenarios across all sub-projects, expressed in terms of total emissions over the entire analysis period.[102] For the monetization of these savings, the shadow price of carbon from the AIIB guidance note was followed.[103]
- *Residual Value.* At the end of the evaluation period, residual asset value for civil works and durable structures (e.g., bridges, culverts) was estimated as 20 percent of the capital cost.[104]

Table 1: Annual Benefits and Costs *(USD million)*

Year	Economic Costs (USD Million)		Economic Benefits (USD Million)						Total Net Benefits (USD Million)
	Capital Works	O&M	MT VOC Savings	MT Time Savings	NMT Time Savings	Accident Cost Reduction	GHG Benefits	Residual Value	
2026	(1.34)	-	-	-	-	-	-	-	(1.34)
2027	(18.34)	-	-	-	-	-	-	-	(18.34)
2028	(27.24)	-	-	-	-	-	-	-	(27.24)
2029	(17.46)	-	-	-	-	-	-	-	(17.46)
2030	(12.92)	-	-	-	-	-	-	-	(12.92)
2031	(1.02)	-	-	-	-	-	-	-	(1.02)
2032	-	7.69	24.76	3.49	1.35	0.25	0.78	-	38.33
2033	-	0.31	20.38	2.01	1.07	0.26	0.91	-	24.94
2034	-	0.31	24.24	3.21	1.27	0.27	0.98	-	30.28
2035	-	0.12	25.39	3.69	1.34	0.28	1.02	-	31.84
2036	-	0.31	25.85	3.99	1.37	0.29	0.91	-	32.72
2037	-	5.59	19.36	2.34	1.04	0.30	1.03	-	29.65
2038	-	(4.41)	25.99	4.55	1.41	0.30	1.17	-	29.00
2039	-	(2.63)	26.63	4.10	1.45	0.31	1.22	-	31.07
2040	-	(7.28)	26.60	4.32	1.47	0.32	1.15	-	26.58
2041	-	(3.53)	23.38	2.55	1.24	0.33	1.31	-	25.27
2042	-	5.42	28.75	4.21	1.53	0.34	1.40	-	41.65
2043	-	(2.93)	31.62	5.41	1.73	0.35	1.46	-	37.64
2044	-	(1.79)	30.57	5.06	1.68	0.36	1.37	-	37.25
2045	-	0.12	26.79	3.34	1.45	0.36	1.55	-	33.60
2046	-	(4.41)	29.65	4.69	1.63	0.37	1.66	-	33.58
2047	-	4.76	32.34	5.20	1.80	0.38	1.72	-	46.19
2048	-	(6.33)	34.26	6.04	1.93	0.38	1.61	-	37.89
2049	-	(3.68)	28.56	3.66	1.57	0.39	1.80	-	32.30
2050	-	(2.59)	32.74	5.13	1.81	0.40	1.89	-	39.38
2051	-	(1.96)	35.17	5.66	1.94	0.41	1.91	-	43.12
2052	-	5.19	35.64	5.99	2.00	0.41	1.78	-	51.01
2053	-	(1.78)	30.20	4.17	1.68	0.42	1.92	-	36.61
2054	-	(3.05)	33.36	5.61	1.90	0.43	2.01	-	40.24

[100] The adopted values are 2.5 deaths and 4.0 injuries per 100 million vehicle-km. The corresponding economic costs were set at USD228,800 per fatality, USD9,732 per serious injury, and USD4,209 per slight injury. Sources: (i) UNDP; "*Road Traffic Accidents in Cambodia*"; 2021; (link); (ii) MPWT; "*Overview of the Transport Infrastructure Sector in the Kingdom of Cambodia*"; 2023; (link); and (iii) Road Crash and Victim Information System (RCVIS) data (link).
[101] World Health Organization; "*Global Status Report on Road Safety*"; 2018; (link).
[102] For each sub-project and each year of the evaluation horizon, total AADT was disaggregated by vehicle class, then projected forward with class-specific growth rates. Multiplying these flows by section length and 365 days provided the annual vehicle-kilometers of activity. HDM-4 only considers CO_2 emissions (g/km).
[103] The values between 2032 and 2055 were derived by applying an annual increase of 2.25 percent to the 2032 benchmark (USD 77 per ton of CO_2 in 2032); source: AIIB; "*Guidance Note on Cost-Benefit Analysis of Projects*" (internal document); 2023.
[104] This was subsequently adjusted by HDM-4 to take into account O&M costs.

