

Project Administration Manual

Project Number: 42334-014
July 2014

Kingdom of Cambodia: Rural Roads Improvement Project II

TABLE OF CONTENTS

	Page
ABBREVIATIONS	
I. PROJECT DESCRIPTION	1
II. IMPLEMENTATION PLANS	3
A. Project Readiness Activities	3
B. Overall Project Implementation Plan	4
III. PROJECT MANAGEMENT ARRANGEMENTS	7
A. Project Implementation Organizations – Roles and Responsibilities	7
B. Key Persons Involved in Implementation	9
C. Project Organization Structure	9
IV. COSTS AND FINANCING	11
A. Detailed Cost Estimates by Expenditure Category	13
B. Allocation and Withdrawal of Loan and Grant Proceeds	14
C. Detailed Cost Estimates by Financier	18
D. Detailed Cost Estimates by Outputs	21
E. Detailed Cost Estimates by Year	22
F. Contract and Disbursement S-curve	23
G. Fund Flow Diagram	24
V. FINANCIAL MANAGEMENT	25
A. Financial Management Assessment	25
B. Disbursement	25
C. Accounting	26
D. Auditing	27
VI. PROCUREMENT AND CONSULTING SERVICES	28
A. Advance Contracting and Retroactive Financing	28
B. Procurement of Goods, Works and Consulting Services	28
C. Procurement Plan	29
D. Consultant's Terms of Reference	34
VII. SAFEGUARDS	66
VIII. GENDER, LABOR, AND SOCIAL DIMENSIONS	68
IX. PERFORMANCE MONITORING, EVALUATION, REPORTING AND COMMUNICATION	71
A. Project Design and Monitoring Framework	71
B. Monitoring	74
C. Evaluation	74
D. Reporting	74
E. Stakeholder Communication Strategy	75
X. ANTICORRUPTION POLICY	79
XI. ACCOUNTABILITY MECHANISM	80
XII. RECORD OF PAM CHANGES	81

Project Administration Manual Purpose and Process

1. The project administration manual (PAM) describes the essential administrative and management requirements to implement the project on time, within budget, and in accordance with Government and Asian Development Bank (ADB) policies and procedures. The PAM should include references to all available templates and instructions either through linkages to relevant URLs or directly incorporated in the PAM.
2. The Ministry of Rural Development is the wholly responsible for the implementation of ADB financed projects, as agreed jointly between the borrower and ADB, and in accordance with Government and ADB's policies and procedures. ADB staff is responsible to support implementation including compliance by MRD of their obligations and responsibilities for project implementation in accordance with ADB's policies and procedures.
3. At Loan Negotiations, the borrower and ADB shall agree to the PAM and ensure consistency with the Loan agreement. Such agreement shall be reflected in the minutes of the Loan Negotiations. In the event of any discrepancy or contradiction between the PAM and the Loan Agreement, the provisions of the Loan Agreement shall prevail.
4. After ADB Board approval of the project's report and recommendations of the President (RRP), changes in implementation arrangements are subject to agreement and approval pursuant to relevant Government and ADB administrative procedures (including the Project Administration Instructions) and upon such approval, they will be subsequently incorporated in the PAM.

Abbreviations

ADB	–	Asian Development Bank
BEC	–	Board of Engineers of Cambodia
DBST	–	double bituminous surface treatment
DDIS	–	detailed design and implementation supervision
DCDM	–	Department of Cooperation and Debt Management
DMF	–	design and monitoring framework
EARF	–	environmental assessment and review framework
EIA	–	environmental impact assessment
EMP	–	environmental management plan
FIDIC	–	Federation Internationale des Ingenieurs-Conseil
GAP	–	gender action plan
GOA	–	Government of Australia
HHTPP	–	HIV/AIDS and human trafficking awareness and prevention program
ICB	–	international competitive bidding
IEE	–	initial environmental examination
KEXIM	–	Export-Import Bank of Korea
km	–	kilometer
MEF	–	Ministry of Economy and Finance
MRD	–	Ministry of Rural Development
NCB	–	national competitive bidding
NGOs	–	nongovernment organizations
NDF	–	Nordic Development Fund
PAM	–	project administration manual
PDRD	–	provincial department of rural development
PMU	–	project management unit
PPMS	–	project performance monitoring system
PPCO	–	provincial project coordination office
PPCR	–	Pilot Program for Climate Resilience
QBS	–	quality based selection
QCBS	–	quality- and cost-based selection
RRP	–	report and recommendation of the President
SEO	–	Social and Environment Office
SOE	–	statement of expenditure
SPS	–	Safeguard Policy Statement
STI	–	sexually-transmitted infections
TOR	–	terms of reference
UNIAP	–	United Nations Interagency Project on Trafficking
UXO	–	unexploded ordnance

I. PROJECT DESCRIPTION

1. The project will rehabilitate about 729 kilometers (km) of rural roads in nine provinces (Banteay Meanchey, Battambang, Kampong Cham, Kampong Chhnang, Kampong Speu, Kampong Thom, Pursat, Siem Reap, and Takeo) to paved condition. The rehabilitated roads will provide poor rural provinces with a safer, cost-effective rural road network with all-year access to markets and other social services. The project will also support a sustainable road maintenance regime in the Ministry of Rural Development (MRD), a community-based road safety program, HIV/AIDS and human trafficking awareness and prevention program (HHTPP), and climate change adaptation measures. The feasibility study of the proposed project was completed through the Rural Roads Improvement Project¹, and a project preparatory technical assistance.²

2. **Impact and Outcome.** The impact of the project is improved access to markets, jobs, and social services in nine project provinces. This impact is consistent with the sector results framework of the Cambodia Transport Sector Assessment, Strategy, and Roadmap.³ The outcome of the project is a safe, climate-resilient, and cost effective rural road network that provides all-year access in the agricultural areas of the nine project provinces. These nine provinces are populated by a large proportion of Cambodia's rural poor.

3. **Outputs.** There are five key outputs in this project: (i) rural road improvements; (ii) rural road asset management; (iii) rural road safety and community awareness program; (iv) project management support; and (v) connectivity improvements for Mekong River Islands.

4. **Rural Roads Improvements.** The first output is improvement of about 729 km of rural roads to climate resilient paved condition. Out of the twelve civil works contracts under this output, one will be a pilot performance-based contract over a 5.5-year duration.⁴ This output also includes green planting and design and implementation supervision consulting services.

5. **Rural Road Asset Management.** The second output of the project will improve rural road asset management in a sustainable manner through a strong capacity-building program. This program will continue the interventions initiated in Loan 2670,⁵ including the overloading prevention program for rural roads to efficiently manage the road assets.⁶ This output continues its focus on improvement the overall construction industry for rural road maintenance as initiated during Loan 2670, including capacity development of provincial departments of rural development (PDRD) who implement road maintenance works and capacity building training of local maintenance contractors. Further, the output will also introduce capacity building approaches for gradual reduction of force account by PDRDs through lessons learned from the ongoing similar intervention in the Ministry of Public Works and Transport.⁷ The output will provide hands on capacity building PDRD staff in the implementation of performance-based

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

² Four outputs were designed under Loan 2670-CAM (footnote 1). For the remaining output, ADB provided a project preparatory technical assistance: ADB. 2013. *Proposed Rural Roads Improvement Project II: Technical Assistance to the Kingdom of Cambodia for Preparing the Mekong River Island Connectivity Output*. Manila (TA 8322-CAM).

³ ADB. 2011. *Cambodia Transport Sector Assessment, Strategy, and Roadmap*. Manila.

⁴ There are 12 civil works contracts planned under the project. One contract under road improvement in Kampong Cham Province is planned under the performance-based contract scheme.

⁵ Footnote 1.

⁶ Rural Road Asset Management Output (accessible from the list of linked documents in Appendix 2 of the RRP).

⁷ ADB. 2009. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Kingdom of Cambodia for the Road Asset Management Project*. Manila (Loan 2406-CAM).

contracts for the maintenance of RRIP rehabilitated roads, through NCB contracts for a period of 3 years.

6. **Rural Road Safety and Community Awareness Program.** The third output will increase the awareness and application of road safety and safeguards by (i) further expanding the pilot community-based road safety awareness program initiated in Loan 2670, including education program for schools, drivers, road users, and the community that also incorporates road safety provisions in road design; (ii) further strengthening the capacity of the social and environment office in MRD established in 2012; (iii) implementing an HHTPP and (iv) conducting a sex disaggregated baseline socioeconomic survey of project beneficiaries.⁸

7. **Project Management Support.** The fourth output is to strengthen the capacity of MRD to provide efficient project management support for project implementation. The project will also promote substantial positive employment and gender impacts in the rural communities under all outputs. The Gender Action Plan (GAP) will incorporate all the labor and gender mainstreaming in all 5 project outputs. Through lessons learned from ongoing Loan 2670, the project will strengthen MRD's focus more on all outputs equally as the tendency has been somewhat inclined towards road improvement activities. This will be achieved through increased MRD staff resources in social, gender, and safeguards areas.

8. **Connectivity Improvements for Mekong River Islands.** The fifth output has two sub-outputs: (i) to rehabilitate roads and jetties within a 5-island cluster in the Mekong River (Koh Mitt, Koh Pir, Koh Samrong, Koh Soutin, and Koh Thmei) in order to improve climate resilient access and connectivity. The civil works contract for rehabilitating roads and jetties also includes provisions for small-scale levees and water management interventions to minimize flooding; and (ii) to develop a climate change adaptation framework and its associated investments of minor activities of multisector nature (agriculture, renewable energy, tourism, water supply, etc.) that will be designed and implemented during the proposed project, include a community-based emergency management system. Although this output will be piloted for the Mekong River Island cluster, it may be replicated in other similar areas with remote access.⁹

Table I-1: List of Proposed Rural Roads

Province	Road ID	Road Name	District	Length (km)
Banteay Meanchey	BC1	Thmaor Pourp-Pheas Thbaung	Thmor Pourk/Svay Chek	27.2
	BC2	Sala Krav-Pheas Thbaung	Preah Netrpreah/Svay Chek	17.4
	BC3	Chub Vary-Ponley	Preah Netrpreah/Phnom Srok	27.0
	BC4	Prek Chik-Thnal Bot	Mongkol Borei	9.1
	BC6	Or Nhor-Ta Sol	Mongkol Borei	10.0
Subtotal (5 roads)				90.7
Battambang	BB1	Ou Ta Ki-Ta Kream	Thmor Kol/Banan	19.6
	BB2	Chroy Sdao-Nikom	Thmor Kol	6.0
	BB3	Ta Meun-Taa Poug	Thmor Kol	8.7
	BB4	Sdao-O Khum	Rattana Mondol	29.2
	BB5	Sdok Pravoeuk-Svay Yor	Rokkha Kiri	14.2
	BB7	Kampong Preang-Svay Cheat	Sangke	11.6
	BB10	Preak Chik-Prey Tralach	Rokkha Kiri	5.5
Subtotal (7 roads)				94.8

⁸ Rural Road Safety and Community Awareness Program Output (accessible from the list of linked documents in Appendix 2 of the RRP).

⁹ Connectivity Improvements for Mekong River Islands Output (accessible from the list of linked documents in Appendix 2 of the RRP).

Province	Road ID	Road Name	District	Length (km)
Kampong Cham	KC1	Veal Toch-Kabas	Memot/Dambe	43.0
	KC3	Khlong Tboung-Beung Chroung	Memot	13.0
	KC4	Phlak Samraong-Teuk Tum	Memot	24.8
	KC5	Memot-Don Roath	Memot	9.8
	KC6	Mream Teak-Trapeang Rusey	Tboung Khmum	25.2
	KC7	Phsa Torsu-Chroy Sosit	O Reang Ov/Kaoh Soutin	17.2
	Subtotal (6 roads)			
Kampong Chhnang	KCH1	Chheu Neak-Preal	Rolea Bier	4.1
	KCH2	Thmar Reab-Veal Sbov	Rolea Bier/Teuk Phos	22.9
	KCH12	Thnal-Alaing Ke	Teuk Phos/Samaki Meanchey	11.5
Subtotal (3 roads)				38.5
Kampong Speu	KSP1	Kreang Kcheay-Kandal	Phnom Sruoch	18.6
	KSP2	Talat-Kandal	Phnom Sruoch	23.1
	KSP5	Phsa Slab Leng-Sala	Basedth	33.5
Subtotal (3 roads)				75.2
Kampong Thom	KT1	Thnort-Au Angkor	Stoung/Prasat Balangk	40.0
Subtotal (1 road)				40.0
Pursat	PS2	O Tapoang-Rom Lech	Bakan	8.6
	PS3	Trapeang Chorng-Beung Botkandal	Bakan	16.1
	PS4	Trapeang Chorng-Khna Toteung	Bakan	5.1
	PS5	Talo-Prahal	Bakan	13.1
	PS6	Trapeang Chorng-Snam Preah	Bakan	14.3
	PS7	Beung Khnar-Phteas Rong	Bakan/Phnom Kravanh	21.9
	PS9	Phteas Prei-Sre Sdok	Pursat Town/Kandieng	18.0
	PS10	Kandieng-Sre Sdok	Kandieng	12.0
	PS11	Bak Chinchean-Phteas Rong	Phnom Kravanh	8.2
	PS13	O Sandan-Kampong Po	Krakor	8.2
Subtotal (10 roads)				125.5
Siem Reap	SR4	Khchas-Chan Sar	Sout Nikom	17.0
	SR7	Angkor Chum-Puok	Puok	29.5
Subtotal (2 roads)				46.5
Takeo	TK1	Tram Kok-Mungkol Meanlech	Tram Kok	16.5
	TK2	Pich Sa-Sobin	Kirivong	18.3
Subtotal (2 roads)				34.8
Mekong River Islands			Kampong Siem/Kao Soutin/ Krouch Chhmar (2)	50.0
Total Project Roads				729.0

II. IMPLEMENTATION PLANS

A. Project Readiness Activities

Indicative Activities	2014								Who responsible
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	
Advance contracting actions	√								ADB and MRD/MEF
Finalize project implementation arrangements	√								MRD
ADB Board approval					√				ADB

Indicative Activities	2014								Who responsible	
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov		
Loan signing						√				ADB and RGC
Government legal opinion provided								√		RGC
Government budget inclusion								√		MEF/MRD
Loan effectiveness									√	ADB and RGC

ADB = Asian Development Bank; MEF = Ministry of Economy and Finance; MRD = Ministry of Rural Development; RGC = Royal Government of Cambodia.

B. Overall Project Implementation Plan

9. The Project is expected to be implemented over a period of 6 years starting 2014 up to 2020. Overall project implementation plan is shown below. The overall project implementation plan will be updated annually by MRD and ADB based on actual physical progress.

Project Implementation Schedule

Activity	2014				2015				2016				2017				2018				2019				2020			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
ADB Loan Processing																												
Advance Action: Recruitment of DDIS consultants services and procurement of EQ1 to EQ4		■	■																									
CS1A: Detailed Design and Implementation Supervision for ADB Financing etc.				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Project Management	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
CW 1: Improve 6 roads, 133.0 km (Kampong Cham)							■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
CW 2: Improve 2 roads, 34.8 km (Takeo)							■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
CW 3: Improve 3 roads, 75.2 km (Kampong Speu)								■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
CW 4: Improve 3 roads, 38.5 km (Kampong Chhnang)								■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
CW 5: Improve 22 roads, 311.0 km (Pursat, Banteay Meanchey, and Battambang)							■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
CW 6: Improve 2 roads, 46.5 km (Siem Reap)								■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
CW 7: Improve 1 road, 40.0 km (Kampong Thom)									■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
CW 9: Green Planting in Kampong Cham, Takeo, and Kampong Speu														■	■	■	■	■	■	■	■	■	■	■	■	■	■	
CW 10: Green Planting in Kampong Chhnang, Pursat, and Battambang														■	■	■	■	■	■	■	■	■	■	■	■	■	■	
CW11: Green Planting in Banteay Meanchey, Siem Reap, and Kampong Thom														■	■	■	■	■	■	■	■	■	■	■	■	■	■	
CS2: Rural Road Asset Management							■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	

III. PROJECT MANAGEMENT ARRANGEMENTS

A. Project Implementation Organizations – Roles and Responsibilities

Project Implementation Organizations	Management Roles and Responsibilities
<ul style="list-style-type: none"> • Ministry of Rural Development (Executing Agency) 	<ul style="list-style-type: none"> ➤ reinforce existing PMU with the required staffing; ➤ timely provision of agreed counterpart funds for project activities; ➤ complying with all loan covenants (social and environmental safeguards, economic, and others); and ➤ ensuring project's sustainability during post implementation stage and reporting to ADB on assessed development impacts.
<ul style="list-style-type: none"> • Project Management Unit (Implementing Agency) 	<ul style="list-style-type: none"> ➤ overall project implementation, management, and coordination; ➤ initiate and coordinate effective communication between all stakeholders of the Project; ➤ recruiting consultants; ➤ finalizing surveys, detailed design, bidding documents, and contract awards; ➤ monitoring and evaluation of project activities and outputs, including periodic review, preparation of review reports reflecting issues and time-bound actions taken (or to be taken); ➤ involving beneficiaries and civil society representatives in all stages of project design and implementation; ➤ public disclosure of project outputs; ➤ quality assurance of works, and services of consultants and counterpart staff; ➤ establishing strong financial management system and submitting timely withdrawal applications to ADB, conducting timely financial audits as per agreed timeframe and taking recommended actions; and ➤ preparing regular periodic progress reports, and project completion report and their timely submission to ADB ➤ designing future project
<ul style="list-style-type: none"> • Provincial Project Coordination Office 	<ul style="list-style-type: none"> ➤ execute and/or monitor civil works in the respective provinces ➤ provide effective coordination between all the stakeholders of the project at the provincial level including: <ul style="list-style-type: none"> • PMU; • DDIS consultant team, as well as other consultants of the project; • Local authorities and project beneficiaries

Project Implementation Organizations	Management Roles and Responsibilities
<ul style="list-style-type: none"> • Ministry of Economy and Finance 	<p style="text-align: center;">especially women groups;</p> <ul style="list-style-type: none"> ➤ coordinate with the SEO and local authority and villagers to carry out their task especially on social and gender, as well as resettlement issues; ➤ assist project technical officers to monitor and evaluate the progress and performance of consultants and contractors; and ➤ receive instructions from and reports to the project manager ➤ signing the loan agreements for the financing required for the Project; ➤ monitoring of loan and project implementation; and providing respective coordination and facilitation; ➤ allocating and releasing counterpart funds and oversight body for procurement, disbursements and resettlement matters; ➤ endorsing to ADB the authorized staff with approved signatures for withdrawal applications processing; and ➤ processing and submitting to ADB any request; when required, for reallocating the loan proceeds
<ul style="list-style-type: none"> • ADB 	<ul style="list-style-type: none"> ➤ assist MRD and its PMU in providing timely guidance at each stage of the project for smooth implementation in accordance with the agreed implementation arrangements; ➤ review all the documents that require ADB approval; ➤ conduct periodic loan review missions, a mid-term review, and a project completion mission; ➤ ensure compliance of all loan covenants ➤ review and monitoring of project implementation activities and compliance with loan covenants (sector reforms, social and environmental safeguards, economic, and others); ➤ timely process withdrawal applications and release eligible funds; ➤ ensure the compliance of financial audits recommendations; ➤ regularly update the project performance review reports with the assistance of MRD; and ➤ regularly post on ADB web the updated project information documents for public disclosure, and also the safeguards documents as per disclosure provision of the ADB safeguards policy statement.

ADB = Asian Development Bank; DDIS = detailed design and implementation supervision; PIU = project implementation unit; PMU = project management unit; MRD = Ministry of Rural Development, SEO = social environmental office.

