



Report and Recommendation of the President to the Board of Directors

Project Number: 42334-018
June 2018

Proposed Loan and Grant Kingdom of Cambodia: Rural Roads Improvement Project III

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Asian Development Bank

CURRENCY EQUIVALENTS

(as of 15 May 2018)

Currency unit	–	riel (KR)
KR1.00	=	\$0.00025
\$1.00	=	KR4,052

ABBREVIATIONS

ADB	–	Asian Development Bank
DDIS	–	detailed design and implementation supervision
EIRR	–	economic internal rate of return
EMP	–	environmental management plan
GGF	–	good governance framework
HHTPP	–	HIV/AIDS and human trafficking awareness and prevention program
KEXIM	–	Export-Import Bank of Korea
km	–	kilometer
LGAP	–	labor gender action plan
MRD	–	Ministry of Rural Development
NDF	–	Nordic Development Fund
PAM	–	project administration manual
PDRD	–	provincial department of rural development
RRIP	–	Rural Roads Improvement Project
SEO	–	social and environment office

NOTE

In this report, "\$" refers to United States dollars.

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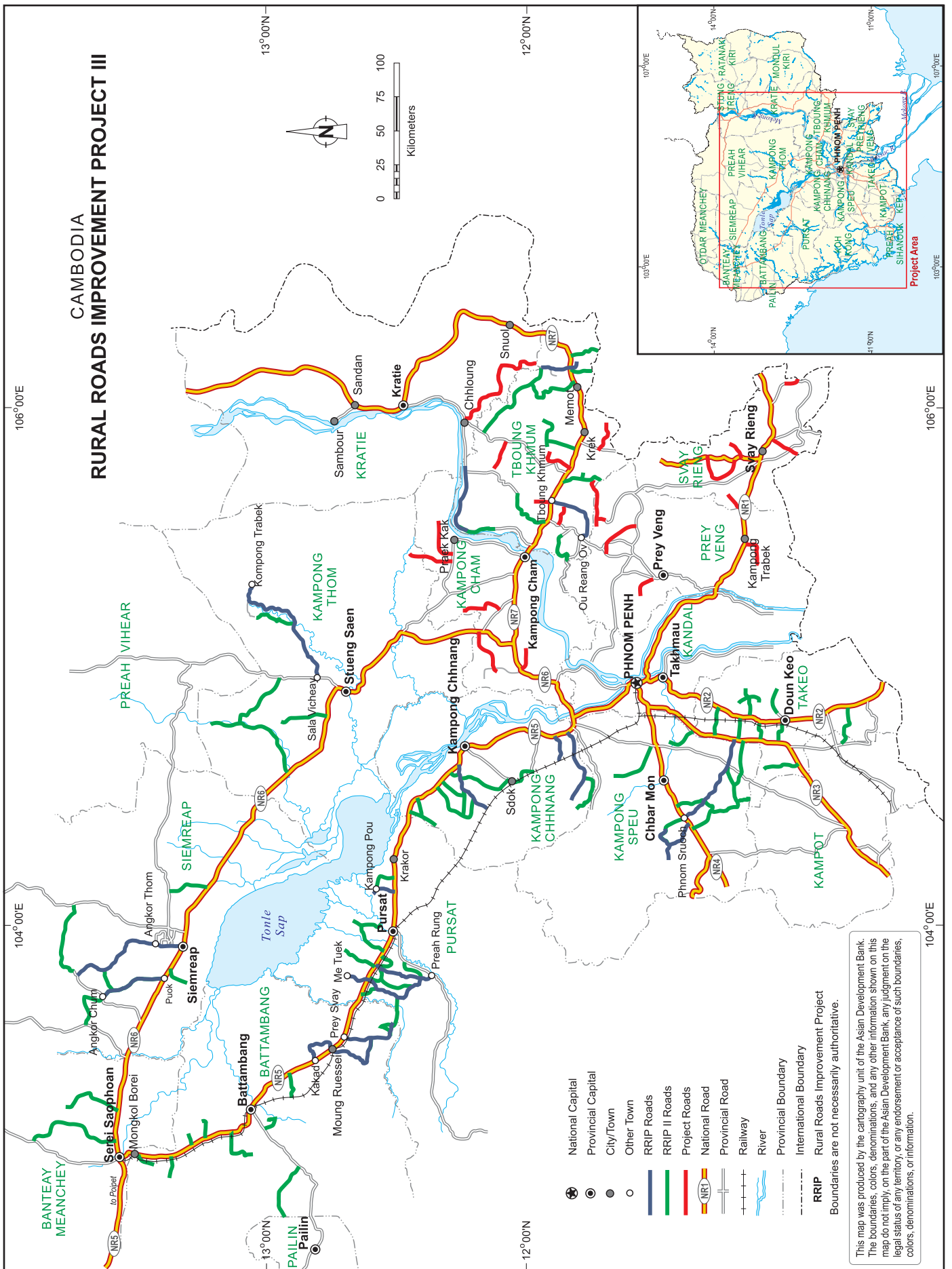
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PROJECT AT A GLANCE

