

Revised Project Administration Manual

Project Number: 42285-013

Loan and/or Grant Numbers: L3311/8295 and Grant 0454

June 2021

Cambodia: Integrated Urban Environmental Management in the Tonle Sap Basin Project

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Project Administration Manual Purpose and Process

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.

The Ministry of Public Works and Transport and provincial departments of public works and transport of Kampong Chhnang and Pursat are 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 the Ministry of Public Works and Transport and provincial departments of public works and transport of Kampong Chhnang and Pursat of their obligations and responsibilities for project implementation in accordance with ADB's policies and procedures.

At Loan Negotiations the borrower and ADB shall agree to the PAM and ensure consistency with the Loan and Grant agreements. 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 and Grant Agreements, the provisions of the Loan and Grant Agreements shall prevail.

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
ADF	-	Asian Development Fund
AFS	-	audited financial statements
CQS	-	consultant qualification selection
DMF	-	design and monitoring framework
EARF	-	environmental assessment and review framework
EIA	-	environmental impact assessment
EMP	-	environmental management plan
ESMS	-	environmental and social management system
GACAP	-	governance and anticorruption action plan
GDP	-	gross domestic product
ICB	-	international competitive bidding
IEE	-	initial environmental examination
IPP	-	indigenous people plan
IPPF	-	indigenous people planning framework
LAR	-	land acquisition and resettlement
LIBOR	-	London interbank offered rate
NCB	-	national competitive bidding
NGOs	-	nongovernment organizations
PAI	-	project administration instructions
PAM	-	project administration manual
PIU	-	project implementation unit
QBS	-	quality based selection
QCBS	-	quality- and cost-based selection
RRP	-	report and recommendation of the President to the Board
SBD	-	standard bidding documents
SGIA	-	second generation imprest accounts
SOE	-	statement of expenditure
SPS	-	Safeguard Policy Statement
SPRSS	-	summary poverty reduction and social strategy
TOR	-	terms of reference

I. PROJECT DESCRIPTION

1. The Asian Development Bank (ADB) approved the project on 10 November 2015 and made it effective on 2 March 2016. The project is scheduled to close on 30 April 2023.

2. **Impact.** The original project impact was to enhance the urban environment, improve public health, and contribute to better quality, coverage, and reliability of services to more than 100,000 residents in the municipalities of Kampong Chhnang and Pursat. The project is aligned with the following impact: increased economic activities and environmental protection in towns in the Tonle Sap Basin.

3. **Outcome and outputs.** The project's original outcome was improved urban services and enhanced climate change resilience in Kampong Chhnang and Pursat municipalities. The project originally had five outputs: (i) Kampong Chhnang urban area environmental improvements, (ii) Pursat urban area environmental improvements, (iii) community mobilization and environmental improvements, (iv) strengthened sector coordination and operations, and (v) strengthened capacity for project implementation and operation and maintenance (O&M).

4. **Revised outcome and outputs.** Changes were made to the project's outcome and outputs to reflect the changes in scope, changed circumstance, and to streamline the performance indicators for efficient monitoring. The revised design and monitoring framework is in Appendix 4.

- (i) **Outcome.** Outcome indicators have been revised to combine performance indicators for the two participating municipalities and to focus on indicators related to coverage, access, and quality of services.
- (ii) **Outputs.** The outputs have been grouped into three, focusing on policy and regulations, urban infrastructure, and institutional effectiveness. The indicators have been grouped accordingly, and where applicable, baselines and targets have been updated to reflect the changes in scope and changed circumstances.

II. IMPLEMENTATION PLANS

A. Project Readiness Activities

Indicative Activities	2014					2015												Responsible Party
	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	
Advance contracting actions				(stopped until completion of loan negotiations)														ADB
Establish PMUs and PIUs																		MPWT
Approve safeguards documents																		Government
Disclose safeguards documents																		ADB
Loan negotiations																		ADB, MPWT
ADB Board approval																		ADB
Loan and Grant signing																		ADB, MPWT
Government legal opinion provided																		Government
Loan effectiveness																		ADB

ADB = Asian Development Bank, MPWT = Ministry of Public Works and Transport, PIU = project implementation unit, PMU = project management unit

B. Overall Project Implementation Plan

No.	Activities	incompleted activities				completed activities (all in past)			
		1 future, orig. plan	2 past, orig. plan (not done)	3 past, actual, orig. plan	4 past, actual, unplanned	5 future, latest plan	6 past, actual, orig. plan	7 past, actual, unplanned	
		2017	2018	2019	2020	2021	2022	2023	
1	Output 1: Kampong Chhnang Urban Environmental Improvements								
	a. Sewerage, Stormwater Drainage and WWTP								
	- Preparation/Approval Design, EMP, IEIA, RP								
	- Bidding Process/Contract Award								
	- Construction								
	- Liability Period, O&M support								
	b. Improved Solid Waste Management								
	b1. Construction Sanitary Landfill								
	- Preparation/Approval Design, EMP, IEIA, RP								
	- Bidding Process/Contract Award								
	- Construction Landfill & Ancillary Works								
	- Liability period and support for SWM								
	b2. Remediation/Closure existing dump sites								
	b3. SWM Equipment Procurement								
	- Procurement 1st Batch Equipment								
	- Procurement 2nd Batch Equipment								
2	Output 2: Pursat Urban Environmental Improvements								
	a. Improvement Solid Waste Management								
	a1. Construction Sanitary Landfill facility								
	- Preparation/Approval Design, EMP, IEIA, RP								
	- Bidding Process/Contract Award								
	- Construction Landfill & Ancillary Works								
	- Liability Period, Support for SWM								
	a2. SWM Equipment Procurement								
	- Procurement 1st Batch Equipment								
	- Procurement 2nd Batch Equipment								
	b. Improvement Drainage in Pursat Town and Waste Water Treatment								
	b1. Improvement Drainage System								
	- Preparation/Approval Design, EMP, IEIA, RP								
	- Bidding Process/Contract Award								
	- Construction Drainage & Ancillary Works								
	- Liability Period, O&M support								
	b2. Construction WWTP and Final Disposal of Storm Water and WWTP effluent								
	- Preparation/Approval Design, EMP, IEIA, RP								
	- Bidding Process/Contract Award								
	- Construction WWTP, Effluent/Storm Water Disposal, Ancillary Works								
	- Liability Period, O&M support								
3	Output 3: Community Mobilization and Environmental Improvements (CMEI)								
	- Recruit International NGO								
	- Train village development committee units for project briefing and output training								
	- Community awareness programs								
	- Needs assessments for small-scale infrastructure works on CCA, sanitation								
	- Planning, implementing, and supervising community improvements								
	- Prepare report on community environmental improvements and lessons								
	- Internal and external monitoring of safeguard documents								
4	Output 4: Strengthened sector coordination and operations								
	- Recruit and mobilize climate change resilience consultants								
	- Prepare, approve, establish, and strengthen USU institutions								
	- Review climate change and urban development documents, and sanitation standards in building codes								
5	Output 5: Strengthened Capacity for Project Implementation, and Operations and Maintenance								
	- Overall project management and implementation support								
	- NGO Support								
	- Procurement transportation, equipment, Office Repairs PMU & PIUs								
	- Recruit external resettlement monitor								
	- Develop PPMS and capacity development plan								

III. PROJECT MANAGEMENT ARRANGEMENTS

A. Project Implementation Organizations – Roles and Responsibilities

Project implementation organizations	Management Roles and Responsibilities
➤ Ministry of Economy and Finance	• Signing the loan and grant agreements for the financing required for the project • Monitoring of loan and project implementation, and providing respective coordination and facilitation, including monitoring and reporting under the PPCR, as the national PPCR focal point • 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 • Submit withdrawal applications to ADB • Chairs the Inter-ministerial Resettlement Committee (IRC); • IRC will recruit external monitoring organization for resettlement • Processing and submitting to ADB any request; when required, for reallocating the loan proceeds and extension of loan and grant closing dates
➤ Ministry of Public Works and Transport (MPWT) - Executing Agency (EA) ; the project management unit (PMU) is located in MPWT.	• Setup Project Steering Committee • Assumes overall responsibility for project implementation and establishment of Project Management Unit (PMU) • Approve medium term and annual rolling plans for project implementation • Ensure compliance with Loan and Grant Covenants • Ensure Government counterpart fund allocation • Establish and manage the project's advance accounts • Submit contract awards and disbursement projections • Submit audited project accounts and audited financial statements to ADB • Recruit and monitor the performance of consulting packages I to IV • Approve procurement plans, bidding documents, bid evaluation and contract awards in accordance with ADB and Government of Cambodia (Government) requirements • Ensure compliance and attainment of relevant and applicable Government environmental permits and clearances prior to bidding • Ensure project monitoring against the design and monitoring framework and submission of annual project performance monitoring and evaluation reports • Submit regular quarterly and annual project progress reports to ADB • Update safeguard documents (e.g., resettlement plans and initial environmental examinations/environmental management plans) and submit to respective agencies for

Project implementation organizations	Management Roles and Responsibilities
	approval prior to sending to ADB concurrence prior to implementation • Approve the contractor environment management plans (EMP) prior to commencement of works • Ensure Output 2d & 3b & 3c is implemented to assist the poor and vulnerable communities, including ethnic Cham and Vietnamese benefit from the project • Coordinate capacity development activities and ensure equal opportunities are provided to qualified women • Ensure the implementation and monitoring of the gender action plan • Ensure that the stakeholder consultation and participation plan is implemented and monitored. • Ensure capabilities are built for operation and maintenance (O&M) of completed infrastructure • Ensure compliance with ADB's social and environmental policies and guidelines during project implementation • Approve proposed actions in the event of adverse financial audits or monitoring and evaluation reports • Prepare withdrawal application for submission to ADB • Select Consultant for Project Implementation Support and Capacity Development • Provide project information to the pilot project climate resilience coordination unit (PPCR) for comprehensive monitoring of PPCR indicators against the results framework
➤ National Committee for Sub-national Democratic Development (NCDD)	• Inter-ministerial mechanism for promoting democratic development through D&D reforms throughout Cambodia • They are accountable to the Government on the implementation of the Organic Law.
➤ Ministry of Land Management, Urban Planning and Construction (MLMUPC)	• Responsible for governing land use, urban planning, construction projects, and the resolution of land use conflicts • Will be a member of the IRC. • Will be a member of the proposed PSC and National Task Force on Urban Development • Issuance of a joint-prakas with MPWT on the Tonle Sap Urban Areas Development Framework (or involved in alternative arrangements for approval of the TSUADF).
➤ Ministry of Environment	• Review environmental documents and issues environment certificates prior to construction (Department of Environment Impact Assessment) • Involved in local training activities related to environmental management, waste management, and energy at the provincial level • The executing agency for the ADB TA on Mainstreaming Climate Resilience into Development Planning in Cambodia • Climate Change Department in MOE serves as the National

Project implementation organizations	Management Roles and Responsibilities
	Climate Change Committee Secretariate, and the Designated National Authority for the Clean Development Mechanism and a focal point for United Nation Framework Convention on Climate Change (UNFCCC), the Intergovernmental Panel on Climate Change (IPCC), and the Kyoto Protocol The Climate Change Department is managing two climate change adaptation programs, including (i) Cambodia Climate Change Alliance (CCCA)—a comprehensive and innovative approach to address climate change in Cambodia, which is a multi-donor initiative funded by EU, UNDP, Sida and Danida; and (ii) Pilot Program for Climate Resilience (PPCR), a two phases program focuses on designing and implementing strategic program for climate resilience, financed by Climate Investment Fund, World Bank and ADB.
➤ Ministry of Interior	- Responsible for public administration throughout Cambodia's provinces and districts. The Ministry governs the Cambodian National Police and the administration of the law enforcement; including the police academy, police training, judicial police, anti-drug efforts, border police and prison administration - Will be a member of the proposed PSC and National Task Force on Urban Development - Representatives of MOI are regular members of the PRSC-WG - Is responsible for approving changes in local administration boundaries in the provinces (i.e., municipality boundaries)
➤ Ministry of Water Resources and Meteorology	- Has the mandate for river basin planning together with the Cambodia National Mekong Committee - Minister of MOWRAM is also the Chairperson of the Tonle Sap Authority - Will be members of the provincial coordination committee for the project in both towns - Will be a member of the PIU in Kampong Chhnang
➤ Tonle Sap Authority (TSA)	- The TSA has the mandate to protect the Tonle Sap Basin. - Will be a member of the proposed PSC - TSA has to coordinate closely with MOWRAM on project implementation at national and subnational levels.
➤ Provincial Government Provincial Coordinating Committee (PCC)	- Coordinate and monitor project activities of the project implementation unit (PIU) - Support PIU in carrying out the approved annual rolling plans - Coordinate in providing capacity development program for PIU - Assist PMU/PMU in ensuring compliance and attainment of relevant and applicable government environmental permits and clearances prior to bidding. - Obtain necessary approvals from respective

Project implementation organizations	Management Roles and Responsibilities
	Departments prior to awarding of civil works contracts • Coordinate regular reporting of PIU to PMU on project implementation. • Coordinate the implement the project's Consultation and Participation Plan, Social Development Plan and Gender Action Plan (GAP) • Work with PMU and PIUs to ensure regular quality control inspection of project facilities is undertaken. • Manage the handover of project facilities to agencies responsible for operation and maintenance • Oversee the monitoring in compliance with the Design and Monitoring Framework (DMF)
➤ Provincial Department of Public Works and Transport/Municipalities in Pursat and Kampong Chhnang Project Implementation Unit (PIU)	• Undertake day to day management of project activities • Implement approved annual rolling work and financial plans • Prepare and submit regular quarterly and annual project progress reports • Supervise civil works contractors • Manage separate project financial records and account, and prepare financial reports for submission to EA and PCA • Work with PMU in complying and attaining relevant and applicable Government environmental permits and clearances prior to bidding. • Ensure Output 2d & 3b & 3c is implemented to assist the poor and vulnerable communities, including ethnic Cham and Vietnamese benefit from the project. • Ensure that EMPs are updated and revised (if necessary) and incorporated in the detailed designs and included in civil works contracts • Ensure implementation of EMP, submit regular monitoring reports to IA and EA • Ensure implementation of Capacity and Participation Plan, Social Development Plan and GAP • Coordinate the updating of the RPs and monitor implementation of resettlement activities by the respective corridor towns and submit monitoring reports to IA and EA • Undertake monitoring with disaggregation of data by sex and income group as required by the project's design and monitoring framework • Establish and manage the sub-account
➤ Municipal Government (Kampong Chhnang and Pursat)	• The implementing agencies and members on the Project Implementation Units (PIUs) • Ensure Output 2d & 3b & 3c is implemented to assist the poor and vulnerable communities, including ethnic Cham and Vietnamese benefit from the project • Responsible for ensuring effective project implementation, particularly through effective construction supervision. PIUs will be established in Pursat and Kampong Chhnang, and their main roles and responsibilities are in

Project implementation organizations	Management Roles and Responsibilities
	implementation planning; project supervision, monitoring and reporting; and day to day management of all project implementation activities
➤ Urban service units (USU) in Kampong Chhnang and Pursat	• PIUs will be converted to USUs in the interim (in PDPWT), with the long-term vision of becoming autonomous urban services management agency under the municipality. • Will operate and manage the SWM, drainage and flood protection in each respective town • The USUs will assume the roles and responsibilities of the PIUs • For solid waste management in Pursat and Kampong Chhnang • USU Pursat will also cover town center drainage including the pumping station, wastewater stabilization ponds and the embankment • USU Kampong Chhnang will also cover flood control river embankment works • A plan will be developed early during project implementation that will propose for each (i) location of the USU, (ii) process of conversion, (iii) staff requirements, (iv) accounting and financial management, etc. • Establishment based on the model used for the wastewater treatment and management in Siem Reap (i.e., special operating agency and account established) • A special account in the USU will be solely for depositing revenue collected from the environmental sanitation fee for USUs with strict replenishment measures
➤ District Government Sangkat/Commune Council Village Development Committees	• The local government (municipal, sangkat, village authorities) will support implementation of project on the ground; including ensuring high levels of community participation (particularly of vulnerable groups) in project activities, carry out information dissemination in sangkats and villages, and help organize public meetings/consultations in connection with Project activities. • Ensure Output 2d & 3b & 3c is implemented to assist the poor and vulnerable communities, including ethnic Cham and Vietnamese benefit from the project • Municipal/Sangkat/Village leaders have vital role in ensuring project information reaches target beneficiaries, especially women, ethnic minorities, the poor and other vulnerable households • Establishment and application of Project Grievance Redress Mechanism, as outlined in safeguard planning documents
➤ ADB	• Assists the PMU through timely guidance at each stage of project implementation following agreed implementation arrangements • Reviews all documents that require ADB approval • Approves procurement activities

Project implementation organizations	Management Roles and Responsibilities
	• Conducts periodic loan review missions, a mid-term review and a completion mission for the project • Review and monitoring of project implementation activities and ensures compliance of all loan covenants • Review and monitor compliance with the government partner agencies on safeguard compliance through project review missions. • Timely processing of withdrawal applications and release of eligible funds • Ensures compliance of financial audit recommendations • With assistance of MOP regularly updates the project performance review reports • Regularly updates project information disclosure on the ADB website

B. Key Persons Involved in Implementation

Executing Agency

Ministry of Public Works and Transport (MPWT)

Officer's Name: H.E. Vong Pisith
 Position: Under Secretary of State
 Telephone No.: +855 12 833 411
 Email address: vong_pisith@yahoo.com
 Office Address: MPWT, Phnom Penh

ADB

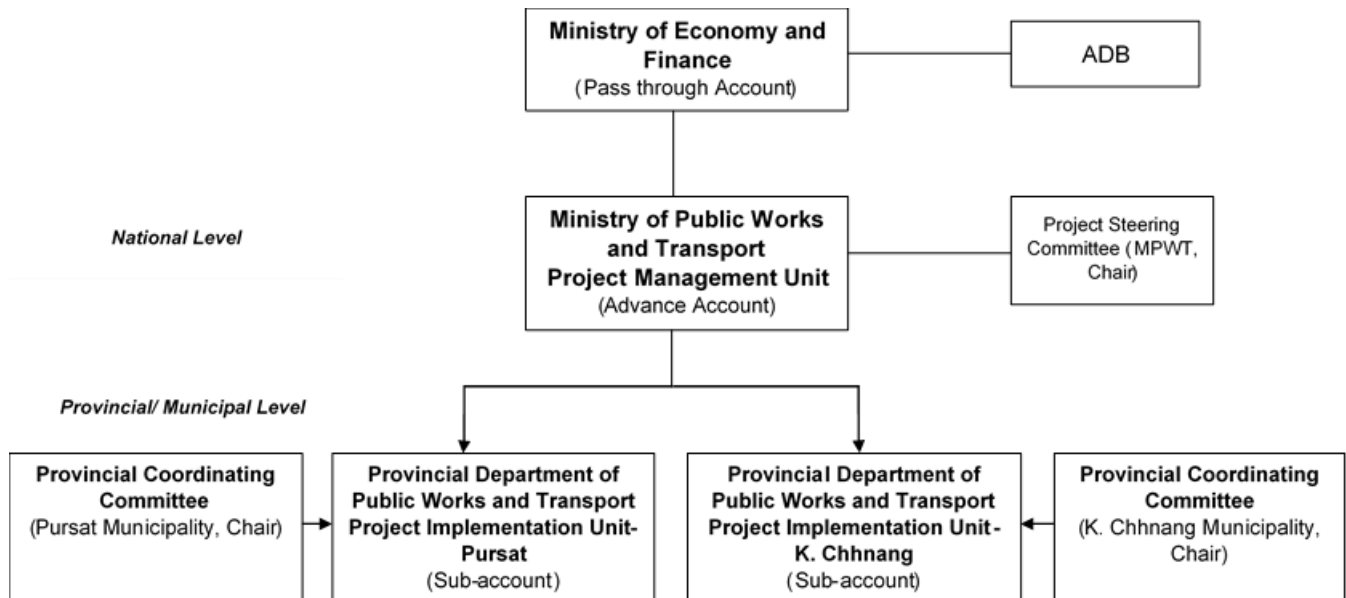
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C. Project Organization Structure



Source: Asian Development Bank.

IV. COSTS AND FINANCING

5. The government has requested a loan in various currencies equivalent to SDR26,382,000 from ADB's Special Funds resources to help finance the project (ADB loan). The ADB loan has a 32-year term, including a grace period of 8 years, an interest rate of 1.0% per annum during the grace period and 1.5% per annum thereafter, and such other terms and conditions set forth in the draft loan agreement.

6. The ADB loan is financing civil works, vehicles and equipment, workshops, consulting services, community mobilization and environmental improvements, interest during implementation to facilitate project implementation, and taxes and duties for incremental administration costs (office and travel expenses and equipment) and workshops¹. The interest during implementation of the ADB loan is capitalized as part of the loan

7. The ADB Strategic Climate Fund (ADB SCF) provided a grant of \$5.0 million and a loan for \$5.0 million. The ADB SCF grant is financing civil works, workshops, and consulting services, including taxes and duties for workshops². The ADB SCF loan has a 40-year term, including a grace period of 10 years, and a service charge of 0.1% per annum on the disbursed and outstanding loan amount. ADB SCF Loan and Grant are front loaded.¹⁹ The ADB SCF service charge is capitalized as part of the loan

8. The government has provided counterpart financing of \$5.4 million equivalent to cover its 10% contribution to output village grants, costs for land acquisition and resettlement, salary supplements, annual audit of project accounts, and taxes and duties (through exemption). The community financing of \$0.2 million covers its 10% contribution to output village grants.