B. Key Persons Involved in Implementation

Executing Agency

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C. Project Organization Structure

10. The Project Management Unit (PMU) has been established and operating since 2010 for the implementation of Loan 2670. The Project will be implemented by PMU with reinforced technical staff, additional unit, and additional staff in various units. The additional unit, the Monitoring and Evaluation Unit will have 2 staff. An additional assistant project manager will also be appointed. PMU will continue to implement, manage, and coordinate project activities for RRIP II. Additional staffing requirements will be identified and recruited as appropriate. The organization chart of the current PMU is shown below, with the aforementioned proposed additions:

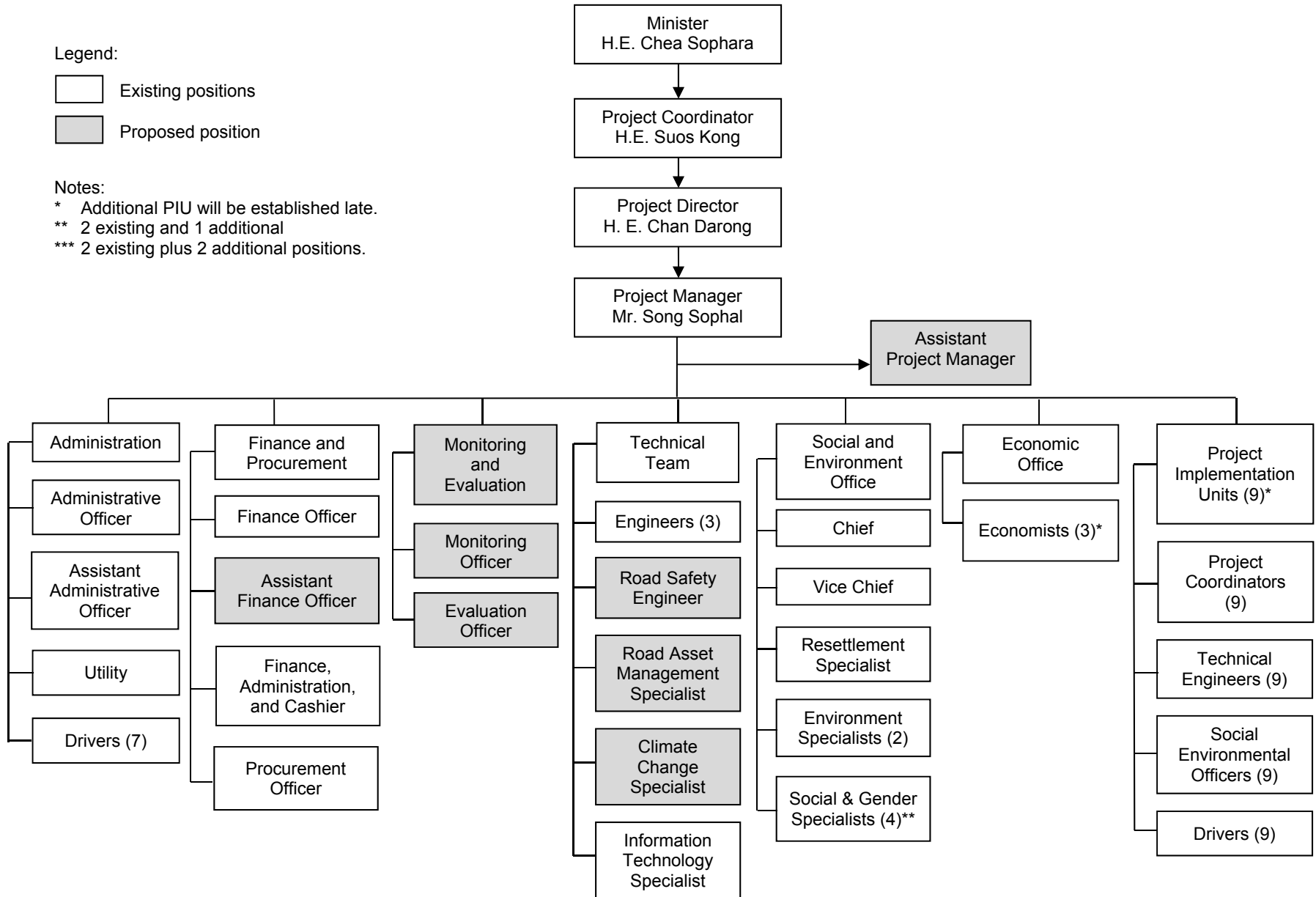
PROJECT MANAGEMENT UNIT

Legend:

- Existing positions
- Proposed position

Notes:

- * Additional PIU will be established late.
- ** 2 existing and 1 additional
- *** 2 existing plus 2 additional positions.



IV. COSTS AND FINANCING

11. The financing plan is in Table 2. The Government of Australia will provide grant cofinancing of AUD7,600,000. ADB will administer the grant, equivalent to \$6.67 million at the exchange rate prevailing at the time of fact-finding. The Government of Korea, through the Export-Import Bank of Korea will provide a tied-parallel loan of \$41 million equivalent for rural road improvements. This loan will finance civil works and design and implementation supervision consulting services. The grant will jointly finance rural road improvements, rural road asset management, rural road safety, and community awareness program, based on different ratios for each cost category and/or subcategory. The Nordic Development Fund (NDF) will provide grant cofinancing of EUR4,000,000. NDF will finance, based on different ratios, the civil works for green planting and climate change adaptation and consulting services for climate change adaptation. ADB will also administer the grant, equivalent to \$5.4 million at the exchange rate prevailing at the time of fact-finding. Both grants will be denominated in US dollars pursuant to ADB's standard accounting practices.¹⁰ NDF and ADB will jointly finance Connectivity Improvements for Mekong River Islands, with green planting under rural roads improvements. The Government of Cambodia will finance taxes and duties in the amount of \$8.66 million (through exemptions) for all outputs, and supplementary allowances in the amount of \$2.49 million (in kind) under project management support.

12. A summary of project investment plan is in Table IV-1 and the tentative financing plan is in Table IV-2.

**Table IV-1: Project Investment Plan
(\$ million)**

Item	Amount ^a
A. Base Cost ^b	
1. Rural Road Improvements	75.99
2. Rural Road Asset Management	1.10
3. Rural Road Safety and Community Awareness Program	2.26
4. Project Management Support	2.11
5. Connectivity Improvements for Mekong River Islands	13.71
Subtotal (A)	95.17
B. Contingencies ^c	
1. Physical	9.52
2. Price	10.61
C. Financing Charges During Implementation ^d	2.93
Total (A+B+C)	118.23

^a Includes taxes and duties of \$8.66 million (through exemption) and \$2.49 million Government contribution for the project management cost, in kind, excluding \$0.71 million for allowances.

^b In March 2014 prices.

^c Physical contingencies computed at 10% of base costs. Price contingencies computed for foreign exchange costs and local currency costs based on the annual rates in the table below; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

Annual Rate	2014	2015	2016	2017	2018	2019	2020
Foreign Currency	1.9%	2.2%	1.9%	1.8%	1.8%	1.8%	1.8%
Local Currency	3.0%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%

^d Includes interest charges and service charges. Interest for ADB loan during construction has been computed at 1.0% per annum during the grace period. Service charge for the Government of Australia grant is \$0.34 million, and for Nordic Development Fund (NDF) grant is \$0.25 million.

Source: Asian Development Bank.

¹⁰ This amount may be adjusted for currency fluctuations to match the grant amount received by ADB.

Table IV-2: Financing Plan

Source	Amount (\$ million)	Share of Total (%)
Asian Development Bank: Asian Development Fund (loan)	54.00	45.67
Cofinanciers ^a		
Government of Australia (grant) ^b	6.67	5.64
Export-Import Bank of Korea (loan)	41.00	34.68
Nordic Development Fund (grant) ^b	5.40	4.57
Government	11.16	9.44
Total	118.23	100.00

^a The cofinancing is calculated at the exchange rate prevailing at 31 January 2014.

^b This will be administered by ADB. This amount also includes ADB's administration fee, audit costs, bank charges, and a provision for foreign exchange fluctuations (if any), to the extent that these items are not covered by the interest and investment income earned on this grant, or any additional grant.

Source: Asian Development Bank.

A. Detailed Cost Estimates by Expenditure Category

ITEMS	Currency (\$ million)					
	Local	Foreign	Total	% Local	% Foreign	Base Costs
A. Base Costs						
1A. Rural Roads Improvement – Civil Works	37.35	29.72	67.07	55.69	44.31	70.47
1B. Consulting Services for Design and Supervision	3.57	5.35	8.92	40.00	60.00	9.37
2. Rural Road Asset Management	0.44	0.66	1.10	40.00	60.00	1.16
3. Rural Road Safety and Community Awareness Program	1.69	0.57	2.26	74.76	25.24	2.37
4. Project Management Support	1.90	0.21	2.11	90.00	10.00	2.22
5. Connectivity Improvements for Mekong River Islands	7.55	6.17	13.71	55.02	44.98	14.41
Subtotal (A)	52.50	42.68	95.17	55.15	44.85	100.00
B. Contingencies						
1. Physical	5.25	4.27	9.53	55.15	44.85	10.01
2. Price	7.35	3.27	10.62	69.20	30.80	11.16
Subtotal (B)	12.60	7.55	20.15	62.56	37.44	21.17
C. Financial Charge During Implementation						
1. Interest During Implementation	1.60	1.30	2.91	55.15	44.85	3.05
Subtotal (C)	1.60	1.30	2.91	55.15	44.85	3.05
Total Project Cost (A+B+C)	66.70	51.53	118.23	56.42	43.58	124.23

B. Allocation and Withdrawal of Loan and Grant Proceeds**Allocation and Withdrawal of Loan Proceeds**

CATEGORY				ADB FINANCING
Number	Item	Amount Allocated (SDR)		Percentage and Basis for Withdrawal from the Loan Account
		Category	Subcategory	
1	Works	28,419,000		
1A	CW1 Improve 6 roads, 133.0 km (Kampong Cham)		7,313,000	90% of total expenditure claimed*
1B	CW2 Improve 2 roads, 34.8 km (Takeo)		1,921,000	90% of total expenditure claimed*
1C	CW3 Improve 3 roads, 75.2 km (Kampong Speu)		3,750,000	90% of total expenditure claimed*
1D	CW4 Improve 3 roads, 38.5 km (Kampong Chhnang)		2,503,000	90% of total expenditure claimed*
1E	CW6 Improve 2 roads, 46.5 km (Siem Reap)		2,890,000	90% of total expenditure claimed*
1F	CW7 Improve 1 road, 40.0 km (Kampong Thom)		2,140,000	90% of total expenditure claimed*
1G	CW8 Improve Mekong River Island roads, 50 km, and 11 jetties		7,430,000	100% of total expenditure claimed*
1H	CW9 Green Planting in Kampong Cham, Takeo, and Kampong Speu		168,000	50% of total expenditure claimed*
1I	CW10 Green Planting in Kampong Chhnang, Pursat, and Battambang		181,000	50% of total expenditure claimed*
1J	CW11 Green Planting in Banteay Meanchey, Siem Reap, and Kampong Thom		123,000	50% of total expenditure claimed*
2	EQ Equipment (vehicles, computer, furniture)**	155,000		100% of total expenditure claimed*
3	Consulting Services	3,958,000		
3A	CS1A: Detailed design and implementation supervision		3,214,000	81% of total expenditure claimed*

CATEGORY				ADB FINANCING
Number	Item	Amount Allocated (SDR)		Percentage and Basis for Withdrawal from the Loan Account
		Category	Subcategory	
3B	CS2: Road Asset Management Program		233,000	30% of total expenditure claimed*
3C	CS3: Sustainable Community-based Road Safety Program		433,000	44% of total expenditure claimed*
3D	CS4: HIV/AIDS & Human Trafficking Prevention and Awareness Program		78,000	12% of total expenditure claimed*
4	Incremental costs (Project Management)	912,000		100% of total expenditure claimed*
5	Interest Charge	1,474,000		100% of total amount due
	Total	34,918,000		

ADB = Asian Development Bank, CS = consulting services; CW = civil works; EQ = equipment; km = kilometer.

* Exclusive of taxes and duties imposed within the territory of the Borrower.

Allocation and Withdrawal of Grant Proceeds

CATEGORY				GOVERNMENT OF AUSTRALIA FINANCING
Number	Item	Amount Allocated (\$)		Percentage and Basis for Withdrawal from the Grant Account
		Category	Subcategory	
1	Works	3,430,000		
1A	CW1 Improve 6 roads, 133.0 km (Kampong Cham)		1,220,000	10% of total expenditure claimed*
1B	CW2 Improve 2 roads, 34.8 km (Takeo)		320,000	10% of total expenditure claimed*
1C	CW3 Improve 3 roads, 75.2 km (Kampong Speu)		630,000	10% of total expenditure claimed*
1D	CW4 Improve 3 roads, 38.5 km (Kampong Chhnang)		420,000	10% of total expenditure claimed*
1E	CW6 Improve 2 roads, 46.5 km (Siem Reap)		480,000	10% of total expenditure claimed*
1F	CW7 Improve 1 road, 40.0 km (Kampong Thom)		360,000	10% of total expenditure claimed*
3	Consulting	2,900,000		
3A	CS1A: Detailed design and implementation supervision		350,000	6% of total expenditure claimed*
3B	CS2: Road Asset Management Program		850,000	70% of total expenditure claimed*
3C	CS3: Sustainable Community-based Road Safety Program		850,000	56% of total expenditure claimed*
3D	CS4: HIV/AIDS and human trafficking awareness and prevention program		850,000	88% of total expenditure claimed*
6	Unallocated**	340,000		
	Total	6,670,000		

CS = consulting services; CW = civil works; km = kilometer.

* Exclusive of taxes and duties imposed within the territory of the Borrower.

** This will be administered by ADB. This amount also includes ADB's administration fee, audit costs, bank charges, and a provision for foreign exchange fluctuations (if any), to the extent that these items are not covered by the interest and investment income earned on this grant, or any additional grant.

Allocation and Withdrawal of Grant Proceeds

CATEGORY				NORDIC DEVELOPMENT FUND FINANCING
Number	Item	Amount Allocated (\$)		Percentage and Basis for Withdrawal from the Grant Account
		Category	Subcategory	
1	Works	2,610,000		
1H	CW9 Green Planting in Kampong Cham, Takeo, and Kampong Speu		260,000	50% of total expenditure claimed*
1I	CW10 Green Planting in Kampong Chhnang, Pursat, and Battambang		280,000	50% of total expenditure claimed*
1J	CW11 Green Planting in Banteay Meanchey, Siem Reap, and Kampong Thom		190,000	50% of total expenditure claimed*
1K	CW 12: Climate Change Adaptation Framework of Investments		1,880,000	100% of total expenditure claimed*
3	Consulting	2,540,000		
3A	CS1A: Consulting Services for Detailed Design and Supervision		790,000	13% of total expenditure claimed*
3E	CS5: Climate Change Adaptation Framework Design and Implementation		1,750,000	100% of total expenditure claimed*
6	Unallocated**	250,000		
	Total	5,400,000		

CW = civil works.

* Exclusive of taxes and duties imposed within the territory of the Borrower.

** This will be administered by ADB. This amount also includes ADB's administration fee, audit costs, bank charges, and a provision for foreign exchange fluctuations (if any), to the extent that these items are not covered by the interest and investment income earned on this grant, or any additional grant.

Financier (\$ million)														
ITEMS	ADB	%	KEXIM	%	GOA ^a	%	NDF ^a	%	Govt. Cost ^b	Govt. Taxes & Duties ^c	Govt. Total	%	TOTAL	%
CS3: Sustainable Community-Based Road Safety Program	0.67	40.00	0.00	0.00	0.85	50.91	0.00	0.00	0.03	0.13	0.15	9.09	1.67	100.00
CS4: HIV/AIDS & Human Trafficking Prevention and Awareness Program	0.12	11.36	0.00	0.00	0.85	79.55	0.00	0.00	0.02	0.08	0.10	9.09	1.07	100.00
<i>Subtotal</i>	<i>0.79</i>		<i>0.00</i>		<i>1.70</i>		<i>0.00</i>		<i>0.05</i>	<i>0.21</i>	<i>0.25</i>		<i>2.73</i>	
4 Project Management Support														
EQ1: Project Management Vehicle 1	0.07	90.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	9.09	0.08	100.00
EQ2: Project Management Vehicle 2	0.07	90.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	9.09	0.08	100.00
EQ3: Office Furniture	0.05	90.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.09	0.05	100.00
EQ4: Computer Equipment	0.05	90.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.09	0.05	100.00
Incremental Administration Costs**	1.41	61.43	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	2.29	100.00
Incremental Administration Costs									0.71 ^b	0.17	0.88	38.57		
<i>Subtotal</i>	<i>1.65</i>		<i>0.00</i>		<i>0.00</i>		<i>0.00</i>		<i>0.71</i>	<i>0.19</i>	<i>0.91</i>		<i>2.56</i>	
5 Connectivity Improvements for Mekong River Islands														
CW8 Improve Mekong River island roads , 50 km and 11 Jetties	11.49	90.91	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.95	1.15	9.09	12.64	100.00
CS5: Climate Change Adaptation Framework Design and Implementation	0.00	0.00	0.00	0.00	0.00	0.00	1.74	90.91	0.03	0.14	0.17	9.09	1.91	100.00
CW12: Climate Change Adaptation Framework of Investments	0.00	0.00	0.00	0.00	0.00	0.00	1.87	90.91	0.03	0.15	0.19	9.09	2.06	100.00
<i>Subtotal</i>	<i>11.49</i>		<i>0.00</i>		<i>0.00</i>		<i>3.61</i>		<i>0.26</i>	<i>1.24</i>	<i>1.51</i>		<i>16.61</i>	
Financial Charge (IDC***, Adm. etc.)	2.28		0.04		0.34		0.27				0.00		2.93	
TOTAL	54.00		41.00		6.67		5.40		2.49	8.66	11.16		118.23	

ADB = Asian Development Bank, CS = consulting services, CW = civil works, EQ = equipment, GOA = Government of Australia, IDC = interest during construction, KEXIM = Export-Import Bank of Korea, NDF = Nordic Development Fund.

^a Administered by the Asian Development Bank. This amount also includes ADB's administration fee, audit costs, bank charges, and a provision for foreign exchange fluctuations (if any), to the extent that these items are not covered by the interest and investment income earned on this grant, or any additional grant.

^b Government contributions are all in kind, except \$0.71 comprising salaries and allowances under the incremental cost.

^c The Government contributions for taxes and duties are through exemptions.

* This is an activity under CS1A, separated for presentation clarity.

** Comprising project administration cost.

*** IDC is only for ADB financing, other financing are grants.

Notes: Amounts and percentages may not match due to rounding off.