1. Basic Data		Project Number: 42334-018	
Project Name	Rural Roads Improvement Project III	Department /Division	SERD/SETC
Country Borrower	CAM Government of Cambodia	Executing Agency	Ministry of Rural Development
2. Sector	Subsector(s)	ADB Financing (\$ million)	
✓ Transport	Road transport (non-urban)		60.00
		Total	60.00
3. Strategic Agenda	Subcomponents	Climate Change Information	
Inclusive economic growth (IEG)	Pillar 2: Access to economic opportunities, including jobs, made more inclusive	Climate Change impact on the Project	Medium
Environmentally sustainable growth (ESG)	Global and regional transboundary environmental concerns		
Regional integration (RCI)	Pillar 2: Trade and investment		
4. Drivers of Change	Components	Gender Equity and Mainstreaming	
Governance and capacity development (GCD)	Anticorruption Institutional development Organizational development	Effective gender mainstreaming (EGM)	✓
Knowledge solutions (KNS)	Application and use of new knowledge solutions in key operational areas		
5. Poverty and SDG Targeting		Location Impact	
Geographic Targeting	No	Rural	High
Household Targeting	No		
SDG Targeting	Yes		
SDG Goals	SDG9, SDG13		
6. Risk Categorization:	Low		
7. Safeguard Categorization	Environment: B Involuntary Resettlement: C Indigenous Peoples: C		
8. Financing			
Modality and Sources		Amount (\$ million)	
ADB		60.00	
Sovereign Project grant: Asian Development Fund		1.50	
Sovereign Project (Concessional Loan): Ordinary capital resources		58.50	
Cofinancing		0.00	
None		0.00	
Counterpart		6.00	
Government		6.00	
Total		66.00	

CAMBODIA RURAL ROADS IMPROVEMENT PROJECT III



- National Capital
 - Provincial Capital
 - City/Town
 - Other Town
 - RRIP Roads
 - RRIP II Roads
 - Project Roads
 - National Road
 - Provincial Road
 - Railway
 - River
 - Provincial Boundary
 - International Boundary
- RRIP** Rural Roads Improvement Project
 Boundaries are not necessarily authoritative.

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I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on (i) a proposed loan and (ii) a proposed grant, both to the Kingdom of Cambodia for the Rural Roads Improvement Project (RRIP) III.

2. The project will rehabilitate about 360 kilometers (km) of rural roads in five provinces (Kampong Cham, Kratie, Prey Veng, Svay Rieng, and Tboung Khmum) to paved condition. The rehabilitated roads will provide poor rural provinces with a safer, disaster- and climate-resilient rural road network with all-year access to markets and other social services. This proposed project will continue to support the sustainability of the rural road network through (i) a rural road maintenance regime in the Ministry of Rural Development (MRD); and (ii) a community-based road safety program. MRD has already established these initiatives through the earlier two projects financed by the Asian Development Bank (ADB): RRIP and RRIP II.¹ The project will also support an HIV/AIDS and human trafficking awareness and prevention program (HHTPP).

II. THE PROJECT

A. Rationale

3. **Sector context.** The principal mode of transport in Cambodia is by road. The road network of about 61,500 km includes (i) about 7,260 km of national roads (primary national highways), (ii) about 9,000 km of provincial roads (secondary national highways), and (iii) about 45,200 km of rural roads. The Ministry of Public Works and Transport manages the national and provincial roads, while MRD manages the rural roads.

4. By the early 1990s, several years of civil war had severely deteriorated the country's road network. Since 1992, with assistance from ADB and other multilateral and bilateral development partners, the government focused on rehabilitating the core national infrastructure required for the economy to develop in a sustainable manner. As of 2017, development efforts over the past 25 years have brought the paved national and provincial road network to about 8,526 km in length, or about 52.3% of the total national and provincial road network.

5. However, the rural road network needs further improvement as well. Only about 2,000 km, or 4.4% of rural roads have been paved as of 2017. Rural roads have a daily traffic volume of about 200–3,000 passenger car units, and motorcycles and three-wheel vehicles account for more than 80% of the traffic.² The annual growth rate of the traffic volume is 4%–6% and is projected to increase by 7%–12% by 2025, requiring more paved rural roads to accommodate future traffic.³

6. About 80% of Cambodia's population reside in rural areas. Road user behavior accounts for more than 90% of road crashes, and the risk of road crashes is higher on rural roads than on national roads. Since better road surfaces may cause increased speeds that rural residents have never experienced, lack of road safety education and near-zero enforcement in rural areas are crucial issues when expanding the paved road network. Although the national crash fatality rate

¹ ADB. 2010. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Kingdom of Cambodia for the Rural Roads Improvement Project*. Manila (Loan 2670-CAM); and ADB. 2014. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Administration of Grants to the Kingdom of Cambodia for the Rural Roads Improvement Project II*. Manila (Loan 3151-CAM).

² ADB estimates in 2017.

³ Economic and Financial Analysis (accessible from the list of linked documents in Appendix 2).

in Cambodia dropped in 2016 after steadily rising during 2004–2015, it is still high compared with other countries, underscoring the need for continuous road safety education and enforcement.⁴

7. Because of rapid economic development and activity, overloading of cargo vehicles has been the major cause of road damage in Cambodia since 2007. This is also a significant issue for rural roads because trucks that haul agricultural products and carry quarry materials for construction tend to be overloaded.