Table 1: Project Investment Plan
(\$ million)

Item	Amount
A. Base Cost ^a	
1. Output 1: Policy and regulatory environment improved	0.4
2. Output 2: Urban infrastructure improved	42.1
3. Output 3: Institutional effectiveness improved	6.7
Subtotal (A)^b	49.2
B. Contingencies^c	3.1
C. Financing Charges During Implementation ^d	1.1
Total (A+B+C)	53.4

O&M = operations and maintenance.

^a Includes taxes and duties of \$4.47 million to be financed by the government through exemptions, ADB and ADB SCF grant.

^b In April 2021 prices.

^c Physical contingencies computed at 10% for civil works, equipment and consulting services for unawarded contracts. Price contingencies computed at 1.6% to 1.8% on foreign exchange costs and 1.8 - 3% on local currency costs; includes provision for potential exchange rate fluctuations under the assumption of a purchasing power parity exchange rate.

^d Includes interest estimated at \$1.11 million during implementation for the ADB loan and \$0.009 million in service charge for the ADB Strategic Climate Fund loan, which will both be capitalized as part of the loans.

Source: Asian Development Bank estimates.

¹ ADB loan will finance taxes and duties on ADB-financed expenditures, as it is within reasonable country thresholds, does not represent an excessive share of the project investment, and is material and relevant to the project's success; and recurrent costs, local transportation, and insurance to facilitate project implementation.

² ADB SCF grant will finance taxes and duties on ADB SCF grant-financed expenditures, as it is within reasonable country thresholds, does not represent an excessive share of the project investment, and is material and relevant to the project's success; and recurrent costs, local transportation, and insurance to facilitate project implementation.

Table 2: Financing Plan

Source	Amount (\$ million)	Share of Total (%)
Asian Development Bank ADF Loan	37.9 ^b	70.8
ADB Strategic Climate Fund loan ^a	5.0	9.4
ADB Strategic Climate Fund grant ^a	5.0	9.4
Royal Government of Cambodia	5.4	10.0
Community	0.2	0.4
Total	53.4	100.0

ADB = Asian Development Bank, ADF = Asian Development Fund.

^a Under the Pilot Program for Climate Resilience financed by the Strategic Climate Fund. Administered by the Asian Development Bank.

^b Increase from \$37m to \$37.9m due to changes in the SDR:USD exchange rate. \$37.9m uses the SDR exchange rate in 29 April 2021 of 1.4346090833 (when all the financial tables were updated and calculated). This does not represent additional financing.

Source: Asian Development Bank estimates.

A. Detailed Cost Estimates by Expenditure Category

Item	(US\$ Million)				
	Foreign	Local			Total
		Non-tax	Taxes	Sub-total	
A. Investment Costs					
1 Civil Works					
b. Kampong Chnnang Solid Waste Management	0.08	0.76	0.08	0.84	0.93
d. Pursat Drainage	0.98	8.85	0.98	9.83	10.82
e. Pursat Solid Waste Management	0.14	1.23	0.14	1.37	1.51
h. Works - Sewer and Flood Protection	4.17	16.68	2.08	18.76	22.93
i. Works - Community Sanitation Works	0.26	2.35	0.26	2.61	2.88
Subtotal	5.64	29.87	3.55	33.42	39.06
2 Equipment					
a. Solid Waste Management	1.92	0.06	0.20	0.25	2.17
3 Workshops					
a. Workshops	0.02	0.07	0.01	0.07	0.09
4 Consulting Services					
a. Project Management and Implementation Support	1.45	1.68	0.31	1.99	3.44
c. Surveys and Investigations	0.61	0.61	0.12	0.73	1.34
d. Climate Change Adaptation in Urban Development	0.23	0.06	0.03	0.09	0.32
e. NGO Support to Community-led Environmental Improvements	0.42	0.85	0.13	0.98	1.39
Subtotal	2.71	3.19	0.59	3.78	6.49
5 Incremental Administration					
a. Office and Travel Expenses	-	0.19	0.02	0.21	0.21
b. Vehicles	0.15	0.03	0.02	0.05	0.19
c. Equipment	0.01	0.16	0.02	0.18	0.19
d. Salaries	-	0.55	0.05	0.60	0.60
Subtotal	0.16	0.93	0.11	1.03	1.19
6 Resettlement Support					
a. Resettlement Support	-	0.19	0.02	0.21	0.21
Total Base Cost (A) a/	10.43	34.30	4.47	38.77	49.20
B. Contingencies b/					
1 Physical					2.35
2 Price					0.76
Subtotal (B)					3.11
C. Financing Charges During Implementation c/					
1 Interest During Implementation					1.12
Total Project Cost (A+B+C)					53.43

a/ In April 2021 prices. Includes taxes and duties of \$4.47 million which will be financed by the Government through exemptions, ADB loan financing of taxes and duties for incremental administration (office and travel expenses and office equipment) and workshops costs; ADB SCF grant financing of

taxes and duties for workshops costs; and resettlement costs subject to change and will be confirmed once detailed design and detailed measurement surveys are completed.

- b/ Physical contingencies computed at 8-10% for civil works, equipment and consulting services for unawarded contracts. Price contingencies were computed at rates ranging from 1.6% to 1.8% on foreign currency costs and 1-8 - 3.0% on local currency costs. The rates used include provisions for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.
- c/ Includes interest estimated at \$1.11 million during implementation which was calculated at 1.0% per annum during the grace period for the ADB loan. A service charge of 0.1% per annum was used and is estimated at \$0.009 million for the ADB Strategic Climate Fund (under the Pilot Program for Climate Resilience financed by the Strategic Climate Fund. Administered by the Asian Development Bank).

Note: Numbers may not sum precisely due to rounding.

ADB = Asian Development Bank; NGO = nongovernment organization, PPCR = pilot program for climate resilience; SCF = strategic climate fund.

Source: Actual contract values and Consultants' estimates.

B. Allocation and Withdrawal of Loan Proceeds

1. Asian Development Bank ADF Loan

		Total amount allocated for ADB / ADF financing (SDR) in \$ equivalent		ADB ADF Financing Percentage and Basis for Withdrawal from the Loan Account	
	Item	Category	Subcategory		
1	Civil Works	18,761,783			
	1B				
	Kampong Chhnang Solid Waste Management		588,511	100%	of total expenditure claimed*
	1D				
	Pursat Drainage		5,140,157	100%	of total expenditure claimed* ***
	1E				
	Pursat Solid Waste Management		953,881	100%	of total expenditure claimed*
	1H				
	Works - Sewer and Flood Protection		11,051,007	100%	of total expenditure claimed* **
	1I				
	Works - Community Sanitation Works		1,028,227	80%	of total expenditure claimed*
2	Equipment	1,374,590			
	2A				
	Equipment		1,374,590	100%	of total expenditure claimed*
3	Workshops	62,901			
	3A				
	Workshops (tax included)		62,901	100%	of total expenditure claimed
4	Consulting Services	2,954,648			
	4A				
	Project Management and Implementation Support		2,177,333	100%	of total expenditure claimed*
	4C				
	Surveys and Investigations		777,315	100%	of total expenditure claimed* ****
5	Incremental Administration	400,000			
	5A				
	Office and Travel Expenses (tax included)		144,816	100%	of total expenditure claimed
	5B				
	Vehicles		122,724	100%	of total expenditure claimed*
	5C				
	. Equipment (tax included)		132,460	100%	of total expenditure claimed
6	Interest during Implementation	772,133		100%	of total amount due
7	Unallocated	2,055,944			
	Total	26,382,000			

ADB = Asian Development Bank, ADF = Asian Development Fund, SDR = special drawing rights.

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

** At the request of the Borrower, advance payment for contracts awarded will be charged to the Loan. Subsequent expenditures will be front-loaded to the SCF Loan until the allocated amounts are fully utilized; the remaining expenditures under this specific category will then be charged to the Loan.

- *** At the request of the Borrower, advance payment for contracts awarded will be charged to the Loan. Subsequent expenditures will be front-loaded to the SCF Grant until the allocated amounts are fully utilized; the remaining expenditures under this specific category will then be charged to the Loan
- *** Expenditures will be front-loaded to the SCF Grant until the allocated amounts are fully utilized; the remaining expenditures under this specific category will then be charged to the Loan
- *

2. ADB Strategic Climate Fund loan

		Total amount allocated for ADB / ADF financing (SDR) in \$ equivalent		ADB SCF Loan Financing Percentage and Basis for Withdrawal from the Loan Account	
Item		Category	Subcategory		
1	Kampong Chhnang Flood Protection	4,991,296		100%	of total expenditure claimed* **
2	Service charge during Construction Implementation	8,704		100%	of total amount due
Total		5,000,000			

ADB = Asian Development Bank, ADF = Asian Development Fund, SCF = Strategic Climate Fund, SDR = special drawing rights.

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

At the request of the Borrower, advance payment for contracts awarded under Category 1 will be charged to the ADB Loan. Subsequent expenditures will be front-loaded to the SCF Loan until the allocated amount is fully utilized; upon full utilization, the remaining expenditures under this specific category will then be charged to the ADB Loan accordingly.

3. ADB Strategic Climate Fund grant

Item		Total amount allocated for ADB / ADF financing (SDR) in \$ equivalent		ADB SCF Grant Financing Percentage and Basis for Withdrawal from the Loan Account	
		Category	Subcategory		
1	Works	3,230,000			
	1A Pursat Drainage		2,460,000	100%	of total expenditure claimed* **
	1D Works - Community Sanitation Works		770,000	100%	of total expenditure claimed*
2	Workshops	1			
	2A Workshops		1	100%	of total expenditure claimed
3	Consulting Services	1,658,009			
	3A Climate Change Adaptation in Urban Development		290,794	100%	of total expenditure claimed*
	3B NGO Support to Community-led Environmental Improvements		1,267,214	100%	of total expenditure claimed*
	3C Surveys and Investigations		100,001	100%	of total expenditure claimed* **
4	Unallocated	111,990			
	Total	5,000,000			

ADB = Asian Development Bank, ADF = Asian Development Fund, NGO = nongovernment organization, SCF = Strategic Climate Fund, SDR = special drawing rights.

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

** (i) At the request of the Recipient, advance payment for contracts awarded under Subcategory 1A will be charged to the ADB Loan; subsequent expenditures will be front-loaded to the SCF Grant until the allocated amount is fully utilized; upon full utilization, the remaining expenditures under this specific category will then be charged to the ADB Loan accordingly.

(ii) Expenditures under Subcategory 3C will be front-loaded to the SCF Grant until the allocated amount is fully utilized; upon full utilization, the remaining expenditures under this specific category will then be charged to the ADB Loan.

C. Detailed Cost Estimates by Financier

		Asian Development Bank								Total Cost						
		Asian Development Bank ADF Loan		ADB Strategic Climate Fund loan		ADB Strategic Climate Fund grant		Total ADB		Government of Cambodia		Beneficiaries				
		Amount (\$'000)	% of Cost Category	Amount (\$'000)	% of Cost Category	Amount (\$'000)	% of Cost Category	Amount (\$'000)	% of Cost Category	Amount (\$'000)	% of Cost Category	Amount (\$'000)	% of Cost Category	Amount (\$'000)	% of Cost Category	Taxes and Duties (\$'000)
		{A}	{A/G}	{B}	{B/G}	{C}	{C/G}	{D}	{D/G}	{E}	{E/G}	{F}	{F/G}	{G}		
A.	Investment Costs															
1.0	Civil Works															
b.	Kampong Chhnang Solid Waste Management	844	91%	-	0%	-	0%	844	91%	84	9%	-	0%	929	100%	84
d.	Pursat Drainage	7,374	68%	-	0%	2,460	23%	9,834	91%	983	9%	-	0%	10,818	100%	983
e.	Pursat Solid Waste Management	1,368	91%	-	0%	-	0%	1,368	91%	137	9%	-	0%	1,505	100%	137
h.	Works - Sewer and Flood Protection	15,854	69%	4,991	22%	-	0%	20,845	91%	2,085	9%	-	0%	22,930	100%	2,085
i.	Works - Community Sanitation Works	1,475	51%	-	0%	770	27%	2,245	78%	427	15%	203	7%	2,875	100%	261
Subtotal		26,916	69%	4,991	13%	3,230	8%	35,137	90%	3,717	10%	203	1%	39,056	100%	3,551
2.0	Equipment															
a.	Solid Waste Management	1,972	91%	-	0%	-	0%	1,972	91%	197	9%	-	0%	2,169	100%	197
3.0	Workshops															
a.	Workshops	90	100%	-	0%	-	0%	90	100%	-	0%	-	0%	90	100%	8
4.0	Consulting Services															
a.	Project Management and Implementation Support	3,124	91%	-	0%	-	0%	3,124	91%	312	9%	-	0%	3,436	100%	312
c.	Surveys and Investigations	1,115	83%	-	0%	100	7%	1,215	91%	122	9%	-	0%	1,337	100%	122
d.	Climate Change Adaptation in Urban Development	-	0%	-	0%	291	91%	291	91%	29	9%	-	0%	320	100%	29
e.	NGO Support to Community-led Environmental Improvements	-	0%	-	0%	1,267	91%	1,267	91%	127	9%	-	0%	1,394	100%	127
Subtotal		4,239	65%	-	0%	1,658	26%	5,897	91%	590	9%	-	0%	6,486	100%	590
5.0	Incremental Administration															
a.	Office and Travel Expenses	208	100%	-	0%	-	0%	208	100%	-	0%	-	0%	208	100%	19
b.	Vehicles	176	91%	-	0%	-	0%	176	91%	18	9%	-	0%	194	100%	18
c.	Equipment	190	100%	-	0%	-	0%	190	100%	-	0%	-	0%	190	100%	17
d.	Salaries	-	0%	-	0%	-	0%	0	0%	600	100%	-	0%	600	100%	55

Subtotal		574	48%	-	0%	-	0%	574	48%	618	52%	-	0%	1,191	100%	108
6.0 Resettlement Support																
a. Resettlement Support		-	0%	-	0%	-	0%	0	0%	210	100%	-	0%	210	100%	19
Total Base Cost (A) a/		33,791	69%	4,991	10%	4,888	10%	43,670	89%	5,331	11%	203	0%	49,204	100%	4,473
B. Contingencies b/																
1.0 Physical		2,237	95%	-	0%	79	3%	2,316	98%	18	1%	18	1%	2,353	100%	
2.0 Price		712	94%	-	0%	33	4%	745	99%	9	1%	2	0%	755	100%	
Subtotal (B)		2,949	95%	-	0%	112	4%	3,061	98%	27	1%	20	1%	3,109	100%	
C. Financing Charges During Implementation c/																
1.0 Interest During Implementation		1,108	99%	9	1%			1,116	100%					1,113	100%	
Total Project Cost (A+B+C)		37,848	71%	5,000	9%	5,000	9%	47,848	90%	5,358	10%	223	0%	53,429	100%	4,473

^a In April 2021 prices. Includes taxes and duties of \$4.47 million which will be financed by the Government through exemptions; ADB loan financing of taxes and duties of incremental administration (office and travel expenses and office equipment) and workshops costs; ADB SCF grant financing of taxes and duties for workshops costs; and resettlement costs subject to change and will be confirmed once resettlement plans are approved.

^b Physical contingencies computed at 8-10% for civil works, equipment and consulting services for unawarded contracts. Price contingencies were computed at rates ranging from 1.6% to 1.8% on foreign currency costs and 1.8% to 3% on local currency costs. The rates used include provisions for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^c Includes interest estimated at \$1.11 million during implementation for the ADB Loan and a service charge of \$0.009 million for the ADB Strategic Climate Fund (under the Pilot Program for Climate Resilience financed by the Strategic Climate Fund. Administered by the Asian Development Bank).

Source: Asian Development Bank

D. Detailed Cost Estimates by Outputs/Components

		Output 1		Output 2		Output 3		Output 4 ^d		Output 5 ^d		Total	
		Amount	% of cost category	Amount	% of cost category	Amount	% of cost category	Amount	% of cost category	Amount	% of cost category	Amount	% of cost category
A.	Investment Costs												
	1.0 Civil Works												
	b. Kampong Chnnang Solid Waste Management	-	0%	929	100%	-	0%	-	0%	-	0%	929	100.0%
	d. Pursat Drainage	-	0%	10,818	100%	-	0%	-	0%	-	0%	10,818	100.0%
	e. Pursat Solid Waste Management	-	0%	1,505	100%	-	0%	-	0%	-	0%	1,505	100.0%
	h. Works - Sewer and Flood Protection	-	0%	22,930	100%	-	0%	-	0%	-	0%	22,930	100.0%
	i. Works - Community Sanitation Works	-	0%	2,875	100%	-	0%	-	0%	-	0%	2,875	100.0%
	Subtotal	-	0%	39,056	100%	-	0%	-	0%	-	0%	39,056	100%
	2.0 Equipment												
	a. Solid Waste Management	-	0%	2,169	100%	-	0%	-	0%	-	0%	2,169	100.0%
	Workshops												
	3.0												
	a. Workshops	90	100%	-	0%	-	0%	-	0%	-	0%	90	100.0%
	4.0 Consulting Services												
	a. Project Management and Implementation Support	-	0%	-	0%	3,436	100%	-	0%	-	0%	3,436	100.0%
	c. Surveys and Investigations	-	0%	-	0%	1,337	100%	-	0%	-	0%	1,337	100.0%
	d. Climate Change Adaptation in Urban Development	320	100%	-	0%	-	0%	-	0%	-	0%	320	100.0%
	e. NGO Support to Community-led Environmental Improvements	-	0%	697	50%	697	50%	-	0%	-	0%	1,394	100.0%
	Subtotal	320	5%	697	11%	5,470	84%	-	0%	-	0%	6,486	100%
	5.0 Incremental Administration												
	a. Office and Travel Expenses	-	0%	-	0%	208	100%	-	0%	-	0%	208	100.0%
	b. Vehicles	-	0%	-	0%	194	100%	-	0%	-	0%	194	100.0%
	c. Equipment	-	0%	-	0%	189	100%	-	0%	-	0%	190	100.0%
	d. Salaries	-	0%	-	0%	600	100%	-	0%	-	0%	600	100.0%
	Subtotal	-	0%	-	0%	1,191	100%	-	0%	-	0%	1,191	100%
	6.0 Resettlement Support												
	a. Resettlement Support	-	0%	210	100%	-	0%	-	0%	-	0%	210	100.0%

Total Base Cost (A) a/		410	1%	42,133	86%	6,661	14%	-	0%	-	0%	49,204	100.0%
B. Contingencies b/													
		-	0%	2,353	100%	-	0%	-	0%	-	0%	2,353	100.0%
	1.0 Physical												
	2.0 Price	0	0%	716	95%	39	5%	-	0%	-	0%	755	100.0%
Subtotal (B)		0	0%	3,069	99%	39	1%	-	0%	-	0%	3,109	100%
C. Financing Charges During Implementation c/													
	1.0 Interest During Implementation											1,116	2.1%
Total Project Cost (A+B+C)		411	1%	45,202	85%	6,700	13%	-	0%	-	0%	53,429	100.0%

^a In April 2021 prices. Includes taxes and duties of \$4.47 million which will be financed by the Government through exemptions; ADB loan financing of taxes and duties of incremental administration (office and travel expenses and office equipment) and workshops costs; ADB SCF grant financing of taxes and duties for workshops costs; and resettlement costs subject to change and will be confirmed once resettlement plans are approved.

^b Physical contingencies computed at 8-10% for civil works, equipment and consulting services for unawarded contracts. Price contingencies were computed at rates ranging from 1.6% to 1.8% on foreign currency costs and 1.8% to 3% on local currency costs. The rates used include provisions for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^c Includes interest estimated at \$1.11 million during implementation for the ADB Loan and a service charge of \$0.009 million for the ADB Strategic Climate Fund (under the Pilot Program for Climate Resilience financed by the Strategic Climate Fund. Administered by the Asian Development Bank).

^d Following the major scope change, project outputs and activities have been consolidated and the number of project outputs in the DMF have changed from five to three. As such, the revised table shows outputs 4 and 5 with "0" allocation.