The costs in the table include both physical and price contingencies. The physical and price contingencies by financiers are:

Contingency	ADB	KEXIM	GOA	NDF	Govt	Total
Physical	4.27	3.38	0.52	0.42	0.92	9.52
Price	4.76	3.77	0.58	0.47	1.03	10.61
TOTAL	9.03	7.15	1.11	0.90	1.95	20.13

D. Detailed Cost Estimates by Outputs

ITEMS	Total Cost	\$ million									
		Output 1		Output 2		Output 3		Output 4		Output 5	
		Rural Road Improvements		Rural Road Asset Management		Road Safety and Community Awareness Program		Project Management Support		Connectivity Improvements for Mekong River Island	
		Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
A. Base Costs											
1A. Rural Road Improvements – Civil Works	67.07	67.07	100.00		0.00		0.00		0.00		0.00
1B. Consulting Services for Design and Supervision	8.92	8.92	100.00		0.00		0.00		0.00		0.00
2. Rural Road Asset Management	1.10			1.10	100.00		0.00		0.00		0.00
3. Rural Road Safety and Community Awareness Program	2.26		0.00		0.00	2.26	100.00		0.00		0.00
4. Project Management Support	2.11		0.00		0.00		0.00	2.11	100.00		0.00
5. Connectivity Improvements for Mekong River Islands	13.71		0.00		0.00		0.00		0.00	13.71	100.00
Subtotal (A)	95.17	75.99	79.85	1.10	1.16	2.26	2.37	2.11	2.22	13.71	14.41
B. Contingency	20.15	16.07	79.77	0.23	1.15	0.48	2.37	0.45	2.22	2.92	14.49
C. Financial Charge during Implementation	2.91	2.56	88.02	0.03	1.16	0.07	2.39	0.06	2.23	0.18	6.19
Total Project Cost (A+B+C)	118.23	94.62	80.03	1.37	1.16	2.80	2.37	2.62	2.22	16.81	14.22

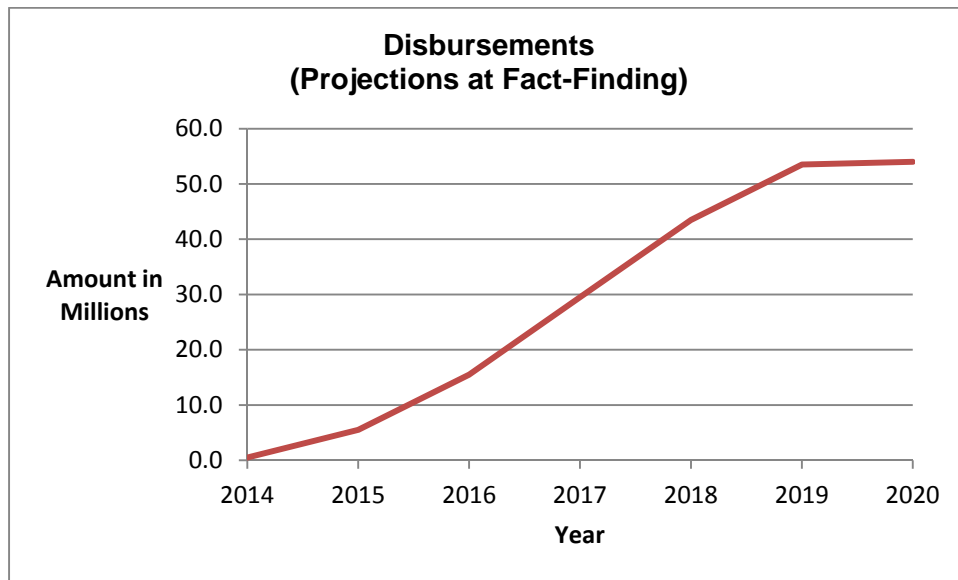
E. Detailed Cost Estimates by Year

		\$ million								
ITEMS	Total Cost	YEAR								
		2014	2015	2016	2017	2018	2019	2020	2021	
A. Base Costs										
1A. Rural Roads Improvements – Civil Works	67.07	0.00	9.86	16.43	17.10	17.10	6.57	0.00	0.00	
1B. Consulting Services for Design and Supervision	8.92	1.78	1.78	1.34	1.34	1.34	1.34	0.00	0.00	
2. Rural Road Asset Management	1.10	0.00	0.13	0.28	0.28	0.28	0.14	0.00	0.00	
3. Road Safety and Community Awareness Program	2.26	0.00	0.45	0.45	0.45	0.45	0.45	0.00	0.00	
4. Project Management Support	2.11	0.44	0.46	0.30	0.30	0.30	0.30	0.00	0.00	
5. Connectivity Improvements for Mekong River Islands	13.71	0.00	1.96	3.43	3.60	3.60	1.13	0.00	0.00	
Subtotal (A)	95.17	2.23	14.64	22.23	23.06	23.06	9.94	0.00	0.00	
B. Contingency	20.15	0.47	3.10	4.70	4.89	4.89	2.10	0.00	0.00	
C. Financial Charge during Implementation	2.91	0.04	0.21	0.31	0.46	0.58	0.52	0.52	0.26	
Total Project Cost (A+B+C)	118.23	2.74	17.95	27.24	28.41	28.53	12.56	0.52	0.26	

F. Contract and Disbursement S-curve

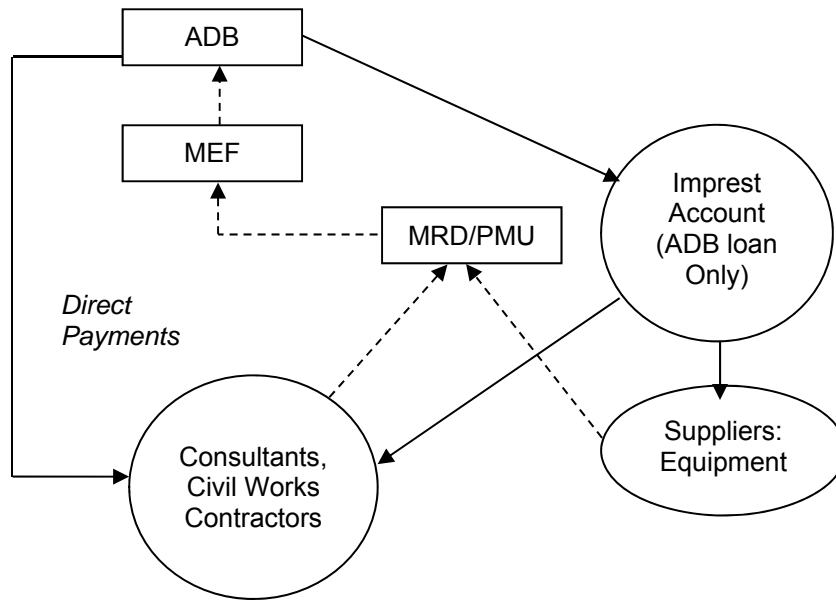


Year	2014	2015	2016	2017
Amount	6.71	44.47	62.11	63.72



Year	2014	2015	2016	2017	2018	2019	2020
Amount	0.5	5.5	15.5	29.5	43.5	53.5	54.0

G. Fund Flow Diagram



---> Claims
 —> Funds

ADB = Asian Development Bank, MEF = Ministry of Economy and Finance, MRD = Ministry of Rural Development, PMU = Project Management Unit.

V. FINANCIAL MANAGEMENT

A. Financial Management Assessment

13. The MRD and PMU have implemented road projects financed by ADB, and the PMU is staffed with experienced accountants. Since the accounting staff in the PMU is experienced in financial management practices for projects funded by ADB, the financial management arrangement for project implementation is generally considered acceptable. Nonetheless, financial management risks are high in some areas particularly in internal control and financial management capacity/ training need for staff. Implementation of mitigation measures described in the GRARMP will reduce the risk to low.

B. Disbursement

14. The Loan proceeds, including ADB administered co-financier funds (grant from the Government of Australia, and NDF grant), will be disbursed in accordance with ADB's *Loan Disbursement Handbook* (2012, as amended from time to time),¹¹ and detailed arrangements agreed upon between the Government and ADB. The KEXIM loan will not be administered by ADB.

15. Disbursements for contracts for consulting services and civil works bid under international competitive bidding (ICB) procedures will be through direct payment procedures defined in ADB's Loan Disbursement Handbook. Disbursements for incremental administrative expenditures will be through an imprest account. MRD, in consultation with Ministry of Economy and Finance (MEF), will open and maintain an imprest account¹² for the ADB loan, under the PMU in Phnom Penh at the National Bank of Cambodia. The currency of the imprest account is in US dollar. All withdrawal applications shall be prepared and submitted by MRD to ADB through MEF. The imprest account will be established, managed, replenished, and liquidated in accordance with ADB's Loan Disbursement Handbook. MRD have previous experience in administering ADB funded project accounts and they will administer the imprest account.

16. The imprest account¹³ is to be used exclusively for ADB's share of eligible expenditures. The executing agency who established the imprest account in its name is accountable and responsible for proper use of advances to the imprest account. The ceiling of the imprest account is 10% of the ADB loan amount. The executing agency may request for initial and additional advances to the imprest account based on an Estimate of Expenditure Sheet setting out the estimated expenditures to be financed through the account for the forthcoming six months. Supporting documents should be submitted to ADB or retained by the executing agency, in accordance with ADB's Loan Disbursement Handbook when liquidating or replenishing the imprest account.

17. Statement of expenditure (SOE) may be used to reimburse eligible expenditures and liquidate advances to the imprest account to ensure speedy project implementation. The ceiling for the SOE procedure will be \$50,000 per individual payment. SOE records should be maintained and made readily available for review by ADB's disbursement and review mission or upon ADB's request for submission of supporting documents on a sampling basis, and for

¹¹ Available at: http://www.adb.org/Documents/Handbooks/Loan_Disbursement/loan-disbursement-final.pdf.

¹² Available in Chapter 10 of the Loan Disbursement Handbook.

¹³ Bank charges may be financed by the ADB loan.

independent audit.¹⁴ Reimbursement and liquidation of individual payments in excess of the SOE ceiling should be supported by full documentation when submitting the withdrawal application to ADB.

18. Before the submission of the first withdrawal application, the Borrower should submit to ADB sufficient evidence of the authority of the person(s) who will sign the withdrawal applications on behalf of the Borrower, together with the authenticated specimen signatures of each authorized person. The minimum value per withdrawal application is \$100,000 equivalent, unless otherwise approved by ADB. Individual payments below this amount should generally be paid from the imprest account, or by the executing agency/implementing agency and subsequently claimed to ADB through reimbursement.

19. **Counterpart Funds Initial Advance.** PMU completes a request for initial advance of counterpart funds together with supporting documents and submits to the MEF – Department of Investment and Cooperation (DIC). The maximum amount of the advance of counterpart funds will be agreed between the MRD and/or Project Team and the MEF. The request for initial advance must be signed by the authorized signatories of MRD/Project and submitted to the MEF/DIC. The request must be recorded in the Project Counterpart Funds Withdrawal Application Register. The MEF/DIC reviews the request and submits for approval of MEF Management. Thereafter, arrangements are made to transfer the funds from General Department of National Treasury Accounts to the Project's Counterpart Funds Designated Account. On receipt of advice from the National Bank of Cambodia (NBC) or other approved financial institution that the funds have been deposited into the Counterpart Funds Designated Account, the receipt of the funds should be recorded in the General Ledger and the Government Withdrawal Application Register must be updated.

20. **Counterpart Funds Replenishment.** PMU completes the request for replenishment and attaches a statement of actual expenditure together with the Disbursement Tracking Form for counterpart funds. Supporting expenditure documentation must be maintained by the Project Team for subsequent review by MEF or audit. The request must be signed by the authorized signatories of MRD/Project and submitted to the MEF/DIC. The request must be recorded in the Project Counterpart Funds Withdrawal Application Register. The DIC reviews the request and submits for approval of MEF Management. Thereafter, arrangements are made to transfer the funds from General Department of National Treasury Accounts to the Project's Counterpart Funds Designated Account. On receipt of advice from the NBC or other approved financial institution that the funds have been deposited into the Counterpart Funds Designated Account, the receipt of the funds should be recorded in the General Ledger and the Government Withdrawal Application Register must be updated.

C. Accounting

21. The MRD will maintain, or cause to be maintained, separate books and records by funding source for all expenditures incurred on the project. MRD will prepare consolidated project financial statements in accordance with the government's accounting laws and regulations which are consistent with international accounting principles and practices.

¹⁴ Checklist for SOE procedures and formats are available in Appendix 9 of the Loan Disbursement Handbook.

D. Auditing

22. The MRD will cause the detailed consolidated project financial statements to be audited in accordance with International Standards on Auditing and with the Government's audit regulations, by an independent auditor acceptable to ADB. The audited project financial statements will be submitted in the English language to ADB within six months of the end of the fiscal year by the MRD. The annual audit report for the project accounts will include an audit management letter and audit opinions which cover (i) whether the project financial statements present a true and fair view or are presented fairly, in all material respects, in accordance with the applicable financial reporting framework; (ii) whether loan and grant proceeds were used only for the purposes of the project or not; (iii) the level of compliance for each financial covenant contained in the legal agreements for the project; (iv) use of the imprest fund procedure; and (v) the use of the statement of expenditure procedure certifying to the eligibility of those expenditures claimed under SOE procedures, and proper use of the SOE and imprest procedures in accordance with ADB's Loan Disbursement Handbook and the project documents. Compliance with financial reporting and auditing requirements will be monitored by review missions and during normal program supervision, and followed up regularly with all concerned, including the external auditor. The MRD has been made aware of ADB's policy on delayed submission, and the requirements for satisfactory and acceptable quality of the audited project financial statements. ADB reserves the right to require a change in the auditor (in a manner consistent with the constitution of the borrower), or for additional support to be provided to the auditor, if the audits required are not conducted in a manner satisfactory to ADB, or if the audits are substantially delayed. ADB reserves the right to verify the project's financial accounts to confirm that the share of ADB's financing is used in accordance with ADB's policies and procedures. Public disclosure of the project financial statements, including the audit report on the project financial statements, will be guided by ADB's Public Communications Policy (2011). After review, ADB will disclose the project financial statements for the project and the opinion of the auditors on the financial statements within 30 days of the date of their receipt by posting them on ADB's website. The Audit Management Letter will not be disclosed.

VI. PROCUREMENT AND CONSULTING SERVICES

A. Advance Contracting

23. All advance contracting will be undertaken in conformity with ADB's Procurement Guidelines (2013, as amended from time to time)¹⁵ and ADB's Guidelines on the Use of Consultants (2013, as amended from time to time).¹⁶ The issuance of invitations to bid under advance contracting and will be subject to ADB approval. The Borrower and MRD have been advised that approval of advance contracting and retroactive financing does not commit ADB to finance the Project.

24. Advance action will be undertaken for the detailed design and implementation supervision (DDIS) consulting services, using quality- and cost based selection method, full technical proposals, with a ratio of 80:20. Under advance action before loan effectiveness, steps up to contract negotiations will be conducted

B. Procurement of Goods, Works and Consulting Services

25. All procurement of goods and works (except the works and consulting services financed by KEXIM), will be undertaken in accordance with ADB's Procurement Guidelines and ADB's Guidelines on the Use of Consultants. KEXIM will use LIB for works and QBS for consulting services.¹⁷

26. ICB procedures will be used for civil works contracts estimated to cost \$1,000,000 million or more. National competitive bidding (NCB) for goods will be adopted for contracts estimated between \$100,000 and \$500,000. Shopping will be used for contracts for procurement of works and equipment worth less than \$100,000.

27. When NCB is proposed, before the start of any procurement, ADB and the Government will review the bidding documents based on SOP of Cambodia to ensure consistency with ADB's Procurement Guidelines.

28. An 18-month procurement plan indicating threshold and review procedures, goods, works, and consulting service contract packages and NCB guidelines is in Section C.

29. All consultants financed by ADB will be recruited according to ADB's Guidelines on the Use of Consultants.¹⁸ Consulting services financed by Export-Import Bank of Korea (KEXIM) will follow their own consultant selection and recruitment procedures. The terms of reference for the DDIS and HHTPP are detailed in Section D.

30. MRD will recruit a consulting firm for the DDIS consultant, which will assume the role of the "Engineer" for the civil works contracts. The MRD will select the consultants using quality and cost-based selection procedure. The estimated personnel and person-month requirements for each consulting services package are provided in the table below. All equipment procured

¹⁵ Available at: <http://www.adb.org/Documents/Guidelines/Procurement/Guidelines-Procurement.pdf>.

¹⁶ Available at: <http://www.adb.org/Documents/Guidelines/Consulting/Guidelines-Consultants.pdf>.

¹⁷ Since the project is financed with ADB-administered cofinancing resources as well as ADF resources, universal procurement will apply. ADB. 2013. *Blanket Waiver of Member Country Procurement Eligibility Restrictions in Cases of Cofinancing for Operations Financed from Asian Development Fund Resources*. Manila.

¹⁸ Checklists for actions required to contract consultants by method available in e-Handbook on Project Implementation at: <http://www.adb.org/documents/handbooks/project-implementation/>.

under the consulting services contracts shall be appropriately handed over to MRD according to the provisions for transfer under the contracts.

C. Procurement Plan

Basic Data

Project Name: RURAL ROADS IMPROVEMENT PROJECT II	
Project Number: 42334	Approval Number: LXXXX-CAM/GXXXX-CAM
Country: Cambodia	Executing Agency: Ministry of Rural Development
Project Financing Amount: \$118.23	Implementing Agency:
ADB Financing: \$54.00	
Non-ADB Financing: \$53.07	
Date of First Procurement Plan	Date of this Procurement Plan: 22 May 2014

1. Methods, Thresholds, Review and 18-Month Procurement Plan

a. Procurement and Consulting Methods and Thresholds

31. Except as the Asian Development Bank (ADB) may otherwise agree, the following process thresholds shall apply to procurement of goods and works.

PROCUREMENT OF GOODS AND WORKS

Method	Threshold	Comments
ICB for Works	Between \$1,000,000 and above	All bidding documents and contracts
ICB for Goods	Between \$500,000 and \$1,000,000	All bidding documents and contracts
NCB for Works	Beneath that stated for ICB, Works	First set of bidding documents in the English language shall be prior reviewed
NCB for Goods	Beneath that stated for ICB, Goods	First set of bidding documents in the English language shall be prior reviewed
Shopping for Works	Below \$100,000	
Shopping for Goods	Below \$100,000	3 quotations required

ICB = international competitive bidding; NCB = national competitive bidding.

CONSULTING SERVICES

Method	Comments
Quality and Cost Based Selection	Prior review
Quality Based Selection	Prior review

b. Good and Works Contracts Estimated to Cost \$1 million or More

32. The following table lists goods and works contracts for which the procurement activity is either ongoing or expected to commence within the next 18 months.

Package Number	General Description	Estimated Value	Procurement Method	Review (Prior/Post)	Bidding Procedure	Advertisement Date (quarter/year)	Comments
CW1	Improve 6 roads, 133.0 km (Kampong Cham)	\$13.79 million	ICB	Prior	1S1E	Q4/2014	Small works bidding documents
CW2	Improve 2 roads, 34.8 km (Takeo)	\$3.62 million	ICB	Prior	1S1E	Q4/2014	Small works bidding documents
CW3	Improve 3 roads, 75.2 km (Kampong Speu)	\$7.08 million	ICB	Prior	1S1E	Q1/2015	Small works bidding documents
CW4	Improve 3 roads, 38.5 km (Kampong Chhnang)	\$4.72 million	ICB	Prior	1S1E	Q1/2015	Small works bidding documents
CW6	Improve 2 roads, 46.5 km (Siem Reap)	\$5.45 million	ICB	Prior	1S1E	Q1/2015	Small works bidding documents
CW7	Improve 1 road, 40.0 km (Kampong Thom)	\$4.03 million	ICB	Prior	1S1E	Q2/2015	Small works bidding documents
CW8	Improve Mekong River Island roads, 50 km, and 11 jetties	\$12.64 million	ICB	Prior	1S1E	Q2/2015	Small works bidding documents
CW12	Climate Change Adaptation Framework of Investments	\$2.06 million	ICB	Prior	1S1E	Q4/ 2016	Small works bidding documents

1S1E = single stage, single envelope; CW = civil works; ICB = international competitive bidding; km = kilometer; Q = quarter.

c. Consulting Services Contracts Estimated to Cost \$100,000 or More

33. The following table lists consulting services contracts for which the recruitment activity is either ongoing or expected to commence within the next 18 months.

Package Number	General Description	Estimated Value	Recruitment Method	Review (Prior/ Post)	Advertisement Date (quarter/year)	Type of Proposal	Comments
CS1A	DDIS for ADB, etc. financing	\$6.71 million	QCBS	Prior	Q2 2014	FTP	International and national
CS2	Rural Road Asset Management	\$1.33 million	QCBS	Prior	Q4 2014	FTP	International and national
CS3	Sustainable Community-Based Road Safety Program	\$1.67 million	QCBS	Prior	Q4 2014	FTP	International and national
CS4	HHTPP	\$1.07 million	QBS	Prior	Q4 2014	STP	National ¹
CS5	Climate Change Adaptation Framework Design and Implementation	\$1.91 million	QCBS	Prior	Q4 2014	FTP	International and national

ADB = Asian Development Bank; CS = consulting services; DDIS = detailed design and implementation supervision; FTP = full technical proposal; HHTPP = HIV/AIDS and human trafficking awareness and prevention program; Q = quarter; QBS = quality-based selection; QCBS = quality- and cost-based selection; STP = simplified technical proposal.

¹ Please refer to para. 130.

d. Goods and Works Contracts Estimated to Cost Less than \$1 Million and Consulting Services Contracts Less than \$100,000 (Smaller Value Contracts)

34. The following table groups smaller-value goods, works and consulting services contracts for which the activity is either ongoing or expected to commence within the next 18 months.