8. Cambodia experiences frequent flooding during the wet season, severely damaging most of the laterite rural roads and making them impassable. Such damage causes significant livelihood losses for rural residents and entails repair costs. Thus, road design requires structural changes to specifically deal with disaster risk and adapt to future precipitation increases caused by climate change.

9. **Systematic assistance.** In 2009, ADB initiated a systematic approach to rehabilitating rural roads to paved condition and helping the government develop a sustainable road network. In 2010, ADB approved RRIP, for rehabilitating 505 km of rural roads with four outputs: (i) improved road asset management; (ii) increased road safety and safeguards; (iii) enhanced climate change adaptation; and (iv) efficient project management. This first project was cofinanced in parallel by (i) the Government of the Republic of Korea, through the Export-Import Bank of Korea (KEXIM), which financed the civil works of rehabilitating 280 km of rural roads and related consulting services; and (ii) the Nordic Development Fund (NDF), which financed the climate change adaptation output.

10. In 2016, after 5 years of project implementation, MRD successfully completed all ADB- and KEXIM-financed outputs on time and within budget, building substantial capacity in multiple areas of project implementation.⁵ Capacity building was highly notable for the Social and Environment Office (SEO), which was established in 2012 under MRD to implement social and environment safeguards, road safety, HIV prevention activities, and gender-related activities.

11. MRD showed strong ownership in designing the succeeding project using mostly the loan proceeds of the first project. ADB approved RRIP II in 2014 and additional cofinancing in 2015. RRIP II will rehabilitate 1,200 km of rural roads. Its cofinanciers are Agence Française de Développement (French Development Agency), the Government of Australia, KEXIM, and the NDF. Both RRIP and RRIP II followed a similar design with similar outputs and aimed to provide reliable all-year road access from provincial towns and agricultural rural areas to markets, employment centers, and social services. RRIP covered seven rural provinces, with RRIP II including an additional three beneficiary provinces. Implementation of RRIP II is on track.⁶

12. **Capacity development support.** The following are the key capacity development achievements of RRIP and RRIP II, and their application to the proposed project.⁷ First, these two projects developed a structural design for roads that would boost disaster resilience and accommodate increasing traffic. The design included: (i) increasing embankment heights; (ii) providing cross drainage; (iii) selecting embankment materials suitable for increased permeability; and (iv) providing hardtop surface with double bituminous surface treatment pavement. This

⁴ ADB estimates that the fatality rate dropped from 74 deaths per billion vehicle-kilometers in 2015 to 55 in 2016. ADB made this estimate for a developing low-income nation using a similar methodology adopted in Singapore, Malaysia, and Japan. Their fatality rates in 2015 were 7.8 (Singapore), 7.3 (Malaysia), and 6.2 (Japan).

⁵ The NDF-financed output was completed in 2017.

⁶ As of 31 March 2017, the overall project progress of RRIP II was about 37.6% against the planned 36.6%.

⁷ Lessons Learned (accessible from the list of linked documents in Appendix 2).

improved design will apply to the project roads of the proposed project.⁸

13. Second, MRD established road selection criteria through ADB's systematic assistance in capacity development. MRD first selects project provinces with the highest poverty incidence and then prioritizes access, making sure that the project roads will connect to already paved national, provincial, or rural roads. MRD applies further criteria on realizing maximum economic potential and creating synergies with ADB-financed rural development projects in other subsectors such as water management, irrigation, and agricultural value chain development (footnote 8).

14. Third, the two projects provided a strong capacity-building program for improving the overall institutional arrangements to ensure sustainable rural road asset management. RRIP completed a program to prevent overloading on rural roads and to manage road assets more effectively. It also focused on improving the overall construction industry for rural road maintenance, including developing the capacity of the provincial departments of rural development (PDRDs), which implement road maintenance works. PDRDs now conduct routine road maintenance with adequate budgetary support. To support rural road asset management, effective axle load control is a key requirement. In fact, axle load control improved during the implementation of the first two projects.⁹

15. Fourth, the two projects strengthened the capacity of MRD's SEO staff. RRIP and RRIP II used consulting services to implement programs on increasing the awareness of road safety of project beneficiaries. SEO strengthened its capacity through these programs and has since become a role model for government bodies in addressing crosscutting social, safeguard, and gender issues. SEO also demonstrates good practice in the equal participation of women. The implementation of the HHTPP and the labor and gender action plan (LGAP) also supported SEO's capacity development. During the implementation of the proposed project, SEO staff is expected to implement, monitor, and report on the road safety program, social safeguards, indigenous peoples, and gender elements.

16. Through such systematic assistance, MRD has gradually gained adequate capacity to implement rural road development projects with minimal support from consultants.

17. **Strategic context.** The proposed project is in line with the government's Rectangular Strategy for Growth, Employment, Equity and Efficiency: Phase III.¹⁰ The strategy places priority on stepping up the construction of national, provincial, and rural roads, particularly by targeting the paving of 300–400 km of roads each year with asphalt or concrete. Also, the government's National Strategic Development Plan 2014–2018 emphasizes improvement of economy through better transport infrastructure.¹¹ The paving of rural roads enables all-year and all-weather access to markets, farms, schools, pagodas, health centers, and the local community. It will also contribute to the achievement of one of the strategy's goals, which is to serve the population's needs and promote economic development.