Source: Asian Development Bank

E. Detailed Cost Estimates by Year

Source of Funds		Years 1-3 (2016-19)	Year 4 (2020)	Year 5 (2021)	Year 6 (2022)	Year 7 (2023)	Year 8 (2024)	Total	
		Amount \$m	Amount \$m	Amount \$m	Amount \$m	Amount \$m	Amount \$m	Amount \$m	% of cost category
I.	Asian Development Bank ADF Loan								
A.	Investment Costs								
	1.0 Civil Works								
	b. Kampong Chnnang Solid Waste Management	-	0.42	0.42	-	-	-	0.84	100%
	d. Pursat Drainage	-	2.21	4.42	0.74	-	-	7.37	100%
	e. Pursat Solid Waste Management	-	0.68	0.68	-	-	-	1.37	100%
	h. Works - Sewer and Flood Protection	-	-	1.59	7.93	4.76	1.59	15.85	100%
	i. Works - Community Sanitation Works	-	-	1.48	-	-	-	1.48	100%
	Subtotal	-	3.32	8.59	8.66	4.76	1.59	26.92	100%
	2.0 Equipment								
	a. Solid Waste Management	-	-	1.04	0.93	-	-	1.97	100%
	3.0 Workshops								
	a. Workshops	0.05	0.02	0.01	0.01	-	-	0.09	100%
	4.0 Consulting Services								
	a. Project Management and Implementation Support	1.55	0.63	0.49	0.45	-	-	3.12	100%
	c. Surveys and Investigations	0.56	0.22	0.17	0.17	-	-	1.12	100%
	d. Climate Change Adaptation in Urban Development	-	-	-	-	-	-	-	0%
	e. NGO Support to Community-led Environmental Improvements	-	-	-	-	-	-	-	0%
	Subtotal	2.11	0.85	0.66	0.62	-	-	4.24	100%
	5.0 Incremental Administration								
	a. Office and Travel Expenses	0.04	-	0.06	0.05	0.05	-	0.21	100%

b. Vehicles	0.15	-	0.01	0.01	0.01	-	0.18	100%
c. Equipment	0.05	-	0.05	0.05	0.04	-	0.19	100%
d. Salaries	-	-	-	-	-	-	-	0%
Subtotal	0.24	-	0.12	0.11	0.11	-	0.57	100%
6.0 Resettlement Support								
a. Resettlement Support	-	-	-	-	-	-	-	0%
Total Base Cost (A) a/	2.39	4.19	10.43	10.34	4.86	1.59	33.79	100%
B. Contingencies b/								
1.0 Physical	-	-	0.44	1.04	0.57	0.19	2.24	100%
2.0 Price	-	-	0.09	0.28	0.23	0.11	0.71	100%
Subtotal (B)	-	-	0.53	1.32	0.80	0.30	2.95	100%
C. Financing Charges During Implementation c/								
1.0 Interest During Implementation	0.04	0.05	0.13	0.25	0.37	0.27	1.11	100%
Total Project Cost (A+B+C)	2.43	4.24	11.09	11.91	6.03	2.15	37.85	100%

Source of Funds		Years 1-3 (2016-19)		Year 4 (2020)		Year 5 (2021)		Year 6 (2022)		Year 7 (2023)		Year 8 (2024)		Total	
		Amount \$m	% of cost category	Amount \$m	% of cost category	Amount \$m	% of cost category	Amount \$m	% of cost category	Amount \$m	% of cost category	Amount \$m	% of cost category	Amount \$m	% of cost category
I.	Asian Development Bank ADF Loan														
A.	Investment Costs														
	1.0 Civil Works														
	b. Kampong Chnnang Solid Waste Management	-	0.0%	0.42	50.0%	0.42	50.0%	-	0.0%	-	0.0%	-	0.0%	0.84	100%
	d. Pursat Drainage Pursat Solid Waste Management	-	0.0%	2.21	30.0%	4.42	60.0%	0.74	10.0%	-	0.0%	-	0.0%	7.37	100%
	e. Works - Sewer and Flood Protection	-	0.0%	0.68	50.0%	0.68	50.0%	-	0.0%	-	0.0%	-	0.0%	1.37	100%
	h. Works - Community Sanitation Works	-	0.0%	-	0.0%	1.59	10.0%	7.93	50.0%	4.76	30.0%	1.59	10.0%	15.85	100%
	i. Sanitation Works	-	0.0%	-	0.0%	1.48	100.0%	-	0.0%	-	0.0%	-	0.0%	1.48	100%
	Subtotal	-	0.0%	3.32	12.3%	8.59	31.9%	8.66	32.2%	4.76	17.7%	1.59	5.9%	26.92	100%
	2.0 Equipment														
	a. Solid Waste Management	-	0.0%	-	0.0%	1.04	52.8%	0.93	47.2%	-	0.0%	-	0.0%	1.97	100%
	3.0 Workshops														
	a. Workshops	0.05	50.0%	0.02	20.0%	0.01	15.0%	0.01	15.0%	-	0.0%	-	0.0%	0.09	100%
	4.0 Consulting Services														
	a. Project Management and Implementation Support	1.55	49.6%	0.63	20.2%	0.49	15.8%	0.45	14.4%	-	0.0%	-	0.0%	3.12	100%
	c. Surveys and Investigations	0.56	50.0%	0.22	20.0%	0.17	15.0%	0.17	15.0%	-	0.0%	-	0.0%	1.12	100%
	d. Climate Change Adaptation in Urban Development	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
	e. NGO Support to Community-led Environmental Improvements	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
	Subtotal	2.11	49.7%	0.85	20.1%	0.66	15.6%	0.62	14.6%	-	0.0%	-	0.0%	4.24	100%
	5.0 Incremental Administration														
	a. Office and Travel Expenses	0.04	21.4%	-	0.0%	0.06	26.7%	0.05	25.9%	0.05	25.9%	-	0.0%	0.21	100%
	b. Vehicles	0.15	83.1%	-	0.0%	0.01	5.7%	0.01	5.6%	0.01	5.6%	-	0.0%	0.18	100%
	c. Equipment	0.05	24.0%	-	0.0%	0.05	27.0%	0.05	26.3%	0.04	22.7%	-	0.0%	0.19	100%
	d. Salaries	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
	Subtotal	0.24	41.2%	-	0.0%	0.12	20.4%	0.11	19.8%	0.11	18.6%	-	0.0%	0.57	100%

6.0 Resettlement Support														
	a. Resettlement Support	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	0%
Total Base Cost (A) a/		2.39	7.1%	4.19	12.4%	10.43	30.9%	10.34	30.6%	4.86	14.4%	1.59	4.7%	33.79 100%
B. Contingencies b/														
1.0	Physical	-	0.0%	-	0.0%	0.44	19.7%	1.04	46.5%	0.57	25.4%	0.19	8.5%	2.24 100%
2.0	Price	-	0.0%	-	0.0%	0.09	12.2%	0.28	39.5%	0.23	32.7%	0.11	15.6%	0.71 100%
Subtotal (B)		-	0.0%	-	0.0%	0.53	17.9%	1.32	44.8%	0.80	27.1%	0.30	10.2%	2.95 100%
C. Financing Charges During Implementation c/														
1.0	Interest During Implementation	0.04	3.4%	0.05	4.5%	0.13	12.1%	0.25	22.4%	0.37	33.3%	0.27	24.2%	1.11 100%
Total Project Cost (A+B+C)		2.43	6.4%	4.24	11.2%	11.09	29.3%	11.91	31.5%	6.03	15.9%	2.15	5.7%	37.85 100%

Source of Funds			Years 1-3 (2016-19)		Year 4 (2020)		Year 5 (2021)		Year 6 (2022)		Year 7 (2023)		Year 8 (2024)		Total	
			Amount \$m	% of cost category	Amount \$m	% of cost category	Amount \$m	% of cost category	Amount \$m	% of cost category	Amount \$m	% of cost category	Amount \$m	% of cost category	Amount \$m	% of cost category
II.	ADB Strategic Climate Fund loan															
A.	Investment Costs															
	1.0	Civil Works														
		b. Kampong Chnnang Solid Waste Management	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
		d. Pursat Drainage	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
		e. Pursat Solid Waste Management	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
		h. Works - Sewer and Flood Protection	-	0.0%	-	0.0%	0.50	10.0%	2.50	50.0%	1.50	30.0%	0.50	10.0%	4.99	100%
		i. Works - Community Sanitation	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
	Subtotal		-	0.0%	-	0.0%	0.50	10.0%	2.50	50.0%	1.50	30.0%	0.50	10.0%	4.99	100%
	2.0	Equipment														
		a. Solid Waste Management	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
	3.0	Workshops														
		a. Workshops	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
	4.0	Consulting Services														
		a. Project Management and Implementation	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
		c. Support Surveys and Investigations	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
		d. Climate Change Adaptation in Urban Development	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
		e. NGO Support to Community-led Environmental Improvements	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
	Subtotal		-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
	5.0	Incremental Administration														

	a.	Office and Travel Expenses	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%		
	b.	Vehicles	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%		
	c.	Equipment	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%		
	d.	Salaries	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%		
	Subtotal		-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%		
6.0	Resettlement Support															
	a.	Resettlement Support	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%		
Total Base Cost (A) a/			-	0.0%	-	0.0%	0.50	10.0%	2.50	50.0%	1.50	30.0%	0.50	10.0%	4.99	100%
B. Contingencies b/																
1.0	Physical		-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%		
2.0	Price		-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%		
Subtotal (B)			-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%		
C. Financing Charges During Implementation c/																
1.0	Interest During Implementation		-	0.0%	-	0.0%	0.00	-	0.00	-	0.00	-	0.00	-	0.01	0%
Total Project Cost (A+B+C)			-	0.0%	-	0.0%	0.50	10.0%	2.50	50.0%	1.50	30.0%	0.50	10.0%	5.00	100%

[illegible]

Subtotal		-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	0%
6.0	Resettlement Support													
	a. Resettlement Support	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	0%
Total Base Cost (A) a/		0.80	16.3%	1.12	22.9%	2.47	50.5%	0.50	10.2%	-	0.0%	-	0.0%	4.89 100%
B. Contingencies b/														
1.0	Physical	-	0.0%	0.01	16.8%	0.07	83.2%	-	0.0%	-	0.0%	-	0.0%	0.08 100%
2.0	Price	-	0.0%	-	0.0%	0.02	62.1%	0.01	37.9%	-	0.0%	-	0.0%	0.03 100%
Subtotal (B)		-	0.0%	0.01	11.9%	0.09	77.0%	0.01	11.1%	-	0.0%	-	0.0%	0.11 100%
C. Financing Charges During Implementation c/														
1.0	Interest During Implementation													- 0%
Total Project Cost (A+B+C)		0.80	16.0%	1.13	22.7%	2.56	51.1%	0.51	10.2%	-	0.0%	-	0.0%	5.00 100%

	a.	Office and Travel Expenses	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
	b.	Vehicles	0.01	83.1%	-	0.0%	0.00	5.7%	0.00	5.6%	0.00	5.6%	-	0.02 100%
	c.	Equipment	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
	d.	Salaries	0.26	42.9%	0.09	14.3%	0.09	14.3%	0.09	14.3%	0.09	14.3%	-	0.60 100%
Subtotal			0.27	44.0%	0.09	13.9%	0.09	14.0%	0.09	14.0%	0.09	14.0%	-	0.62 100%
6.0		Resettlement Support												
	a.	Resettlement Support	-	0.0%	0.06	30.0%	0.15	70.0%	-	0.0%	-	0.0%	-	0.21 100%
Total Base Cost (A) a/			0.56	10.5%	0.68	12.7%	1.76	33.1%	1.41	26.4%	0.71	13.4%	0.21	5.33 100%
B.		Contingencies b/												
	1.0	Physical	-	0.0%	-	0.0%	0.02	100.0%	-	0.0%	-	0.0%	-	0.02 100%
	2.0	Price	-	0.0%	-	0.0%	0.00	38.5%	0.00	22.5%	0.00	39.0%	-	0.01 100%
Subtotal (B)			-	0.0%	-	0.0%	0.02	80.4%	0.00	7.2%	0.00	12.4%	-	0.03 100%
C.		Financing Charges During Implementation c/												
	1.0	Interest During Implementation											-	0%
Total Project Cost (A+B+C)			0.56	10.5%	0.68	12.7%	1.78	33.3%	1.41	26.3%	0.72	13.4%	0.21	5.36 100%

[illegible]

	c.	Equipment	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
	d.	Salaries	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
	Subtotal		-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
6.0		Resettlement Support														
	a.	Resettlement Support	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0%
	Total Base Cost (A) a/		-	0.0%	-	0.0%	0.20	100.0%	-	0.0%	-	0.0%	-	0.0%	0.20	100%
	Contingencies b/															
B.		Physical	-	0.0%	-	0.0%	0.02	100.0%	-	0.0%	-	0.0%	-	0.0%	0.02	100%
1.0		Price	-	0.0%	-	0.0%	0.00	100.0%	-	0.0%	-	0.0%	-	0.0%	0.00	100%
2.0																
Subtotal (B)			-	0.0%	-	0.0%	0.02	100.0%	-	0.0%	-	0.0%	-	0.0%	0.02	100%
		Financing Charges During Implementation c/														
C.																
1.0		Interest During Implementation														0%
	Total Project Cost (A+B+C)		-	0.0%	-	0.0%	0.22	100.0%	-	0.0%	-	0.0%	-	0.0%	0.22	100%

ADB = Asian Development Bank; SCF = Strategic Climate Fund. Note: Numbers may not sum precisely because of rounding.

^a In April 2021 prices. Includes taxes and duties of \$4.47 million which will be financed by the Government through exemptions; ADB loan financing of taxes and duties of incremental administration (office and travel expenses and office equipment) and workshops costs; ADB SCF grant financing of taxes and duties for workshops costs; and resettlement costs subject to change and will be confirmed once resettlement plans are approved.

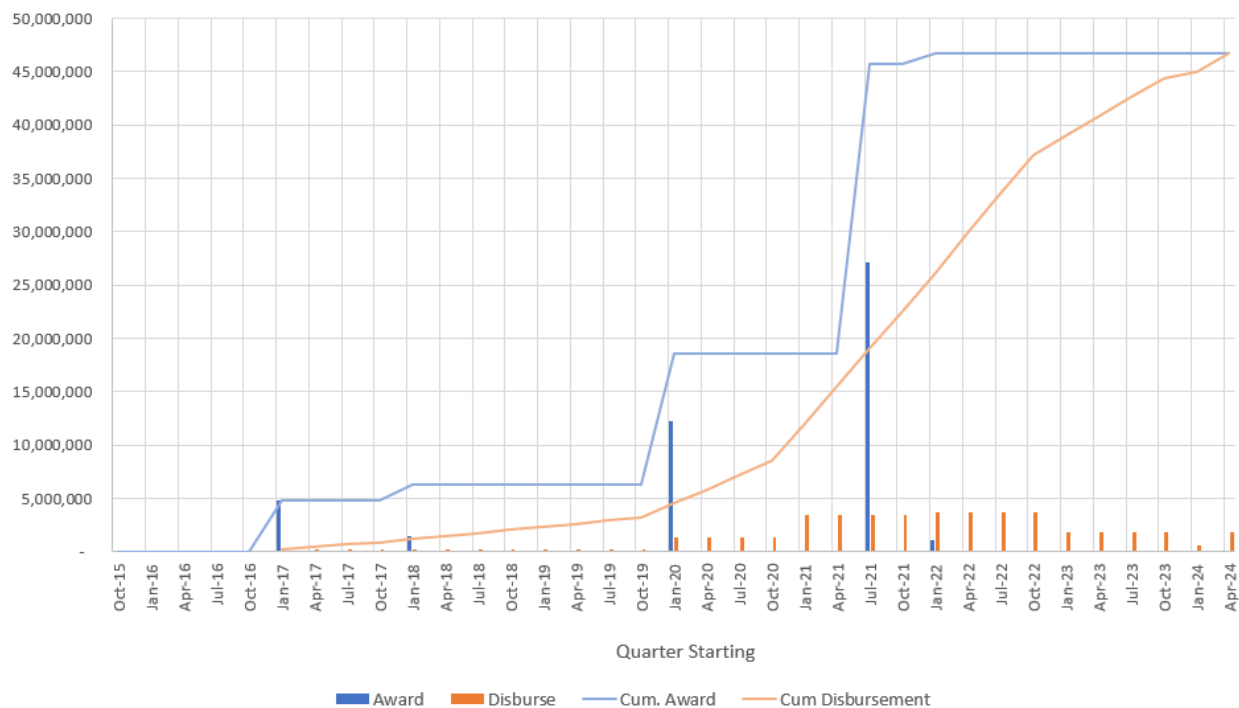
^b Physical contingencies computed at 8-10% for civil works, equipment and consulting services for unawarded contracts. Price contingencies were computed at rates ranging from 1.6% to 1.8% on foreign currency costs and 1.8% to 3% on local currency costs. The rates used include provisions for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^c Includes interest estimated at \$1.11 million during implementation for the ADB Loan and a service charge of \$0.009 million for the ADB Strategic Climate Fund (under the Pilot Program for Climate Resilience financed by the Strategic Climate Fund. Administered by the Asian Development Bank).

Source: Asian Development Bank.

F. Contract and Disbursement S-curve

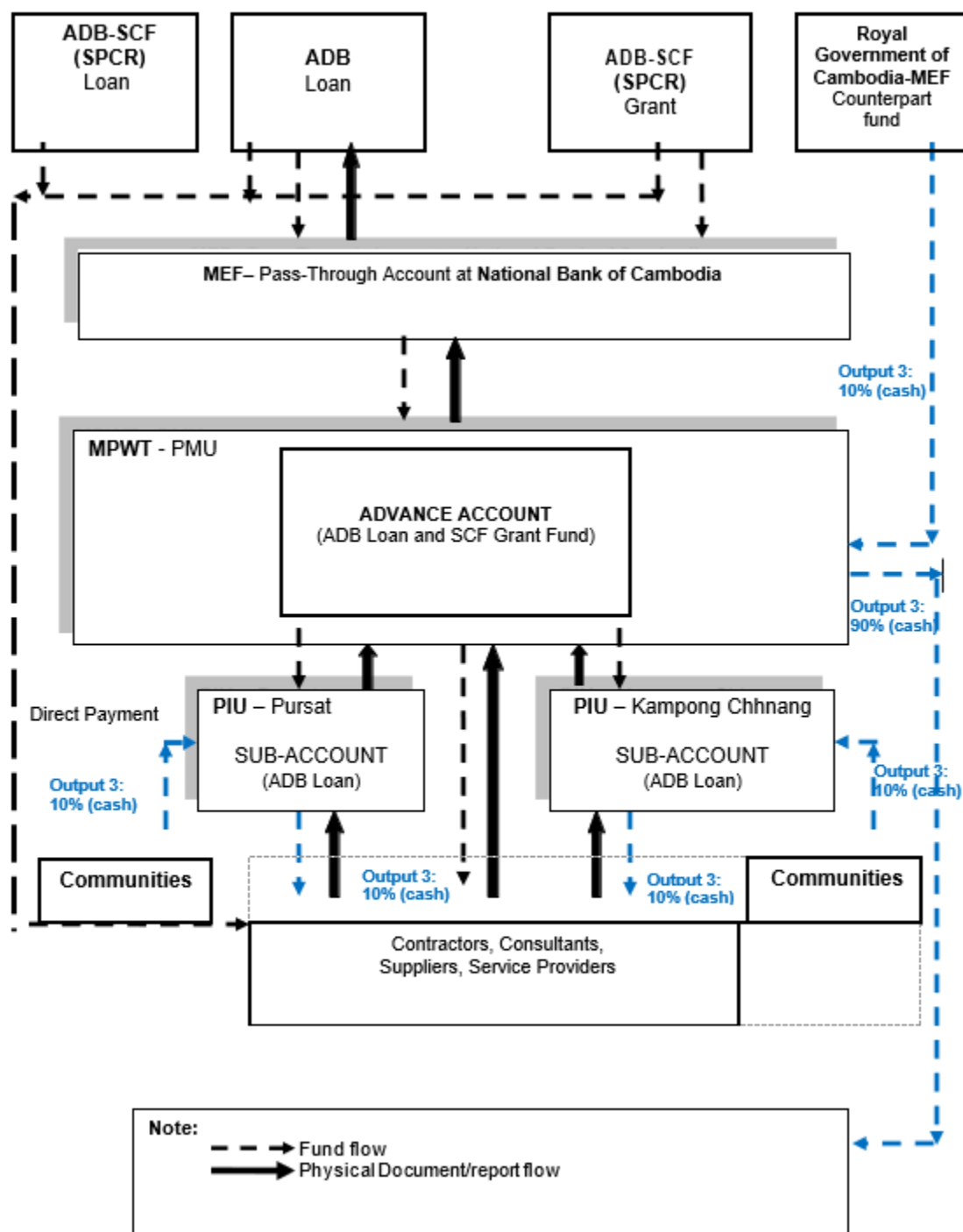
Proposed Awards and Disbursements (s-Curve)



	Contract Awards (in \$ million)					Disbursements (in \$ million)				
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total
2015				-	-				-	-
2016	-	-	-	-	-	-	-	-	-	-
2017	4.82	-	-	-	4.82	0.23	0.23	0.23	0.23	0.91
2018	1.45	-	-	-	1.45	0.29	0.29	0.29	0.29	1.15
2019	-	-	-	-	-	0.28	0.28	0.28	0.28	1.13
2020	12.27	-	-	-	12.27	1.33	1.33	1.33	1.33	5.33
2021	-	-	27.15	-	27.15	3.50	3.50	3.50	3.50	14.01
2022	1.05	-	-	-	1.05	3.67	3.67	3.67	3.67	14.67
2023	-	-	-	-	-	1.79	1.79	1.79	1.79	7.16
2024	-				-	0.60	1.79	-	-	2.38
	Total Contract Awards				46.73	Total Disbursements				46.73

*interest during implementation (final disbursement)

G. Fund Flow Diagram



V. FINANCIAL MANAGEMENT

A. Financial Management Assessment

9. Financial management assessments (FMAs) of the executing agency and implementing agencies have been completed at project appraisal stage.