GOODS AND WORKS

Package Number	General Description	Estimated Value	Number of Contracts	Procurement Method	Review (Prior/ Post)	Bidding Procedure	Advertisement Date (quarter/year)	Comments
EQ1	Project Management Vehicle 1	\$0.08 million	1	Shopping	Prior	n/a	Q3/2014	Project Management vehicle (1 mini-van purchased for project management)
EQ2	Project Management Vehicles 2	\$0.08 million	2	Shopping	Prior	n/a	Q3/2014	Project Management vehicles (2 pickups purchased for project management)
EQ3	Office Furniture	\$0.05 million	1	Shopping	Prior	n/a	Q3/2014	Office furniture for project management
EQ4	Computer Equipment	\$0.05 million	1	Shopping	Prior	n/a	Q3/2014	Computer equipment purchased for

Package Number	General Description	Estimated Value	Number of Contracts	Procurement Method	Review (Prior/ Post)	Bidding Procedure	Advertisement Date (quarter/year)	Comments
								project management
CW9	Green Planting, Kampong Cham, Takeo, Kampong Speu	\$0.58 million	1	n/a	Prior	NCB	Q4/2016	Small works bidding documents
CW10	Green Planting, Kampong Chhnang, Pursat, Battambang	\$0.61 million	1	n/a	Prior	NCB	Q4/2016	Small works bidding documents
CW11	Green Planting, Banteay Meanchey, Siem Reap, Kampong Thom	\$0.42 million	1	n/a	Prior	NCB	Q4/2016	Small works bidding documents

CW = civil works; EQ = equipment; n/a = not applicable; NCB = national competitive bidding; Q = quarter.

2. List of Awarded and On-going, and Completed Contracts

35. The following tables list the awarded and on-going contracts, and completed contracts.

a. Awarded and Ongoing Contracts

Package Number	General Description	Estimated Value	Contract Value	Procurement Method	Advertisement Date (quarter/year)	Date of ADB Approval of Contract Award	Comments ¹

ADB = Asian Development Bank.

¹ Indicate the Contractor's name and the contract signing date.

Package Number	General Description	Estimated Value	Contract Value	Recruitment Method	Advertisement Date (quarter/year)	Date of ADB Approval of Contract Award	Comments ¹

ADB = Asian Development Bank.

¹ Indicate the Consulting Firm's name and the contract signing date.

b. Completed Contracts

GOODS AND WORKS

Package Number	General Description	Estimated Value	Contract Value	Procurement Method	Advertisement Date (quarter/year)	Date of ADB Approval of Contract Award	Date of Completion	Comments

ADB = Asian Development Bank.

Consulting Services

Package Number	General Description	Estimated Value	Contract Value	Recruitment Method	Advertisement Date (quarter/year)	Date of ADB Approval of Contract Award	Date of Completion	Comments

ADB = Asian Development Bank.

3. Non-ADB Financing

36. The following table lists goods, works and consulting services contracts over the life of the project, financed by Non-ADB sources.

GOODS AND WORKS

General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Procurement Method	Comments
CW 5 Improve 22 roads, 311.0 km	\$40.96 million	1	LIB	KEXIM financing

CW = civil works; KEXIM = Export-Import Bank of Korea; km = kilometer; LIB = limited international bidding.

CONSULTING SERVICES

General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Recruitment Method	Comments
CS 1B Detailed Design and Implementation Supervision	\$4.10 million	1	QBS	KEXIM financing

CS = consulting services; KEXIM = Export-Import Bank of Korea; QBS = quality-based selection.

D. National Competitive Bidding

i. General

37. The procedures to be followed for NCB shall be those set forth for the "National Competitive Bidding" method in the Government's Procurement Manual of May 2012 issued under Sub-decree No. 74 ANK.BK dated 22 May 2012 with the clarifications and modifications described in the following paragraphs required for compliance with the provisions of the Procurement Guidelines.

ii. Application

38. Contract packages subject to NCB procedures will be those identified as such in the project Procurement Plan. Any changes to the mode of procurement from those provided in the

Procurement Plan shall be made through updating of the Procurement Plan, and only with prior approval of ADB.

iii. Eligibility

39. Bidders shall not be declared ineligible or prohibited from bidding on the basis of barring procedures or sanction lists, except individuals and firms sanctioned by ADB, without prior approval of ADB.

iv. Advertising

40. Bidding of NCB contracts estimated at \$500,000 or more for goods and related services or \$1,000,000 or more for civil works shall be advertised on ADB's website via the posting of the Procurement Plan.

v. Anti-Corruption

41. Definitions of corrupt, fraudulent, collusive and coercive practices shall reflect the latest ADB Board-approved Anti-Corruption Policy definitions of these terms and related additional provisions

vi. Rejection of all Bids and Rebidding

42. Bids shall not be rejected and new bids solicited without ADB's prior concurrence.

vii. Bidding Documents

43. The bidding documents provided with the government's Procurement Manual shall be used to the extent possible. The first draft English language version of the procurement documents shall be submitted for ADB review and approval, regardless of the estimated contract amount, in accordance with agreed review procedures (post and prior review). The ADB-approved procurement documents will then be used as a model for all procurement financed by ADB for the project, and need not be subjected to further review unless specified in the procurement plan.

viii. Member Country Restrictions

44. Bidders must be nationals of member countries of ADB, and offered goods, works and services must be produced in and supplied from member countries of ADB. For NDF co-financing, it is necessary to obtain procurement/consultant selection waiver, through a footnote in the Report and Recommendation of the President (RRP), as NDF includes Iceland as a non-ADB member country.

E. Consultant's Terms of Reference

45. Detailed terms of reference (TOR) for the DDIS and HHTPP are as follows:

1. Detailed Design and Implementation Supervision

a. Introduction

46. The Government has applied for a loan from ADB for the Rural Roads Improvement Project II, which will implement the improvement of 39 roads about 729 km located in nine provinces. The provinces are: Battambang, Banteay Meanchey, Kampong Cham, Kampong Chhnang, Pursat, Kampong Speu, Kampong Thom, Siem Reap, and Takeo.

47. Part of the loan proceeds will be applied for eligible payments under the civil works and consulting services contracts under the Project.

48. The MRD will be the executing agency for the Project. MRD will be responsible for engaging consulting services and awarding civil works contracts. The Director General of the Department for Technical Affairs will have overall administrative oversight of the consulting services and civil work contracts, and the Project Manager will have responsibility for day-to-day operations.

49. The civil works comprise the improvement of existing earth or gravel surfaced roads to a bitumen sealed standard using a double bituminous surface treatment (DBST), including placement as necessary of sub-base and road base, using unbound materials. The works do not permit widening of the existing road structure. The works also involves replacement or repair of existing cross drainage and the placement of some new culverts. It also involves repair replacement of small bridges at existing locations. Bridges that are replaced will be widened. The works also include a series of capacity build components including support to the MRD and its Departments in road asset management and training, support for the local contracting industry and the Board of Engineers of Cambodia (BEC), support for community-based road safety, HHTPP and environmental considerations.

50. The civil works (CW) will be executed through 12 contract packages, ranging in value from \$0.42 million to \$13.79 million. The Consultant will be responsible for the design and supervision of civil works packages CW-1 to CW-12 (except KEXIM-financed CW-5) which are financed by ADB, and the Government of Australia as shown in Table VI-1. The consultant will also be responsible for environmental and social safeguards measures and for capacity building projects encompassing all roads for all contract packages irrespective of the financier. All above-mentioned contract packages (except KEXIM-financed CW-5) will be procured under the arrangements acceptable to ADB. The detailed design will be used to prepare the bid documents of civil works contracts. Following the Fédération Internationale des Ingénieurs-Conseil (FIDIC) conditions, the employer will be MRD, the employer's representative will be the Director General for Technical Affairs of MRD, the consultant will be the engineer, and the engineer's representative will be the consultant's team leader.

Table VI-1: Contract Packages

Contract Package and Provinces	Roads	Total Length (km)	Approximate Value (\$ million)	Financier	Completion (months)
CW 1 (Kampong Cham)	6 roads	133.0	13.79	ADB/GOA	66
CW 2 (Takeo)	2 roads	34.8	3.62	ADB/GOA	30
CW-3 (Kampong Speu)	3 roads	75.2	7.08	ADB/GOA	30
CW 4 (Kampong Chhnang)	3 roads	38.5	4.72	ADB/GOA	30
CW 5 (Pursat, Battambang)	22 roads	311.0	40.96	KEXIM	30

Contract Package and Provinces	Roads	Total Length (km)	Approximate Value (\$ million)	Financier	Completion (months)
and Banteay Meanchey)					
CW 6 (Siem Reap)	2 roads	46.5	5.45	ADB/GOA	30
CW 7 (Kampong Thom)	1 roads	40.0	4.03	ADB/GOA	30
CW 8 (Mekong River Island, Kampong Cham)	5 islands	50 (11 jetties)	12.64	ADB	36
CW 9 Green Planting (Kampong Cham, Takeo, Kampong Speu)	11 roads	243.0	0.58	ADB/NDF	24
CW 10 Green Planting (Kampong Chhnang, Pursat, Battambang)	20 roads	258.8	0.61	ADB/NDF	24
CW 11 Green Planting (Banteay Meanchey, Siem Reap, Kampong Thom)	8 roads	177.2	0.42	ADB/NDF	24
CW 12 Climate Change Adaptation Framework of Investments	5 islands	5 islands	2.06	NDF	36

ADB = Asian Development Bank; CW = civil works; GOA = Government of Australia; KEXIM = Korea Export Import Bank; km = kilometer; NDF= Nordic Development Fund.

51. The consultant will be responsible for detailed design, construction supervision, implementation monitoring, as well as project performance monitoring and evaluation.

52. The consultant will also be responsible for the support of the Social and Environmental Office (SEO) at MRD. The unit will work in close association with MEF, for resettlement and other social issues, and with the Ministry of the Environment (MOE) and with the Ministry of Culture and Fine Arts (MCFA) for environment issues.

53. The consultant will also be responsible for the preparation of a future project that will be similar in nature to this project. The output of the future project will be a project design similar to this project as given in its feasibility study Final Report found in the following link of the ADB website: <http://www.adb.org/Documents>. Therefore, the consultant should carefully read this final report and understand the tasks involved in the preparation of a future project, involving the Team Leader, Transport Economist, Road Design Engineer, Environment Specialist, and Social Development/Safeguards Specialist; all experts international, but using the national experts appropriately.

54. The DDIS consultant should be aware that capacity-building components are planned under separate consulting services to provide road asset management and road safety consulting services. These will cover all project roads and beyond. The DDIS consultant will have an important role in providing the coordination and assistance for the successful implementation of these other services. The scope of the other services is described below under items (i) to (vii).

- (i) preparation of an inventory of road assets, planning for the measurement of traffic and road condition statistics,
- (ii) training MRD staff in the design, construction and maintenance of paved roads and other road assets;

- (iii) an axle load control component which involves provision of portable weighbridges, training in their use, and the preparation of a policy for prohibiting contracts with abusers of the road law in this respect,
- (iv) planning and budgeting involving preparing an effective mechanism to attract funding for the rural road network,
- (v) preparation of a disaster mitigation strategy, involving an emergency mitigation planning to increase the capacity of the Provincial Departments of Rural Development (PDRD) roads to react to flooding emergency situations, including registers of resources, locations of safe havens and delineations of road links at risk to be included in the inventory of assets at risk.
- (vi) support for the local contracting industry component of the project including support to the BEC and support for the formation of an association of contractors and consultants, registration of local contractors with MRD and training.
- (vii) a road safety component involving training of local communities and MRD and its department staff in good safe practice in the detailed design of the project, the enhancement of enforcement measures including the procurement support for procuring mobile weigh pads and motor cycles for the authorities. This equipment will be also used in the enforcement of the traffic law on overloading of vehicles.

b. Objectives

55. The main objectives of the consulting services are to:

- (i) Review the preliminary engineering designs for the project roads and prepare detailed engineering designs, cost estimates and bid documents suitable for ICB and NCB, if necessary, and to assist in the evaluation of bids;
- (ii) Cause subcontracts from the main civil works contracts to be left to firms and entities for the civil works that can be taken up by local contractors or entities such as the road maintenance committees of the community councils by preparing suitable clauses in the bidding documents and ensuring their take-up in the evaluation of bidding process;
- (iii) function as "the engineer" in administering civil works contracts and ensuring completion of construction, and closure of contracts in accordance with the contract provisions;
- (iv) assist MRD in carrying out resettlement screening and ensuring that there will be no permanent acquisition of land and compliance with the agreed Resettlement Framework and ADB's Safeguard Policy Statement (SPS, 2009);¹⁹
- (v) Assist the MRD in ensuring that the Project is implemented consistent with the provisions of the Environmental Management Plan (EMP) and SPS;
- (vi) Assist MRD with the updating as necessary and implementing use of its manuals and guidelines for project planning, implementation and procurement and ensuring these are all in-line with ADB guidelines on these subjects including preparation of pilot audits and testing audited information using external auditors,
- (vii) Assist the MRD in the implementation of an HIV/AIDS/sexually transmitted infection (STI) and human trafficking awareness and prevention program. Separate consultants will be engaged to support this role,

¹⁹ Available at: <http://www.adb.org/Documents/Policies/Safeguards/Safeguard-Policy-Statement-June2009.pdf>.

- (viii) Assist MRD and contractors to ensure compliance with ADB's environmental guidelines and monitor the implementation of mitigation measures,
- (ix) Provide on the job training to MRD staff in civil works construction, administration and other aspects of professional engineering skills,
- (x) Carry out performance monitoring and evaluation of the civil works at mid-term and after physical completion,

c. The Consultant

56. The consulting services will be provided by a consulting firm, joint venture, or consortium of consulting firms, to be appointed by MRD in accordance with ADB's Guidelines on the Use of Consultants. The consultant will provide the staffing, as indicated in para. 68, although in preparing the proposals, the consultant may provide comments to improve the quality of the works. The final staffing will be adjusted to suit the actual procurement and implementation schedules. It is a mandatory requirement that all national experts should have sufficient fluency in English.

d. Implementation Arrangements

57. Under the overall guidance of the Project Director as the head of the project management unit, and assisted by the Project Manager, established in MRD for the project to administer all project activities, the consulting services are expected to continue through 72 months, during the entire period of the civil works and other activities, and the level of inputs will depend on the annual work programs.

58. The consultant will establish a main office in Phnom Penh (provided by the MRD) headed by the team leader; and three site offices in selected project provinces (to be determined during implementation and provided by the civil works contractors) to provide adequate coverage of the project roads. The main office will be responsible for highway design, benefit monitoring and evaluation, and overall assistance in coordination with MRD. The site offices will administer the civil works in accordance with the contracts.

59. The cost estimate for the services is given in the Table VI-2 below.

Table VI-2: Cost Estimates

Item	\$'000
Remuneration-International	3,857
Remuneration-National	1,030
Out-of-Pocket Expenses-Foreign	251
Out-of-Pocket Expenses-Local	200
Office and Local Expenses	30
Computers/Office equipment	30
Surveys	100
Training, Workshops and Study Tours, Seminar	50
Contingencies	554
Total	6,102

e. Scope of Work

60. The civil works will be executed under FIDIC Conditions of Contract, as outlined in the bid documents. Accordingly, MRD will be the employer and the consultant will function as the

engineer for all road improvement contracts under the Project. The consultant will appoint a team leader to act as the engineer's representative for the contracts.

61. As the engineer's representative, the consultant's team leader will implement the civil work contracts and ensure that the works are constructed in accordance with its provisions. The consultant will have all the powers defined in the FIDIC Conditions of Contract as being the engineer, except the following, which will be retained and exercised by the employer, generally on the advice of the engineer:

- (i) issuing the order to commence the works;
- (ii) approving variation orders that have financial implications;
- (iii) approving significant variations in quantities;
- (iv) approving subletting of any part of the works; and
- (v) approving extensions of time.

62. In addition to all of the duties necessary for the adequate supervision of the construction activities on site, the consultant's responsibilities will also include:

- (i) preparation of formal contract documentation; and
- (ii) contract administration.

63. In detail, the consultant's responsibilities will include:

- (i) approving the contractor's work program, method statements, material sources, etc.;
- (ii) preparing and issuing reports as defined subsequently;
- (iii) approving and/or issuing working drawings, approving the setting out of the works, and instructing the contractor;
- (iv) taking measurements and keeping measurement records;
- (v) maintaining records, correspondence, and diaries;
- (vi) certifying work volume and recommending interim certificates for progress payments;
- (vii) certifying completion of part or all of the works;
- (viii) inspecting the works at appropriate intervals during the defects liability period and issuing the defects liability certificate; after completion of the works, the team leader will be retained until the end of the project to write the PCR;
- (ix) processing the contractor's possible claims;
- (x) ensuring minimum disruption/damage to the environment and local settlements by approval of contractors' work statement/methodology, including monitoring the impact of construction works on the environment and local settlements and providing information to MRD and ADB in the monthly progress reports;
- (xi) providing the employer with complete records and reports, and approving the contractors' as-built drawings for the works;
- (xii) providing advice and on-the-job training to MRD staff in contract administration;
- (xiii) providing advice to ensure there is no permanent acquisition of land and any impacts (temporary or unanticipated impacts) will be addressed in accordance with the agreed Resettlement Framework and SPS;
- (xiv) under a capacity building role the consultant will establish a social and environmental unit at MRD.

- (xv) carrying out performance monitoring and evaluation for the Project in accordance with the schedule and terms of reference to be mutually agreed by MRD and ADB.

f. Staffing and Other Inputs

64. The consultant is expected to provide personnel as shown in Table VI-3 for the indicated duration, which is the minimum. The duration of consulting services is 60 months. The details of individual experts' TORs are given.

Table VI-3: Personnel Inputs of Consulting Services

CS 1A. DDIS Consultants (ADB/GOA-funded roads)	Person-Months
International	
Team Leader (highway engineer)	56
Road Design Engineer	12
Materials Engineer	12
Structural Engineer	3
Quantity/Cost Engineer	36
Resident Engineer	60
Environment Specialist	6
Procurement Specialist	6
Social Development/Safeguards Specialist	8
Transport Economist	4
Subtotal	203
National	
Road Design Engineer	12
Material/Lab Engineer	72
Structural Engineer	4
Surveyor	24
Quantity/Cost Estimator	48
Hydrologist	4
Transport Economist	6
Assistant Resident Engineer	90
Environment Specialist	12
Procurement Specialist	8
Labor and Gender Specialist	18
De-mining/UXO Specialist	4
Resident Inspectors/Surveyor	240
Subtotal	542
CS 1A : Total	745

ADB = Asian Development Bank, CS = consulting services, DDIS = detailed design and implementation supervision, GOA = Government of Australia, UXO = unexploded ordnance.

(i) INTERNATIONAL DDIS TEAM

(a) Team Leader (Highway Engineer) – International, 56

person months

65. The Team Leader will be an internationally qualified highway engineer with 20 years' experience as the team leader in leading road rehabilitation projects of DBST paving with a capacity building output/s, and with extensive experience in Cambodia or countries within

similar geographical areas in the region. The Team Leader has to be fully aware of the requirements and responsibilities of an ADB financed projects.

66. The DDIS consulting Services comprise:
- (i) detailed design of contract packages CW1 to CW12 of Table VI-1 covering about 729 km of project roads and 11 jetties; roads will be improved from gravel or earth surface to paved road standard.
 - (ii) preparation of suitable bidding documents for tender by international/national civil works contractors.
 - (iii) the supervision of 11 civil works packages including 3 green planting packages shown in Table VI-1.
 - (iv) the preparation of a future project that will be similar in nature to the preparation for this Project.
 - (v) providing coordination and support for a series of capacity building components including support to the MRD and its Departments in road asset management and training, support for road safety, HHTPP and environmental considerations, and support for implementation of the project's GAP.

67. The Team Leader, through the effective leadership of the DDIS team and effective communication with the PMU, will be responsible for all aspects of the consulting engineer services leading to the successful implementation of the project.

68. The MRD will be the executing agency for the Project. MRD are responsible for the engagement of consulting services and for awarding civil works contracts. The Project Director of the PMU will have overall administrative oversight of the consulting services and civil work contracts, and the Project Manager will have responsibility for day-to-day operations.