Year	Economic Costs (USD Million)		Economic Benefits (USD Million)						Total Net Benefits (USD Million)
	Capital Works	O&M	MT VOC Savings	MT Time Savings	NMT Time Savings	Accident Cost Reduction	GHG Benefits	Residual Value	
2055	-	0.31	36.07	6.16	2.07	0.44	2.07	13.69	60.82
Total	**(78.32)**	**(16.25)**	**688.27**	**104.56**	**37.72**	**8.35**	**34.62**	**13.69**	**792.64**

4. **Results and Sensitivity Analysis**. Based on the data derived from HDM-4, the estimated EIRR and ENPV for NRRPCP-II is 22.83 percent and USD111.94 million, respectively, and the project is economically viable. A sensitivity analysis was carried out with the following scenarios: (i) a 25 percent increase in costs; (ii) a 25 percent decrease in benefits; and (iii) a combined 25 percent increase in costs and 25 percent decrease in benefits. The project remains viable in all scenarios.

Table 2: Summary of Sensitivity Analysis

Particulars	EIRR	ENPV (USD million)
Base scenario	22.83%	111.94
25 percent increase in cost	19.68%	97.80
25 percent decrease in benefits	18.94%	69.95
Combination of 25 percent increase in cost and 25 percent decrease in benefits	16.13%	55.81

Annex 3: PAA and Climate Finance

A. PAA Assessment

BB1 Assessment	
Criteria	**Assessment**
Uniform Assessment Criteria (UC)	
UC1: Checking if the project/economic activity included in the universally aligned list of activities that have a positive or negligible impact on the climate.	The project will support upgrading rural roads, without capacity expansion, that have low traffic volumes and will provide access to communities which currently do not have all-weather access (e.g., connecting farmers to markets or providing access to rural schools or hospitals). Given that the roads are already existing, there is no risk of deforestation. As such, this project is considered universally aligned with BB1 (road upgrading, rehabilitation and reconstruction are included in the Joint Multilateral Development Bank (MDB) Universally Aligned List for mitigation).
Results	***Aligned for BB1.***

BB2 Assessment	
Criteria	**Assessment**
Criterion 1: Establishment of Climate Risk and Vulnerability Context	
Step 1: Establishing climate risk and vulnerability context.	As above-mentioned, the PMU prepared a CRA for NRRPCP-II. That drew on credible databases, data, and tools.[105] The climate projections were primarily based on simulations, which are part of the Coupled Model Intercomparison Project Phase 6 (CMIP6) ensembled under two global scenarios: the shared socioeconomic pathways (SSP2-4.5, medium-emissions) and SSP5-8.5 (high-emissions) scenarios over the mid-21st century (2040–2059). The CRA identified that inland floods, heatwaves, and droughts are the material climate risks for the entire project while coastal flooding[106] and landslides pose material risk for specific road sections, especially under SSP5-8.5.
Criterion 2: Definition of the Climate Adaptation and Resilience Measures	
Step 2: Identifying and integrating adaptation and climate resilience measures.	To address the identified climate risk, the following set of climate resilience measures have been identified and will be factored into the DEDs: ▪ *Flooding*

[105] It includes, among others, (i) Intergovernmental Panel on Climate Change (IPCC); "*Sixth Assessment Report (AR6)*"; March 20, 2023 (Synthesis Report); (link); (ii) The World Bank Group; "*Climate Change Knowledge Portal*"; 2025; (link); (iii) The World Bank and ADB; "*Climate Risk Country Profile – Cambodia*"; 2024; (link); (iv) The United Nations Children's Fund (UNICEF); "*Children's Climate Risk Index for Cambodia*"; (link); (v) GOKC; "*Cambodia Climate Change Strategic Plans 2014–2023*"; 2013; (link); (vi) GOKC; "*Cambodia Climate Change Strategic Plans 2024–2033*"; May 22, 2025; (link); and (vii) Ministry of Environment (GOKC); "*National Adaptation Programme of Action to Climate Change (NAPA)*"; October 2006; (link).