18. The project is also consistent with ADB's country partnership strategy, 2014–2018 for

⁸ Output: Rural Road Improvements–Road Selection Criteria (accessible from the list of linked documents in Appendix 2).

⁹ The reduction rate of overloading violations in the project provinces of RRIP improved from 40% in 2011 to 50% in 2015.

¹⁰ Government of Cambodia. 2013. *Rectangular Strategy for Growth, Employment, Equity and Efficiency: Phase III*. Phnom Penh.

¹¹ Government of Cambodia. 2014. *National Strategic and Development Plan, 2014–2018*. Phnom Penh.

Cambodia, which emphasizes rural–urban–regional links.¹² Greater connectivity between rural communities and urban growth centers will give rural residents better access to markets and social services. Rehabilitating rural roads and increasing their resilience against disasters and climate change will support inclusive economic growth, help ease poverty, and enhance social development and equity.

19. **Development partner contributions.** Although ADB has been leading the efforts to improve rural roads in Cambodia, other development partners also contributed. The Government of Germany through KfW, the Government of Japan, the World Bank, the Government of the Republic of Korea through KEXIM, the Government of Australia, the NDF, the Government of the People’s Republic of China, and the Government of France through Agence Française de Développement have collectively improved about 2,160 km of rural roads to paved condition since 2005. Ongoing projects financed by the Government of the People’s Republic of China, the Government of Germany through KfW, and the World Bank will improve an additional 500 km of rural roads to paved condition.

20. **Climate change adaptation.** RRIP supported initial climate change adaptation interventions in climate-resilient road design; hazard mapping; maintenance planning; green planting; and emergency preparedness, response, and recovery planning. The outcomes of these initiatives were replicated in the ongoing road project of the Ministry of Public Works and Transport.¹³ Meanwhile, RRIP II supports the (i) implementation of green planting in all project provinces; and (ii) design and implementation of a community-based emergency management system for an island cluster in the Mekong River, in Kampong Cham Province.¹⁴ In the proposed project, a climate risk assessment revealed that the intensity and frequency of heavy rainfall events will increase, with 5-day and 1-day storms expected to increase by 10% by 2030 and 20% by 2050. The most vulnerable provinces are Prey Veng and Svay Rieng. The proposed climate change adaptation measures are to raise the embankments and provide cross drainage.¹⁵

21. **Value added by ADB assistance.** The proposed project helps MRD improve rural road construction and maintenance practices by making use of knowledge obtained by ADB’s previous initiatives in RRIP and RRIP II, through continuous supports for the five provinces including four new provinces. For example: (i) MRD has selected and will design the project roads based on the experiences of RRIP and RRIP II (paras. 12 and 13); (ii) PDRDs will maintain the project roads to the required quality (para. 14); and (iii) SEO will use own staff resources with some support from recruited facilitators, as well as detailed design and implementation supervision (DDIS) consultants to implement road safety and social programs (para. 15). Upon completion of the project, MRD is expected to develop and maintain, using its own capacity, the rural road network to reasonable quality. Thus, the proposed project will be the last phase of ADB’s capacity development support to MRD for improving the rural road network using conventional design and quality. Based on their proven effectiveness in RRIP, overhead control gates will be installed under the proposed project to reduce the road damage and road maintenance burden inflicted by overloaded vehicles. Further, the proposed project will use the disaster risk reduction financing mechanism to finance activities

¹² ADB. 2014. *Country Partnership Strategy: Cambodia, 2014–2018*. Manila.

¹³ ADB. 2011. *Report and Recommendation of the President to the Board of Directors: Proposed Loan, Technical Assistance, and Administration of Loan and Grant to the Kingdom of Cambodia for the Provincial Roads Improvement Project*. Manila (Loan 2839-CAM); and ADB. 2016. *Report and Recommendation of the President to the Board of Directors: Proposed Loan for Additional Financing to the Kingdom of Cambodia for the Provincial Roads Improvement Project*. Manila (Loan 3442-CAM).

¹⁴ Community-based emergency management system refers to introduction of appropriate communication as well as preparation of emergency and rescue equipment so that residents at risk can be evacuated immediately in such cases as typhoon.

¹⁵ Project Climate and Disaster Risk Assessment (accessible from the list of linked documents in Appendix 2).

to mitigate flood risk, such as by raising the embankment above the flood level.¹⁶

B. Impacts and Outcome

22. The project is aligned with the following impact: needs of the population served and economic development promoted (footnote 10). The project will have the following outcome: all-weather access in rural areas of the five project provinces improved.¹⁷

C. Outputs

23. **Output 1: Rural roads improved.** The project will rehabilitate about 360 km of rural roads to disaster-resilient paved condition and reduce the average roughness of project roads. MRD plans to increase SEO staff from 7 to 11 and engage DDIS consultants to implement this output (footnote 8).