69. Under the overall guidance of the Project Director of the PMU, the Team Leader will work directly with the PMU, established in MRD for the project to administer all project activities. The Services of the Team Leader are expected to continue through the entire period of the civil works and other activities, or 60 months.

70. As mentioned in para. 69, the Team Leader will head the consultants' main office in Phnom Penh to be established at MRD, and be responsible for three site offices to provide adequate coverage of the project roads.

71. The main office will be responsible for highway design, benefit monitoring and evaluation, and overall assistance in coordination with MRD. The site offices will administer the civil works in accordance with the contracts.

72. Following the FIDIC conditions, the employer will be MRD, the employer's representative will be the Project Director of the PMU, the consultant will be the engineer, and the Team Leader will be the engineer's representative.

73. The capacity building components for which the Team Leader will have a coordinating and supporting role are listed below:

- (i) preparation of an inventory of road assets, planning for the measurement of traffic and road condition statistics,

- (ii) training MRD staff in the design, construction and maintenance of paved roads and other road assets;
- (iii) planning and budgeting involving preparing an effective mechanism to attract funding for the rural road network,
- (iv) preparation of a disaster mitigation strategy, involving an emergency mitigation planning to increase the capacity of the Provincial Departments of Rural roads to react to flooding emergency situations, including registers of resources, locations of safe havens and delineations of road links at risk to be included in the inventory of assets at risk.
- (v) coordination with Road Asset Management consultants for the local contracting industry component of the project including support to the BEC and support for the formation of an association of contractors and consultants, registration of local contractors with MRD and training.
- (vi) a road safety component involving training of local communities and MRD and its department staff in good safe practice in the detail design of the project, the enhancement of enforcement measures including the provision of equipment and motor cycles for the authorities. This equipment will be also used in the enforcement of the traffic law on overloading of vehicles.

74. The Team Leader will lead the DDIS team to undertake the following to achieve the objectives of the Project:

- (i) review the preliminary engineering designs for the project roads and prepare detail engineering designs, cost estimates and bid documents suitable for ICB, and to assist in the evaluation of bids;
- (ii) cause subcontracts from the main civil works contracts to be left to firms and entities for the civil works that can be taken up by local contractors or entities such as the road maintenance committees of the community councils by preparing suitable clauses in the bidding documents and ensuring their take-up in the evaluation of bidding process;
- (iii) function as "the engineer" in administering civil works contracts and ensuring completion of construction, and closure of contracts in accordance with the contract provisions;
- (iv) assist MRD in ensuring there is no infringement of the criteria that there will be no resettlement;
- (v) assist the MRD in the implementation of an SEO at MRD. The work involves training of MRD staff, conducting international study tours and the operation of the unit for 24 months;
- (vi) support MRD in the implementation of the GAP;
- (vii) assist the MRD in ensuring that the Project is implemented consistent with the provisions of the EMP and SPS;
- (viii) assist MRD with the updating as necessary and implementing use of its manuals and guidelines for project planning, implementation and procurement and ensuring these are all in line with ADB guidelines on these subjects including preparation of pilot audits and testing audited information using external auditors,
- (ix) assist the MRD in the implementation of an HHTPP. Separate consultants will be engaged to support this role;
- (x) assist MRD and contractors to ensure compliance with ADB's environmental guidelines and monitor the implementation of mitigation measures;
- (xi) provide on the job training to MRD staff in civil works construction, administration and other aspects of professional engineering skills; and

- (xii) carry out performance monitoring and evaluation of the civil works at mid-term and after physical completion.

75. As the engineer's representative, the consultant's Team Leader will implement the civil work contracts and ensure that the works are constructed in accordance with its provisions. The consultant will have all the powers defined in the FIDIC Conditions of Contract as being the engineer, except the following, which will be retained and exercised by the employer, generally on the advice of the engineer:

- (i) issuing the order to commence the works;
- (ii) approving variation orders that have financial implications;
- (iii) approving significant variations in quantities;
- (iv) approving subletting of any part of the works; and
- (v) approving extensions of time.

76. In addition to all of the duties necessary for the adequate supervision of the construction activities on site, the Team Leader's responsibilities as the consultant also include:

- (i) preparation of formal contract documentation; and
- (ii) contract administration.

77. In detail, the Team Leader's responsibilities as the Consultant include:

- (i) assessing the exposure of unexploded ordnance (UXO) in project roads before any works starts through the engagement of national professional expert who will join the DDIS team;
- (ii) approving the contractor's work program, method statements, material sources, etc.;
- (iii) preparing and issuing reports as defined subsequently;
- (iv) approving and/or issuing working drawings, approving the setting out of the works, and instructing the contractor;
- (v) taking measurements and keeping measurement records;
- (vi) maintaining records, correspondence, and diaries;
- (vii) certifying work volume and recommending interim certificates for progress payments;
- (viii) maintaining consolidated project accounts, and preparing of financial statements and withdrawal applications for submission to ADB;
- (ix) certifying completion of part or all of the works;
- (x) inspecting the works at appropriate intervals during the defects liability period and issuing the defects liability certificate;
- (xi) processing the contractor's possible claims;
- (xii) ensuring minimum disruption/damage to the environment and local settlements by approval of contractors' work statement/methodology, including monitoring the impact of construction works on the environment and local settlements and providing information to MRD and ADB in the monthly progress reports;
- (xiii) providing the employer with complete records and reports, and approving the contractors' as-built drawings for the works;
- (xiv) providing advice and on-the-job training to MRD staff in contract administration;
- (xv) providing advice to ensure there is no resettlement;

- (xvi) assisting MRD to establish a new SEO at MRD and building capacity of its members (including on gender issues); and
- (xvii) carrying out performance monitoring and evaluation for the Project in accordance with the schedule and terms of reference to be mutually agreed by MRD and ADB.

(b) Road Design Engineer – International, 12 person months

78. The road design engineer will be an internationally qualified professional engineer with 15 years' experience. He/she should have experience, as the road design engineer, in road rehabilitation projects of DBST paving with a capacity building output/s, and with extensive experience in Cambodia or countries within similar geographical areas in the region.

79. The road design engineer's role is to provide two inputs, firstly to prepare the detailed design of the Project roads and secondly to prepare the engineering requirements for the preparation of the future project.

80. For the detailed design of the project roads the road design engineer will undertake the following tasks:

- (i) administer and supervise site investigation and design and documentation activities for road improvement civil works contracts.
- (ii) confirm detailed design guidelines and specifications in collaboration with MRD.
- (iii) confirm classified traffic counts and axle loading on the project roads together with an estimate of present and future traffic and axle loading as necessary for designing appropriate pavement structures.
- (iv) carry out necessary topographic surveys for design and documentation works; establish control points, benchmarks and reference beacons as required to prepare detailed engineering designs and to enable construction quantities.
- (v) review the need for road safety measures based on the findings of the road safety output and design the road safety features appropriately.
- (vi) recommend specifications for road construction and apply any modifications that are essential;
- (vii) assist in the preparation of construction schedules showing anticipated progress of works and expenditures for the rehabilitation contract package. The schedules will reflect seasonal weather effects at the work sites;
- (viii) assist the Environmental specialist with the preparation of a suitable EMPs to mitigate adverse environmental impacts including those encountered during construction;
- (ix) prepare practical and cost-effective pavement designs on the basis of condition surveys, projected traffic levels, pavement structure studies, and axle load considerations, as determined from activities above and from any previous studies.
- (x) ensure deliverables comply with relevant MRD technical requirements, ADB conditions and the terms of the assumptions in the cost benefit analysis;
- (xi) ensure that the bid documents for road rehabilitation works include specific provisions to avoid resettlement and minimize disruption and/or damage to local settlements due to construction;
- (xii) ensure that the bid documents for road rehabilitation works include specific provisions to avoid resettlement and minimize disruption and/or damage to local settlements due to construction;

- (xiii) prepare contract drawings for the road works; including road plans, longitudinal profiles, cross-sections, and others for rehabilitation works. Road plans should include all existing features.
- (xiv) assist with the preparation of road improvement bid documents.
- (xv) assist with preparation of tender documentation suitable for procurement under ICB and NCB methods in accordance with ADB's Procurement Guidelines.
- (xvi) assist with the appraisal of road improvement bids as part of the bid evaluation process.
- (xvii) assist with the evaluation of the capacity of road improvement contractors.
- (xviii) assist with on-the-job training to engineers appointed to the PMUs and project implementation units

81. For the preparation of the future project, a strong basis exists from the feasibility study of this project including criteria for the selection of project roads, the technical specifications and draft road design documents, including suitable pavement design standards all held by MRD. In the preparation for this future project, the road design engineer will assist the transport economist to prepare the cost benefit analysis by supplying feasibility cost for improvement civil works.

82. Specific tasks will include:

- (i) in discussion with MRD the selection of provinces through an appropriate screening criteria;
- (ii) preparation of an initial list of candidate unpaved rural roads;
- (iii) selection of project roads based on suitable engineering surveys that should be undertaken as necessary, including the evaluation of pavement condition and strength;
- (iv) assist the transport economist with a review existing traffic data; carry out necessary classified traffic counts, origin/destination application of axle load information leading to a forecast of traffic loading for each road/road section;
- (v) assist the transport economist on the basis of traffic counts and vehicle loading, determine the cost effective means of road improvement for each road or subsection section of road;
- (vi) review road safety implications for each design alternative and design and provide a cost estimate for road safety mitigation measures;
- (vii) prepare a report on the engineering component of the study.

(c) Materials Engineer – International, 12 person months

83. The civil works comprise the improvement of existing earth or gravel surfaced roads to a bitumen sealed standard using a DBST, including placement as necessary of sub-base and road base, using unbound materials for the road pavement. It is expected that applying stabilization techniques will reuse the existing road structure including the remaining gravel-wearing course. The works do not permit widening of the existing road structure. The works also involves replacement or repair of existing cross drainage and the placement of some new culverts. It also involves repair replacement of small bridges at existing locations.

84. The materials engineer will be fully experienced in the materials and process involved for the improvement of the project roads including the use of unbound (aggregate and natural

materials) and hydraulically bound pavement materials and the use of bituminous surface treatments.

85. The Materials Engineer will also be fully experienced with materials selection and processing for cross drainage structures, and for bridge works and all other concrete works.

86. A Materials Engineer with 15 years' experience is required. Experience with materials used for paved roads and structures are essential. He or she should have experience, as the materials engineer, in road rehabilitation projects of DBST paving with a capacity building output/s, and with extensive experience in Cambodia or countries within similar geographical areas in the region.

87. The Materials Engineer will:

- (i) During the detail design stage, review existing information and conduct site visits, select potential materials sources and propose their usage for the detail design.
- (ii) Conduct a suitable laboratory program to test materials as necessary for this stage of the project design, especially for stabilized materials.
- (iii) Establish a testing regime for the construction phase that complies fully with the range of materials that will be used for the project roads
- (iv) During the construction (intermittently) oversee the use of materials to ensure they meet quality standards required.
- (v) Determine the materials requirements for a cement concrete pavement trial to be located on one of the project roads.
- (vi) Work closely with the national materials engineer to ensure at all times that a suitably competent and experienced materials engineer is on-hand to work with the resident engineers.

(d) Structural Engineer – International, 3 person months

88. There are a number of bridges on the roads that are to be improved. Some are of timber construction and others are very narrow, or deteriorated. These will be replaced with wider bridges with 8 m. The structural engineer will be an internationally qualified professional engineer with 10 years' experience. He or she should have experience, as the structural engineer, in road rehabilitation projects with a capacity building output/s, and with extensive experience in Cambodia or countries within similar geographical areas in the region. He or she is required to:

- (i) Inspect the bridges and confirm those that require replacement, and any repairs required on other bridges
- (ii) Work closely with the national hydrological engineer to determine adequacy of the structural design
- (iii) Prepare the detailed design for the repair or replacement of bridges, as required.
- (iv) Prepare detail design documentation suitable for bidding documents.

(e) Quantity/Cost Engineer– International, 36 person months

89. The Quantity/Cost Engineer will be an internationally qualified professional engineer with 10 years' experience. He or she should have experience, as the Quantity/Cost Engineer, in road rehabilitation projects of DBST paving with a capacity building output/s, and with extensive experience in Cambodia or countries within similar geographical areas in the region. The Quantity/Cost Engineer will report to the Team Leader.

90. The Quantity/Cost Engineer's role will be:

- (i) to prepare detailed cost estimates of the detailed design of the Project roads,
- (ii) to prepare cost estimates during the preparation of the future project, and
- (iii) to check quantity and cost for variations of the works and assist the Team Leader in certifying monthly statements of civil works contracts.

91. The Quantity/Cost Engineer will undertake the following tasks:

- (i) prepare detailed cost estimates including bills of quantities of civil works contract packages;
- (ii) assist preparing contract drawings for the road works; including road plans, longitudinal profiles, cross-sections, and others for rehabilitation works.
- (iii) for preparation of future project, prepare the estimates of quantity and costs for improvement civil works and overall project costs.
- (iv) review and analysis of weekly report and monthly report of civil works contracts;
- (v) collect information on work done quantities, material on site;
- (vi) review and calculate monthly statements submitted by contractors;
- (vii) regular update of overall project cost estimates by completion;
- (viii) estimate required quantities and costs of variations for civil works contracts;
- (ix) prepare yearly budget plan for implementation and necessary financial documents.

(f) Resident Engineer (3 persons) – International, 60 person months total

92. A resident engineer will be assigned to one or two civil works package. In total, three resident engineers are required. Each resident engineer will be an internationally qualified professional engineer with at least 10 years' experience internationally and preferably with at least 5 years' experience in the region. He or she should have experience, as the resident engineer, in road rehabilitation projects of DBST paving with a capacity building output/s, and with extensive experience in Cambodia or countries within similar geographical areas in the region. The engineer will be experienced in the supervision of internationally qualified contractors, the Engineer's responsibilities and legal aspects of the works. The Resident Engineers will report to the Team Leader.

(g) Environment Specialist – International, 6 person months

93. The environment specialist will have a suitable international environmental qualification with 10 years' experience, have experience on ADB assisted projects, and demonstrate

significant experience on environmentally sensitive areas and issues in Cambodia or countries within similar geographical areas in the region.

94. The environment specialist will provide approximately 4 months of services on the main Project responsibilities and approximately 2 months of services supporting the preparation of the future project (see para. 8).

95. For the Project roads the environment specialist will:

- (i) ensure that an EMP based on the ADB-approved initial environmental examination (IEE) is included in the bid and contract documents for civil works;
- (ii) ensure that environmental design measures specified in the EMP are incorporated in the detailed design;
- (iii) as required in the EMP, monitor implementation of environmental mitigation measures and environmental performance of contractors based on the EMP schedule, and assist MRD in the preparation of semi-annual environmental monitoring reports for submission to ADB. The monitoring reports shall describe the progress of implementation of each environmental mitigation measure specified in the EMP, compliance issues, and corrective actions, if any;
- (iv) undertake field measurements for dust, noise, and water quality as required in the EMP and submit corresponding reports to ADB;
- (v) coordinate with the Social Development/Safeguards Specialist (international) in preparing environmental training materials and train SEO staff in the scope and detail of their responsibilities so they can inform and train staff of other offices of MRD and PDRDs;
- (vi) undertake environmental training for the MRD/SEO staff to build their capacity on environmental management and monitoring. The training will be implemented through on-the-job training and workshops based on the provisions of the EMP.

96. For the future project, to ensure environmental safeguard requirements are met, the specialist will, in accordance with the SPS, undertake the following tasks, including preparation of relevant appendixes and sections of an RRP:

- (i) prepare a Rapid Environmental Assessment for ADB's approval using the ADB sector-specific checklist included in ADB's Environmental Assessment Guidelines (2003);
- (ii) depending on the project's environmental category (likely to be categorized as environmental B) as approved by ADB, prepare an environmental assessment report (i.e. environmental impact assessment [EIA] for category A and IEE for category B) considering the likely impacts associated with pre-construction and construction activities, as well as the long-term impacts during operation. The environmental assessment report shall be prepared consistent with the requirements of SPS;
- (iii) as part of the environmental assessment, prepare an EMP detailing environmental mitigation measures to address each identified impact as well as an environmental monitoring program to be implemented during various project phases. The EMP shall identify specific costs, institutional responsibilities, schedule/timeframe, location, and monitoring parameters;
- (iv) conduct consultations with groups to be affected (local residents, local officials, people's organizations, and other stakeholders) by the project and local non-government organization (NGOs). For category B project, the public consultation

shall be conducted at least once while for category A, consultations shall be carried out at least twice, i.e., once during the early stages of EIA field work; and once when the draft EIA report is available, and prior to loan appraisal by ADB. Document the results of the consultations in the environmental assessment report;

- (v) ensure that the cost for implementing, mitigation measures, monitoring plan, and environmental management capacity strengthening activities are included in the project cost; and,
- (vi) prepare the terms of reference for any further detailed environmental assessments, if required.

(h) Procurement Specialist – International, 6 person

months

97. The Project involves the procurement of both goods and civil works. To undertake these activities, to entirely meet the ADB procurement guidelines, an international procurement expert with suitable qualifications and 10 years' experience is required. The specialist will be experienced specifically with the ADB requirements for successful procurement and should demonstrate significant experience on procurement issues in Cambodia or countries within similar geographical areas in the region. A national procurement specialist will support the specialist.

98. The activities include but are not limited to:

- (i) The procurement of eleven civil works packages through international/national bidding procedures. Within the procurement of these civil works internationally, suitable and appropriate smaller scale civil works will be specifically identified for procurement under sub-contracting terms under the process of procuring the principal contractor. These sub-contracts will permit works to be undertaken by provincial, local and community based contracts.
- (ii) In conducting the procurement process the specialist will first prepare a detailed plan showing all of the processes to be adhered to and all time schedules, such that the process is entirely defined. It must also give guidance on what must not be done such that the procurement process could be placed in jeopardy.
- (iii) The specialist will work closely with the DDIS Team Leader and with the PMU through the PMU Director and in particular with the MRD procurement Officer and with the Procurement committee(s).

(i) Social Development/Safeguards Specialist – International, 8 person months

99. The Project involves the social and safeguards issues/activities like temporary disturbances to residents due to construction, gender requirements (see GAP), and HIV and human trafficking prevention. To undertake these related activities, to entirely meet the ADB safeguards policy requirements, an international Social Development/Safeguards Specialist with suitable qualifications and 10 years' experience is required. The specialist will be experienced specifically with the ADB requirements adequately. The specialist should demonstrate significant experience on safeguards issues in Cambodia or countries within similar geographical areas in the region. A national labor and gender specialist will support this

international specialist. Together with the international environmental specialist, this specialist tasks will include:

- (i) use approximately one month of services supporting the preparation of the future project (see para. 8),
- (ii) assist with the planning and design functions in the establishment of the SEO at MRD,
- (iii) establish links and cooperation between the SEO and MRD's Gender Working Group, as well as other line ministries such as the Resettlement Department of the Ministry of Finance, inter-ministerial resettlement committee, the MOE and the MCFA,
- (iv) undertake study tours: regionally and elsewhere,
- (v) design and implement training programs and prepare training materials for SEO specific to consultation and participation, gender and development, social safeguards, and management of social risks and vulnerabilities,
- (vi) prepare the SEO staff to enable them to train staff of other offices of MRD and PDRDs,
- (vii) ensure systems are set up for effective implementation of the project's GAP.

100. Document any steps taken to reduce resettlement impacts. Prepare options for discussion with other team members to minimize resettlement effects. Assist the team in the resettlement screening and preparation of resettlement plan, as required, as per agreed Resettlement Framework and Safeguard Policy Statement, and monitoring and reporting of resettlement-related issues.