[106] Coastal flooding risk may be a factor to be considered for the roads in Kep and Kampot provinces.

BB2 Assessment	
Criteria	**Assessment**
	○ Increasing road level by at least 0.5 m above the maximum flood level.[107] ○ Promoting the use of water-resistant materials (gravel, stone pitching, concrete). ○ Providing adequate and sufficient cross and side drains, culverts, bridges and concrete fords/spillways (based on the hydrological analysis). ○ Fortifying wing wall of culverts with either stone rock or grass. ○ Using concrete-lined drains, and detention basins. ○ Constructing submersible roads with RC surfaces. ○ Protecting slopes and embankments with bioengineering measures (e.g., vetiver grass or grass turfing). ○ Managing river/canal/stream courses at the bridge section of the road. ○ Cleaning clogged culverts regularly from debris and heavy silt and mud accumulation. ▪ *Heatwaves* ○ Promoting the use of heat-tolerant binders (e.g., performance grade bitumen 76-10 or polymer-modified bitumen). ○ Modifying asphalt mixes (e.g., stone mastic asphalt). ○ Increasing pavement thickness and improving subsurface drainage. ▪ *Droughts* ○ Conducting soil stabilization with lime or cement to prevent shrinkage cracks. ○ Using thicker gravel sub-bases and geotextile layers. ○ Carrying our dust control through paving or dust suppressants (chlorides, polymers). ○ Planting drought-tolerant vegetation (e.g., vetiver grass). ▪ *Coastal Flooding* ○ Raising embankments to account for sea-level rise. ○ Using salinity-resistant materials (e.g., modified bitumen). ○ Erosion protection (e.g., riprap, gabions, and mangrove restoration). ○ Improving drainage systems. ▪ *Landslides* ○ Conducting slope stabilization using gabion walls, soil nailing, and re-grading.

[107] The crest level should be a minimum height of the water level of floods with a recurrence interval of 1 in 10 years plus 0.25 meters. If the cost of raising the road level is excessive and the occasional loss of connectivity is acceptable, a climate resilient road that can withstand occasional inundation may be also considered.

BB2 Assessment	
Criteria	**Assessment**
	○ Improved drainage using intercepting drains and lined side drains. ○ Adopting nature-based solutions for slope stabilization (e.g., hydroseeding or planting deep-rooted vegetation). ○ Implementing rockfall protection measures (scaling, mesh, barriers). SP4 will include climate experts to provide further support during DEDs preparation. In addition, consultants may be also engaged to design and deliver capacity building programs for national contractors with a focus on delivering high-quality and climate resilient rural roads.
Criterion 3: Assessment of Inconsistency with a National/Broad Context for Climate Resilience	
Step 3: Assessing potential inconsistency with broader climate resilience policies and priorities.	As indicated above, the project is not inconsistent with the Cambodia's broad context and policies for climate resilience, as outlined below. ▪ *NDC 3.0*:[108] The project is not inconsistent with the stated priorities of NDC 3.0, and it will contribute to achieving NDC 3.0 targets of rehabilitating 12,000 km of rural roads by 2030, and meeting climate-proofing standards for 5,000 km of rural roads by 2035. ▪ *Cambodia Climate Change Strategic Plan (CCCSP) 2024–2033*:[109] The project is not inconsistent with the three CCCSP strategic areas (mitigation, adaptation, and governance), as it will directly support adaptation (by enhancing climate resilience of critical infrastructure, such as rural roads) and governance (through capacity building and international collaboration to deliver climate resilient roads) and indirectly will support mitigation objectives (by planting vegetation on the road slopes that will contribute to carbon sequestration). ▪ *Pentagonal Strategy – Phase 1*: [110] The project is not inconsistent with the 5 pillars of the pentagonal strategy. As mentioned above, it will contribute to achieving the targets of pentagons 2, 3 and 5. ▪ *NAPA*:[111] The project is not inconsistent with the objectives and priorities of NAPA, as it will contribute to improving climate change adaptation in rural areas through climate-proofing rural roads. ▪ *Climate Change Action Plan for Rural Development Sector (CCAP-RD) 2021-2023*:[112] The project is not inconsistent with