24. **Output 2: Rural road asset management improved.** Under this output, MRD will increase the annual operation and maintenance budget for project roads to a sufficient level which will keep the reasonable quality of the roads. PDRDs need to conduct routine maintenance and budgetary support needs to be adequately allocated for maintaining already paved rural roads. The project will also install overload control gates to curtail overloaded and oversized trucks for effective axle load control.¹⁸

25. **Output 3: Awareness of road safety and potential social problems strengthened.** Under this output, (i) community residents will improve their knowledge and understanding of road safety measures;¹⁹ (ii) community residents and contractors' personnel will improve their HHTPP awareness; and (iii) SEO will establish a sex-disaggregated baseline socioeconomic database and receive training on designing and conducting a socioeconomic survey.

26. All three outputs are gender sensitive and have relevant gender indicators. The LGAP describes the gender-related activities.²⁰ SEO will implement the LGAP for the overall project with support from DDIS consultants.

D. Summary Cost Estimates and Financing Plan

27. The project is estimated to cost \$66.00 million, including taxes and duties of \$5.48 million (Table 1). The total cost includes physical and price contingencies, and interest and other charges during implementation. Detailed cost estimates by expenditure category and by financier are included in the project administration manual (PAM).²¹

¹⁶ The disaster risk reduction financing mechanism established under the ADF 12 period (2017–2020) will finance 100% of the grant and \$5.32 million of the loan.

¹⁷ The design and monitoring framework is in Appendix 1.

¹⁸ Output: Rural Road Asset Management (accessible from the list of linked documents in Appendix 2).

¹⁹ This will be implemented through three key activities: (i) data collection and analysis, (ii) provision of safe school zones, and (iii) social enforcement. The project will provide 46 safe school zones with road signs, retractable speed humps, and road markings. It will also provide hands-on education for stakeholders.

²⁰ Labor and Gender Action Plan (accessible from the list of linked documents in Appendix 2).

²¹ Project Administration Manual (accessible from the list of linked documents in Appendix 2).

Table 1: Summary Cost Estimates
(\$ million)

Item	Amount ^a
A. Base Cost^b	
1. Rural roads improved	50.16
2. Rural road asset management improved	0.49
3. Awareness of road safety and potential social problems strengthened	0.64
Subtotal (A)	51.29
B. Contingencies^c	13.38
C. Financial Charges During Implementation^d	1.33
Total (A+B+C)	66.00

^a Includes taxes and duties of \$5.48 million. Such amount does not represent an excessive share of the project cost. ADB will finance a part of tax and duties imposed within the territory of the Borrower.

^b In end-2017 prices.

^c Physical contingencies computed at 10% of base costs. Price contingencies computed at 1.5% for 2018–2020 and 1.6% after 2021 on foreign exchange costs, and 3.2% for 2018 and 3.5% after 2019 on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^d Includes interest charges. Interest during construction for the ordinary capital resources (concessional loan) has been computed at 1% per year during the grace period.

Source: Asian Development Bank.

28. The government has requested (i) a concessional loan of \$58.5 million from ADB's ordinary capital resources and (ii) a grant not exceeding \$1.5 million from ADB's Special Funds resources (Asian Development Fund) to help finance the project.²² The loan will have a 32-year term, including a grace period of 8 years; an interest rate of 1.0% per year during the grace period and 1.5% per year thereafter; and such other terms and conditions set forth in the draft loan agreement. The ADB loan and grant will support infrastructure and livelihood improvement.

29. The summary financing plan is in Table 2. ADB will finance the expenditures in relation to works, services, equipment, incremental administration cost, and interest charge. The Government of Cambodia will finance the remaining costs, equivalent to \$6.0 million. The grant funds will be front-loaded. KEXIM is considering providing collaborative cofinancing, which will be recorded during project implementation upon its commitment.

Table 2: Summary Financing Plan

Source	Amount (\$ million)	Share of Total (%)
Asian Development Bank		
Ordinary capital resources (concessional loan)	58.50	88.64
Special Funds resources (Asian Development Fund grant)	1.50	2.27
Government	6.00	9.09
Total	66.00	100.00

Source: Asian Development Bank.

30. Climate adaptation is estimated to cost \$4.5 million. ADB will finance 100% of adaptation costs.

E. Implementation Arrangements

31. MRD will be the executing agency, and MRD and the PDRDs will be the implementing agencies for the project, which will be implemented from 2019 to 2025. Procurement (including consulting services), to be financed by ADB, will follow the ADB Procurement Policy (2017, as

²² ADB. 2017. *Country Operations Business Plan: Cambodia, 2018–2020*. Manila.

amended from time to time) and Procurement Regulations for ADB Borrowers (2017, as amended from time to time). The implementation arrangements are summarized in Table 3 and described in detail in the PAM.

Table 3: Implementation Arrangements

Aspects	Arrangements		
Implementation period	January 2019–December 2025		
Estimated completion date	31 December 2025		
Estimated loan closing date	30 June 2026		
Management			
(i) Oversight body	Ministry of Economy and Finance		
(ii) Executing agency	MRD		
(iii) Key implementing agencies	PMU under MRD and provincial departments of rural development		
(iv) Implementation unit	PMU under MRD, Phnom Penh, 57 staff		
Procurement	OCB (international advertisement)	5 contracts	\$47.5 million
	OCB (national advertisement)	1 contract	\$3.5 million
Consulting services	QCBS	593 person-months	\$3.2 million
Advance contracting	Advance contracting is requested for the civil works contract for Tboung Khmum worth \$3.5 million (CW-B2) and for the recruitment of the detailed design and implementation supervision consultant (CS-1A).		
Disbursement	The loan and grant proceeds will be disbursed following ADB's <i>Loan Disbursement Handbook</i> (2017, as amended from time to time) and detailed arrangements agreed between the government and ADB.		