(j) Transport Economist – International, 4 person months

101. Under the overall direction of the Team Leader and supported by the Road Design Engineer (International), the International Transport Economist will lead the feasibility study for the future project (see para. 8). The specialist should have 10 years' experience specifically with the ADB requirements on economic analysis, adequately. The specialist should demonstrate significant working experience in Cambodia or countries within similar geographical areas in the region. The activities of this position include, but are not limited to, the following:

- (i) visit the proposed rural roads for rehabilitation as advised by the DDIS road engineer and discuss with MRD staff and other development partners, etc. to obtain data necessary for the tasks. As such, the consultant will collect existing traffic volume data of recent years if any and in case of absence of such conduct traffic counts on these roads, to determine the daily average traffic volumes, and forecast traffic volume growth.
- (ii) collect a set of basic road deterioration and road user related data, to determine the economic indicators to suit the current situation and necessary for HDM-4 analysis.
- (iii) conduct economic analysis of the proposed rural roads based on HDM-4 model, and conduct risk and sensitivity analyses in line with ADB's Guidelines for Economic Analysis of Projects (1997).
- (iv) adopt a life cycle cost approach and make an analysis to determine the most economical rehabilitation method for the current rural roads of MRD.
- (v) draft the benefit monitoring framework for the future project along with a design and monitoring framework (DMF).

- (vi) draft a summary report outlining the issues, the proposed project, its inputs, outputs, outcome and impacts, and its budget and general implementation arrangements as identified by the Road Engineer. The summary report will include relevant annexes summarizing the findings and conclusions of the overall study done by the team.
- (vii) provide an economic analysis report in the midterm report of the feasibility study of the future project and draft final report of satisfactory quality, to be in the form of main text for a final report and appendixes of an RRP.
- (viii) during project processing at the end of the feasibility study of the future project, fact-finding and appraisal missions, assist the ADB mission to smoothly undertake such missions.
- (ix) assist the DDIS Team Leader in the coordination of the activities for the future project.
- (x) based on the current project's DMF, prepare a benefit monitoring evaluation framework, discuss with the PMU and ADB and finalize all monitoring indicators and obtain baseline data for all indicators within 9 months after the loan effectiveness.
- (xi) conduct benefit monitoring and evaluation during the project's the mid-term review, and at the end of the project.

(ii) NATIONAL DDIS TEAM

(a) Road Design Engineer (deputy team leader) – National,

12 person months

102. A nationally qualified professional engineer with 15 years' experience will be required to be the road design engineer and to undertake the role of Deputy Team Leader. The expert should have project experience of road rehabilitation with DBST paving with a capacity building output, and also experience working with international organizations. Duties as the road design engineer will be undertaken to assist in the preparation of the detailed design and future projects.

(b) Materials Engineer (2 persons) – National, 72 person

months total

103. A nationally qualified professional engineer with 10 years' experience will be required to be the materials engineer (national). Experience of the materials quality requirements for paved roads is essential. Knowledge and experience of working with road building materials is necessary, while the expert should have project experience of road rehabilitation with DBST paving with a capacity building output, and also experience working with international organizations. The duties as the materials engineer will be to assist in the preparation materials aspects of the detailed design and to guide and undertake laboratory and field investigations to prove the quality of materials used in the Project. The materials engineer will act under the direction of the international materials engineer and will fully support the Project in the selection, assessment and approval of materials for use by the project.

(c) Structural Engineer – National, 4 person months

104. A nationally qualified professional engineer with 15 years' experience will be required to be the structural engineer (national). The expert should have project experience of road

rehabilitation with DBST paving with a capacity building output, and also experience working with international organizations. The structural engineer will work under the direction of the Structural Engineer international and is expected to fully competent to independently undertake all aspects of the work.

(d) Surveyor (2 persons) – National, 24 person months
total

105. A nationally qualified professional surveyor with 10 years' experience will be engaged under the DDIS team. The experts should have project experience of road rehabilitation with DBST paving with a capacity building output, and also experience working with international organizations. The surveyor's role will be as follows:

- (i) conduct topographic and other surveys as a component of the detailed design; and
- (ii) support the resident engineer's office at the commencement and completion of civil works at each job site (project road) to determine measurement procedures and accuracies required.

106. The hydrologist will work closely with the Team Leader and international and the national structural engineers and the road design engineer during the detailed design stage to review documentation, measure and advise on the adequacy of the existing drainage structures with respect to their position, alignment and capacity to ensure any deficiencies are detected and rectifications are included in the detailed design. The expert should have 15 years of project experience of road rehabilitation with DBST paving with a capacity building output, and also experience working with international organizations.

(e) Quantity/Cost Engineer – National, 48 person months

107. A nationally qualified professional engineer with 10 years' experience will be required to be the quantity/cost engineer (national). Experience of the quantity and cost estimates for paved roads is essential. Knowledge and experience of working with road design is necessary, while the expert should have project experience of road rehabilitation with DBST paving with a capacity building output, and also experience working with international organizations. The duties as the quantity/cost engineer will be assist the international quantity/cost engineer work: (i) to prepare detailed cost estimates of the detailed design of the Project roads, (ii) to prepare cost estimates during the preparation of the future project and (iii) to check quantity and cost for variations of the works and monthly statements of civil works contracts.

(f) Hydrologist – National, 4 person months

108. The hydrologist will work closely with the Team Leader and international and the national structural engineers and the road design engineer during the detailed design stage to review documentation, measure and advise on the adequacy of the existing drainage structures with respect to their position, alignment and capacity to ensure any deficiencies are detected and rectifications are included in the detailed design. The expert should have 15 years of project experience of road rehabilitation with DBST paving with a capacity building output, and also experience working with international organizations.

(g) Transport Economist – National, 6 person months

109. Under the direction of the Team Leader, National Transport Economist assists international transport economist, who will lead the feasibility study for the future project. The specialist should have 10 years' experience economic analysis specifically with the ADB of this position include, but are not limited to, the following:

- (i) visit the proposed rural roads for rehabilitation as advised by the DDIS road engineer and assist international transport economist in discussing with MRD staff and other development partners, etc. to obtain data necessary for the tasks;
- (ii) collect a set of basic road deterioration and road user related data, to determine the economic indicator requirements on economic analysis, adequately. The specialist should demonstrate significant working experience in Cambodia working with international organizations. The activities have to be suit with the current situation and necessary for HDM-4 analysis;
- (iii) assist international transport economist in conducting economic analysis of the proposed rural roads based on HDM-4 model, and conduct risk and sensitivity analyses in line with ADB's Guidelines for Economic Analysis of Projects (1997);
- (iv) assist international transport economist in adopting a life cycle cost approach and make an analysis to determine the most economical rehabilitation method for the current rural roads of MRD;
- (v) assist international transport economist in drafting the benefit monitoring framework for the future project along with a DMF;
- (vi) assist international transport economist in drafting a summary report of, the proposed project including its budget and general implementation arrangements as identified by the Road Engineer; and
- (vii) assist the international transport economist in the coordination of the activities for the future project and benefit monitoring of the project.

(h) Assistant Resident Engineer (4 persons) – National, 90

person months total

110. An assistant resident engineer will be engaged to assist each international Resident Engineer. The assistant resident engineer will be a nationally qualified engineer with 15 years' experience in the improvement of paved roads. The expert should have project experience of road rehabilitation with DBST paving with a capacity building output, and also experience working with international organizations. The assistant resident engineer will fully support all aspects of the civil works and work closely with and through the international Resident Engineer.

(i) Environment Specialist – National, 12 person months

111. The environment specialist will have a suitable qualification in environment, science, engineering or management and will have 10 years overall experience, including experience on projects assisted by ADB and also experience working with other international organizations. The specialist will be fully conversant with the areas and locations of protected and sensitive areas of the country and will be knowledgeable of the environmental laws of Cambodia and their practical application. The specialist will have experience in the environmental requirements and Environmental Management Plans and monitoring procedures required during the

implementation of civil works. The specialist will work under the direction of the International Environment Specialist.

(j) Procurement Specialist – National, 8 person months

112. A suitably qualified national procurement specialist with 10 years' experience in Cambodia will be engaged to support the international procurement specialist in all aspects of the procurement process. The procurement specialist will have significant experience working on ADB assisted projects in Cambodia as the procurement specialist and also experience working with other international organizations. The specialist will be fully conversant with the national standard operating procedures, financial management procedures and procurement guidelines of the RGC.

(k) Labor and Gender Specialist – National, 18 person months total

113. The Rural Roads Improvement Project is expected to bring significant benefits to rural residents in seven Cambodian provinces by reduced travel times, less arduous journeys and better connectivity to the national road network. It is intended that the benefits to local populations are maximized, and to ensure that the benefits are equally shared by men and women. Therefore, the labor and gender specialist will have a suitable qualification in social aspects related to labor and gender, and will have 10 years overall experience, including experience on projects assisted by ADB and also experience working with other international organizations.

114. Labor-based road construction and maintenance is an area with significant potential for gender mainstreaming and greater gender equality in road construction and maintenance can provide significant social benefits to the households and communities that are involved. Measures to effectively mainstream gender in rural road activities include:

- (i) capacity development activities to promote better understanding of the differential gender impact of poor infrastructure and of the social benefits of improving it (related to gender differences in the purpose of travel and travel patterns, and in mobility outside the home and outside the village);
- (ii) mandatory recruitment procedures or quotas in minor works contracts, preceded by sensitization activities targeting both men (to encourage them to allow female family members to participate) and women (to inform them of opportunities);
- (iii) a requirement that contractors recruit a new workforce at regular intervals (e.g. every 5 km) to maximize employment creation and to ensure that women are not discouraged by excessive travel distances; and
- (iv) equal pay for equal work for both men and women, with a requirement that contractors to submit time sheets that are disaggregated by gender

115. Implementation arrangements and costs of mainstreaming labor and gender have been integrated into the overall arrangements and total project budget. MRD as the executing agency will be responsible for implementing and monitoring the GAP, particularly through the ministry's Gender Working Group. As part of the DDIS team, a national labor and gender specialist will be appointed to:

- (i) work with the Gender Working Group to conduct gender awareness training for the PMU, PDRDs, and the new SEO;
- (ii) establish sex-disaggregated indicators for project performance monitoring and evaluation; and
- (iii) coordinate with other specialists during subproject preparation and implementation. The PDRDs should incorporate labor and gender monitoring in quarterly progress reports to the PMU, and the PMU will do the same in their reports to ADB and the RGC.

116. Where appropriate, civil works will be based on the concept of labor-based appropriate technology, and contractors will prioritize (and monitor and report on) the use of local unskilled labor in civil works contracts and through subcontracting. The labor and gender specialist will prepare plans and undertake actions to ensure the following:

- (i) at least 30% of unskilled laborers will be female;
- (ii) male and female unskilled workers will receive equal pay for equal work;
- (iii) contractors will not employ child labor on civil works contracts; and
- (iv) road shoulders will have a sealed bituminous surface enabling carts with wheels for carrying water to reduce the burden on women and girls who haul water in rural areas

117. The Project will also support improving the capacity of the local contracting industry; this process will include the following gender and labor-based appropriate technology issues. The specialist will:

- (i) develop a database such that labor force data will be available for contractors and also that PDRDs may track the use of local labor;
- (ii) assist with the preparation of a suitable road maintenance action plan for MRD (PDRDs specifically) so that (a) a sustainable road maintenance regime will be supported by the Project; and (b) the works will be delegated to rural communities in the project areas through small community contracts, in a sustainable manner;
- (iii) at least 30% of the road maintenance workers will be women;
- (iv) child labor will not be employed for road maintenance;
- (v) for the safety of children and pedestrians, all project roads will have speed bumps to slow traffic in villages;
- (vi) all project roads will include road safety signage; and
- (vii) assist with the preparation of a community-based road safety campaign that will involve community members as facilitators, and ensure that at least 50% of community facilitators will be women

118. The Project will implement HIV/AIDS awareness and prevention program to mitigate the potential HIV-related impacts of road construction on rural communities. The specialist will assist with ensuring:

- (i) the Project implements a human trafficking awareness and prevention program; and
- (ii) the baseline socio-economic survey includes the collection of sex-disaggregated data.

119. The Project will include vulnerability mapping for rural roads to improve planning for climate change adaptation will include local women at planning stages. The specialist will assist with ensuring that:

- (i) emergency management and early warning systems does include special needs for potentially more vulnerable groups such as disabled persons, women etc., during all planning stages and that special provisions are included for such groups in actual operation of the systems; and
- (ii) for green planting on embankments for climate change adaptation, community-based work programs will be developed to involve women in planting and caring for road-side trees and other plants

(I) De-mining/UXO Specialist – National, 4 person months

120. A land mine or unexploded ordnance risk is widespread in Cambodia including the provinces in which the proposed project will be conducted. The works are to improve existing roads and much of the work will be carried out within the width of the existing roads. Nevertheless, a risk remains. Deep seated mines may be exploded by heavy construction equipment and shallow ordnance may be uncovered during the works. Although maps exist to give a first indication of the level of risk, and many areas will have already been cleared by the Cambodian authorities and other organizations the evidence of clearance must be established.

121. A Cambodian expert with 10 years in-country experience will be engaged within the DDIS team to determine the level of risk for any particular project road or area and advice on the need for clearance. The expert should have project experience of road rehabilitation with DBST paving with a capacity building output, and also experience working with international organizations. Clearance must be carried out by expert firms who will certify that areas are cleared.

122. Construction activities will attract the attention of the local communities and children frequently watching the works from nearby. For these and other reasons, a public information program will be undertaken within the local communities to prepare and advise them of the risks. The workers of the implementing consultants and the civil works contractors as well as others associated with the project will also be taught and advised of the risks.

- (i) assessing the exposure of UXO in project roads before any works starts including a suitable sampling survey of the project roads, as necessary and to ensure the safety of the Project site team(s) involved in the detailed design;
- (ii) preparing the necessary documentation for any clearance that is required which will be undertaken through the civil works contracts, by the engagement by the contractor of qualified local clearance firms;
- (iii) prepare a suitable information program for project staff and visitors to ensure they are fully aware of any de-mining or UXO risks before they visit (on visiting the work sites); and
- (iv) prepare a suitable information program for the public within the areas where there is a perceived de-mining UXO risk, before the commencement of any works.

(m) Resident Inspectors/Surveyor (12 persons) – National, 240 person months total

123. A team of resident engineer's inspectors will be assigned to each civil works packages to work under the direction of the Resident Engineer (international). Each inspector/survey person will have at least 10 years' experience and also experience working with international organizations. Collectively, they will be experienced in all of the tasks required to ensure the quality of the civil works including but not limited to supervision of the testing laboratory, supervision of field testing to meet end-product specifications, correct use of plant and equipment, and survey of works for the determination of quantity for payment in accordance with the bill of quantities and specifications for the civil works.

g. Facilities

124. A furnished main office in Phnom Penh and its utilities for the consultant will be provided by the MRD. Transport and accommodation of the consultant's full-time, short-term, international, and domestic staff will be financed under the consulting services contract. Two furnished field offices, material testing laboratories, field transport, and their maintenance, as well as utilities will be provided through the two civil works contracts.

h. Reports

125. The consultant will submit reports to MRD and ADB as shown in Table VI-4 below.

Table VI-4: Reports to be Submitted to the MRD and ADB

	MRD	ADB
Inception Report (month 3)	3	3
Monthly Progress Reports	3	3
Quarterly Reports	3	3
Project Completion Report	3	3

ADB = Asian Development Bank; MRD = Ministry of Rural Development.

126. **HIV/AIDs and Human Trafficking Awareness and Prevention Program (HHTPP).** The following para. describes the HHTPP and the TOR.

a. Description of the Program

127. **Impact and Outcome.** The impact of the proposed intervention is to have contributed to achieving the Millennium Development Goal 6, Target 7: to have halted and begun to reverse the spread of HIV/AIDS by 2015 in the Greater Mekong Subregion. The outcome is reduced HIV transmission and prevalence of STIs among workers and communities associated with the Project and prevention of human trafficking. The project will focus on four outputs: (i) community-based risk mitigation package for HIV and human trafficking; (ii) focused HIV initiatives in the work setting/construction sites; (iii) strengthened sexual and reproductive health services at district-level; and (iv) a rigorous monitoring and evaluation system.

128. This program is expected to be implemented by national experts. The rationale for having national experts' inputs for the program is due to the fact that such experts are more effective in delivering the required outputs of the program than the international experts due to the ability of national experts for direct communication with the affected persons and

beneficiaries and being able to handle more efficiently the culturally-sensitive education, awareness, and prevention activities of HIV epidemic and human trafficking.

b. Methodology and Key Activities

129. The project will focus on four outputs:

(i) **Community-Based Risk Mitigation Package for HIV and Human Trafficking.** The output will be strengthened capacity of local communities to address HIV and human trafficking issues associated with road construction. In line with the D&D policy, focus will be placed on supporting local communities in designing, implementing and monitoring community-based HIV and human trafficking prevention activities. The consultant will support the commune AIDS committees in reviewing, implementing and updating the strategies and actions plans they developed under RETA 6467: Mitigating Risk in the Greater Mekong Subregion, for continued HIV and human trafficking risk mitigation during and after the improvement of subproject roads. The consultant will also coordinate activities under RETA 6448: Integrating Human Trafficking and Safe Migration Concerns for Women and Children into Regional Cooperation, conducted by United Nations Interagency Project on Trafficking (UNIAP). The activities under this component are presented below.

(a) A capacity needs assessment will be conducted among the district and commune AIDS committees, village health support groups and commune health centers on what knowledge and skills need to be strengthened in order to effectively implement the community strategies and action plans for HIV, STI, safe migration and human trafficking prevention. In collaboration with the provincial AIDS committees, UNIAP, and relevant ministries and task force on anti-human trafficking Leading Task Force to Fight Human Trafficking, Smuggling, Exploitation and Sexual Exploitation of Women and Children; National Task Force to Implement Agreements, Memoranda of Understanding between the Royal Government of Cambodia and Relevant Countries on the Elimination of Trafficking in Persons and Assisting Victims of Trafficking, Secretary of State for the Ministry of Women's Affairs, and involved relevant ministries, the consultant will develop a customized curriculum and conduct training at district-level, clustering nearby commune AIDS committees per training. As one of the main outputs of the training workshop, each commune AIDS committees will be asked (i) to prioritize which prevention activities in the action plans can be supported by the Project; and (ii) to develop and update annual work plans, cost estimates and monitoring and evaluation frameworks to implement these. The consultant, in collaboration with the provincial AIDS committees and task force on anti-human trafficking, will be responsible for overall management, coordination, quality assurance, and providing timely technical support to the commune AIDS committees for designing, implementing and monitoring the approved annual work plans.

(b) Regular awareness and behavior change activities for HIV and STI prevention, safe migration and anti-trafficking will be integrated into the community action plans, which the consultants will be responsible for implementation. The consultants will use the *For Life, With Love: Training*

Tool for HIV Prevention in Road Construction Settings and Affected Communities, developed by ADB and the International Organization for Migration (IOM) in 2009. ADB and IOM. 2009. *For Life, With Love: Training Tool for HIV Prevention in the Road Construction Setting and Affected Communities*. Manila. This consultant will also do on-the-job training for the commune AIDS committees on how to use the *For Life, With Love* training tool.

- (c) Partner with the provincial health authorities and NGOs in the area to ensure condom accessibility, availability and affordability.
- (ii) **Focused HIV Initiatives in Work Settings.** The output will be effective and gender-responsive HIV and STI prevention services for the construction workforce, entertainment and casino workers, and border police and officials. In collaboration with the local AIDS authorities, NGOs and other relevant government agencies, HIV prevention activities and services should include the activities below.
- (a) For the construction workforce, awareness and behavior change activities will be conducted using the *For Life, With Love* Training Tool. Weekly education and training sessions in the campsites will be conducted targeting supervising consultants, project managers, construction laborers, transport and auxiliary workers, office staff, campsite laborers, etc. These will be done at an appropriate time for men and women to attend, considering the difference in women's duties and work schedules. Condoms will be available to the construction workforce at the sites.
 - (b) For entertainment sites (e.g. karaoke bar, casinos, restaurants), awareness and behavior change activities using the *For Life, With Love* Training Tool will be implemented targeting entertainment workers "Entertainment workers" is a term used in Cambodia to include direct and indirect sex workers and their clients. Activities will include motivating entertainment owners/managers to support and sustain HIV prevention programs in the workplace, including the 100% Condom Use Program (where appropriate). Interventions should consider the varying nationalities of the entertainment workers and clients (e.g. Vietnamese entertainment workers and Thai clients).
 - (c) Voluntary confidential counseling and testing services will be promoted for HIV and other STIs and a confidential referral system will be established for all target groups throughout the construction period, and afterwards.
 - (d) Partnership with the provincial health authorities and NGOs in the area to ensure condom accessibility, availability and affordability.
- (iii) **Strengthened Sexual and Reproductive Health Services at District-Level.** The output will be sexual and reproductive health (SRH) services that are responsive to the needs of men, women and youth in the community, including the construction workforce and other migrant workers. The activities are presented below.
- (a) Follow-up and/or refresher training courses on STI diagnosis and treatment and HIV referral will be provided to public and private health and pharmacy workers near construction camps and work sites.