[108] Ministry of Environment; "*Cambodia's Third Nationally Determined Contribution (NDC 3.0)";* August 8, 2025; (link).
[109] GOKC; "*Cambodia Climate Change Strategic Plans 2024–2033*"; May 22, 2025; (link).
[110] GOKC; "Pentagonal Strategy – Phase I for Growth, Employment, Equity, Efficiency, and Sustainability: Building the Foundation Towards Realizing the Cambodia Vision 2050"; August 2023; (link).
[111] Ministry of Environment (GOKC); "*National Adaptation Programme of Action to Climate Change (NAPA)*"; October 2006; (link).
[112] MRD; "*CCAP-RD 2021-2023*"; 2021; (link).

BB2 Assessment	
Criteria	**Assessment**
	CCAP-RD, as it will contribute to Strategic Priority 1 (Reconstruction and Rehabilitation of Resilient Rural Road), Strategic Priority 3 (Capacity Building on Climate Change in the Rural Sector) and Strategic Priority 4 (Mainstreaming Climate Change by training contractors in delivering high-quality resilient roads).
Result	***Aligned for BB2.***

Project PAA	
PAA Result	***Aligned.***

B. Climate Finance

1. As mentioned above, the project will contribute to climate adaptation finance as the three eligibility criteria established in the relevant guidelines[113] are met:

- *Criterion 1: Context of Climate Risk and Vulnerability*. This has been substantiated by the CRA that was summarized in Step 1 of the BB2 assessment presented above.
- *Criterion 2: Explicit Statements of Intent to Reduce the Identified Climate Vulnerability and/or to Enhance Climate Resilience*. The intention to address the identified climate vulnerabilities and enhance resilience through specific interventions is explicitly stated in Step 2 (list of structural and non-structural climate adaptation measures) of the BB2 assessment above. In addition, the two following indicators proposed in the RMF will be utilized to monitor the contribution of the project to climate resilience: (i) national contractors that benefit from capacity building to deliver high-quality and resilient rural roads; and (ii) rural roads upgraded with climate resilience measures.
- *Criterion 3: Direct and Logic Link Between Project Activities and Identified Climate Vulnerabilities*. CRA establishes a direct and traceable link between the identified climate risks and the proposed adaptation measures. For flooding risks, the proposed measures include raising road levels to prevent overtopping, improving drainage systems to manage excessive runoff, installing larger culverts to accommodate increased water flow, and implementing slope protection to reduce erosion and embankment failures. In response to heatwave risks, it is recommended to use heat-tolerant binders,[114] concrete surfacing, and moisture-resistant materials.[115] These measures are intended to improve pavement durability, prevent rutting and cracking, and extend the service life of road infrastructure under rising temperatures. To address