ADB = Asian Development Bank; MRD = Ministry of Rural Development; OCB = open competitive bidding; PMU = project management unit; QCBS = quality- and cost-based selection.

Source: Asian Development Bank.

III. DUE DILIGENCE

A. Technical

32. The project covers 22 subproject roads, all of which were subjected to due diligence. The project is technically viable because the design considered local design standards and construction materials, and equipment compatible with local conditions. All 360 km will be paved for all-year and all-weather access—short road sections through congested market areas will be paved in concrete, while the remaining roads will have a double bituminous surface treatment. Under the rural road asset management output, MRD will erect concrete and/or steel barriers to prevent entry of oversized and overloaded trucks, which can be easily maintained using locally available technology. Safe school zones will have road markings, signs, retractable humps, and rumble strips.

B. Economic and Financial

33. Rural roads improvement under the project will serve about 680,000 beneficiaries who are mostly poor rural residents. The approach used to evaluate the project follows the standard practice of comparing the lifecycle costs of the road agency and the road users, with and without the project. The economic internal rate of return (EIRR) is 40.1% for the project and above 6.0% for the individual road sections. Sensitivity analysis shows that the EIRR is most sensitive to variations in traffic from the base year or the traffic growth rate. In the severe case of costs increasing by 50% and traffic decreasing by 50%, the EIRR remains at 14.6%, which is higher than the 6.0% threshold. The risk analysis shows that the project is highly viable economically.

34. Since the project does not generate its own revenue, the financial analysis focused on the financial sustainability of the executing agency. Government funding of routine maintenance for rural roads has increased steadily since 2015. The percentage of the maintenance requirement for the rural road network covered by government financing increased from 70.6% in 2015 to 92.7% in 2017. This maintenance requirement covers routine and periodic maintenance. Based on the trend for increased funding for the maintenance of rural roads and stronger control of overloaded vehicles through the project, the financial analysis expects the government's budget provision for the operation and maintenance of the project roads to be sustainable.²³

C. Governance

35. ADB's Anticorruption Policy (1998, as amended to date) was explained to and discussed with the government and MRD. MRD will apply the policy throughout project implementation. In coordination with the government, ADB developed a good governance framework (GGF), which is included as Annex 1 in the PAM and will be posted on the MRD and ADB websites. The specific policy requirements and supplementary measures to ensure good governance are described in the GGF. Review missions will closely monitor compliance with GGF provisions and requirements. Project procurement-related review report issued in September 2016 pointed out bid evaluation issues in some cases of procurement of RRIP and RRIP II.²⁴ Although the follow-up review indicated improvements in compliance with Cambodia's procurement requirement, the procurement risk is *substantial* and will be mitigated through appropriate staffing at PMU and close monitoring by ADB and Ministry of Economy and Finance.²⁵ The financial management assessment of MRD confirmed that the financial management risk is *moderate* and arises mainly from significant turnover of junior staff. The risk will be mitigated by recruiting sufficient staff and providing training to junior staff.

D. Poverty, Social, and Gender

36. The project is classified *effective gender mainstreaming* at entry. ADB has prepared a LGAP for the project, which includes gender actions and targets to promote women's voice and active participation in project activities. LGAP implementation for RRIP and RRIP II is on track. Results from the first two projects show that women are the main direct beneficiaries of road construction and maintenance. The benefits of improved roads, particularly for women in rural areas, include shorter travel times, greater mobility, and better access to basic facilities and services. With easier access, school attendance will improve in general but particularly among girls, and the rate of secondary education completion is expected to increase. Easier access to health centers should contribute to better health outcomes and help reduce the incidence of child and maternal mortality. Road improvements also have a positive effect on household incomes because they increase the opportunities for business, trading, and local employment.

37. SEO will continue to use the training materials and tools developed under the RRIP to promote women's access to jobs. Men and women will receive equal pay for equal work. Any negative social impacts that greater connectivity may create will be monitored and mitigated

²³ Economic and Financial Analysis (accessible from the list of linked documents in Appendix 2).

²⁴ ADB. 2016. *Project Procurement-related Review, Loan 2670-CAM: Rural Roads Improvement Project and Loan 3151-CAM(SF) and Grant 0401-CAM: Rural Roads Improvement Project II*. Manila.

²⁵ ADB. 2017. *Follow-up Review of the Implementation of Project Procurement-related Review Recommendations, Loan 2670-CAM: Rural Roads Improvement Project and Loan 3151-CAM(COL) and Grant 0401-CAM: Rural Roads Improvement Project II*. Manila.

through the HHTPP. A rural road safety community awareness program will promote the safety of road users and residents, with the active involvement and participation of women.