- (b) A functional referral system for HIV testing, treatment, care and support services will be established in district and commune health centers near the construction camps and sites.
 - (c) Partnership with the provincial health authorities and NGOs in the area to ensure condom accessibility, availability and affordability at affected districts.
- (iv) **Monitoring and Evaluation.** The output will be high-quality, timely information on the progress and effectiveness of the project activities being implemented. This will be implemented in close collaboration with the provincial, district and commune AIDS committees. The activities included are presented below.
- (a) Development of a project performance and management system (PPMS) to be applied throughout the project duration (baseline, mid-term and end-term) that is informed by, and can inform the national monitoring and evaluation (M&E) framework.
 - (b) Documentation, forums and dissemination activities on the changing risks and vulnerabilities faced by local communities around HIV and human trafficking.
 - (c) Mid-term and end-term workshops will be conducted among key stakeholders to discuss concerns, lessons and recommendations for remedial measures and improving strategies for future interventions in the project area or other similar areas.

c. Implementation Arrangements

130. The MRD will be the executing agency for the Project and will be responsible for overall coordination with the steering committee (to be established) and other partners. In the PMU of MRD, there will be a nominated focal person responsible for overseeing the overall implementation of the program. This focal person will convene a steering committee that will provide technical advice in the design, monitoring, and evaluation of the activities, chaired by MPWT (Ministerial AIDS Committee) and NAA. The co-chairs will include representatives from the project supervision consultant and provincial AIDS committees, UNIAP, and task force on anti-human trafficking.

131. Twelve civil works contractors and subcontractors will be required to request and encourage all workers to participate in HIV awareness training. Conditions to this effect will be included in the relevant works contracts. Contractors are to maintain up-to-date lists of workers employed by work site and provide this information on a monthly basis to the service provider to enable the service provider to monitor participation rates in training and awareness raising activities. Civil works contractors will also be required to assign an HIV focal point for each work site who will be responsible for passing on relevant information, education, and communication materials to any new workers who commence at a given work site after HIV awareness training has already been conducted at the site.

d. Consulting Services

132. MRD will select a program-implementing consultant, which may a consulting firm, a joint venture, a consortium of consulting firms, or a non-governmental organization, following the quality-based selection and simplified technical proposal in accordance with ADB's Guideline on

Use of Consultants. Procurement by consultants of the office equipment and supplies required for the program implementation will be in accordance with ADB's Procurement Guidelines.

133. The program-implementing consultant will be responsible for the effective and efficient implementation of the Program. The consultant should have demonstrated competence and experience in implementing an HHTPP in the infrastructure sector. The consultant should have at least 5 years of prior work experience in the project area. The consultant team should consist of one national team leader (30 person months), a national deputy team leader (48 person months), 4 national program officers (a total of 120 person months), and a national M&E officer (30 person months). The civil works contractors and subcontractors need to be involved in the HIV prevention program, as required by the DDIS consultant. Collaboration with the program-implementing consultant is included in the terms of reference for the DDIS consultant and the bidding documents for civil works contractors and subcontractors, for ADB, the Government of Australia, Pilot Program for Climate Resilience, and KEXIM financed works.

134. The composition of consultants and person-month are shown below.

Consultant team – for revision		Person-months
National	Team Leader	30
	Deputy Team Leader	48
	Program officers (4)	120
	M&E Officer	30
Total		228

M&E = monitoring and evaluation.

e. Terms of reference

(i) Team Leader – National, 30 person months

135. The team leader and HIV prevention specialist will have a bachelor's degree in health, public health, social service, or related field, and at least eight years of work experience, including five years in project management. At least 4 years of proven work experience in HIV prevention is required and at least 2 years work experience in safe migration and human trafficking. The specialist will undertake the following tasks but will not be limited to them:

- (i) Report to the supervising consultant team leader, MRD focal person and ADB;
- (ii) Manage all implementation, administration, and financial requirements;
- (iii) Lead consultations on HIV and human trafficking in the project area;
- (iv) Guide the team and ensure that all the activities are implemented according to the TOR and any subsequent instructions or guidance from PMU and ADB, and be responsible for the collective work of the team;
- (v) Ensure regular liaison with PMU, Steering Committee, Commune Councils, and other key partners;
- (vi) Take responsibility for preparing a detailed implementation and budget for outputs 1–4 through a participatory planning process, including extensive consultations with the commune councils, civil works contractors and subcontractors, transport companies, commercial and entertainment establishments, local communities, and the Steering Committee.
- (vii) Manage the overall technical and financial assistance to the commune AIDS committees;
- (viii) Get the *For Life, With Love* training tool from ADB and/or IOM and train the team

- on how to use it;
- (ix) Design the work plan for the education and behavior change activities for outputs 1–3 using the *For Life, With Love* training tool, including the on-the-job training for commune AIDS committees;
- (x) Develop and ensure the overall implementation of an effective M&E system for internal monitoring of implementation and outcomes;
- (xi) Provide technical guidance to the national M&E officer in developing the project PPMS and supporting the commune AIDS committees in developing and updating their community M&E frameworks;
- (xii) Support the M&E officer in developing indicators and targets that are adequate for detailed planning, monitoring, and evaluation of the program using updated information on HIV/AIDS, STIs, sex work, transport settings, commercial and entertainment settings, mobility and migration patterns, ethnic minority settings, health systems, among others.
- (xiii) Prepare memorandum of understanding and/or agreements required to implement the implementation design, financial and reporting requirements, and ensure formal and documented approval of the activities at provincial and district levels; and
- (xiv) Ensure complete and on-time submission of formal written reports, including the inception report, baseline study, implementation report, quarterly reports, annual reports, and completion report.

(ii) Deputy Team Leader – National, 48 person months

136. The deputy team leader will have a bachelor's degree in health, public health, social service, or related field, at least five years of work experience in project implementation and/or coordination, and at least 3 years of proven work experience in HIV prevention and safe migration and human trafficking. The specialist will undertake the following tasks but will not be limited to them:

- (i) Report to the team leader, and support the team leader in managing the team and other consultants and making all arrangements for the smooth implementation and administration of the team's work;
- (ii) Support the establishment of close working relationships with MRD, Steering Committee, supervising consultant, civil works contractors, commune councils and AIDS committees, district AIDS committees, and CAMCONTROL. CAMCONTROL is the force of enforcement officers from Police and Customs who are specially assigned for border-post control., and other partners;
- (iii) Work with the team leader to design, implement, and monitor detailed implementation and budget plans for outputs 1–4 through a participative approach;
- (iv) Organize and participate in the training course for using the *For Life, With Love* training tool;
- (v) Assist in designing the curriculum for the *For Life, With Love* training tool, including the on-the-job training for the commune AIDS committees;
- (vi) Conduct awareness and behavior change activities using the *For Life, With Love* training tool;
- (vii) Provide regular and timely technical assistance and support to the commune AIDS committees and the Steering Committee;
- (viii) Ensure that each commune AIDS committee undertakes appropriate consultations at provincial, district, and village levels to develop and maintain

- their community databases and action plans;
- (ix) Support the national officers in preparing and implementing their work plans and assist the national M&E officer in establishing and maintaining the PPMS;
- (x) Draft quarterly and annual progress reports, including detailing achievements, implementation issues, and recommendations for remedial measures; and
- (xi) Assist the team leader in preparing formal written reports, including the inception report, baseline study, implementation report, annual reports, and completion report.

(iii) Program Officers (4 persons) – National, 120 person months total

137. The program officers will have a bachelor's degree in any related field and at least three years of work experience in HIV and/or and human trafficking prevention. The specialists will undertake the following tasks but will not be limited to them:

- (i) Report to the deputy team leader and work as a member of the team;
- (ii) Implement field-level activities for outputs 1–3 and assist in output 4;
- (iii) Work closely with commune, district and provincial AIDS committees, UNIAP and task force on anti-human trafficking;
- (iv) Conduct awareness and behavior change activities using the *For Life, With Love* training tool, including on-the-job training for commune AIDS committees;
- (v) Assist the commune AIDS committees in maintaining their community databases and developing evidence-informed action plans;
- (vi) Provide technical support to commune AIDS committees in designing, implementing and monitoring their annual work plans, including financial and liquidation requirements;
- (vii) Assist in ensuring that commune AIDS committees, outreach workers and SRH service providers undertake appropriate consultations with communities, village health support groups, associations for people living with HIV/AIDS, and other key partners in the project area;
- (viii) Provide the deputy team leader with quarterly progress reports of community action plans, including achievements, implementation issues, and recommendations for remedial measures; and
- (ix) Assist the national M&E officer in implementing the PPMS.

(iv) M&E Officer – National, 30 person months (intermittent)

138. The national M&E officer will develop and implement PPMS to (i) assess implementation progress in a timely fashion, (ii) enable appropriate adjustment of the activities during road construction through monitoring performance indicators, and (iii) evaluate the impacts of the intervention. The PPMS is aimed at improving the knowledge of the HIV and human trafficking issues and its dynamics in relation with the implementation of infrastructure projects to help fine-tune prevention programs associated with such projects in HIV and human trafficking-prevalent areas. The national M&E officer will undertake the following tasks but will not necessarily be limited to them:

- (i) During the inception phase, develop a PPMS including establishment of data sources and a set of performance indicators based on the intervention targets and anticipated outputs. The PPMS will report on a set of data including (a) HIV prevalence in the project areas disaggregated by gender and target group, e.g. construction workers, local communities and entertainment workers; (b)

incidence of STIs among the same vulnerable groups and accessibility of quality STI testing and treatment services; (c) behavior change; (d) availability of condoms in project areas; and (e) cases of human trafficking.

- (ii) Train and provide technical assistance to the commune AIDS committees in developing and maintaining the community databases;
- (iii) Prepare appropriate procedures, and mechanisms for the participation of key stakeholders and periodic collection and processing of data. Maintain data on the numbers of workers who participate in the awareness training. The data should include total numbers as well as unique individuals of those participating as well as numbers of workers not participating in the awareness training per site based on lists of workers provided by the contractor/subcontractor as well as other anecdotal information as appropriate;
- (iv) Design a baseline survey that considers the community action plans and the high turnover of employees in the construction companies and among migrant and mobile workers for the follow-up surveys. Complete the baseline survey 1 month after the commencement of civil works;
- (v) Undertake a mid-term assessment of the project outputs, compare them with those anticipated, and recommend corrective measures; in evaluating the program impacts, the PPMS should focus on those benefiting the vulnerable populations (construction workforce, local communities affected by the road construction, and entertainment workers); these outputs will be further analyzed upon completion of the program to evaluate the cost-effectiveness of the community-based interventions, behavior change communication method adopted, and health systems intervention;
- (vi) Provide inputs to the meetings and seminars.

f. Reporting

139. The program implementing consultant will prepare the following reports: (i) an inception report, 4 weeks after commencement of the services; (ii) baseline study report 3 months after commencement of services; (iii) an implementation report detailing activities, annual budgets, and the PPMS plans (indicators, targets, source of data, and methodology) 1 month after completing the baseline study; (iv) semi-annual progress reports highlighting the component achievements over the period under review, the issues, and proposed remedial actions at the end of each quarter; (v) a mid-term report detailing achievements, implementation issues, and remedial measures; and (vi) a completion report, 3 months after completion of the Program. Three copies of these reports in the English language will be submitted to ADB, MRD's Ministerial AIDS Committee and NAA. Four copies of these reports in Khmer language will be submitted to the Steering Committee and each of the provincial AIDS Committees.

g. Cost Estimate

140. The following table gives the indicative cost estimate for the Program.

Indicative Cost Estimate – for revision
(\$'000)

Item	Cost
1. National Consultants	
a. Remuneration and Per Diem	456.0
b. Local Travel (air and land)	96.0
2. IEC Materials, Office and Communication Costs	

Item	Cost
a. Print and audio-visual materials and equipment	30.0
b. Office equipment and supplies	30.0
c. STI diagnostic kits, medicines and condoms	40.0
d. Communication	19.0
3. IEC/BCC Activities, Trainings and Workshops	96.0
4. Surveys and Research	40.0
5. Facilitators and Outreach Workers	74.0
6. Contingencies	88.0
Total	969.0

BCC = behavior change communication, IEC = information, education and communication, STI = sexually-transmitted infection.

141. **Rural Road Asset Management, Rural Road Safety and Community Awareness Program, and Connectivity Improvements for Mekong River Islands.** These are web-linked documents to the RRP, with the detailed TORs.

VII. SAFEGUARDS

A. Environmental Safeguards

142. The Government will ensure and cause MRD to ensure that the preparation, design, construction, implementation, operation and decommissioning of the Project and all Project facilities comply with (a) all applicable laws and regulations of Cambodia relating to environment, health and safety; (b) the Environmental Safeguards; and (c) all measures and requirements set forth in the IEE, the EMPs, environmental assessment and review framework (EARF) and any corrective or preventative actions set forth in a Safeguards Monitoring Report. The Government will ensure that any requirement under the Environmental Safeguards are applied and implemented for all Project components regardless of financing sources. Should there be any discrepancy between the ADB's policy and national laws and regulations, ADB's policy will prevail.

B. Involuntary Resettlement and Indigenous Peoples

143. The Project's categorization on Involuntary Resettlement and Indigenous People has been approved by ADB's Chief Compliance Officer. Given the nature of the proposed project (i.e., improvement of existing roads and no widening of the roads, no land acquisition and/or resettlement activity, and no indigenous peoples involved), the Project is categorized as C for Involuntary Resettlement and Indigenous Peoples. Therefore, the safeguards policy is not triggered. However, a resettlement framework will be developed and agreed by MEF and ADB and will be followed if any unexpected resettlement activities take place during the implementation.

C. Human and Financial Resources to Implement Safeguards Requirements and Other Social Matters

144. The Government shall make available budgetary and human resources as necessary to fully implement the EMP, EARF, resettlement framework, GAP and HHTPP. The Government will meet any unforeseen obligations in the resettlement plan budget estimate in order to satisfy resettlement objectives, if it happens.

D. Safeguards-Related Provisions in Bidding Documents and Works Contracts

145. The Government will ensure that all bidding and contract documents for consulting services include relevant provisions of the EMP and ensure close supervision and monitoring of EMP implementation during pre-construction and construction phases.

146. The Government will ensure that all bidding documents and contracts for Works contain provisions that require contractors to:

- (i) comply with the measures relevant to the contractor set forth in the respective IEE, EMP, EARF, resettlement framework, GAP and HHTPP (to the extent they concern impacts on affected people and construction workers during construction), and any corrective or preventative actions set forth in the respective Safeguards Monitoring Report;
- (ii) make available a budget for all such environmental and social measures; and provide the Government with a written notice of any (i) unanticipated

environmental, resettlement or indigenous peoples risks or impacts that arise during construction of the Project that were not considered in the IEE, EMP, EARF, resettlement framework, GAP and HHTPP, and (ii) corresponding proposed corrective action plan to adequately address such impacts and to ensure compliance with SPS.

147. Pursuant to ADB's SPS, ADB funds may not be applied to the activities described on the ADB Prohibited Investment Activities List set forth at Appendix 5 of the SPS. All financial institutions will ensure that their investments are in compliance with applicable national laws and regulations and will apply the prohibited investment activities list (Appendix 5) to subprojects financed by ADB.

VIII. GENDER, LABOR, AND SOCIAL DIMENSIONS

A. Gender Action Plan

148. The Government, through MRD, will ensure that the GAP is fully implemented and that all project activities are designed and implemented in accordance with ADB's Policy on Gender and Development (1998). Measures will include, but not be limited to, the following: (i) works will utilize labor based appropriate technology to the extent possible, (ii) at least 20% of unskilled laborers will be women, (iii) unskilled men and women workers will receive equal pay for equal work, (iv) contractors will not hire child labor, (v) all project roads will have road safety signs and safe speed reduction measures on busy sections such as in front of hospitals, clinics, schools, markets, (vi) road shoulders will be paved to ease travel and transport for women and girls, (vii) all socioeconomic data will be sex-disaggregated, (viii) SEO staff, contractors and Provincial Project Coordination Office staff involved in project implementation will be trained in gender mainstreaming and other social and risk mitigation issues, (ix) Mekong River Island road improvements by concreting will be labor based appropriate technology and involve at least 30% women as unskilled labor force in the contract, and (x) at least 30% of livelihood activity participants will be women in Mekong River Island Connectivity.

149. The table below shows the activities under gender action plan.

Project Output	Proposed Activities and Targets	Agency/ Person Responsible
<p><u>Output 1:</u></p> <p>Rural Road Improvements</p>	<ul style="list-style-type: none"> • Civil works subcontractors will prioritize the use of local unskilled labor where possible • Contractors will hire women for at least 20% of the required unskilled labor days through enhanced awareness using the MRD <i>Ready for Roads</i> tools and outreach materials • Unskilled men and women workers will receive equal pay for equal work. • Contractors will not hire child labor. • Contractors will ensure strict implementation of the safeguard measures during civil works and at the camp sites, including wearing personal protection equipment, hard hats, gloves, safety boots, etc. • Road shoulders will have a sealed bituminous surface enabling carts with wheels to reduce the burden on women and girls who haul water in rural areas. • Green planting will include work programs that involve community women in planting and maintaining roadside plants, and at least 70% of the workers will be women. 	<ul style="list-style-type: none"> - SEO - PDRDs - Consultants - Contractors - Commune Councils (Gender Focal Person)
<p><u>Output 2:</u></p> <p>Rural Road Asset Management</p>	<ul style="list-style-type: none"> • Capacity of the local contracting industry will be built, including gender and labor-based approaches to routine maintenance. • A sex-disaggregated registry of local unskilled labor will be available for contractors, and PDRDs will be able to track the use of local labor. • A road maintenance action plan for MRD and PDRDs will support sustainable road maintenance regime, with works delegated to rural communities through small community contracts. • Training on road maintenance will be provided to local women and men. • At least 20% of road maintenance workers will be women. 	<ul style="list-style-type: none"> - SEO - PDRDs - Consultants - Contractors - Commune Councils (Gender Person)

Project Output	Proposed Activities and Targets	Agency/ Person Responsible
	<ul style="list-style-type: none"> • Strict enforcement of the core labor standards (equal pay for equal work for men and women, no child labor, etc.) 	
<p><u>Output 3:</u></p> <p>Road Safety and Community Awareness Program</p>	<ul style="list-style-type: none"> • All project roads will have road safety signs and safe speed reduction measures especially on busy sections (i.e., in front of hospitals, clinics, schools, markets, etc.) to ensure the safety of the local residents and especially women, children, disabled, and elderly persons. • A community road safety program will involve community members as facilitators, of whom at least 30% will be mothers who lead daily road safety activities at schools. • An HIV/AIDS and Human Trafficking prevention program will mitigate potential negative impacts during and after construction. The program will target communities, construction workers, schools, and other stakeholders. 40% of residents (50% women) and all contractor personnel will participate in the HHTPP. • All socio-economic baseline data will be sex-disaggregated. 	<ul style="list-style-type: none"> - SEO - PDRDs - Consultants - Contractors - Commune Councils (Gender Person)
<p><u>Output 4:</u></p> <p>Project Management Support</p>	<ul style="list-style-type: none"> • Capacity building will be provided to the SEO, contractors, and PDRDs. • Recruit 3 additional staff for the SEO (at least 1 woman). • Recruit 1 international social development specialist and 2 national gender specialist consultants. • All PMU staff (currently 7 men, 5 women but likely to increase to 17 men, 8 women) will participate in training on social and gender issues. 	
<p><u>Output 5:</u></p> <p>Connectivity Improvements for Mekong River Island</p>	<ul style="list-style-type: none"> • Island road improvements using concrete will be labor-based • At least 40% of the unskilled work days created will be for women. 	<ul style="list-style-type: none"> - SEO - PDRDs - Consultants - Contractors - Commune Councils (Gender Person)

MRD = Ministry of Rural Development; PDRD = provincial department of rural development; SEO = social and environmental office.