[113] (i) African Development Bank Group, ADB, AIIB, Council of Europe Development Bank, European Bank for Reconstruction and Development, European Investment Bank, InterAmerican Development Bank, Islamic Development Bank, New Development Bank, World Bank Group and International Development Finance Club; *"Common Principles for Climate Adaptation Finance Tracking*"; December 5, 2023; (link); and (ii) AIIB; "*Guideline on Estimating Climate Adaptation Finance in AIIB Projects*" (internal document); September 1, 2025.
[114] Such as (i) higher performance grade asphalt binders (e.g., 76-10) or (ii) polymer-modified bitumen or (iii) crumb rubber-modified binders. Adding materials like graphite powder can improve thermal conductivity of the asphalt, helping to reduce the maximum surface temperatures and mitigate issues like rutting and thermal cracking.
[115] They could include hydraulic road binders/cement-stabilized soils or foamed bitumen (for the base and sub-base); and RC, DBST or polymers (for the surface layer).

drought and erosion risks, CRA emphasizes the importance of planting vegetation and soil cover to stabilize slopes and embankments.

2. Given that adaptation and climate resilience are not the primary objective of the project, but it includes adaptation measures to manage the physical climate risks, the project is classified as a Type 1 under the joint MDB adaptation typology. To estimate the climate adaptation finance, a proportional approach has been followed. Component 1 will support the implementation of structural adaptation measures and Component 2 will support non-structural adaptation measures.[116] Hence, the adaptation finance has been calculated as 15 percent of AIIB contribution to Component 1 (USD11.1 million) plus 5 percent of the estimated cost of Component 2, fully funded by AIIB, (USD0.3 million),[117] totaling USD11.4 million (or 14.25 percent of the AIIB financing).

[116] The proposed structural and non-structural measures are provided in Step 2 of the BB2 assessment above.
[117] These percentages are recommended in Table 3 of the following internal document: AIIB; "*Guideline on Estimating Climate Adaptation Finance in AIIB Projects*"; September 1, 2025.

Annex 4: GESI Assessment

A. GESI Assessment in the Transport Sector in Cambodia

3. Cambodia has made gradual progress in GESI aspects in line with its economic growth and rising living standards, but gaps persist. Women consist of 50.5 percent of Cambodia's total population[118] and 21.9 percent of households are female-headed.[119] GDI has been steadily increasing in the country from 0.889 in 2003 to 0.939 in 2023, but it remains lower than in all the Association of Southeast Asian Nations (ASEAN) members, barring Lao People's Democratic Republic and the world average (0.955).[120] Cambodia's Gender Inequality Index (GII) stood at 0.506 in 2023, higher (worse) than the global average of 0.455.[121] The Global Gender Gap Index (GGI) ranks Cambodia 102nd out of 146 countries, which is one of the lower-ranked ASEAN members.[122] PWDs make up a substantial share of Cambodia's population, with around 21 percent experiencing some form of disability, including about 4 percent with severe disabilities.[123] 57 percent of PWDs are women, vis-à-vis 43 percent of men.[124] A report prepared by the Disability Action Council[125] revealed that PWDs were not left behind as most of the well-being indicators have improved at a similar path for both persons with and without disabilities.

4. In terms of labor participation, women's rate stood at 62 percent in 2019, relatively close to men's 77 percent.[126] However, employment quality remains a concern, particularly in rural areas, where informal employment is prevalent, with 87.6 percent of women engaged in informal work.[127] Encouragingly, the gender wage gap, although exists, has narrowed, declining from 24 percent in 2017 to 19 percent in 2020. Nevertheless, social norms reinforce barriers: women spend five hours per day on unpaid care work compared to two hours for men,[128] limiting their ability to take up more formal jobs or training opportunities. Data from the Ministry of Civil Service (MCS) in 2024 shows that women's representation in ministries and line departments related to construction, transport, and infrastructure ranges between 21-28 percent, notably lower than their overall share in civil services workforce (42 percent).[129]

5. In rural areas in Cambodia, women and disadvantaged groups face significant mobility and safety challenges due to the absence of universal design features (such as ramps and safe crossings), and adequate lighting. In these settings, women frequently travel while