E. Safeguards

38. In compliance with ADB's Safeguard Policy Statement, the project's safeguard categories are as follows.

39. **Environment (category B).** An initial environmental examination (IEE) and environmental management plan (EMP) covering all project roads were prepared, endorsed by MRD and disclosed on ADB website on 18 April 2018. Works will be limited to the existing rights-of-way. Potential negative environmental impacts will be short-term and localized during peak construction activities, such as access disruption, traffic noise, and dust. Potentially sensitive environmental receptors along the road corridors include villages, schools, pagodas, and river crossings. Public consultations informed project design and will continue during implementation. The EMP details the mitigation and monitoring measures for identified impacts, institutional arrangements and the budget for implementation. Loan covenants specify environmental safeguard requirements. MRD environmental capacity will be supported through project implementation consulting services. A project grievance redress mechanism will help facilitate the resolution of complaints.

40. **Involuntary resettlement (category C).** MRD carried out poverty and social assessment due diligence based on the preliminary design. It also carried out additional resettlement due diligence with walk-over surveys to confirm that no land acquisition and resettlement impacts will arise.²⁶ In fact, the construction works will take place within the existing rights-of-way assigned to rural roads, owned by MRD on government land. MRD prepared a community participation framework with criteria for voluntary land donation, in some cases for minor realignment, which will require narrow strips of land to be made available.²⁷ Impact on structures will be avoided through road design modifications. The specific requirements for meaningful consultations with communities are discussed in the community participation framework. The government ensured that the project would not finance any road section that would require involuntary resettlement or land acquisition, and that the due diligence report will be (i) updated upon completion of the detailed engineering design to exclude resettlement or land acquisition impacts and (ii) submitted to ADB for review and concurrence.

41. **Indigenous peoples (category C).** Based on due diligence, the government ensured that the project would not finance any road section that would have negative impacts on ethnic minorities or indigenous peoples. MRD will update the due diligence report upon completion of the detailed engineering design to exclude any impact on ethnic minorities and indigenous peoples and submit the updated report to ADB for review and concurrence. The communities will benefit from the improvement of rural roads to paved standard, through less exposure to dust and better health results.

F. Summary of Risk Assessment and Risk Management Plan

42. Significant risks and mitigating measures are summarized in Table 4 and described in detail in the risk assessment and risk management plan.²⁸

²⁶ Due Diligence Report on Social Safeguards (accessible from the list of linked documents in Appendix 2).

²⁷ Community Participation Framework (accessible from the list of linked documents in Appendix 2).

²⁸ Risk Assessment and Risk Management Plan (accessible from the list of linked documents in Appendix 2).

Table 4: Summary of Risks and Mitigating Measures

Risk	Mitigating Measures
Procurement risk related to bid evaluation	The PMU consists of experienced staff who are aware of the lessons learned from procurement for the previous projects. ADB will carry out prior review of all bid submissions. Ministry of Economy and Finance will have procurement oversight.

ADB = Asian Development Bank; PMU = project management unit
Source: Asian Development Bank.

IV. ASSURANCES

43. The government and MRD have assured ADB that implementation of the project shall conform to all applicable ADB policies, including those concerning anticorruption measures, safeguards, gender, procurement, consulting services, and disbursement as described in detail in the PAM and loan documents. The government and MRD have agreed with ADB on certain covenants for the project, which are set forth in the draft loan agreement.

V. RECOMMENDATION

44. I am satisfied that the proposed loan and grant would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve

- (i) the loan of \$58,500,000 to the Kingdom of Cambodia for the Rural Roads Improvement Project III, from ADB’s ordinary capital resources, in concessional terms, with an interest charge at the rate of 1.0% per year during the grace period and 1.5% per year thereafter; for a term of 32 years, including a grace period of 8 years; and such other terms and conditions as are substantially in accordance with those set forth in the draft loan agreement presented to the Board; and
- (ii) the grant not exceeding \$1,500,000 to the Kingdom of Cambodia from ADB’s Special Funds resources (Asian Development Fund) for the Rural Roads Improvement Project III, on terms and conditions that are substantially in accordance with those set forth in the draft grant agreement presented to the Board.

Takehiko Nakao
President

6 June 2018

DESIGN AND MONITORING FRAMEWORK

Impacts the Project is Aligned with			
Needs of the population served and economic development promoted (Rectangular Strategy for Growth, Employment, Equity and Efficiency: Phase III) ^a			
Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
<p>Outcome</p> <p>All-weather access in rural areas of the five project provinces improved</p>	<p>By 2026</p> <p>a. Average travel time per trip on project roads decreased by 10 minutes (2017 baseline: 40 minutes)</p> <p>b. Share of people who have all-year access increased by 4.7% (2017 baseline: 1.3%)</p> <p>c. Average number of days per year that the project roads are accessible increased to 365 days (2017 baseline: 280 days)</p>	<p>a. MRD field traffic surveys</p> <p>b–c. MRD annual reports</p>	<p>Project roads suffer serious damage from severe and frequent disasters triggered by natural hazards.</p>
<p>Outputs</p> <p>1. Rural roads improved</p> <p>2. Rural road asset management improved</p>	<p>1a. About 360 km of rural roads rehabilitated by 2025 (2017 baseline: 0 km)</p> <p>1b. Average roughness of project roads decreased to 2–3 by 2025 (2017 baseline: 6–14)</p> <p>1c. Women hired by contractors for at least 25% of the required unskilled labor days by 2025 (2017 baseline: 0%)^b</p> <p>1d. LGAP implementation, monitoring, and reporting done by SEO staff with minimal support from project gender consultants by 2025 (2017 baseline: gender consultants prepare the LGAP progress reports)</p> <p>1e. SEO staff increased by four, 50% of them women, by 2019 (2017 baseline: seven staff, three are women)</p> <p>2a. Annual O&M budget for project roads increased to</p>	<p>1a–e. MRD project progress reports, including LGAP progress reports</p> <p>2a–c. MRD project progress reports</p>	<p>Poor weather conditions delay construction.</p>