B. HIV/AIDS and human trafficking awareness and prevention program (HHTPP)

150. The Government will ensure that agreed measures under HHTPP are fully implemented to prevent HIV/AIDS transmission and human trafficking associated with project activities within any Project areas. HHTPP will include awareness raising measures, dissemination of medical packages (including condoms), promotion of voluntary counseling and HIV/STI testing. The details of HHTPP will be subject to review and concurrence by ADB prior to the commencement of the relevant Works.

C. Grievance Redress

151. The Government will establish and publicize grievance redress mechanisms through which it will receive and facilitate resolution of affected peoples' concerns, complaints, and grievances about the Project.

D. Monitoring and Reporting for Safeguards and Other Social Matters

152. The Government will do the following:

- (i) submit semi-annual Safeguards Monitoring Reports to ADB and upload them on MRD's project website within 2 weeks after their submission;
- (ii) if any unanticipated environmental and/or social risks and impacts arise during construction, implementation or operation of the Project that were not considered in the respective IEE, EMP, EARF, resettlement framework, GAP and HHTPP, promptly inform ADB of the occurrence of such risks or impacts, with detailed description of the event and proposed corrective action plan;
- (iii) report any actual or potential breach of compliance with the measures and requirements set forth in the respective EMP, EARF, resettlement framework, GAP or HHTPP promptly after becoming aware of the breach; and
- (iv) prepare a new or supplementary environmental assessment report in compliance with the SPS in the event there are additional components or major changes in the Project such as location and/or design, etc., that are not within the scope of the IEE and are expected to result in adverse environmental impacts. Such report shall be prepared by MRD in compliance with the SPS and submitted to ADB for clearance prior to the implementation of the additional component or changes.

E. Works Contract

153. Without limiting the generality of the foregoing, the Government, through MRD, will ensure that any bidding document for Works contracts includes provisions to require the contractors to: (i) use local unskilled labor and prioritize employment of women and the poor based on targets as set forth in GAP; (ii) provide equal pay for equal work; (iii) provide the timely payment of wages; (iv) comply with core labor standards and the applicable labor laws and regulations, including stipulations related to employment; (v) not employ child labor; and (vi) implement HHTPP for all employees and at risk groups in local communities in the Project areas and provide necessary measures to ensure the safety and health of their employees.

IX. PERFORMANCE MONITORING, EVALUATION, REPORTING AND COMMUNICATION

A. Project Design and Monitoring Framework

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
<p>Impact Improved access to markets, jobs, and social services in nine project provinces</p>	<p>Volume of agricultural products transported on project roads increased by 100% from 2013 to 2022. By 2022, in the project provinces:</p> <ul style="list-style-type: none"> (i) economic activity rate (ages 15–64, both sexes) increases to 85% (baseline 2010: 80%) (ii) the under-5 mortality rate per 1,000 live births decreased to 30 (baseline 2010: 54) (iii) the maternal mortality ratio per 100,000 live births decreased to 150 (baseline 2010: 206) (iv) the grade 9 completion rate for girls increased by 12% (baseline 2010–2011: 44.3%) <p>620,000 beneficiaries will have improved access to markets, jobs, and social services by 2022 (baseline 2013: zero)</p>	<p>National and regional statistics: NIS</p> <p>Field surveys: MRD</p> <p>Population census: NIS (adjusted to target years)</p> <p>Health information system and Cambodia demographic and health survey: NIS</p> <p>Education management information system: Ministry of Education, Youth and Sports</p> <p>Field surveys: MRD</p>	<p>Assumptions Rehabilitation of project roads increases availability and quality of transport services.</p> <p>Agriculture-related and other industries increase in the project area.</p> <p>Risks An unexpected long-term new epidemic affects Cambodia.</p> <p>The project roads deteriorate because of insufficient funds for road maintenance programs due to prolonged extreme events.</p>
<p>Outcome Safe, climate-resilient, and cost-effective rural road network that provides all-year access in agricultural areas of the nine project provinces</p>	<p>Road crash rate in the project area decreased by 20% by 2020 (baseline 2012: 8.1 crashes per 1,000 beneficiaries)</p> <p>Average travel time per trip on project roads decreased to 30 minutes in 2020 (baseline 2015: 40 minutes, to be confirmed by baseline survey)</p> <p>Share of the paved rural road network increased to 3.6% in 2020 (baseline 2015: 1.8%)</p> <p>Average number of days per year that the project roads</p>	<p>National road safety action plan annual report: National Road Safety Committee</p> <p>Field traffic surveys: MRD</p> <p>Field traffic surveys: MRD</p> <p>Annual reports: MRD</p> <p>Annual reports: MRD</p>	<p>Assumption The government sustains its commitment to rural infrastructure development and also commitment to maintain national and provincial road network.</p> <p>Risks Project roads are severely damaged by unexpectedly severe and frequent natural disasters.</p> <p>MRD does not receive the planned maintenance budget for</p>

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
	are accessible increased to 365 days in 2020 (baseline 2015: 200 days)		already paved roads.
Outputs 1. Rural roads improvements	About 729 km of rural roads rehabilitated with standard provisions for all road users by 2020	Monthly and quarterly project progress reports: MRD	Assumption The government sustains its commitment to rural infrastructure development and also
	Average roughness of project roads decreased to 2–3 in 2020 (baseline 2015: 6–14) By 2020, contractors hire women for 20% of the required unskilled labor days.	Monitoring reports: MRD Quarterly progress reports: MRD PCR: ADB Project review missions: ADB Quarterly progress reports: MRD PCR: ADB	commitment to maintain national and provincial road network. Risk Project roads are severely damaged by unexpectedly severe and frequent natural disasters.
2. Rural road asset management	Overloading control mobile teams increased to 5 in 2020 (baseline 2014: 1) Annual operation and maintenance budget for project roads increased to \$310/km in 2020 (baseline 2013: \$268/km)	Annual reports: MRD Quarterly progress reports: MRD PCR: ADB Annual reports: MRD	
3. Rural road safety and community awareness program	By 2020, 40% of residents (50% women) in project provinces and all contractors' personnel participate in an HHTPP before and during civil works construction By 2015, sex-disaggregated baseline socioeconomic data established Mothers have a 30% share in community participants in road safety awareness programs by 2020	Quarterly progress reports: MRD PCR: ADB Quarterly progress reports: MRD Quarterly progress reports: MRD PCR: ADB	
4. Project management support	PMU personnel increased to 22 (14 males, 8 females) in 2020 (baseline 2013: 12 [7 males, 5 females]) By 2020, all PMU staff participate in training on social and gender issues, by 2020 (likely 22 with 14 male,	Quarterly progress reports: MRD PCR: ADB Quarterly progress reports: MRD PCR: ADB	

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks																				
	8 female) (baseline 2013: 7 male, 5 female).																						
5. Connectivity	Emergency-related deaths	National health																					
Improvements for the Mekong River islands	due to lack of access to health services from islands reduced to 0 in 2020 (baseline 2011: 15) 40% of unskilled workdays created are for women for manual concrete paving of island roads	statistics: NIS Quarterly progress reports: MRD PCR: ADB																					
Activities with Milestones		Inputs																					
1. Rural road improvements (civil works) 1.1 MRD selects detailed design and construction supervision consultants: Mar–Sep 2014 1.2 MRD prepares tender documents and selects contractors: Oct 2014–Jun 2015 1.3 MRD completes 729 km of road rehabilitation: Jun 2015–Jun 2020 2. Rural road asset management 2.1 MRD completes procurement of mobile weigh pads and enforcement vehicles: Mar–Oct 2015 2.2 MRD expands mobile axle-load control: Oct 2014–Dec 2016 2.3 MRD awards four road maintenance contracts Aug–Dec 2017 3. Rural road safety and community awareness program 3.1 MRD implements the road safety program: Jun 2015–Dec 2019 3.2 MRD implements the HHTPP: Jun 2015–Jun 2020 3.3 MRD completes the baseline socioeconomic survey with sex-disaggregated data: Jun 2015–Jun 2020 4. Project management support 4.1 MRD completes training on social and gender issues for all PMU staff: Jun 2015–Dec 2016 4.2 PMU recruits 10 new staff to increase its efficiency: Jun 2015–Dec 2019 4.3 MRD manages the project efficiently: Mar 2014–Jun 2020 5. Connectivity improvements for the Mekong River islands 5.1 MRD completes the concrete roads in Mekong River islands: Jun 2015–Jan 2020 5.2 MRD completes procurement and construction of jetties in Mekong River islands: Jun 2015–Jan 2020		ADB: \$54.00 million Government: \$11.16 million Cofinancing: \$53.07million Government of Australia 6.67 million Export-Import Bank of Korea 41.00 million Nordic Development Fund 5.40 million Total \$118.23 million																					
		<table border="1"> <thead> <tr> <th>Item</th> <th>Amount (\$ million)</th> </tr> </thead> <tbody> <tr> <td>1. Rural road improvements</td> <td></td> </tr> <tr> <td> a. Improvement of 729 km of rural roads and green planting</td> <td>67.07</td> </tr> <tr> <td> b. Consulting services for design and implementation supervision</td> <td>8.92</td> </tr> <tr> <td>2. Rural road asset management</td> <td>1.10</td> </tr> <tr> <td>3. Rural road safety and community awareness program</td> <td>2.26</td> </tr> <tr> <td>4. Project management support</td> <td>2.11</td> </tr> <tr> <td>5. Connectivity improvements for Mekong River islands</td> <td>13.71</td> </tr> <tr> <td>6. Contingencies</td> <td>20.13</td> </tr> <tr> <td>7. Financial charges during implementation</td> <td>2.93</td> </tr> </tbody> </table>		Item	Amount (\$ million)	1. Rural road improvements		a. Improvement of 729 km of rural roads and green planting	67.07	b. Consulting services for design and implementation supervision	8.92	2. Rural road asset management	1.10	3. Rural road safety and community awareness program	2.26	4. Project management support	2.11	5. Connectivity improvements for Mekong River islands	13.71	6. Contingencies	20.13	7. Financial charges during implementation	2.93
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ADB = Asian Development Bank, HHTPP = HIV/AIDS and human trafficking awareness and prevention program; km = kilometer, MRD = Ministry of Rural Development, NIS = National Institute of Statistics, PCR = project completion report, PMU = project management unit.

Source: Asian Development Bank.

B. Monitoring

154. **Project performance monitoring.** MRD has agreed to a set indicators for evaluating Project performance in relation to its impacts, outcomes, outputs, and conditions. At the beginning of project implementation, MRD will establish baseline and target values for the indicators. The indicators will be measured at project inception, project completion, and 3 years after Project completion and compared with the baseline. Data will be disaggregated by gender. The consultants will provide support for monitoring and evaluation. The main sources of data will include (i) secondary data from the Borrower's sources, (ii) traffic counts, (iii) traffic accident database, and (vi) producer and price surveys. MRD shall submit a report to ADB summarizing the findings of monitoring at inception, project completion, and 3 years after project completion.

155. **Compliance monitoring:** The ADB project team will field a minimum of 2 full review missions per year to review and monitor the compliance of covenants—policy, legal, financial, economic, environmental, and others. Also, ADB will provide technical oversight on implementing NDF financed outputs, though financed parallel. ADB will conduct joint review missions with the Government of Australia, KEXIM and NDF and coordinate with cofinanciers at least one month prior to the scheduled mission to confirm availability of all parties.

156. **Safeguards monitoring:** MRD shall regularly monitor the contractor's environmental performance based on the provisions of the EMP. MRD shall submit environmental monitoring reports to ADB on a semi-annual basis. MRD's SEO will be responsible for this. Resettlement issues, if any, will also be regularly monitored by the DDIS Consultant under its regular reporting requirements.

157. **Gender and social dimensions monitoring:** Please refer to GAP accessible from the list of linked documents in Appendix 2 of RRP.

C. Evaluation

158. In addition to regular bi-annual reviews by ADB staff, the Government and ADB will jointly undertake a midterm review of the Project in early 2016 to assess (i) the status of implementation, (ii) the design and construction standards, (iii) the performance of consultants and contractors, (iv) the impacts of the Project, (v) the status of compliance with the covenants stipulated in the Loan Agreement, and (vi) the need for any changes in the project scope or schedule to achieve the project's impact and objectives. Within 6 months of physical completion of the Project, MRD will submit a project completion report to ADB.²⁰

D. Reporting

159. MRD will provide ADB with (i) monthly progress reports in a format consistent with ADB's project performance reporting system; (ii) semi-annual environmental monitoring reports on progress of EMP implementation, compliance issues and corrective actions, if any; and (iii) a project completion report within 6 months of physical completion of the Project.

160. To ensure projects continue to be both viable and sustainable, project accounts and the executing agency annual financial statement, together with the associated auditor's report, should be adequately reviewed.

²⁰ Project completion report format is available at: <http://www.adb.org/Consulting/consultants-toolkits/PCR-Public-Sector-Landscape.rar>

161. MRD will monitor project implementation in accordance with the implementation schedule and will keep ADB informed of any significant deviations from the schedule. The monthly report will include basic data on utilization of funds, achievement of immediate development objectives, compliance with covenants, implementation progress, land acquisition, resettlement progress, and major issues and problems.

162. MRD will submit to ADB annual contract awards and disbursement projections. This requirement is effective in monitoring project implementation and will help identify impediments to implementation progress. The annual projections are submitted to ADB on 15 December of each year.

163. The project completion will provide a detailed evaluation of the project design, costs, contractors' and consultants' performance, social and economic impact, economic rate of return, and other details as may be requested by ADB.

E. Stakeholder Communication Strategy

164. All relevant project documents will be uploaded in MRD and ADB websites. The resettlement framework and semi-annual environmental monitoring reports submitted by MRD shall be posted on ADB website upon receipt. The Project will also implement a community-based road safety campaign, an HHTPP to mitigate the potential HIV-related and human trafficking impacts of road construction in rural communities.

165. The stakeholder communication policy is based on the principles of transparency, timeliness, participation, meaningful engagement, and inclusiveness. Means of communication and consultation are to promote participation of those who may otherwise tend to be marginalized such as women, indigenous people, elderly, and the poor. Stakeholder communication will encompass institutional stakeholders, communities within the project area, and persons directly affected by the project.

166. Institutional stakeholders include (i) government agencies responsible for the design, management, and implementation of the project; and (ii) state institutions, community based organizations, and private sector institutions whose mandates share an interest with the outcomes and/or impacts of the project.

167. Communities within the project area as well as individuals directly affected by the project have a natural vested interest in the effectiveness of project design and implementation as well as mitigation of negative impacts and maximization of project benefits and are stakeholders.

168. Institutional stakeholders will participate in the design of the project, including technical design, institutional framework, monitoring and evaluation as well as measures to enhance project benefits and mitigate negative impacts. Consultation will continue throughout the project cycle from inception, design, implementation and evaluation. Particularly, implementing agencies will ensure that agencies that will be responsible for operation and maintenance of the project facilities after project completion will be fully consulted on the designs and specifications of the facilities. The implementing agencies will undertake quality control inspections and manage the handover of the project facilities to the agencies responsible for operation and maintenance.

169. Communities and affected individuals will be meaningfully consulted on all project activities which affect them. Such consultation shall take place as early as possible in the

project and be ongoing, continuing throughout the project cycle. Consultations will be timely with information provided when the feedback of consultations could be incorporated in to design features or mitigation measures and prior to commencement of any project activity. Consultation will include information on project objectives and policies; project technical design; implementation activities and schedules; potential and actual impacts and risks such as environmental, resettlement, livelihood, access restrictions, HIV/AIDS transmission, and human trafficking along with mitigation measures; benefit and opportunities; institutional arrangements; grievance redress mechanisms; and the results of project monitoring and evaluation. All significant communications will be recorded²¹ and stakeholders will have the opportunity to present questions, opinions and suggestions.

²¹ Significant consultations will typically be recorded in writing (such as minutes) and with the informed consent of those participating.

Table IX-1: Planned Consultation Activities and Disclosure Measures

ISSUE	TARGET AUDIENCE	MEANS OF COMMUNICATION	RESPONSIBLE	TIMING
RESETTLEMENT				
Disclosure of Resettlement Framework	Government agencies, local government authorities (Provincial, District, Commune) Communities in project areas.	Public consultation meetings prior to finalization; Translated Resettlement Framework publically accessible in local Provincial, District and Commune offices, uploaded on ADB website for public disclosure.	<ul style="list-style-type: none"> PMU with support of DDIS. ADB for uploading on ADB website 	Prior to finalization for draft Resettlement Framework Upon final approval of updated Resettlement Plan
Implementation schedule of resettlement plan and civil works	Local communities along project alignment	Public consultation meetings and notices posted in each commune and village	PMU, local authorities	Ongoing prior to implementation and upon significant change in implementation schedule.
Notification of DMS / notification of results of DMS (contingency item as resettlement impacts are not expected)	Local communities along project alignment and affected households	Public consultation meetings; Individual notices to affected households	Local authorities and IRC-WG	1 month prior to DMS Not longer than 1 month following DMS for notification of DMS results
Compensation / Assistance disbursement schedule (contingency item as resettlement impacts are not expected)	Affected households	Notices to individual households	Local authorities and IRC-WG	Minimum 1 week prior to disbursement
OTHER SOCIAL IMPACT ISSUES				
HIV/AIDS and human trafficking awareness and prevention.	Civil works employees Local communities along project alignment	Targeted information meetings; IEC materials,	HHTPP service provider with collaboration of civil works contractors	Prior to commencement of civil works and throughout project implementation
Opportunities for project work,	Local communities along project alignment	Public announcements in local communities.	Civil works contractors; with support of DDIS (for promotion of women's participation)	Prior to commencement of civil works and throughout project implementation when labor recruitment takes place
Implementation schedule, restricted access, disruptions,	Communities in the project area.	Public information meetings, public announcements in local	PMU, local authorities, DDIS, civil works	Ongoing during implementation.

ISSUE	TARGET AUDIENCE	MEANS OF COMMUNICATION	RESPONSIBLE	TIMING
hazards, road safety.		communities.	contractors.	
ENVIRONMENT				
- To be filled up				

ADB = Asian Development Bank, DDIS = detailed design and implementation supervision; DMS = details management survey; IEC = information, education and Communication, IRC-WG = Inter-Ministerial Resettlement Committee Working Group; PMU = project management unit, HHTPP = HIV/AIDS and Human Trafficking Prevention Program.

X. ANTICORRUPTION POLICY

170. ADB reserves the right to investigate, directly or through its agents, any violations of the Anticorruption Policy relating to the Project.²² All contracts financed by ADB shall include provisions specifying the right of ADB to audit and examine the records and accounts of the executing agency and all Project contractors, suppliers, consultants and other service providers. Individuals/entities on ADB's anticorruption debarment list are ineligible to participate in ADB-financed activity and may not be awarded any contracts under the Project.²³

171. To support these efforts, relevant provisions are included in the loan agreement and the bidding documents for the Project.

²² Available at: <http://www.adb.org/Documents/Policies/Anticorruption-Integrity/Policies-Strategies.pdf>

²³ ADB's Integrity Office web site is available at: <http://www.adb.org/integrity/unit.asp>

XI. ACCOUNTABILITY MECHANISM

172. People who are, or may in the future be, adversely affected by the project may address complaints to ADB, or request the review of ADB's compliance under the Accountability Mechanism. MRD have established a project specific website within MRD's website that provides information on accountability mechanism of MRD and ADB. This will include a hotline for grievance related matters as email contacts may not be possible in rural areas.

XII. RECORD OF PAM CHANGES

173. This PAM was first developed during the fact finding mission of the project in July 2013. The current version has been agreed with the Borrower and the executing agency during the loan negotiations on 23 May 2014. All revisions/updates during course of implementation should be retained in this Section to provide a chronological history of changes to implemented arrangements recorded in the PAM.