- (i) Executing Agency—MPWT, specifically the General Department of Public Works (GDPW)
- (ii) Implementing agencies—
 - a. Provincial department of public works and transport in Kampong Chhnang,
 - b. Provincial department of public works and transport in Pursat,
 - c. Kampong Chhnang Municipality, and
 - d. Pursat Municipality.

10. The General Department of Public Works (GDPW), a directorate of the MPWT, is in charge of the orientation, advice, follow up and control of the construction, repair, and maintenance of the roads, bridges, and other infrastructure development. The MPWT with the GDPW as PMU will implement the project. The Royal Government of Cambodia through its ministries, various decrees, and training strengthened the guidelines for financial management in its governance (e.g., Standard Operating Procedures for all Externally Financed Projects/Programs in Cambodia, May 2012, which includes an Updated Financial Management Manual for All Externally Financed Projects/Programs in Cambodia).³ Furthermore, another ADB project under MPWT, the GMS Southern Economic Corridor Towns Development Project, has provided capacity development support for Financial and Procurement Management for other projects as well. These efforts are coordinated by the EA and MEF to avoid duplication in capacity development support.

11. The results of the FMA showed that the PMU and PIUs in the municipalities of Kampong Chhnang and Pursat will require technical support in the following areas: (i) budget preparation and oversight, (ii) ensuring shift from manual to electronic accounting system, (iii) training in procurement guidelines and financial disbursement arrangements, and (iv) financial audit process and requirements. Training on the proper use and accounting of the advance accounts are recommended and part of the project management and implementation support consultants' terms of reference

³ Ministry of Economy and Finance. (Updated May 2012). *Standard Operating Procedures for all Externally Financed Projects/Programs in Cambodia* is available at <http://www.mef.gov.kh/documents/shares/investment/sop-sub-decree-8-june-2012.pdf>

RISK ASSESSMENT AND RISK MANAGEMENT PLAN

Risk Description	Risk Assessment	Mitigation Measures or Risk Management Plan	Update as of Nov 2020
Financial Management Arrangements			
Municipalities are not prepared to collect revenues for O&M of urban infrastructure.	High	The MPWT will pursue improved collection of fees and charges for urban environment infrastructure to recover the cost of O&M expenditures. The MPWT has applied a similar approach in Siem Reap under the Greater Mekong Subregion Mekong Tourism Development Project where a special municipal office has been established to collect user fees of the wastewater treatment plant and collection fees from private and institutional users. A similar approach will be used for the project towns. A special operating agency and account will be established and linked to contract awards for embankment protection in Kampong Chhnang and for drainage in Pursat. These units will be encouraged to introduce business plans to recover O&M costs for the services provided. An environmental sanitation fee will be introduced—reducing the risk to medium–low.	In December 2019, the project held a national forum with all ADB project towns to discuss options for cost recovery and billing. At the same time, the Cambodian Government passed Sub Decree 182 harmonizing the Functions and Structure of Municipal Administrations (a reform pursued under Reform Area 1 of ADB Project No. 52145-001). This sub-decree strengthens municipal control over some line ministry functions (e.g. MPWT's local urban service functions), and specifically creates a municipal office for "Public Works, Transportation, Hygiene, Environment, and Public Order" (PWTHEPO). The project will support these new offices. Capacity building efforts will be concentrated into financial and O&M management aspects. On the revenue side, the strategy is two-fold. In the first instance, the provincial governments will formally commit to funding the O&M of the assets in the years after they are built through the creation of a dedicated budget line. Secondly, the PMC teams will continue to work with the provincial governments to put in place billing systems for wastewater and solid waste, to develop business plans and established ringfenced accounts. In parallel, ADB is supporting the WB initiative to establish joint water and sewerage billing (currently being proposed by MPWT and MISTI to MEF). The national requirement for joint billing will largely reduce the risk of insufficient O&M revenues for wastewater and stormwater drainage, thanks to the enforcement mechanism provided by water services.
The project implementation units (PIUs) in Kampong Chhnang and Pursat are new entities and may have difficulty in managing project sub-accounts and	Medium	The PIUs will draw management staff from PDPWTs and municipalities. A PMU in the MPWT will support the PIUs in project implementation. The PMU will use a project financial management system developed under previous ADB projects, and will be responsible for all procurement. It will support the PIUs, with assistance from the project management and implementation	Though the PAM provides for sub-accounts at each PIU level, based on the AM of the project inception mission (7-14 Dec 2016) these will only be utilized during the latter part of implementation (i.e. at operation and maintenance stage), and are thus not yet established at this time.

Risk Description	Risk Assessment	Mitigation Measures or Risk Management Plan	Update as of Nov 2020
adhering to accounting policies and procedures.		support consultants. A provincial coordination committee will guide the project in each town. Each PIU sub-account will have a ceiling of \$5,000. To ensure strict financial controls, each PIU will be required to liquidate every month. A late submission of liquidation (more than 10 days from the end of the month) will be grounds for suspension of the sub-account—reducing the risk to low–medium.	
Fund mismanagement	Medium	The implementation arrangements are outlined in the project administration manual. All procurement will be done from within the PMU; a representative from each PIU will be invited to participate on the procurement committee. An imprest account will be established in the PMU. A sub-account will be established in each PIU, with a ceiling of \$5,000 and requirement for monthly liquidations. The proposed fund allocation also helps minimize fund mismanagement—reducing the risk to low.	Two imprest accounts are established under the project (one for Loan 3311, and the other for Grant 0454). As indicated in item 2 above, the sub-accounts at PIU level are not yet established. The operational costs of the PIUs are handled by the PMU.
Inadequate internal audit	Medium	Each government ministry has a Department of Inspectorate, whose role is to carry out the functions of an internal auditor within the ministry, and ensure that government rules and regulations are observed at all times. The MPWT has extensive experience in undertaking audits for externally financed projects. The <i>Standard Operating Procedures for all Externally Financed Projects/Programs in Cambodia</i> (May 2012) outline the requirements for internal audit—reducing the risk to low–medium.	Unfortunately, the project does not have any internal auditor in place due to lack of resources. The Department of Inspectorate only checks on the implementation of legal aspects of each government agency/ministry (i.e. if prakas or sub-decrees are followed).
Inadequate external audit	Medium	The MEF will recruit an independent auditor to carry out external audits of all externally financed projects, including ADB-supported projects. The <i>Standard Operating Procedures for all Externally Financed Projects/Programs in Cambodia</i> (May 2012) outline the requirements for external audit—reducing the risk to low–medium	No issues here. The project is being audited every FY by KPMG Cambodia Ltd.

IRC = Inter-ministerial Resettlement Committee, MEF = Ministry of Economy and Finance, MLMUPC = Ministry of Land Management, Urban Planning and Construction, MOE = Ministry of Environment, MPWT = Ministry of Public Works and Transport, O&M = operations and maintenance, PCC = provincial coordination committee, PDPWT = provincial department of public works and transport, PIU = project implementation unit, PMU = project management unit, SPCR = Strategic Program for Climate Resilience.

Source: Asian Development Bank.

B. Disbursement

12. The Loan proceeds, including ADB administered co-financier funds, will be disbursed in accordance with ADB's *Loan Disbursement Handbook* (2017, as amended from time to time),⁴ and detailed arrangements agreed upon between the Government and ADB. The SPCR loan and grant funded through the Strategic Climate Fund is administered by ADB. The proposed project funds flow is shown in Section IV.G on page 36. Online training for project staff on disbursement policies and procedures is available at: http://wpqr4.adb.org/disbursement_elearning. Project staff are encouraged to avail of this training to help ensure efficient disbursement and fiduciary control.

13. Pursuant to ADB's Safeguard Policy Statement (2009) (SPS),⁵ 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.

14. Payments under the project will be generally through direct payment and advance fund (formerly "imprest" fund) procedures. Direct payment procedure will be used as mode of payment for large amount invoices (\$100,000 and over). ADB will pay, at the borrower's request, the designated beneficiary (e.g. contractor, supplier, or consultant) directly.

15. The government will establish one Pass-through account at the National Bank of Cambodia to receive funds from ADB loan and ADB SPCF grant resources.

16. The MPWT, in consultation with MEF, will open two separate advance accounts—one for the ADB loan and the other for the SPCR grant. The ceiling of each advance account is 10% of the respective ADB loan and SPCR grant. The currency of the advance accounts will be the US dollars. The advance accounts will be established, managed, replenished, and liquidated in accordance with ADB's *Loan Disbursement Handbook* (2017, as amended from time to time) and the financial regulations of the Government. The MPWT who established the advance accounts in its name is accountable and responsible for proper use of advances to the advance accounts, including advances to the sub-accounts.

17. Request for initial and additional advance to the advance accounts should be accompanied by an Estimate of Expenditure Sheet⁶ setting out the estimated expenditures for the forthcoming six (6) months of project implementation. For every liquidation and replenishment request of the advance account, the borrower will furnish to ADB (a) Statement of Account (Bank Statement) where the advance account is maintained, and (b) the Advance Account Reconciliation Statement (AARS)⁷ reconciling these above-mentioned bank statement against the EA's records.

18. The PIU in Kampong Chhnang and the PIU in Pursat will each establish a sub-account. The PIU sub-account for the ADB loan will be used for operational costs with a ceiling of \$5,000 equivalent. The PIU will manage the sub-account; it will be the basis for each PIU to improve their skills in financial management and internal audit. To ensure strict compliance with audit arrangements, the PIU shall liquidate its expenses at the end of each month (no later than 10

⁴ Available at: <https://www.adb.org/sites/default/files/adb-loan-disbursement-handbook-2017.pdf>

⁵ Available at: <http://www.adb.org/Documents/Policies/Safeguards/Safeguard-Policy-Statement-June2009.pdf>

⁶ Refer to Appendix 8A of ADB's *Loan Disbursement Handbook* (2017, as amended from time to time).

⁷ Ibid.

days after the last day of the month). Proposed fund allocation also helps to ensure that fund mismanagement through petty cash is minimized. Each PIU will be required to liquidate on a monthly basis, with possible suspension if the account is not liquidated on time. The sub-accounts are to be used exclusively for ADB's share of eligible expenditures. Supporting documents should be submitted to ADB or retained by the EA/IA (as appropriate) in accordance with ADB's Loan Disbursement Handbook when liquidating or replenishing the advance and sub-accounts.

19. The SOE procedure⁸ may be used for reimbursement and to liquidate and replenish the advance accounts. Each individual payment reimbursed or liquidated using the statement of expenditures procedures will not exceed the equivalent of \$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 independent audit. 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.

20. All withdrawal applications will be consolidated by MPWT and submitted to ADB through MEF. The PMU will copy and keep records of their withdrawal applications. The minimum value per withdrawal application is \$100,000 equivalent. Individual payments below this amount should be paid (i) by the EA/IA and subsequently claimed to ADB through reimbursement, or (ii) through the advance fund procedure, unless otherwise accepted by ADB

21. Before the submission of the first withdrawal application, the government 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 borrower should ensure sufficient category and contract balances before requesting disbursements. Use of ADB's Client Portal for Disbursements (CPD)⁹ system is encouraged for submission of withdrawal applications to ADB.

22. The project will provide 80% of the total contract value (net taxes) for civil works under Output 2d (community-based works). The PIU will collect the community's 10% cash contribution and deposit into a bank account for payment to the contractors. In case of any shortfall, the government will provide the funds to meet the total 20% contribution for Output 2d. MEF will provide its 10% contribution (net taxes) directly to the PMU for payment to the contractors.¹⁰

23. For the government counterpart funding, the disbursement procedures are similar to the project's advance account procedures. A six-months statement of expenditures is prepared by the PMU, which will be transmitted to MEF along with the payment request. MEF will then process by transferring funds from the General Department of National Treasury to the PMU's account.

C. Accounting

24. The PMU and PIUs will maintain separate project accounts and records by funding source for all expenditures incurred on the project. The PMU will prepare consolidated project financial statements in accordance with the government's accounting laws and regulations which are

⁸ Checklist for SOE procedures and formats are available at Appendix 7B of the Loan Disbursement Handbook (2017, as amended from time to time).

⁹ The CPD facilitates online submission of WA to ADB, resulting in faster disbursement. The forms to be completed by the Borrower are available online at <https://www.adb.org/documents/client-portal-disbursements-guide>

¹⁰ Confirmed with the Ministry of Economy and Finance and Ministry of Public Works and Transport in a meeting on 25 August 2014

consistent with international accounting principles and practices

25. Recording and reporting of transactions of project expenditures will be consistent with the Chart of Accounts and Budget Classification of the Government (2007) and the Government's Standard Operating Procedures for the Externally Financed Projects/Programs (May 2012, as updated from time to time).¹¹

D. Auditing

26. MEF will cause the detailed consolidated project financial statements to be audited in accordance with International Standards on Auditing and/or 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 MPWT (by 30 June of each year).

27. The annual audit report will include an audit management letter and audited financial statements on the use of the advance funds and SOE procedures. It shall 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) compliance with the advance fund procedure; and (v) compliance with use of the SOE procedure certifying: (a) to the eligibility of those expenditures claimed under SOE procedures, and (b) proper use of the procedure in accordance with ADB's Loan Disbursement Handbook and the project documents

28. The Government and MPWT have been made aware of ADB's policy on delayed submission, and the requirements for satisfactory and acceptable quality of the audited accounts. 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. For revenue generating projects only, ADB requires audited financial statements (AFS) for each executing and/or implementation agency associated with the project.

29. Public disclosure of the annual audited financial statements including the audit report for the project financial statements should be guided by ADB's public communication 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.

30. 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.

VI. PROCUREMENT AND CONSULTING SERVICES

¹¹ Ministry of Economy and Finance (MEF): Standard Operating Procedures, Financial Management Manual and Procurement Manual Volume I and II- May 2012 for the Externally Financial Projects/Program issued the Sub-Decree no. 74ANK.BK of the Royal Government of Cambodia on 22 May 2012. Available online: <http://www.mef.gov.kh/documents/shares/investment/sop-sub-decree-8-june-2012.pdf>

A. Advance Contracting

31. The initial scope of services for advance contracting were the recruitment of the project management and implementation specialist (PMIS), initial institutional development specialists, non-governmental organization, and climate change resilience consultants. However, only the recruitment process for the PMIS consultants were initiated in advance, as there were delays in recruiting the other assignments (the initial institutional development scope was eventually assumed by the PMIS). Advance contracting was undertaken in conformity with ADB's *Guidelines on the Use of Consultants* (2013, as amended from time to time).¹²

B. Procurement of Goods, Works and Consulting Services

32. All procurement of goods and works will be undertaken in accordance with ADB's Procurement Guidelines.

33. International competitive bidding procedures will be used for civil works contracts estimated to cost \$3 million or more, and supply contracts valued at \$1 million or higher. Shopping will be used for contracts for procurement of works and equipment worth less than \$100,000.

34. In cases where NCB will be used: The first NCB contract will be reviewed and approved by ADB. All succeeding contracts will be post review.

35. An 18-month procurement plan indicating threshold and review procedures, goods, works, and consulting service contract packages and national competitive bidding guidelines is in Appendix 1. The plan is updated annually or as required after every loan review mission or after award of each major ICB contract. For changes in the procurement arrangements involving threshold, procurement methods and review requirements and contract packaging during project implementation, the EA shall present its justification for the changes and submit an updated procurement plan for ADB approval. The procurement plan and subsequent updates are posted on the ADB website.

36. All consultants and nongovernment organizations (NGOs) will be recruited according to ADB's *Guidelines on the Use of Consultants*.

37. Three consulting firm packages have been awarded:

- (i) **Project management and implementation support services.** A consulting firm, with estimated 506 person-months of consultants, 78 person-months of international and 428 person-months of national consultants, has been engaged by the EA using the quality-and cost-based selection (QCBS) method with a quality: cost ratio of 80:20. Additional inputs were later added through a variation to provide the required institutional development support (initially envisaged as a separate contract).
- (ii) **Climate change resilience in urban development consultants.** A consulting firm, with estimated 13 person-months of consultants—6 person-months of international and 7 person-months of national consultants, was engaged by the EA and ADB using the consultant qualification selection (CQS) procedures.
- (iii) **Non-governmental organization support for Output 2d & 3b & 3c.** An international NGO has been engaged by the EA through a quality-based (QBS)

¹² Available at: <http://www.adb.org/Documents/Guidelines/Consulting/Guidelines-Consultants.pdf>.

selection method to support the implementation of the Output 2d & 3b & 3c on community mobilization and environmental improvements.

C. Consultant's Terms of Reference

38. The outline terms of reference for all consultant contracts are in Appendix 2.

VII. SAFEGUARDS

39. **Safeguards.** In compliance with ADB's SPS (2009), the project's safeguards categories are as follows:¹³

40. **Environment (category B).** Two original IEEs were disclosed in 2014, and are available at:

- (i) Kampong Chhnang¹⁴
- (ii) Pursat¹⁵

41. A consolidated IEE was developed and updated to accommodate further project scope changes in 2018-2019 during the detailed design and implementation phase. This consolidated IEE was disclosed in ADB's website in July 2020.¹⁶ Changes in the consolidated IEE in 2018-2019 included:

- (i) Changes to approach for Pursat wastewater treatment and network location;
- (ii) Removal of landfill closure from project scope;
- (iii) Removal of Pursat riverbank erosion protection; and
- (iv) Removal of Kampong Chhnang embankment from project scope.

41. A separate IEE was developed to cover a new Subproject in Kampong Chhnang. This follows a further major scope change to the project which now includes:

Wastewater treatment plant (WWTP), sewage collection network and stormwater drainage improvements.

42. In addition to this IEE, its corresponding EMP for the new component was prepared by MPWT in accordance with ADB SPS and government laws and regulations, was reviewed and cleared by ADB, and disclosed on the ADB website on 1 February 2021.¹⁷

43. The IEE was developed based on meaningful consultations during the project preparation. The subproject is expected to experience short-term localized impacts during construction that

¹³ ADB. [Safeguard Categories](#).

¹⁴ Kingdom of Cambodia. Ministry of Public Works and Transport. 2014. *Initial Environment Examination: Kampong Chhnang Urban Area Environment Improvements* (prepared by ADB).

¹⁵ Kingdom of Cambodia. Ministry of Public Works and Transport. 2014. *Initial Environment Examination: Pursat Urban Area Environmental Improvements* (prepared by ADB)

¹⁶ Kingdom of Cambodia. Ministry of Public Works and Transport. 2020. *Initial Environment Examination: Pursat and Kampong Chhnang Urban Area Environmental Improvements* (prepared by ADB)

¹⁷ The IEE and EMP are accessible from the list of linked documents in Appendix 2.

are site specific and reversible¹⁸, and can be mitigated or minimized to an acceptable level with good construction practices and mitigation measures as defined in the EMP and the corresponding site-specific construction EMP (CEMP).

44. The IEE and corresponding EMP will be updated based on the detailed engineering design, also in line with the national IEIA assessment, approved by the government, cleared by ADB, and disclosed before contract award. The subproject requires an Initial Environmental Impact Assessment (IEIA) under Cambodian law prior to construction. An approved company registered with the Ministry of Environment (MoE) will be required to undertake the separate IEIA for the subproject. The results of the IEIA will be incorporated into the IEE and EMP ensuring that the contractor has one consolidated set of EMP requirements to follow, which meet good international practice standards and national requirements.

45. The PMU will be responsible for the review of the IEE and will undertake internal review, with assistance of the PIC, as required. The PIU will undertake consultations following the finalization of the detailed design, and again will conduct consultation interviews within four to six weeks of construction starting and then again, every three months until the end of construction. The PMU will be responsible for updating the IEE in response to comments received from meaningful consultations and public review and to submit the IEE to ADB for review and clearance.

46. The final EMP, cleared by ADB, will form part of the bidding document. A CEMP, including construction risk management and health and safety plan, will be prepared prior to the construction commencement, and duly approved by the PMU and PIU before any works are permitted to start. No civil works will commence without the CEMP being confirmed by the PMU. During implementation, if unanticipated environmental impacts are encountered, the PMU will update the environmental assessment and EMP or prepare a new environmental assessment and EMP to assess the potential impacts, evaluate the alternatives, and outline mitigation measures and resources to address those impacts.

47. Costs associated with the environmental management, which include staff and consultant time for IEE and EMP preparation, EMP implementation, monitoring and field investigations will be included in the surveys and investigation budget for the project. Costs of regular environmental monitoring and reporting are to be covered under staff cost allocations. A simple reporting format has been prepared for use.

48. Institutional arrangements and their responsibilities are to be followed as per the IEE and corresponding EMP, which also contains a table summary of the key functions for project implementation and environmental safeguards.