[118] World Bank; "*Population, Female (Percentage of Total Population) – Cambodia"*; 2024; (link).
[119] National Institute of Statistics; "*Cambodia Socio-Economic Survey 2023*"; October 2024; (link).
[120] GDI is measured based on the (i) life expectancy at birth; (ii) expected years of schooling; and (iii) estimated earned income. A high GDI value indicates low inequality between men and women, and vice-versa. Source: United Nations Development Program (UNDP); "*Human Development Reports: Gender Development Index – Cambodia"*; 2023; (link).
[121] GII is based on the dimensions of (i) reproductive health, (ii) empowerment, and (iii) labor market participation. A high GII value indicates high inequality between men and women, and vice-versa. Source: UNDP; "*Human Development Reports: Gender Inequality Index – Cambodia"*; 2023; (link).
[122] Ranking of some of the peer ASEAN members: Philippines – 25, Singapore – 48, Thailand – 65, Viet Nam – 72, Lao PDR – 89, Indonesia – 100; Source: World Economic Forum; *"Global Gender Gap Report"*; 2024; (link).
[123] UNDP; "*Accelerating Disability Rights in Cambodia*"; accessed on September 5, 2025; (link).
[124] Australia Cambodia Cooperation for Equitable Sustainable Services (ACCESS) program; "*Persons With Disabilities In Cambodia: Findings From The Cambodia Demographic And Health Survey, 2014 & 2021-22*"; 2023; (link).
[125] Ministry of Social Affairs, Veterans and Youth Rehabilitation (Disability Action Council) and Ministry of Planning (National Institute of Statistics); "*Persons with Disabilities in Cambodia: Findings from the Cambodia Demographic and Health Survey, 2014 & 2021-22*"; September 2023; (link).
[126] Cambodia National Institute of Statistics, Ministry of Planning; "*Report on the Cambodia Labour Force Survey 2019*"; 2019; (link).
[127] UNDP; "*Understanding the Paths to Formalization in Cambodia*"; 2023; (link).
[128] Oxfam; "*Policy Brief on Addressing Unpaid Care and Domestic Work (UCDW) in Cambodia*"; 2025; (link).
[129] Ministry of Civil Service (MCS), "*Report on Civil Service Official Statistics, 2024-2028*".

managing caregiving responsibilities, such as carrying children or goods, which heightens their exposure to unsafe rural road and inadequate pedestrian facilities. These limitations not only hinder access to transport infrastructure and essential services but also constrain economic opportunities, perpetuating cycles of exclusion and poverty. Construction activities can exacerbate these risks, with GBV and traffic accidents disproportionately affecting women, children, and the elderly. National survey data also indicate that one in five women reported experiencing intimate partner violence in 2021–22.[130] The GBV risk is further elevated around construction sites, particularly in poorly lit and isolated areas.

6. GOKC has developed several policies to further advance GESI aspects and contribute to bridging some of the above-mentioned gaps. The Gender Mainstreaming Strategic Plan 2019–2023 set a target for women and disadvantaged groups to constitute at least 45 percent of participants in rural agriculture and service delivery activities.[131] This commitment has been reinforced through the updated Five-Year Strategic Plan (2024–2028), which mainstreams gender across all sectors and provides guidance to line ministries (including MRD) on women's participation targets and measures to address and prevent GBV.[132] In parallel, GOKC is also developing the National Action Plan on Violence Against Women (NAPVAW) 2025–2030, focusing on GBV prevention and workplace harassment. Complementing these policies, the Road Traffic Law (2014, updated 2020) and the Road Law (2014) provide the legal framework to ensure equitable access and protection for all road users.