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
<p>3. Awareness of road safety and potential social problems strengthened</p>	<p>\$400 per km by 2025 (2017 baseline: \$350 per km)</p> <p>2b. 2,600 km of project roads maintained by PDRDs based on annual budget planning by 2025 (2017 baseline: 2,000 km)</p> <p>2c. 10% of labor hired by contractors for unskilled O&M works are women (2017 baseline: 2%)</p> <p>2d. 52 overload control gates equipped by 2025 (2017 baseline: 0)</p> <p>3a. 40% of community residents, 50% of whom are women, report on improved knowledge and understanding of road safety measures by 2025 (2017 baseline: 0%)</p> <p>3b. 40% of community residents, of whom 50% are women, and all contractors' personnel gained awareness and understanding of HHTPP actions by 2025 (2017 baseline: 0)</p> <p>3c. Sex-disaggregated, baseline socioeconomic database established, and SEO staff trained on designing and conducting a gender-sensitive socioeconomic survey by 2020 (2017 baseline: not established)</p>	<p>3a–c. MRD project progress reports</p>	
<p>Key Activities with Milestones</p>			
<p>1. Rural roads improved</p> <p>1.1 MRD selects detailed design and construction supervision consultants, by December 2018.</p> <p>1.2 MRD prepares tender documents and selects contractors, by December 2018.</p> <p>1.3 MRD completes 360 km of road rehabilitation, with 25% women's involvement in unskilled labor, by December 2025</p> <p>1.4 MRD implements, regularly monitors, and submits quarterly LGAP progress reports that were prepared by SEO with gradually decreasing support from project gender consultants, by December 2025.</p>			

<p>Key Activities with Milestones</p> <p>2. Rural road asset management improved</p> <p>2.1 MRD prepares sufficient budget for road maintenance, by December 2025.</p> <p>2.2 MRD delegates some of the maintenance of project roads to PDRDs, with women involved in 10% of O&M, by December 2025.</p> <p>2.3 MRD installs overload control gates, by December 2025.</p> <p>3. Awareness of road safety and potential social problems strengthened</p> <p>3.1 SEO staff receive training on designing and conducting a gender-sensitive socioeconomic survey, including questionnaire's design, data collection, analysis, and report preparation, by December 2020</p> <p>3.2 MRD completes the baseline socioeconomic survey with sex-disaggregated data, by December 2020.</p> <p>3.3 MRD increases the number of SEO staff, including female staff, by December 2020.</p> <p>3.4 MRD implements the road safety program, by December 2025.</p> <p>3.5 MRD implements the HHTPP, by December 2025.</p>
<p>Project Management Activities</p> <p>Project management and construction supervision consultants recruited</p> <p>Procurement packages awarded</p>
<p>Inputs</p> <p>ADB: \$58.50 million (concessional loan)</p> <p>ADB: \$1.50 million (grant)</p> <p>Government: \$6.00 million</p>
<p>Assumptions for Partner Financing</p> <p>Not applicable</p>

ADB = Asian Development Bank; HHTPP = HIV/AIDS and human trafficking awareness and prevention program; km = kilometers; LGAP = labor gender action plan; MRD = Ministry of Rural Development; O&M = operation and maintenance; PDRD = provincial department of rural development; SEO = social and environment office.

^a Government of Cambodia. 2013. *Rectangular Strategy for Growth, Employment, Equity and Efficiency: Phase III*. Phnom Penh.

^b A conservative target (although higher than for the Rural Roads Improvement Project II) has been set for women's involvement in unskilled labor for civil works to take into account some limiting factors, such as (i) location of some road sections close to special economic zones, which offer better and longer-term employment opportunities for women in garment factories; (ii) other income-generating opportunities; (iii) migration trends; (iv) persistent social norms about nontraditional jobs for women; and (v) relatively limited needs for local unskilled labor in road rehabilitation.

Source: Asian Development Bank.

LIST OF LINKED DOCUMENTS

<http://www.adb.org/Documents/RRPs/?id=42334-018-3>

1. Loan Agreement
2. Grant Agreement
3. Sector Assessment (Summary): Transport
4. Project Administration Manual
5. Contribution to the ADB Results Framework
6. Development Coordination
7. Economic and Financial Analysis
8. Country Economic Indicators
9. Summary Poverty Reduction and Social Strategy
10. Risk Assessment and Risk Management Plan
11. Project Climate and Disaster Risk Assessment
12. Labor and Gender Action Plan
13. Initial Environmental Examination

Supplementary Documents

14. Community Participation Framework
15. Due Diligence Report on Social Safeguards
16. Lessons Learned
17. Output: Rural Road Improvements–Road Selection Criteria
18. Output: Rural Road Asset Management
19. Output: Road Safety and Community Awareness Program