49. **Involuntary resettlement (category B).** Two resettlement plans (RPs) were prepared for each participating municipality to guide the expected Land Acquisition and involuntary resettlement (LAR) impacts of the project. The estimated impacts are as follows (by subproject):

¹⁸ The installation of the sewer network will impact most significantly on people living and working in the area during construction. The impacts will be localized and short term but will include increased levels of dust, noise, and traffic in Kampong Chhnang town center. This may give rise to temporary community health and safety impacts and restricted access to business and residential properties. The mitigation of these impacts in the EMP will focus on good construction practice to ensure the communities' health and safety is not put at risk from trench excavations, and to control dust and noise through water spraying and use of mobile noise barriers to protect local residents and businesses. The EMP will also require good communication with the community to inform them in advance of the construction works and associated traffic disruption

1	Pursat Landfill	• 1,410 m² of agricultural land acquired for road widening • 5 AH / 26 AP (of which 1 AH / 8 AP vulnerable) • No loss of use of land • Site on public land (16Ha)
2	Pursat Drainage & WWTP	• No land acquisition (all public or RoW) • 21 AH / 96AP (of which 5 AH vulnerable) / • No loss of use of land
3	Kampong Chhnang Landfill	• No loss of use of land • Site acquired through negotiated settlement (6.6Ha)
4	Kampong Chhnang Stormwater Drainage, Sewer and WWTP	• 4,115 m² of land ag. / residential land acquired for road widening • 107,553 m² loss of land use (agricultural) for WWTP • 22 AH / 111 AP (WWTP only, of whom 3 AH / 17 AP vulnerable¹⁹)

50. An estimated 33.8Ha of land (16 + 6.6 + 10.7 = 33.3 Ha [public] and 5,525 m² [private]) will be acquired for the project. About 48 affected households (AHs) with 233 Affected Persons (APs) have been identified in the participating municipalities, with no affected HH from the network laying activities, where potential impacts can be mitigated during construction. 22 AHs (111 APs) in Kampong Chhnang Municipality, and 26 AHs (122 APs) in Pursat Municipality. There are 18 severely affected households (90 APs) in Kampong Chhnang; one (17) AH (85 APs) will be severely affected by acquisition of private agricultural land equal to 10% or more of their total productive land, and the remaining 1 AHs (5 APs) will be severely affected due to loss of employment. Two (2) AHs will be severely affected in Pursat due to loss of agricultural land/permanent loss of land use equivalent to 10% or more of their total productive assets. The RPs have been prepared in accordance with Royal Government of Cambodia laws and regulations and ADB's SPS (2009). The estimated cost of resettlement (as of 27 Oct 2020) is \$311,794.63 (\$284,785.75 in Kampong Chhnang, and \$ 27,008.88 in Pursat). This includes the base costs, allowances for severely affected and vulnerable APs, external monitoring organisation, contingencies and administrative costs.

51. A Basic Resettlement Plan (BRP) for the new component (Kampong Chhnang Stormwater Drainage, Sewer and WWTP) was prepared by MPWT in accordance with ADB SPS and government laws and regulations, was reviewed and cleared by ADB, and disclosed on 1 February 2021.²⁰ There are no significant involuntary resettlement implications as the WWTP site is on public land, which is currently used for seasonal cropping due to its low-lying elevation, but there are some minor impacts due to widening of the access road to the WWTP and laying of sewer lines under footpaths.

52. The General Department of Resettlement (GDR) is responsible for land acquisition and resettlement under the project. MEF will review, approve and allocate budget for LAR, including the cost for the finalization of the BRP and its implementation. The BRP will be finalized and submitted to ADB for review, approval, and disclosure following the detailed design, and before contract award.

53. MPWT PMU is staffed with the social safeguards officer who will liaise with GDR, provincial authorities, and other stakeholders to ensure uninterrupted project implementation in compliance with ADB SPS requirements. The PMIS Consultant includes International and

¹⁹ The exact number of vulnerable AH will be confirmed by GDR during the detailed measurement survey.

²⁰ The Basic Resettlement Plan is accessible from the list of linked documents in Appendix 2.

National Social Safeguards Consultants engaged intermittently during project implementation to help GDR in finalizing the BRP as needed.

54. GDR will ensure that final/detailed RP (DRP): (i) adequately addresses all involuntary resettlement issues pertaining to the project, (ii) describes specific mitigation measures that will be taken to address the issues, and (iii) ensures the availability of sufficient resources to address the issues satisfactorily. No physical and/or economic displacement will occur until compensation at replacement cost and all other entitlements are paid to the AP's in accordance with the DRP. Implementation guidance is provided in the BRP and will be further detailed in the DRP.

55. **Indigenous peoples (category C).** The proposed scope will not positively or negatively affect indigenous peoples or ethnic minorities. It will not directly or indirectly affect the dignity, human rights, livelihood systems, or culture of indigenous peoples or ethnic minorities, or affects the territories or natural or cultural resources that they own, use, occupy, or claim as an ancestral domain or asset.

56. **Capacity Building.** PMU environment and social safeguards officers will be further trained. GDR will provide training on LAR Standard Operating Procedures to PMU's social safeguards officer as well as other stakeholders as relevant. PMIS Consultant's international environment and social safeguards experts will provide training and awareness sessions on ADB SPS safeguards requirements based on the issues related to the project impacts, meaningful consultation and documentation and disclosure, monitoring and reporting, the project Grievance Redress Mechanism (GRM), etc. The targeted participants of the briefings and awareness sessions would be (but not limited to) PIU staff, design engineers, province, district, commune and/or village authorities, contractors etc.

57. A training program is set out in the EMP which addresses the safeguard reporting and implementation requirements during construction. For Operation, the project is under discussion with MPWT with regards to operational training requirements. The project consultancy contract has a provisional sum for targeted training allocated for O&M training for all infrastructure components under the project. A Variation Order is planned to increase the budget to allow an additional sum for specific O&M training for this subproject. Briefings will be conducted to the contractors upon their mobilization.

58. **Grievance redress mechanism.** A grievance redress mechanism has been defined in the respective IEE and BRP in accordance with the relevant government regulations and ADB SPS.

59. PMU and GDR shall ensure; (i) efficient grievance redress mechanisms are in place and functional to assist the affected persons resolve queries and complaints, if any, in a timely manner; (ii) all complaints are registered, investigated and resolved in a manner consistent with the provisions of Grievance Redress Mechanism in the IEE and DRP; (iii) the Complainants/aggrieved persons are kept informed about status of their grievances and remedies available to them; and (iv) adequate staff and resources are available for supervising and monitoring the mechanism.

60. **Meaningful consultation.** The PMU, PIU and GDR will undertake meaningful consultation with project affected communities and persons, including poor, ethnic groups and other vulnerable groups, village, district and provincial authorities, community-based organizations and civil society organizations, as relevant, throughout the project implementation period as stipulated in the IEE/EMP and BRP/DRP.

61. GDR shall ensure that: (i) additional consultations during updating and implementation of the DRP is conducted; (ii) the displaced persons are informed about: (a) resettlement impacts, asset valuation, entitlements and compensation payment modalities with timelines, (b) rehabilitation and income restoration measures suggested for the project displaced persons, and (c) grievance redress mechanism put in place with status of redress of grievances; and (iii) liaison is maintained with affected persons and community, and consultation meetings are held regularly with project displaced persons including women and vulnerable groups to share up to date information during the project implementation period.

62. **Information Disclosure.** Information sharing and disclosure are tools to engage with local communities and the project affected population during project planning, development and implementation aimed to promote understanding about project activities and discuss way forward for fruitful solutions for various local needs, problems and prospects for environmental and social safeguards. PMU and GDR shall ensure that all the safeguards documents including monitoring reports are disclosed by: (i) uploading the draft and final safeguards documents on ADB website (once cleared by ADB); and (ii) up to date Project Information Booklets (PIBs) containing summary of the subproject' impacts as per final EMP/DRP, the GRM with procedures and forms, contacts of the GRC members in local language are distributed amongst the affected communities and persons.

63. **Prohibited investment activities.** Pursuant to ADB's Safeguard Policy Statement (2009), ADB funds may not be applied to the activities described on the ADB Prohibited Investment Activities List set forth at Appendix 5 of the Safeguard Policy Statement (2009).

VIII. GENDER AND SOCIAL DIMENSIONS

64. **Gender Action Plan.** The project is classified as *effective gender mainstreaming*. A Gender Action Plan (GAP) has been prepared in accordance with ADB's Policy on Gender and Development (1998), ADB Operations Manual Section C2/BP (2010) Gender and Development in ADB Operations, and the Government's goal to strengthen the role and social status of women through capacity building for women in all sectors, changing discriminatory social attitudes, and safeguarding women's rights to actively and equally participate in nation building.²¹ The GAP includes specific gender actions to help ensure men and women actively participate in project activities, receive project information, and have access to opportunities during project implementation. The GAP is in Appendix 3.

65. **Project Gender Features.** The revised DMF includes outcome and output indicators focusing on gender equity. The new focus on wastewater treatment will protect people currently exposed to pathogens released into the environment, which is mostly at the periphery of town in fields, via irrigation channels containing raw sewage. Agricultural workers will therefore be primary beneficiaries, and reduced disease burden on them and (indirectly) their children, will benefit any women agricultural workers or primary child carers. The community-based component which constructs pour-flush latrines for ID Poor households has been updated to specifically focus on female-headed households and ensure their equal access to safe sanitation facilities. The building code proposals being developed by the project will include gender responsive elements focusing on adaptation to climate change. The project also emphasizes the importance of building female technical and management capacity in the executing and implementing agencies, and in listening to female voices during consultation and design phases.

²¹ RGC. Ministry of Planning. National Institute of Statistics. 2011. Women and Men in Cambodia. Phnom Penh.

IX. PERFORMANCE MONITORING, EVALUATION, REPORTING AND COMMUNICATION

A. Project Design and Monitoring Framework

66. The revised project design and monitoring framework is in Appendix 4.

B. Monitoring

67. **Project Performance Monitoring.** The Government through MPWT will establish a project performance management system (PPMS) that shall be used to monitor and evaluate the project during implementation. The Government will ensure that the indicators, baseline data, proposed data sources and the assumptions and risks set out in the DMF are accurate

68. The DMF includes indicators and targets that focus on, for example: (i) economic and health data to assist in monitoring project impacts; (ii) estimated number of households benefitting by the improved solid waste management, drainage, riverbank protection and household sanitation; (iii) public satisfaction with the urban environmental improvements; and (iv) capacity development of PDPWT and the Municipalities. The DMF assumes that safeguard documents will be approved and implemented, and project monitoring reports will be prepared.

69. At the start of the project, the PMU with assistance from the PMIS consultants will develop PPMS procedures and simple data collection forms to generate data systematically on the inputs and outputs of the subprojects, as well as the agreed socioeconomic, environmental, and health indicators to be used to measure the project impacts. During this time, the PMIS consultants will assist the PMU and PIUs to: (i) refine the PPMS, as needed; (ii) confirm baseline figures and targets; (iii) determine monitoring and recording arrangements; (iv) confirm data sources; (v) check assumptions and risks; and (vi) establish systems and procedures. The PMU will submit the final PPMS, with revisions and recommendations for improvement (if any) to ADB for approval within 18 months of effectiveness. Any changes will be uploaded by ADB into the e-Operations system. An annual project performance monitoring and evaluation (PPME) report will be prepared and submitted to ADB by 31 January of the following year.

70. The PMU will be responsible for managing the PPMS - including the establishment of benchmarks, collection of baseline and progress data, monitoring of benefits, and evaluation of social impact. Data will be presented in simple formats that allow local authorities to help in monitoring. The PMU will be responsible for analyzing and consolidating the resulting data through its management information system. The PPMS will be designed to permit adequate flexibility to adopt remedial action regarding project design, schedules, and activities. The PMU will submit to ADB quarterly progress reports on both the physical implementation and financial aspects of the Project, to ensure that impacts are monitored and reported in line with ADB requirements.

71. A midterm survey shall be carried out prior to project midterm to determine progress. Alternately, a PPME report could be generated and provided to ADB prior to fielding the midterm review. A survey shall be carried out prior to project completion, which shall be expanded to include an evaluation of progress against project outcome and achievement towards project impact.

72. **PPCR monitoring and reporting.** The project management and implementation

consultant team will assist the PMU in monitoring and reporting the project in accordance with the Pilot Program for Climate Resilience Monitoring and Evaluation Results Framework and Guidelines. The PPCR monitoring and reporting toolkit (March 2014) 41 responds to the reporting requirements of PPCR pilots to the Climate Investment Fund Admin Unit (CIF AU). The reporting tools consist of three scorecards and two tables (available in excel sheets). They should be completed together with the PPCR country focal point and PPCR units/teams, and submitted annually to CIF AU before 30 June. The reporting period is 12 months (1 April to 31 March the following year). The PMU shall work with the PMIS consultant team (PMIS) to consolidate the necessary information for the ADB SCF-supported TA, which will consolidate the information for submission of annual reports.

73. **Compliance monitoring.** Standard covenants for the proposed project will be agreed between Government, MPWT and ADB. The status of compliance with covenants - policy, legal, financial, economic, environmental, social safeguards and others will be reviewed at each ADB review mission—to be conducted at about 6-month intervals. The PMU will monitor compliance against the covenants and report updates in quarterly progress reports submitted. Any non-compliance issues will be specified in quarterly progress reports, with proposed remedial actions for consideration at ADB review missions.

74. **Environmental safeguards monitoring.** As laid forth in the EMP Section D on monitoring and reporting, the PIU will oversee the monitoring and implementation of the subproject EMP. The PMC environmental specialists will provide technical advice, guidance, and support to the PIU in overseeing the EMP implementation and to the PIU for monitoring compliance with the EMP during construction. The PIU will provide inputs to the semi-annual environmental monitoring report, which will be prepared by the PMU. This semi-annual environmental monitoring report will be prepared semi-annually for the EA by the PMIS consultant in collaboration with PMU's Environmental Safeguard Officer and sent to MPWT's Environmental Safeguard Office, MoE and ADB. The reports will table all indicators measured with the monitoring plan of EMP and will include relevant national environmental quality standards.

75. The PMC will assist the PMU to ensure that design measures are incorporated into detailed design, to update the EMP, following detailed design and to carry out monitoring during the construction phase. Note this applies to construction only; during operation, it is the responsibility of the appropriate ministry or its line department to ensure monitoring of operational facilities is incorporated in the operations and maintenance manual and carried out routinely. The PMU will be responsible for monitoring the EMP during planning, while the PIU will have primary responsibility during construction.

76. Before construction, the PMIS consultant will monitor the project's readiness on environmental management based on a set of indicators and report it to ADB and PMU, see Table 21 in the EMP Section D on monitoring and reporting. This assessment will formally demonstrate that environmental commitments are being carried out and environmental management systems are in place before construction starts or suggest corrective actions to ensure that all requirements are met.

77. The PMU will assess: (i) compliance with the project IEE and EMP; (ii) the availability of personnel, material, and financial resources; and (iii) identification of any problems and the need for remedial actions to correct any problems that arise. The PMU will provide an update on environmental safeguards in the quarterly progress reports. The PMU will submit the semi-annual environmental safeguards monitoring report every 6 months. The reports for January-June will be submitted to ADB latest 15 July, and for July-December on 15 January of the following year. The

indicative template of the environmental safeguards monitoring report is included in Appendix 5.

78. Based on environmental monitoring and reporting systems in place, the PMU shall assess whether further mitigation measures are required as corrective action, or improvement in environmental management practices are required. The effectiveness of mitigation measures and monitoring plans will be evaluated by a feedback reporting system. The PMU will play a critical role in the feedback and adjustment mechanism. If the PMU identifies a substantial deviation from the EMP, or if any changes are made to the project scope that may cause significant adverse environmental impacts or increase the number of affected people, then the PMU shall immediately consult MoE, MPWT and ADB to get approval and identify EMP adjustment requirements or update the IEE.

79. **Social safeguards monitoring - internal.** All resettlement activities and the outcomes of the DRP shall be monitored internally by GDR and the Department of Internal Monitoring and Data Management. The monitoring results shall be consolidated into quarterly reports and submitted to PMU for incorporation into the project quarterly progress reports and semi-annual monitoring reports. The semi-annual social safeguards monitoring reports will be shared with ADB for review, clearance, and disclosure. The indicative template of the social safeguards monitoring report is included in Appendix 5. BRP/DRP provides guidance on monitoring, reporting and disclosure.

80. **Social safeguards monitoring - external.** The External Monitoring Organization (EMO) recruited for the project will verify information produced through the project land acquisition and resettlement monitoring process, in accordance with the loan agreement and as detailed in the BRP/DRP.

81. **Indigenous Peoples/Ethnic Minorities.** The PMU, with assistance from Project Management and Implementation Support (Package I) Consultants and the NGO (Package IV), will be responsible for supervision and monitoring of ethnic minority-related issues and actions for the project, including documentation and reporting. Internal monitoring will serve to evaluate (i) compliance with the project's social safeguards policies and procedures, including for ethnic minorities; (ii) timely availability of personnel, material, and financial resources and efficient use of these to carry out specific actions integrated in project design to benefit the ethnic Cham and Vietnamese (specifically for Output 2d & 3b & 3c Community Mobilization and Environmental Improvement) and in Kampong Chhnang Resettlement Plan (RP); and, (iii) identification of problems, if any, and development of remedial actions to address these.

82. The PMU will develop internal monitoring indicators, procedures and reporting requirements for project components that affect ethnic minorities and will report on implementation progress as part of quarterly project progress reports submitted to MPWT and ADB. A separate paragraph will be included in all progress reports highlighting the project benefits to ethnic Cham and Vietnamese through the project design and features. ADB supervision missions will also periodically review progress in implementation of ethnic minority actions and whether or not the project is successful delivering culturally appropriate benefits and mitigating adverse impacts on ethnic Cham and Vietnamese

83. All consultation minutes, relevant documentation, signed compensation forms, etc. will be included in the records/documentation to be maintained by the PMU on behalf of the EA and made available to ADB during missions and/or for due diligence and spot check

84. **Gender and social monitoring.** Monitoring and evaluation of GAP implementation will

be incorporated into the overall project monitoring and evaluation plan. Sex-disaggregated data will be collected during implementation to monitor the projects' impacts on women and will be reflected in regular progress reports, as well as the project midterm review. A gender monitoring table is in Appendix 7, and shall be completed and attached to project progress reports for Quarters 2 and 4.

C. Evaluation

85. The ADB and government will jointly review the project at least twice a year (at 6-month intervals). This will include (i) achievement of contract awards and disbursements; (ii) physical progress of each project output; (iii) effectiveness of capacity development programs; (iv) compliance with social and environmental safeguards; (v) progress of gender and social dimensions; (vi) compliance of project covenants; and (vii) performance of government agencies, implementation units and consultant and contractor performance. In addition to the regular reviews, the ADB and the Government may conduct special project administration reviews to address and resolve specific administration problems.

86. A midterm review of the project will be conducted at about 36 months after the start of project implementation. The review will include a comprehensive assessment of project implementation and record any changes necessary to improve project relevance or effectiveness, or accelerate project progress. A staff consultant may be recruited to help provide an external assessment of the project at this time. Specific items may include:

- (i) Changes to the project design or implementation arrangements,
- (ii) Progress on the institutional development arrangements and timing of the establishments of the urban service units,
- (iii) Revisions to the DMF,
- (iv) Cost estimates and financing plan,
- (v) Areas for savings and suggested reallocations,
- (vi) Additional financing,
- (vii) Review of contract award and disbursement projections,
- (viii) Possible extension of the project closing date,
- (ix) Review of land acquisition and resettlement activities,
- (x) Review of social development and gender aspects,
- (xi) Arrangements for cost recovery of operation and maintenance costs, SWM collection fees, etc.

87. Evaluation of the closure and remediation of existing dumpsites to ensure that these have been achieved to acceptable environmental standards. Within 6 months of physical completion of the Project, the MPWT (with PDPWT and Municipalities in both Kampong Chhnang and Pursat), will conduct an end-of project survey and submit a project completion report to ADB. The information that will be included in the project completion report shall be discussed and agreed upon with ADB in advance.

D. Reporting

88. MPWT will provide ADB with (i) quarterly progress reports in a format agreed to in advance with ADB, which is consistent with ADB's project performance reporting system; (ii) consolidated PPME annual reports including (a) progress achieved by output as measured through the indicator's performance targets, (b) key implementation issues and solutions; (c) updated procurement plan and (d) updated implementation plan for next 12 months; and (iii) a project

completion report within 6 months of physical completion of the Project. To ensure projects continue to be both viable and sustainable, project accounts and the executing agency AFSs, together with the associated auditor's report, should be adequately reviewed.

89. The following reports will also be required on a semi-annual basis and may be attached to the progress report for that quarter:

- (i) Gender action plan monitoring table (Annex E); and
- (ii) Semi-annual monitoring reports, including progress on indigenous peoples, involuntary resettlement and environment. A format shall be agreed in advance with ADB and EA.

90. The safeguards monitoring report for involuntary resettlement include

- (i) Internal monitoring report on involuntary resettlement will be required on a quarterly basis and may be attached to the progress report for that quarter. A format shall be agreed in advance with ADB and EA.
- (ii) The EMO quarterly report will be forwarded to ADB about 1-2 months after the end of relevant monitoring quarter (i.e., external resettlement monitoring report for January– March, will be forwarded to ADB by 31 May).
- (iii) The EMO will prepare the resettlement completion report at the end of resettlement activities; and
- (iv) The EMO will prepare the post-evaluation resettlement report 6–12 months following completion all resettlement activities.

91. The following reports will also be required on an annual basis:

- (i) Project performance monitoring and evaluation reports (by 31 January each year covering period 1 January to 31 December); and
- (ii) Project monitoring and reporting of the project in accordance with the Pilot Program for Climate Resilience Monitoring and Evaluation Results Framework and Guidelines. The PPCR monitoring and reporting toolkit (March 2014) ⁴² responds to the reporting requirements of PPCR pilots to the Climate Investment Fund Admin Unit (CIF AU). The reporting period is 12 months (1 April to 31 March the following year).
- (iii) External audit report, due six months after the end of the government's fiscal year (e.g., 30 June).