B. GESI Practices in NRRPCP

7. NRRPCP made notable contributions on GESI as captured below:

- *High Participation in Capacity Building Programs and Awareness Campaigns.* There was a significant and active participation of women, girls, and vulnerable groups in several training courses and awareness campaigns. For example:
  (i) Nearly 40 percent of the participants in OHS sessions were women, including female workers at construction sites. These trainings enhanced awareness of workers' rights, and safe working conditions. Additionally, the sessions raised GBV awareness, including sexual harassment risks at construction sites, and informed participants about available reporting channels and support services.
  (ii) More than half of the participants in road safety campaigns were women, many of whom played active roles in promoting the road safety agenda.
  (iii) During the design phase of rural road and community pond, the PMU promoted conducting inclusive consultations. Consequently, 38 percent of the participants were women, including many from marginalized backgrounds.
- *GESI-sensitive Designs.* The inclusion of sealed bituminous shoulders made it easier for carts with wheels to travel, reducing the physical burden on women and girls tasked with collecting and transporting water. Safety and accessibility were also improved, considering the needs of women and PWDs through the deployment of speed bumps, pedestrian crossings and calming areas near markets, health centers, and schools.

[130] National Institute of Statistics; "*Demographic and Health Survey 2021-2022*"; 2023; (link).
[131] Ministry of Women's Affairs; "*Neary Rattanak V Five Year Strategic Plan for Strengthening Gender Mainstreaming and Women's Empowerment 2019-2023*"; 2020; (link).
[132] Ministry of Women's Affairs; "*Neary Rattanak VI Five Year Strategic Plan for Strengthening Gender Mainstreaming and Women's Empowerment 2024-2028*"; 2024; (link).

- *Dedicated Gener Specialist during Implementation*. The PMU was not only gender-diverse but also included a dedicated focal person responsible for monitoring GESI actions and serving as a point of contact for GBV- and harassment-related complaints. To reinforce gender-sensitive practices, training and refresher sessions were provided to all contractors and PIU staff, with a particular focus on promoting gender equality, improving workplace conditions, and strengthening mechanisms for GBV prevention and response.
- *Enhanced Accessibility to Health Care Services.* In provinces where rural roads were improved, health service providers reported that more women, especially pregnant ones, were able to access health centers more regularly for pre- and post-natal services and child immunizations, owing to better road connectivity.

C. GESI Strategy for NRRPCP-II

8. NRRPCP-II will continue having a strong commitment to the improvements of GESI aspects, while introducing additional measures to close remaining gaps. GESI considerations will be mainstreamed across four key areas:

- *Stakeholder Engagement.* NRRPCP-II will strengthen the inclusive engagement practices demonstrated in NRRPCP by promoting the active and meaningful participation of women and disadvantaged groups throughout all stages of the project, from planning to implementation and operations. A consultations participation target of 40+ percent of women and vulnerable groups have been proposed in GESIP.
- *Engineering Design.* Road designs will continue to integrate GESI aspects by addressing the mobility needs of women, girls, and vulnerable groups, including PWDs. Site-specific community consultations, particularly with women and disadvantaged populations, will inform each subproject's design.
- *Construction Phase.* To address GESI gaps in the construction sector, the contractors will be required to (i) explore avenues to enhance job opportunities for women in both skilled and unskilled roles, (ii) provide equal pay, and (iii) create and maintain inclusive and respectful workplaces. GBV risks will be mitigated through training, awareness campaigns, and strengthened GRM.
- *Operation Phase.* With O&M responsibilities transitioning to PDRDs, the project will support delivering capacity building for PDRDs to promote the participation of women and disadvantaged groups in maintenance activities. This will also include ensuring equal pay, safe working conditions, and targeted skills training to enhance engagement and long-term economic empowerment.

9. Under NRRPCP-II, the following two indicators will be assessed to track the project's contribution to GESI:

- Rural women that benefit from increased employment and income generation opportunities (target: 25,000); and
- Percentage of rural road segments with universal access features in areas serving key socio-economic facilities (target: 100 percent).

Annex 5: Country Credit Fact Sheet

Recent Economic Developments

1. Cambodia is a lower-middle-income country with a population of around 17.5 million, and per capita income of around USD2,900 (or around USD8,600 in purchasing power parity terms). The economy grew by 6.0 percent in 2024, supported by strong garment exports, expansion in non-garment manufacturing, and a rebound in tourism. Agricultural output remained resilient despite El Niño-related droughts. However, construction and real estate activity continued to soften due to weak domestic demand and ongoing price corrections. Growth is projected to slow to 4.0 percent in 2025, reflecting weaker external demand, trade policy uncertainty, and moderation in foreign direct investment (FDI) inflows. Inflation fell from 5.3 percent in 2022 to 0.9 percent in 2024, driven by declining global commodity prices and subdued domestic demand. Price growth remains moderate in 2025.