E. Stakeholder Communication Strategy

92. The Stakeholder Communications Strategy is described in the following table. MPWT will have a dedicated website for this project. The website will include at a minimum the following information: (i) bidding procedures, bidders, and contract awards; (ii) use of the funds disbursed under the project; and (iii) physical progress. The communication strategy should be revised and updated periodically during the project to reflect changing implementation situation, it should be read together with the Stakeholder Consultation and Participation Plan (RRP linked document 23).

Table 3: Stakeholder Communication Strategy

Project Information	Means of Communication	Responsible	Audience	Frequency
RRP	ADB website	ADB	ADB, the government, Development partners, CSOs, NGOs, individuals	Once at same time as Board circulation
Project planning information	Discussions and consultations	PMU/PIUs	Project beneficiaries	Specific intervals during planning
Status of construction during implementation	Information boards at site	PMU/PIUs and contractors	Project beneficiaries	Continuous
Project Performance Reports and Project Information Document	Posting of project documents on the ADB website. Summary of project progress on project website, as appropriate	PMU/PSC	General population	At Board approval and period updates
Land acquisition and environment documents and resettlement monitoring reports	ADB website	ADB	ADB, the government, Development partners, displaced persons, CSOs	Immediately upon receipt from Government
Quarterly progress reports	Project website, EA and IAs submissions (summary only)	PMU	ADB, the government, Development partners, CSOs, NGOs, individuals	Quarterly
Project Completion Report	ADB website	ADB	ADB, the government, Development partners, CSOs, NGOs, individuals	Once

ADB = Asian Development Bank, CSO = civil society organizations, EA = executing agency, NGO = nongovernment organization, PIU = project implementation unit, PMU = project management unit, PSC = project steering committee. Source: Asian Development Bank and Executing Agency.

X. ANTICORRUPTION POLICY

93. 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

94. To support these efforts, relevant provisions are included in the good governance framework (Annex F), loan and grant agreements, and the bidding documents for the project. Moreover, the Government will ensure that all of the MPWT/PDPWT/Municipality project staff are fully aware of and comply with the Government's and ADB's procedures, including procedures for (i) implementation, (ii) procurement, (iii) use of consultants, (iv) disbursement, (v) reporting, (vi) monitoring, and (vii) prevention of fraud and corruption.²⁴

95. The borrower shall: (i) undertake necessary measures to create and sustain a corruption-free environment for activities under the project; (ii) comply with ADB's Anticorruption Policy (1998, as amended to date); and (iii) where appropriate, ensure that relevant provisions of ADB's Anticorruption Policy are included in all bidding documents for the project. The Beneficiary: (i) acknowledges ADB's right to investigate, directly or through its agents, any alleged corrupt, fraudulent, collusive and coercive practices relating to the project; and (ii) agrees to cooperate fully with any such investigation and to extend all necessary assistance, including providing access to all relevant books and records, as may be necessary for the satisfactory completion of any such investigation. All external costs related to such investigations shall be met by the project resources or by the borrower.

96. Without limiting the generality of the preceding paragraph, the borrower shall cause MPWT to: (i) conduct periodic inspections on the suppliers', contractors', consultants' and other service providers' activities related to the Loan proceeds, fund withdrawals and settlements; and (ii) ensure that all contracts financed by ADB in connection with the project include provisions specifying the right of ADB to audit and examine the records and accounts of the PMU/MPWT, and all suppliers, contractors, consultants and other service providers as they relate to the project

97. In addition to the above requirements, the borrower shall cause MPWT to set up a project website within 18 months of Effective Date that shall disclose how the Loan and Grant proceeds are being used and the contracts awarded, including: (i) the list of participating bidders; (ii) the name of the winning bidder; (iii) basic details on bidding procedures adopted; (iv) the amount of the contract awarded; (v) the list of goods and/or services purchased; and (vi) the resettlement monitoring reports. The website shall be updated within two weeks after each award of contract.

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>

²⁴ GACAP II Guidelines available at: <http://www.adb.org/Documents/Guidelines/GACAP-II-Guidelines.pdf>. See also Sourcebook: Diagnostics to Assist Preparation of Governance Risk Assessments: <http://www.adb.org/documents/books/Diagnostics-to-Assist-Preparation-of-GRAs/default.asp>.

XI. ACCOUNTABILITY MECHANISM

98. People who are, or may in the future be, adversely affected by the project may submit complaints to ADB's Accountability Mechanism. The Accountability Mechanism provides an independent forum and process whereby people adversely affected by ADB-assisted projects can voice, and seek a resolution of their problems, as well as report alleged violations of ADB's operational policies and procedures. Before submitting a complaint to the Accountability Mechanism, affected people should make a good faith effort to solve their problems by working with the concerned ADB operations department. Only after doing that, and if they are still dissatisfied, should they approach the Accountability Mechanism.²⁵

99. The government also has a Complaints Handling Mechanism that is outlined in their *Standard Operating Procedures for all Externally Financed Projects/Programs in Cambodia*, May 2012), including:²⁶

- (i) The IRC has a well-articulated complaints handling mechanism comprising a committee of representatives of various relevant agencies and interested groups. This mechanism was established under Sub-Decree 0306/10028 dated 23 March 2006.
- (ii) The Anti-Corruption Unit has the mandate to investigate and monitor all corruption offences in government, public as well as private institutions, and to take action according to procedures set out in the Law on Anti-Corruption No. NS/RKM/0410/004 which was enacted on 19 April 2010. All corruption related complaints arising from DP funded projects can also be brought to this unit's attention.
- (iii) The Ministry of National Assembly-State Relations and Inspection (MoNASRI) is a government ministry, established under Sub-Decree No 67/ANK/BK dated 3 August 1999, which is mandated to handle complaints from ordinary citizens. MoNASRI was created by the government to promote good governance and carry out investigations on allegations of fraud, corruption and abuse of office.
- (iv) General Inspectorate Department. Each Ministry within the government has a Department of Inspectorate, whose role is to carry out the functions of an internal auditor within the Ministry, and ensure that the government rules and regulations are observed at all times. Although this mechanism is not open to the general public, if complaints are made to a government department in relation to specific projects, this mechanism could be activated to undertake an investigation.

²⁵ For further information see: <http://www.adb.org/Accountability-Mechanism/default.asp>.

²⁶ Ministry of Economy and Finance. (Updated May 2012). *Standard Operating Procedures for all Externally Financed Projects/Programs in Cambodia* is available at <http://www.mef.gov.kh/documents/shares/investment/sop-sub-decree-8-june-2012.pdf>

XII. RECORD OF PAM CHANGES

100. 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.

Record of PAM Changes (5 June 2020)	
Original/Previous Version	Revised Version
III. B. Key Persons Involved in Implementation: Under MPWT: H.E. Vong Pisith Deputy Director General Under PDWT-Kampong Chhnang: Mr. Kang Penghak Asian Development Bank: Ms. Tatiana Gallego-Lizon Ms. Anupma Jain Ms. Debra Ann D. Cruz	III. B. Key Persons Involved in Implementation: Under MPWT: H.E. Vong Pisith Under Secretary of State Under PDWT-Kampong Chhnang: Mr. Chhay Leaphea Asian Development Bank: Mr. Vijay Padmanabhan Mr. Alexander David Nash Ms. Virginia E. Villanueva
IV. Costs and Financing, Table B. Item 1B Kampong Chhnang Solid Waste Management*** Item ID Pursat Drainage - of total expenditure claimed * ** Item 1E Pursat Solid Waste Management*** Item 4C Surveys and Investigations - of total expenditure claimed * **	IV. Costs and Financing, Table B. Item 1B Kampong Chhnang Solid Waste Management Item ID Pursat Drainage - of total expenditure claimed * *** Item 1E Pursat Solid Waste Management Item 4C Surveys and Investigations of total expenditure claimed * ****

Record of PAM Changes (5 June 2020)	
Original/Previous Version	Revised Version
Footnote ** under ADB STRATEGIC CLIMATE FUND LOAN FINANCING: ** ADB SCF Loan and Grant will be front loaded.	specific category will then be charged to the ADB Loan. Footnote ** under ADB STRATEGIC CLIMATE FUND LOAN FINANCING: ** At the request of the Borrower, advance payment for contracts awarded under Category 1 will be charged to the ADB Loan. Subsequent expenditures will be front-loaded to the SCF Loan until the allocated amount is fully utilized; upon full utilization, the remaining expenditures under this specific category will then be charged to the ADB Loan accordingly.

Record of PAM Changes (11 Dec 2020)
Major change. As a result of the proposed major change in scope, the following are the revisions that have been made to the PAM: • Amendment to the project scope; • Update of the overall implementation plan; • Update of the key persons involved in implementation; • Amendment to the financing plan and cost tables; • Amendment to the allocation and withdrawal of loan proceeds for ADB; • Revision to the contract and disbursement s-curve; • Update of safeguard assessments; • Update of the design and monitoring framework; • Update of the gender action plan; and • Update of the procurement plan.

APPENDIX 1 – PROCUREMENT PLAN

Basic Data

Project Name: Integrated Urban Environmental Management in the Tonle Sap Basin Project	
Project Number: 42285-013	Approval Number: 3311/8295/0454
Country: Cambodia	Executing Agency: Ministry of Public Works and Transport
Project Procurement Risk: Medium	Implementing Agency: N/A
Project Financing Amount: US\$ 52,600,000 ADB Financing: US\$ 37,000,000 Cofinancing (ADB Administered): US\$ 10,000,000 Non-ADB Financing: US\$ 5,600,000	Project Closing Date: 30 April 2023
Date of First Procurement Plan: 14 October 2014	Date of this Procurement Plan: 15 September 2020
Advance Contracting: No	e-GP: No

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

1. Procurement and Consulting Methods and Thresholds

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
International Competitive Bidding for Goods	US\$ 1,000,000 and Above	
National Competitive Bidding for Goods	Between US\$ 100,001 and US\$ 999,999	The first NCB is subject to prior review, thereafter post review.
Shopping for Goods	Up to US\$ 100,000	
International Competitive Bidding for Works	US\$ 3,000,000 and Above	
National Competitive Bidding for Works	Between US\$ 100,001 and US\$ 2,999,999	The first NCB is subject to prior review, thereafter post review.
Shopping for Works	Up to US\$ 100,000	

Consulting Services	
Method	Comments
Quality- and Cost-Based Selection for Consulting Firm	
Quality-Based Selection for Consulting Firm	
Consultant's Qualification Selection for Consulting Firm	
Individual Consultant Selection for Individual Consultant	

2. Goods and Works Contracts Estimated to Cost \$1 Million or More

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
CW09	Kampong Chhnang and Pursat Community Driven Environment Improvements	2,480,000.00	NCB	Post	1S1E	Q4 / 2020	Prequalification of Bidders: N
							Domestic Preference Applicable: N
							Bidding Document: Small Works
							Covid-19 Response? No
							Comments: Harmonized standard bidding documents
	Lot 1: 1	413,333.00					
	Lot 2: 2	413,333.00					
	Lot 3: 3	413,333.00					
	Lot 4: 4	413,333.00					
	Lot 5: 5	413,333.00					
	Lot 6: 6	413,335.00					
CW10	Kampong Chhnang Sewerage, Flood Protection and Wastewater Treatment	23,000,000.00	ICB	Prior	1S1E	Q4 / 2020	Prequalification of Bidders: N
							Domestic Preference Applicable: N
							Bidding Document: Large Works

							Covid-19 Response? No
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3. Consulting Services Contracts Estimated to Cost \$100,000 or More

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
None							

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

The following table lists 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
G05	Manual Equipment for Pursat Drainage Maintenance and Flood Protection	72,000.00	1	SHOPPING	Post		Q3 / 2021	Covid-19 Response? No Comments: Government SOP

G06	Manual Equipment for Kampong Chhnang Drainage Maintenance and Flood Protection	36,000.00	1	SHOPPING	Post		Q3 / 2021	Covid-19 Response? No Comments: Government SOP
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Consulting Services								
Package Number	General Description	Estimated Value	Number of Contracts	Recruitment Method	Review (Prior/Post)	Advertisement Date (quarter/year)	Type of Proposal	Comments
None								

B. Indicative List of Packages Required Under the Project

The following table provides an indicative list of goods, works and consulting services contracts over the life of the project, other than those mentioned in previous sections (i.e., those expected beyond the current period).

Goods and Works							
Package Number	General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Procurement Method	Review (Prior/Post)	Bidding Procedure	Comments
G07-a	Supply of Kampong Chhnang Solid Waste Management Equipment	370,000.00	1	NCB	Post	1S1E	Prequalification of Bidders: N Domestic Preference Applicable: N Bidding Document: Goods

							Covid-19 Response? No Comments: Harmonized bidding documents
G07-b	Supply of Kampong Chhnang Solid Waste Management Equipment	370,000.00	1	NCB	Post	1S1E	Prequalification of Bidders: N Domestic Preference Applicable: N Bidding Document: Goods Covid-19 Response? No Comments: Harmonized bidding documents
G08-a	Supply of Pursat Solid Waste Management Equipment	410,000.00	1	NCB	Post	1S1E	Prequalification of Bidders: N Domestic Preference Applicable: N Bidding Document: Goods Covid-19 Response? No Comments: Harmonized

							bidding documents
G08-b	Supply of Pursat Solid Waste Management Equipment	410,000.00	1	NCB	Post	1S1E	Prequalification of Bidders: N Domestic Preference Applicable: N Bidding Document: Goods Covid-19 Response? No Comments: Harmonized bidding documents

Consulting Services							
Package Number	General Description	Estimated Value	Number of Contracts	Recruitment Method	Review (Prior/Post)	Type of Proposal	Comments
None							

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

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

1. Awarded and Ongoing Contracts

Goods and Works							
Package Number	General Description	Estimated Value	Awarded Contract Value	Procurement Method	Advertisement Date (quarter/year)	Date of ADB Approval of Contract Award	Comments
CW06	Construction of Kampong Chhnang and Pursat Landfill Sites	2,570,000.00	2,212,729.57	NCB	Q3 / 2019		

CW05	Construction of Pursat Drainage and Treatment Plant	7,340,000.00	9,834,116.59	ICB	Q2 / 2019	30-DEC-19	
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Consulting Services							
Package Number	General Description	Estimated Value	Awarded Contract Value	Recruitment Method	Advertisement Date (quarter/year)	Date of ADB Approval of Contract Award	Comments
CS01	Project Management and Implementation Support	4,672,987.00	4,206,913.00	QCBS	Q4 / 2015	03-NOV-16	
CS04	NGO Support for Output 2d & 3b & c	830,000.00	829,878.00	QBS	Q1 / 2017	11-JAN-18	
IC01	Finance Assistant	21,120.00	21,120.00	ICS	Q4 / 2017	09-OCT-17	
CS05	Project Engineer	70,000.00	70,000.00	ICS	Q1 / 2018	23-APR-18	

D. National Competitive Bidding

A. Regulation and Reference Documents

1. The procedures to be followed for national competitive bidding shall be those set forth for the “National Competitive Bidding” method in the Government’s Procurement Manual issued under Sub-Decree Number 74 ANKR.BK, updated version dated 22 May 2012 with the clarifications and modifications described in the following paragraphs. These clarifications and modifications are required for compliance with the provisions of the Procurement Guidelines.

2. For the procurement of ADB financed contracts under National Competitive Bidding (NCB) procedures, the use of harmonized national bidding documents (NCB and National Shopping) developed in consultation with development partners including ADB, is mandatory except where the Government and ADB have agreed to amendments to any part of the documents. The Procurement Manual also advises users to check the ADB website from time to time for any update on ADB documents, which form the basis, among others, of the existing harmonized national bidding documents.

B. Procurement Procedures

1. Application

3. Contract packages subject to National Competitive Bidding procedures will be those identified as such in the project Procurement Plan. Any change to the mode of procurement of any procurement package in the Procurement Plan shall be made through updating of the Procurement Plan, and only with prior approval of ADB.

2. Sanctioning

4. 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.

3. Rejection of all Bids and Rebidding

5. The Borrower shall not reject all bids and solicit new bids without ADB's prior concurrence. Even when only one or a few bids is/are submitted, the bidding process may still be considered valid if the bid was satisfactorily advertised and prices are reasonable in comparison to market values.

4. Advertising

6. Bidding of NCB contracts shall be advertised on the ADB website via the posting of the Procurement Plan. Borrowers have the option of requesting ADB to post specific notices in the ADB website.

C. Bidding Documents

5. Use of Bidding Documents

7. The Standard National Competitive Bidding Documents provided with the Government's Procurement Manual shall be used to the extent possible both for the master bidding documents and the contract-specific bidding documents. The English language version of the procurement documents shall be submitted for ADB review and approval in accordance with agreed review procedures (post and prior review) as indicated in the Procurement Plan. The ADB-approved procurement documents will then be used as a model for all procurement financed by ADB for the project.

6. Bid Evaluation

8. Bidders shall not be eliminated from detailed evaluation on the basis of minor, non-

substantial deviations.

9. A bidder shall not be required, as a condition for award of contract, to undertake obligations not specified in the bidding documents or otherwise to modify the bid as originally submitted.

7. Employer's Right to Accept or Reject Any or All Bids

10. The decision of the Employer to accept or reject any or all bids shall be made in a transparent manner and involve an obligation to inform of the grounds for the decision through the bid evaluation report.

8. ADB Policy Clauses

11. A provision shall be included in all NCB works and goods contracts financed by ADB requiring suppliers and contractors to permit ADB to inspect their accounts and records and other documents relating to the bid submission and the performance of the contract, and to have them audited by auditors appointed by ADB.

12. A provision shall be included in all bidding documents for NCB works and goods contracts financed by ADB stating that the Borrower shall reject a proposal for award if it determines that the bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the contract in question.

13. A provision shall be included in all bidding documents for NCB works and goods contracts financed by ADB stating that ADB will declare a firm or individual ineligible, either indefinitely or for a stated period, to be awarded a contract financed by ADB, if it at any time determines that the firm or individual has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices or any integrity violation in competing for, or in executing, ADB-financed contract.

APPENDIX 2 - CONSULTANT'S TERMS OF REFERENCE

1. A Project Management Unit (PMU) is to be established within the Ministry of Public Works and Transport (MPWT), and Project Implementation Units (PIUs) in the provinces, and later Urban Services Units (USUs) within the two towns—Kampong Chhnang and Pursat. The PMU will ensure effective project execution, including overall project planning; ensuring designs and contract documents are prepared and approved; ensuring contracting and procurement of goods, works and services under the project; monitoring and reporting to the Government and Asian Development Bank (ADB) on project implementation; ensuring compliance with project safeguards and loan covenants; and assist PIUs/USUs with community mobilization and local environmental improvements, project and construction supervision, monitoring and reporting and day to day management of project activities.
2. MPWT, the provincial departments and the municipalities of Kampong Chhnang and Pursat require assistance in managing and implementing the project. This will be provided through the provision of consulting services under the proposed project management and implementation support (PMIS) program. A team of international and national consultants will be recruited under ADB guidelines to provide this assistance. Advance recruitment of the consultants has been requested by MPWT to ensure that they are in place to train staff to adequately plan and manage the start-up and execution of the project.
3. Consultants will also be recruited to support the PMU in other areas of project implementation support—. The terms of reference for these specialists are also provided.
4. The overall goal of the consulting services package is to enhance the effectiveness and efficiency of the MPWT, its provincial departments of Pursat and Kampong Chhnang, and the Municipalities of Pursat and Kampong Chhnang, and to ensure that the proposed project is implemented effectively. Assistance will be provided to the PMU and the supporting USUs, and MPWT, provincial departments and municipalities. Key objectives of the assistance are:
 - To provide engineering services—detailed engineering design, contract tendering, and construction supervision—for project implementation.
 - To provide project implementation and management support, including safeguards, procurement, and monitoring.
 - To develop the capacity of the PMU staff to effectively manage project execution, and with PIUs' staff, implementation.
 - To develop the capacity the USUs to operate and maintain the facilities developed and equipment purchased under the project.
 - To assist in the establishment of the National Task Force for Urban Development.

1. Package I: Project Management and Implementation Support (PMIS)

(a) Description

5. The scope of the consulting services involves five main components: (i) provision of engineering services; (ii) provision of project implementation and management support; (iii) capacity development and training of PMU and PIUs/USUs in project management and implementation; (iv) strengthening the capacity of the MPWT, provincial government and municipalities through on-the-job training in urban management, project identification and

structuring; and (v) assisting government establish the Urban Task Force. One package is proposed to accomplish all four of the above objectives for the project management and implementation support. Each of these components includes the inclusion and mainstreaming of climate change resilience in infrastructure design and implementation (e.g., design, construction, supervision, capacity development, monitoring, and knowledge sharing), supported by the ADB SCF loan and grant. Package I consultants will coordinate closely with Package II, Package III and Package IV consultants.

6. Engineering services will cover the detailed engineering design, tendering and construction supervision for (i) flood protection works and solid waste management facilities in Kampong Chhnang; and (ii) drainage, flood protection works and solid waste management facilities in Pursat. The engineering services will be required to incorporate the safety features suggested during project preparation in the gender action plan, as they pertain to community, women and child safety.

7. Consultants will carry out all necessary surveys—including detailed topographical and soil surveys, field verification, studies, collection of data, and analyses needed to prepare the detailed engineering designs and contract documents for the subprojects. The consultants will prepare detailed designs and cost estimates—accurate to plus or minus five percent—and tender documents in line with the procurement plan. They will manage and administer construction contracts, including any variation orders. The consultants will also support the PMU and PIUs in the supervision of construction to ensure quality control and compliance with all aspects of the project designs and specifications.

8. All design and procurement documents prepared by the design and construction supervision consultants will be in accordance with national and international norms and procedures as required. The consultants will coordinate closely with the PMU and PIUs in all aspects of the consultancy design and supervision services. Tender and Contract Documents shall be in accordance with the *ADB Procurement Guidelines (2015 as amended from time to time)*, ADB Standard Bidding Documents for Procurement of Works, or Procurement of Goods, and government procurement rules and regulations.

9. PMU and PIUs in project implementation, management and financing, managing advance accounts, monitoring resettlement, environmental and social safeguards. General tasks include assistance in:

- Setting up project accounts.
- Preparing project administration procedures, manuals, and software.
- Training PMU and PIUs' staff on project implementation.
- Training on ADB procedures for national, provincial and municipal agencies and for other stakeholders.
- Preparing, updating and implementing resettlement plans, environmental plans and other social plans—gender action plan—for the project.
- On-job-training for PMU, PIUs/USUs and provincial and municipal agencies on (O&M) of the infrastructure improvements to be implemented under the project.
- Preparation of required project reports—quarterly progress (including quarterly resettlement safeguard monitoring reports and semi-annual environment and indigenous peoples safeguard monitoring reports), annual project performance monitoring and evaluation, and other required reports.
- Support the Government and the ADB project team in carrying out milestone reviews—midterm and final reviews, and the preparation of the project completion

report (including safeguard monitoring reports). The PMIS consultants will also assist in updating the procurement capacity assessment during the midterm review.

10. PIUs/USUs and NGO in the implementation of project awareness and community-driven environmental improvements program, the operations and maintenance (O&M) of the facilities to be constructed under the project, and the collection of associated user charges and fees.

11. In addition, the consultants will assist the government in establishing the National Task Force on Urban Development and in convening meetings semiannually.

12. On-the-job training will also include regional study tours to expose local stakeholders to good practice in urban management, and O&M in Southeast Asia (e.g., Viet Nam or Lao PDR) or East Asia (e.g., Mongolia). A proposal and cost estimates will be submitted to ADB and Ministry of Economy and Finance for approval before participating in any study tours. This will be kept in reserve in the project costs and will not be included as part of the PMIS consultant package.

13. The purpose of the capacity development plan includes:

- To train staff for the effective and efficient implementation of the project.
- To improve staff capacities in the management of Pursat and Kampong Chhnang urban services.
- To improve the efficiency and delivery of urban services.
- To ensure adequately trained staff for effective operations and maintenance of the project facilities, and to enhance cost recovery.
- To strengthen monitoring, reporting and evaluation of the project (project performance management system and PPCR results framework)

14. The capacity development plan proposes training to be provided and knowledge transferred in all aspects of project management; more specifically:

- *Procurement*—formal and informal training through on-the-job sessions which will include the preparation of bidding documents, specifications, selection criteria as well as bid evaluation processes. It will cover the training of EA, PMU, PIUs/USUs of the project towns, and provincial and municipal authority staff.
- *Financial management*—the procurement and operationalization, including staff training, of a computerized accounting system for the PMU and PIUs/USUs; training in ADB loan disbursement procedures and the government's standard operating procedures for externally-financed programs and projects; and technical support in project financial management and administration, and project accounting.
- *Customer relations*—training to improve the interface with customers, and the design and operations of an effective billing and collection system.
- *Social and environmental safeguards*—training of PMU and PIUs/USUs staff in the design and methodology for undertaking poverty and social assessments (PSA), conducting such surveys, and the necessary data and information analysis. These training programs will incorporate the provisions of the national policies and requirements of the ADB Safeguard Policy Statement.

- *Gender mainstreaming*—participatory workshops with provincial and municipal authorities and project staff to update the gender action plan (GAP), to improve knowledge and skills staff in respect of gender issues, increasing women's participation in key decision making and implementation arrangements. On-the-job training will be provided on gender related matters. Information, Education and Communication (IEC) programs will also be implemented to improve the participation of women in urban community development through communities in the two towns. Implementation of workshops and sessions might be done together with MPWT's gender working group and/or the women and children consultative committees.
- *Environmental management*—training to enable staff to review the Initial Environmental Examination (IEE) reports and to update the Environmental Management Plan (EMP). Seminars and workshops are proposed as well as consultative forums, to provide public awareness on the impacts and mitigating measures required for urban infrastructure projects in the Pursat and Kampong Chhnang.
- *Operation and maintenance of the project facilities*—manuals will be prepared by the PMU and training will be provided on their use. Training, through workshop sessions, group discussions and on-the-job training will be provided to provincial, municipal and project implementation staff, including those in the PIUs/USUs. Training also will be provided in revenue generation and collections.
- *Monitoring, reporting and evaluation*—training to enable the design and implementation of the Project Performance and Monitoring System (PPMS). This will assist the project staff to carry out monitoring, reporting and evaluation activities required during implementation, including reporting against PPCR results framework.
- *Solid waste management*—training in the management of the controlled landfill operations, involving spending some time at a correctly functioning controlled landfill elsewhere; in accounting to better manage costs and budgets; and the review of monthly operational reports, and the preparation of executive summaries for senior management.
- *Drainage operations*—in Pursat, training in the operation of combined sewerage systems, sewage pumping and waste stabilization ponds, including spending some time at a correctly functioning system elsewhere; in accounting to better manage costs and budgets; and the preparation of executive summaries for senior management.

15. For all project training activities, the PMU office manager will be responsible for the coordination of training activities, and undertake consultations with the PSC and the provincial and municipal administrations. Consultation will also take place with key personnel of training programs being carried out by other donors, including the EU SPACE Project, and the ADB TA Capacity Management for Urban Management Project.

16. The capacity development plan will be implemented by the EA through the PMU. Capacity building assistance and training programs on financial and procurement management will need to be closely coordinated with the Ministry of Economy and Finance. The PMU will

work closely with Ministry of Environment on the training programs involving the updating of the EMPs and mitigation measures on environment safeguards. Capacity development on gender considerations will be coordinated with the gender working group within MPWT and the Ministry of Women's Affairs, and sustainability measures will be developed during project implementation. The training programs on the O&M of urban infrastructure require the participation of provincial and municipal administrations to ensure sustainability of the arrangements. Specialized capacity building and training programs will be coordinated with relevant training institutions and human resource development learning centers.

(b) Staffing and Qualifications

17. The consultants' team to be fielded to prepare detailed engineering designs, tendering, undertake construction supervision, and to implement the capacity development plan will require an estimated 506 persons months of consultants—78 person-months of international and 428 person-months of national consultants and advisers will be required. The team will work closely with all relevant stakeholders, particularly the PMU and the PIUs/USUs. All team members are expected to act as resource persons for the training and development activities. The international and national positions required are set out in the table below:

Person & Task	Person-Months	Minimum Qualifications	Minimum Work Experience
<i>International Consultants</i>			
Team Leader & Municipal Engineer	35	University degree in civil engineering, construction management or related subject	15 years' experience of infrastructure implementation under donor-funded projects of which 5 should be as team leader. Should have 3 years' experience in procurement, & 2 years in construction supervision, preferably with familiarity of ADB or WB procedures. 3 years' experience working as a Team Leader for international development bank-funded urban development or related projects is essential.
Geotechnical Engineer or Specialist	4	Masters Degree in civil or geotechnical engineering or related subject	10 years' experience of geotechnical engineering & soil mechanics for roads, bridges & embankments. Experience in south east Asia and of urban development or related projects financed by multilateral development funding agencies is required.
River Engineering Specialist	8	Degree in civil or geotechnical engineering	At least 10 years' experience of design of riverbank protection including embankment & groynes. Experience in south east Asia and of urban development or related projects financed by multilateral development funding agencies is required.
Solid Waste Management Specialist	6	Degree in civil or municipal engineering or equivalent	10 years' experience in solid waste management facility design. Experience in south east Asia and of urban development or related projects financed by multilateral development funding agencies is required.
Environment Specialist	4	Masters Degree in environmental science, engineering, planning or equivalent	10 years' experience in environmental management & assessment in developing countries. Experience in south east Asia and of urban development or related projects financed by multilateral development funding agencies is required.

Person & Task	Person-Months	Minimum Qualifications	Minimum Work Experience
Social Development and Resettlement Specialist	6	Degree in relevant social sciences discipline	10 years' experience in poverty & social analysis with particular expertise in areas of social risk mitigation, microenterprise promotion & gender & development preferably within urban & peri-urban communities. Experience in south east Asia and of urban development or related projects financed by multilateral development funding agencies is required.
Municipal Finance Specialist / Economist	6	Degree in finance, accounting, business management or a related discipline.	8 years of experience of financial management & accounting of projects financed by multilateral development funding agencies, with 5 years' experience on the financing of urban development and on designing cost recovery systems for municipal services.
Private Sector Specialist	3	Degree in finance, commerce, engineering or a related subject	10 years of experience of preparing and structuring infrastructure projects and service delivery contracts for public private partnerships. Experience in South east Asia and of urban development or related projects financed by multilateral development funding agencies is required, and country experience preferred.
Institutional Specialist	6	Master's degree in human resource management, governance institutional development or another related discipline or an equivalent professional qualification.	More than 10 years of working experience in consultancy assignments and/or at senior level within national or local government and have been involved in urban development and service delivery. At least eight years' experience should have been in developing countries and some on urban development and/or governance assignments funded by multilateral development financing institutions. He/she will be a senior professional consultant and experienced in carrying out training assignments, including those on urban or related projects of multilateral development funding agencies.
TOTAL	78	Person Months of International Consultants	
National Consultants			
Deputy Team Leader/ Civil Engineer	66	University degree in civil, structural or municipal engineering, construction management or a related discipline	10 years' experience on projects implementation, including those funded by multilateral development funding agencies, with 3 years' experience as a deputy team leader on urban development or related projects. Fluency in written and spoken English is required.
National Geotechnical Engineer or Specialist	12	Masters degree in civil or geotechnical engineering or related subject	8 years' experience of geotechnical engineering & soil mechanics for roads, bridges & embankments. Fluency in written and spoken English is required. Must have a demonstrated ability to work within a multi-disciplinary consulting team with counterparts and others project stakeholders.

Person & Task	Person-Months	Minimum Qualifications	Minimum Work Experience
Senior Civil Engineers (2)	24	Degree in civil, structural or municipal engineering, construction management or a related discipline	At least ten years' experience in the detailed engineering design of municipal infrastructure, preferably with particular experience of drainage, river bank protection, and small scale sanitation schemes. Fluency in written and spoken English is required. Must have a demonstrated ability to work within a multi-disciplinary consulting team with counterparts and others project stakeholders.
Civil Engineer – River Hydrology	12	Degree in civil or municipal engineering, construction management or a related discipline	At least five years' experience in the detailed engineering design of municipal infrastructure, with particular experience of river hydrology and river bank protection. Fluency in written and spoken English is required. Must have a demonstrated ability to work within a multi-disciplinary consulting team with counterparts and others project stakeholders.
Civil Engineer – Solid Waste Management	10	Degree in civil or municipal engineering, construction management or a related discipline	At least five years' experience in the detailed engineering design of municipal infrastructure, with particular experience of landfill design. Fluency in written and spoken English is required. Must have a demonstrated ability to work within a multi-disciplinary consulting team with counterparts and others project stakeholders.
Resident Engineer (2 positions)	24	Master's Degree in construction management, civil engineering or related discipline.	10 years' experience of supervising construction of large scale infrastructure projects and having worked as resident engineer on 3 projects and with at least one urban development or related project funded by a multilateral development financing institutions would be beneficial.
Site Engineers (4 positions)	80	A degree in civil, structural or municipal engineering or a related discipline	3 years of experience in construction supervision of urban infrastructure development projects.
AutoCAD Operators (3 positions)—solid waste management (10 pm), drainage and river bank protection (8 pm), and flood control (8 pm)	26	A diploma in computer aided technical design	3 years of experience in the preparation of computer aided detailed engineering designs using AutoCad software for urban infrastructure. Familiarity with the design of landfills, drainage systems and flood control facilities would be beneficial, as would work with international funding institutions.
Gender and Development Specialist	6	Degree in social sciences, development sociology or a related discipline.	5 years' experience of working on gender and development aspects of projects. Experience on urban development or related assignments funded by multilateral development financing institutions (preferably ADB) would be beneficial. Fluency in written and spoken English is required.

Person & Task		Person-Months	Minimum Qualifications	Minimum Work Experience
Resettlement Specialist 1—Pursat		6	Degree in social sciences, development sociology or a related discipline.	5 years' experience of working with social safeguards in development projects. Experience on urban development or related assignments funded by multilateral development financing institutions (preferably ADB).would be beneficial. Fluency in written and spoken English is required.
Resettlement Specialist 2—Kampong Chhnang		18	Degree in social sciences, development sociology or a related discipline.	5 years' experience of working with social safeguards in development projects. Experience on urban development or related assignments funded by multilateral development financing institutions (preferably ADB).would be beneficial. Fluency in written and spoken English is required.
Environment Specialist		12	Degree in environmental science, engineering, planning or a related discipline	5 years of experience in environmental management, safeguards or environmental impact assessments. Experience on urban development or related assignments funded by multilateral development financing institutions would be beneficial. Fluency in written and spoken English is required
Financial Management / Accounting Specialist		60	Qualified accountant with a degree in business management or accounting	5 years of experience of financial management & accounts for urban development project implementation. Experience on urban development or related assignments funded by multilateral development financing institutions would be beneficial. Fluency in written and spoken English is required
Procurement Specialist		24	Degree in civil engineering, or an equivalent professional qualification	5 years of working experience on the procurement of services within urban development agencies at a senior operational level. Experience on urban development assignments funded by multilateral development financing institutions would be beneficial. Fluency in written and spoken English is required.
Municipal Finance /Tariff / Economic Specialist		24	Master's degree in economics, urban management, or an equivalent	10 years of working experience in consultancy assignments &/or at senior level within national or local government. Experience on urban development or related assignments funded by multilateral development financing institutions would be beneficial. Fluency in written and spoken English is required.
Human Resource / Training Coordinator		24	Master's degree in human resource management, governance or another related institutional development discipline or an equivalent professional qualification.	5 years or more of working experience in consultancy assignments and/or at senior level within national or local government in urban development and service delivery. Experience on urban development or related assignments funded by multilateral development financing institutions related to human resources and training assignments would be beneficial. Fluency in written and spoken English is required.

Person & Task	Person-Months	Minimum Qualifications	Minimum Work Experience
TOTAL	428	Person Months of National Consultants	
GRAND TOTAL	509	Person Months of International and National Consultants	

2. Detailed Terms of Reference

Team Leader and Municipal Engineer (International, 35 person months)

- Responsible for overall project implementation and delivery of all aspects including but not limited to procurement, safeguards, detailed engineering design, financial and social development
- Responsible for signing off on the final project / infrastructure designs for all outputs, including CMEI.
- Develop strong working relationship with executing agencies, implementing agencies, and PIUs, and ensure smooth coordination among them.
- Confirm commitments to project implementation from all stakeholders.
- Develop detailed time bound implementation schedules.
- Development a project performance management system that includes links to the gender action plan, loan covenants and PPCR indicators.
- Provide initial training in project management and oversight for PMU, PIUs, and NGO members.
- Help ensure compliance with the relevant policies and guidelines of the Government and ADB.
- Check as necessary detailed designs, cost estimates, bidding documents, and other contract documentation for all outputs, including CMEI.
- Provide regular oversight to PMU and PIU staff and local consultants in the management of civil works and goods contracts and in the supervision of construction and subsequent commissioning of works for all outputs, including CMEI.
- Provide oversight for overall subproject financial management, accounting, disbursements and audit requirements.
- Coordinate cross-cutting in the project amongst team members, and ensure policy dialogue, O&M manuals, and follow-up works reflect cross-cutting issues (i.e., water-related cross-cutting issues such as SWM, wastewater management and flood management.)
- Coordinate with the project team members to ensure proper urban wastewater treatment should be considered including the septic management in the short-term.
- Assist in arranging for smooth handover of the project facilities to the agencies responsible for operation and maintenance including advice and assistance on the preparation of all documentation necessary (i.e. as-built drawings) to close out contracts.
- Ensure proper and timely submission of regular progress reports to executing agencies and ADB, particularly the progress against target indicators. Incorporate information from other consulting packages for respective outputs.
- Initiate actions in the event of any adverse, oblique and / or other variances against the original plan.
- Provide overall guidance to the implementation of training and community awareness programs in partnership with the Package IV NGO.
- Assist in ensuring all resettlement and environmental impact mitigation measures are fully implemented, ensure associated reporting is completed, and minimize adverse environmental impacts during construction, including CMEI.
- Provide site management guidance to PIUs and local consultants in relation to the construction for the all outputs, including CMEI.
- Assist in project planning, scheduling, and reporting of sub-project activities.
- Assist in ensuring the quality of all of the infrastructure components, including CMEI.

- Train executing agency, implementing agency, and PMU and PIU staff on ADB procurement guidelines.
- Assist in the detailed monitoring and evaluation surveys for the project and PPCR.
- Provide overall support for selection of contractors and suppliers, contract management, and quality control and inspection.
- Ensure annual submission of project performance monitoring reports against the PPMS developed.
- Ensure implementation of gender and social development measures, including the implementation and monitoring of the GAP and community participation plan.
- Ensure monitoring and reporting of PPCR indicators in accordance with the PPCR results framework and associated guidelines.
- Ensure coordination amongst the different consulting package (e.g., tasks to undertaken in close consultation with the Package II consultants to ensure incorporation of additional climate change measures into the design of infrastructure interventions; and with Package IV consultants with respect to technical and bidding requirements of infrastructure development in CMEI implementation and timely delivery of hygiene information within the project).

Geotechnical Engineer/Specialist (International, 4 person months)

- Prepare scope of work and terms of reference for geotechnical surveys and investigations required for all sub-projects, to ensure sufficient data are collected for effective and efficient design of the civil works structures.
- Provide overall supervision of the geotechnical surveys and investigations and report to the
- Prepare preliminary geotechnical designs, and assist with cost estimates for the detailed engineering designs for the (i) improvement of the existing embankment and the new embankment sections, where required at Kampong Chhnang; and (ii) river bank erosion protection at selected locations along the Pursat River.
- Based on results from the surveys and investigations confirm or develop appropriate geotechnical design criteria, design concepts, and methodologies for the civil works.
- Incorporate climate change projections in the design of civil works based on the information provided by surveys completed and information from Package II consultants;
- Prepare detailed geotechnical designs for all subproject works, technical specifications, performance specifications, detailed cost estimates and quantities.
- Undertake periodic inspections during construction to ensure that the geotechnical works comply with the design intent.
- Contribute to the final design report.
- Contribute to all necessary reporting under the Project, as determined by the Team Leader.
- Assist in any other related works as deemed necessary by the Team Leader.

Resettlement and Social Development Specialist (International, 6 person months)

- On **involuntary resettlement** aspects:
 - Assist the PMU, PIUs and local authorities on involuntary resettlement safeguards matters, in updating the resettlement plans;
 - Assist the PMU to ensure that ADB's involuntary resettlement safeguard categorization remains B;
 - Assist in the preparation of updated RPs;p
 - Assist in monitoring that the grievances are addressed promptly and properly and that grievance redress mechanism is functioning well;
 - Provide necessary training on grievance if needed;

- Assist PMU with ongoing internal monitoring for resettlement based on the approved updated resettlement plan and AH database, including the preparation of a consolidated quarterly internal monitoring report for involuntary resettlement (i.e., quarterly safeguard monitoring report for involuntary resettlement) as an attachment to the quarterly project progress reports;
 - Design and deliver capacity development activities for the PMU, as needed, in the area of involuntary resettlement and resettlement plans.
 - Assist the PMU in updating the public information booklets and translating them into Khmer.
- On **social development** aspects:
 - Assist the PMU in preparing, updating and implementing the indigenous peoples plans (if any);
 - Assist the PMU in preparing, updating the gender action plan;
 - Assist the PMU in ensuring that ADB's indigenous peoples categorization remains B;
 - Assist in establishing and implementing liaison mechanisms to ensure proper technical and logistical support to PMU and PIUs, local administrative authorities, and concerned government departments in implementing the social development aspects of the project;
 - Design and deliver capacity development activities for the PMU, PIUs and other relevant stakeholders on indigenous peoples policy (if needed); participation and communication; and gender and development.
 - Coordinate with the NGO to develop information education and communication (IEC) programs for public awareness on the CMEI component for implementation by the NGO.
 - Assist the NGO conduct information campaigns, public consultations and community participation on the project and hygiene campaigns;
 - Assist the PMU to implement the project's Gender Action Plan and prepare GAP monitoring reports semi-annually. Work with the NGO to facilitate MPWT's gender working and local women and children consultative committees support in communicating, implementing and monitoring required actions in the GAP to the communities.