2. The fiscal deficit widened from near balance in 2022 to 2.8 percent of GDP in 2023, driven by temporary social support measures, spending related to the Southeast Asia Games and general elections, and weaker tax revenues. The deficit is projected to reach 3.1 percent in 2024 and 3.2 percent in 2025. Public debt remains sustainable, with GOKC gross debt projected at 29.1 percent of GDP in 2025, below the International Monetary Fund (IMF)'s 55 percent threshold for low-income countries.

3. The current account recorded a deficit of 19.0 percent of GDP in 2022, due to a spike in gold imports. The situation returned to more normal in 2023 and 2024, supported by gold import restrictions and improved trade performance. Gross international reserves reached USD30.2 billion in June 2025, covering approximately seven months of projected imports. External debt is moderate, estimated at 27.4 percent of GDP in 2025, and the exchange rate has remained broadly stable.

Economic Indicators	2022	2023	2024*	2025*	2026*	2027*
Real GDP growth (percentage change)	5.1	5.0	6.0	4.0	3.4	4.3
CPI[133] inflation (average, % change)	5.3	2.1	0.9	1.0	3.2	3.0
General Government overall balance	-0.3	-2.8	-3.1	-3.2	-3.0	-2.9
General Government gross debt	25.0	25.7	26.6	29.1	30.7	31.9
Current account balance	19.0	1.3	-1.7	2.3	1.1	-0.6
External debt[134]	25.0	25.7	26.6	27.4	27.3	27.2
Gross international reserves (USD billion)[135]	29.3	29.5	28.7	30.2		
Exchange rate (KHR/USD, end-of-period)[136]	4,117	4,085	4,025	4,008		

Data source: IMF; "*World Economic Outlook (WEO)*"; April 2025; (link).

* Denotes projections and estimates; in percentage of GDP unless stated otherwise.

Outlook and Risks

4. Growth is projected to moderate to 3.4 percent in 2026 and recover to 4.3 percent in 2027. Over the medium term, growth is expected to converge toward 5 percent by 2030,

[133] CPI stands for the consumer price index.
[134] IMF; "Country Report - Cambodia"; 2022-2025.
[135] IMF; "*International Financial Statistics*"; (link).
[136] National Bank of Cambodia; "Exchange Rate"; as of August 19, 2025; (link).

supported by structural reforms, diversification into non-garment manufacturing, and continued recovery in tourism. Risks to this outlook include prolonged weakness in global trade, climate-related disruptions to agriculture, and delays in infrastructure investment.

5. Inflation is expected to stabilize around 3.0 percent from 2026 onwards, reflecting normalization of domestic demand and potential upward pressure from food and energy prices, and assuming stable exchange rate dynamics and prudent monetary policy. Risks include imported inflation from global commodity price shocks and domestic supply constraints.

6. The fiscal deficit is projected to narrow slightly to 3.0 percent in 2026 and 2.9 percent in 2027. This trajectory reflects the GOKC's commitment to fiscal consolidation, including scaling back temporary support measures and improving tax administration. Public debt is expected to drift upwards and stabilize at around 32–33 percent over the medium term. Risks to fiscal sustainability include slower revenue growth, contingent liabilities, and rising interest costs.

7. The current account balance is projected to oscillate between small deficits and surpluses. External debt is projected to remain contained and sustainable. Risks include external financing pressures, exchange rate volatility, and tighter global financial conditions.

8. In April 2025, Moody's affirmed the Cambodia's B2 credit rating with stable outlook, citing improvements in the external position and recovery in tourism and FDI. Cambodia is not rated by Fitch and S&P.