Solid Waste Management Specialist (International, 6 person months)

The national consultant will support the international consultant in carrying out the tasks below:

- Provide guidance in the implementation of the landfill and solid waste management subprojects.
- Review and finalize detailed designs, cost estimates and procurement documents including remediation of open dumpsites.
- Assist in preparing details on the specifications and bidding documents.
- Provide site management guidance in relation to the establishment of the sanitary landfill including access roads and related facilities.
- Prepare work plans and schedule of activities and regular physical reports of subproject activities on sanitary landfill and solid waste management.

- Ensure the engineering quality of civil works and construction activities.
- Ensure proper hand over arrangements of the sanitary landfill and related facilities and equipment under the Project to the implementing agency and district authorities that are responsible for operation and maintenance.
- Conduct capacity development needs assessment in planning and implementation, operation and maintenance of sanitary landfill and solid waste management subprojects and develop training programs and capacity development measures for participating agencies, provincial and district authorities.
- Work with the Team Leader and Institutional specialist to develop a mechanism to stop dumping in the open dumpsites after it has been closed.
- Work with the Package IV NGO teams to ensure that small-scale infrastructure development in solid waste management are linked to the larger project components and are technically accurate.
- Undertake site audits, providing onsite and also office based training on all operational aspects of the SWM facility, as well as preparing and writing summary reports of the audit findings and recommendations.

Environment Specialist (International, 4 person months)

- Assist the PMU in the conduct of the following for proposed Community Mobilization and Environmental Improvements (CMEI) subprojects, to include the: (i) review, finalization and confirmation of the results of the rapid environmental assessment (REA) and categorization; and (ii) basic environmental assessment and preparation of report for compliance with EARF and government requirements.
- Ensure ADB Environment safeguard category remains B.
- Assist the PMU in ensuring the incorporation of relevant mitigation measures in the detailed designs, coordinated public consultations and disclosure/information dissemination with the social/resettlement team, and that the government's environmental assessment requirements will not cause delay in the commencement of the construction phase.
- Finalize and update the IEEs and EMPs, as necessary, based on the detailed engineering designs, and ensure consistency, where applicable, with other safeguard plans.
- In coordination with the Solid Waste Management Specialist, finalize remediation and closure plans for all three dumpsites in coordination with the government/Municipality and monitor implementation. Assist the PMU in preparing for procurement by: (i) ensuring that the SPS-compliant EMP is part of the tender documents and civil works contracts; and (ii) establishing and incorporating environmental criteria, scoring and weight in the evaluation of bids in coordination and agreement with the procurement committee.
- Assist the PMU in ensuring that contractors prepare their respective contractor's EMP (C-EMP) based on the SPS-compliant EMP and actual site conditions and in evaluating the contractor's EMPs (C-EMPs).
- Assist the PMU in preparing for the activation of the grievance redress mechanism, undertaking pre-construction environmental quality monitoring as recommended in the EMP, and reviewing/evaluating Contractor's EMPs to ensure they are fully responsive to the SPS-compliant EMPs.
- Design a tool or system to facilitate effective consultations, monitoring/inspection and reporting by the PMU.
- Coordinate with the MOE and TSA on regulatory compliance issues—for water quality in the Tonle Sap, noise and dust from construction sites, sanitation in workers campsite, etc.
- Provide training lectures/seminars on the EMP and its implementation.

- During construction and operation, guide the PMU in supervising, monitoring, and reporting EMP implementation.
- Assess the operation/observance of the grievance redress mechanism, and recommend improvements.
- Review the results of the environmental effects monitoring. Recommend investigations and recommend corrective actions, as necessary
- Assist the PMU and PIUs in follow up consultations.
- Conduct visits to work sites to provide guidance to, and advise the PIUs and operators on environmental management concerns arising during project construction and operation, respectively, and recommend corrective measures.
- Prepare the necessary status reports for compliance with the conditions set out in approved Royal Government of Cambodia's IEE/IEIA Reports.
- Assist in the preparation of semi-annual environmental monitoring reports (EMRs) and finalize the monthly EMRs for input to the PMU's semi-annual safeguards monitoring report for submission to the ADB.
- Recommend measures to ensure effective EARF and EMP compliance/ implementation, as necessary.
- Ensure that capacity development in environmental management is carried out through "hands on" training during the implementation of the EARF and EMPs.

Municipal Finance/Tariff/Economic Specialist (International, 6 person months)

- Review current institutional arrangements for the provision of solid waste management, flood protection, drainage and sanitation services.
- Review contracts currently ongoing for the different operating entities in operation of urban services with duration, incentives, due dates and termination conditions.
- Identify issues and problems and propose tariff structure in consideration of the affordable limits of target beneficiaries, operation & maintenance cost, economic efficiency, and sustainability.
- Collaborate with the social development/resettlement specialist to develop a willingness to pay survey for solid waste collection and management and drainage services component of the targeted population.
- Review the financial performance of service delivery and capacity of implementing agencies regarding cost recovery, borrowing capacity, collection of fees and taxes, accounts receivable, and subsidies, as appropriate.
- Develop a tariff setting and subsidy methodology designed to achieve financial sustainability of the related urban services.
- Monitor project financial performance of the investments and the sector, considering the proposed financial structure and tariff setting methodology.
- Draft recommendations regarding an effective and appropriate regulatory mechanism to ensure requisite service quality and tariffs.
- Develop a set of performance indicators that can be verified and.
- Determine synergies between the urban infrastructure and other municipal services, and the economic benefits of urban infrastructure and environmental improvements.

Institutional Specialist (International, 6 person months)

The institutional specialist will ensure smooth transition from the start-up package for sector strengthening and institutional development. She/he will:

- Implement the institutional recommendations and agenda proposed and agreed for the establishment and functioning of the urban services unit,
- Develop a detailed capacity development plan for the project, catering to the needs of the PMU, PIUs, and future USUs.
- Update the capacity development plan, as needed,
- Prepare, deliver, evaluate and follow-up on training courses,
- Ensure that training records are sex-disaggregated for each session,
- Ensure that at least 30% of training opportunities are allocated to women in project implementation structures, urban service unit training,
- Contribute to Project workshops, training events and reports as required,
- Prepare a monitoring table for capacity development and training activities,
- Prepare an capacity development and training evaluation report at project end,
- Work with each USU to :
 - a. Review and determine human resource requirements and capacity (current and future) for each USU with concrete recommendations. Disaggregate the information for men and women;
 - b. Prepare a simple and user-friendly 3-year rolling corporate plan, acceptable to MPWT, MEF and ADB, which includes: (a) mission statement and corporate objectives; (b) standards, performance indicators and targets; (c) tariffs; (d) market analysis; (e) management and organization review; (f) related action plan and detailed activities; (g) 3-year financial forecast; and (h) capital investment program.
 - c. Implement its corporate plan.

River Engineering Specialist (International, 8 person-months)

- Prepare scope of work and terms of reference for all hydrological and meteorological surveys and investigations required for all sub-projects, to ensure sufficient data are collected for effective and efficient design of the civil works structures.
- Supervise the surveys and investigations.
- Analyze the impact of the civil works designs on the river systems and advise on any necessary design modifications to minimize impacts by the civil works.
- Based on results from the surveys and investigations confirm or develop appropriate hydraulic design criteria, design concepts, and methodologies for the civil works.
- Incorporate climate change projections in the design of civil works based on the information provided by surveys completed and information from Package II consultants;
- Prepare detailed hydraulic analyses and designs for all relevant subprojects, including inputs to technical specifications, performance specifications, detailed cost estimates and quantities.
- Undertake periodic inspections during construction to ensure that the river works comply with the design intent.
- Contribute to the final design report.
- Contribute to all necessary reporting under the Project, as determined by the Team Leader.
- Assist in any other related works as deemed necessary by the Team Leader.

Private Sector Specialist (International, 3 person-months)

An international consultant shall be engaged on an individual basis for a period of 3 person- months. The consultant shall provide intermittent services over about 6 months (or as needed) to assist the PMU and PIUs/USUs in contract management during the initial project development phase of the solid waste management suboutput. The consultant shall have at least a Master's Degree and at least 15 years of experience in managing PPP transactions.

Prior experience in the country and the region is preferred:

- Explore private sector opportunities and review the existing private sector contracts in solid waste management, including collection in both Pursat and Kampong Chhnang municipalities.
- Review the of Feasibility Study/ Business Plan of the existing private sector company/person
- Review the initial PPP contract signed by all parties and suggest amendments as required based on new available data (e.g., feasibility study/business plan of the private sector)
- Development a strategy for including existing private sector into SWM.
- Advise the PIUs/USUs on the next steps and assist them in communicating these steps to provincial authorities
- Identification of Performance Milestones to be implemented during the Conditions Precedent period
- Assisting the PIUs/USUs in reviewing the progress of plans and performance milestones during the Conditions Precedent phase
- Reporting requirements include simple briefing notes for EA and ADB in English, with Khmer translation as required.
- Assist in structuring new PPP transactions for SWM.
- Work with the PMU and the Office of Private Sector Development Coordination, Department Investment, General Department of Budget, Ministry of Economy and Finance.
- Additional tasks that may be assigned relevant to the assignment.

Deputy Team Leader/Engineer (National, 66 person months)

The national consultants will support the international consultant in carrying out the tasks below:

- Be responsible for overall project implementation and delivery of all aspects including but not limited to procurement, safeguards, detailed engineering design, financial and social development for all outputs, including CMEI
- Develop strong working relationship with executing agencies, implementing agencies, civil society organizations and PIUs, and ensure smooth coordination among them.
- Confirm commitments to project implementation from all stakeholders.
- Work with the Team Leader to develop detailed time bound implementation schedules.
- Provide initial training in project management and oversight for PMU, PIUs, and Package IV NGO
- Help ensure compliance with the relevant policies and guidelines of the Royal Government of Cambodia and ADB.
- Check as necessary detailed designs, cost estimates, bidding documents, and other contract documentation.
- Provide regular oversight to PMU and PIU staff and local consultants in the management of civil works and goods contracts and in the supervision of construction and subsequent commissioning of works.

- Provide oversight for overall subproject financial management, accounting, disbursements and audit requirements.
- Assist in arranging for smooth handover of the project facilities to the agencies responsible for operation and maintenance including advice and assistance on the preparation of all documentation necessary (i.e. as-built drawings) to close out contracts.
- Ensure proper and timely submission of regular progress reports to executing agencies and ADB, particularly the progress against target indicators.
- Initiate actions in the event of any adverse obligations and / or other variances against the original plan.
- Provide overall guidance to the implementation of training and community awareness programs.
- Assist in ensuring all resettlement and environmental impact mitigation measures are fully implemented, ensure associated reporting is completed, and minimize adverse environmental impacts during construction.
- Provide site management guidance to PIUs and local consultants in relation to the construction.
- Assist in project planning, scheduling, and reporting of sub-project activities.
- Assist in ensuring the quality of all of the infrastructure components.
- Update the draft procurement plan from time to time (at least annually).
- Train executing agency, implementing agency, and PMU and PIU staff on ADB procurement guidelines.
- Assist in the detailed monitoring and evaluation surveys.
- Provide overall support for selection of contractors and suppliers, contract management, and quality control and inspection.
- Ensure implementation of gender and social development measures, covering GAP and community participation plan.

National Geotechnical Engineer or Specialist (National, 12 person-months)

- Assist the International Geotechnical Engineers to prepare scope of work and terms of reference for geotechnical surveys and investigations required for all sub-projects.
- Provide day-to-day supervision of the geotechnical surveys and investigations and report to the
- Assist with the preparation of preliminary geotechnical designs, and assist with cost estimates for the detailed engineering designs for the (i) improvement of the existing embankment and the new embankment sections, where required at Kampong Chhnang; and (ii) river bank erosion protection at selected locations along the Pursat River.
- Assist the International Geotechnical Engineer to prepare detailed geotechnical designs for all subproject works, technical specifications, performance specifications, detailed cost estimates and quantities.
- Undertake regular inspections during construction to ensure that the geotechnical works comply with the design intent and report back any issues to the Team Leader and International Geotechnical Engineer.
- Contribute to the final design report.
- Contribute to all necessary reporting under the Project, as determined by the Team Leader. Assist in any other related works as deemed necessary by the Team Leader.

Senior Civil Engineers (National, 2 persons—12 person months each)

- Review feasibility studies against current site conditions to prepare detailed designs.

- Liaise with the PMU and PIUs in ensuring that all land required for the project is acquired or reserved as necessary.
- Prepare ToRs for detailed topographical surveys, evaluate quotations and recommend first ranked surveyor to the PMU.
- Monitor topographical survey work and recommend the final survey drawings for approval to the PMU.
- Incorporate climate change projections in the design of civil works based on the information provided by surveys completed and information from Package II consultants;
- Update design parameters based upon results of topographical and soil surveys and apply to preliminary designs.
- Prepare and finalize detailed designs with quantities.
- Ensure detailed designs accommodate the recommendations of the land acquisition and resettlement plans and the environmental management plans.
- Prepare final cost estimates by obtaining updated item costs and applying them to the bill of quantities.
- Ensure final cost estimates accommodate the costs of the land acquisition and resettlement plans and the environmental management plans.
- Finalize bill of quantities and drawings for inclusion in tender documents.
- Liaise with the PMU and procurement specialist in developing contractor selection criteria
- Prepare detailed implementation plan and specific tender document clauses that ensure those tendering respond to the intermittent construction season as a result of the Tonle Sap flood levels.

Civil Engineer – River Hydrology (National, 12 person months)

The national consultant will support the international consultants in carrying out the tasks below:

- Review soil conditions and take soil samples for at necessary intervals to assess bearing capacity of soil and other physical parameters necessary to prepare the structural designs.
- Work with other consultant team members to incorporate climate change recommendations in the design of civil works based on the information provided by surveys completed and information from Package II consultants;
- Monitor topographical survey work and recommend the final survey drawings for approval to the PMU.
- Provide guidance in the implementation of flood protection and drainage structures subproject.
- Provide necessary guidance to the civil engineers on the detailed designs, cost estimates and procurement documents.
- Assist in preparing detailed specifications for the bidding documents.
- Provide site management guidance in relation to the construction of flood protection and control measures, access roads and drainage structures.
- Prepare work plans and schedule of activities including submission of regular physical reports on subproject activities related to flood protection and drainage structures.
- Ensure the engineering quality of civil works and construction activities.
- Ensure proper hand over arrangements of the flood protection facilities under the Project to agencies that are responsible for operation and maintenance.

- Conduct capacity development needs assessment in planning and implementation, operation and maintenance of flood protection and drainage structures and develop training programs and capacity development measures for participating agencies, provincial and district authorities

Civil Engineer – Solid Waste Management (National, 12 person months)

- Assist in the detailed designs, cost estimates and procurement documents.
- Assist in preparing details on the specifications and bidding documents
- Assist the International Solid Waste Management Specialist with the provisions of site management guidance in relation to the establishment of the sanitary landfill including access roads and related facilities.
- Work with other consultant team members to incorporate climate change recommendations in the design of civil works based on the information provided by surveys completed and information from Package II consultants;
- Assist in the preparation of work plans and schedule of activities and regular physical reports of subproject activities on sanitary landfill and solid waste management.
- Monitor the engineering quality of civil works and construction activities on a regular basis and report any issues back to the Team Leader, including decommissioning of existing sites.
- Assist with hand over arrangements of the sanitary landfill and related facilities and equipment under the Project to the implementing agency and district authorities that are responsible for operation and maintenance.
- Assist in the capacity development needs assessment in planning and implementation, operation and maintenance of sanitary landfill and solid waste management subprojects and develop training programs and capacity development measures for participating agencies, provincial and district authorities.
- Work with the Package IV NGO teams to ensure that small-scale infrastructure development in solid waste management are linked to the larger project components and are technically accurate.
- Assist with site audits, providing onsite and also office based training on all operational aspects of the SWM facility.

Resident Engineers (National, 2 persons—12 person months each)

- Carry out overall supervision of the works on site and assure quality of construction.
- Review the Contractor's monthly statements and prepare Payment Certificates.
- Issue any variation orders regarding the quantities of the works and the period for completion of the works after obtaining the approval of the contracting authority.
- Supervise and monitor construction of all project components, prepare measurements for works completed and in progress and verify bills for payment to the contractors/ suppliers.
- Ensure contractors adhere to the provisions of the land acquisition and resettlement plans and the environmental management plans.
- Attend third party inspections, as necessary, and provide certification on the quality of the supplies based on such inspections.
- Monitor and enforce the measures taken to ensure safety of the workers, other project personnel, general public and works.
- Furnish detailed drawings, with revisions as necessary, to the contractor.

- Regularly monitor physical and financial progress against the milestones according to the contract to ensure completion on time.
- Assist the Implementing Agency in the resolution of various other contractual issues and overall contract management.
- Approve "as built" drawings.
- Prepare the Taking-over Certificate, and Final Acceptance Certificate.

Site Engineers (National, 4 persons—20 person months each)

- Assist the resident engineer in all tasks.
- Check correctness of the contractor's setting out related to all survey reference markers provided by the relevant authorities.
- Inspect the works, and check to ensure compliance with the specifications and drawings.
- Check line levels and the layout of construction to ensure conformity with the contract, and propose any change in the plans, if required.
- Witness testing of all materials and equipment arriving at the site to ensure compliance with the specifications.
- Continuously monitor the contractor's work program and progress, quality of work, site safety, equipment/material orders and deliveries, environmental issues, etc. If necessary instigate corrective actions in accordance with the conditions of contract.
- Maintain a daily works site logbook recording works site events and instructions given to the contractor, and other relevant information, which may at a later date be of assistance in resolving queries or dispute—in particular, records shall be kept of the contractor's activities, including equipment and labor on site. Relevant information concerning weather conditions, equipment breakdown and other factors affecting work progress will also be recorded.
- Supervise the contractor in all matters concerning site health, safety and environment.
- Examine contractors' claims for time extension, variations, additional compensation etc. and recommend appropriate decisions.
- Review and recommend for approval the contractor's "As Built Drawings".
- Inform the resident engineer of any potential problems, which may arise in connection with the construction of the works, and provide recommendations and possible solutions.

AutoCad Operators (National, 3 persons: Solid Waste Management, 10 p/m; Drainage and River Bank Protection, 8p/m and Flood Control 8 p/m)

- Develop and prepare all drawings as requested by the team leader
- Provide soft and hard copies of as directed by the team leader
- Ensure correct filing and storage of all hard and soft copy drawings, including systematic and regular back-up of soft copies.

3. Gender and Development Specialist (National, 6 person-months)

Assist international resettlement and social development specialist and the team leader with implementing and monitoring progress against the gender action plan. Specific tasks include:

- Development a project performance management system that includes links to the gender action plan, loan covenants and PPCR indicators.
- Ensure implementation of gender and social development measures, including the implementation and monitoring of the GAP and community participation plan.
- Work closely with MPWT, the gender working group in MPWT, and local authorities in mainstreaming gender actions into the project design, especially with respect to those outlined in the gender action plan.
- Work with other consulting Packages (II-IV) to ensure gender considerations are incorporated into the documents and results, especially the international NGO recruited for implementing Output 2d & 3b & 3c (package IV)
- Draft the GAP monitoring plan for review and finalization by the Team Leader
- Design and deliver capacity development activities for all relevant agencies, as needed, in the areas of gender and development, coordinating with national and local agencies, institutions, community groups and civil society groups
- Assist the government to implement the project's Gender Action Plan and prepare GAP monitoring reports semi-annually. Work with the NGO to facilitate MPWT's gender working and local women and children consultative committees support in communicating, implementing and monitoring required actions in the GAP to the communities.

Resettlement Specialist—Kampong Chhang (National, 18 person months)

Assist international resettlement and social development specialist with:

- Assist the PMU, PIUs and local authorities on involuntary resettlement safeguards matters, in updating the resettlement plans;
- Assist the PMU to ensure that ADB's involuntary resettlement safeguard categorization remains B;
- Assist in the preparation of updated RPs based on the detailed design based on the results of the DMS and the replacement cost survey;
- Assist in monitoring that the grievances are addressed promptly and properly and that grievance redress mechanism is functioning well;
- Provide necessary training on grievance if needed;
- Assist PMU with ongoing internal monitoring for resettlement based on the approved updated resettlement plans and AH database, including the preparation of a consolidated quarterly internal monitoring report for involuntary resettlement (i.e., quarterly safeguard monitoring report for involuntary resettlement) as an attachment to the quarterly project progress reports;
- Design and deliver capacity development activities for the PMU, as needed, in the area of involuntary resettlement and resettlement plans.
- Assist the PMU in updating the public information booklets and translating them into Khmer.

Resettlement Specialist—Pursat (National, 6 person months)

Assist international resettlement and social development specialist with:

- Assist the PMU, PIUs and local authorities on involuntary resettlement safeguards matters, in updating the resettlement plans;
- Assist the PMU to ensure that ADB's involuntary resettlement safeguard categorization remains B;

- Assist in the preparation of updated RPs based on the detailed design based on the results of the DMS and the replacement cost survey;
- Assist in monitoring that the grievances are addressed promptly and properly and that grievance redress mechanism is functioning well;
- Provide necessary training on grievance if needed;
- Assist PMU with ongoing internal monitoring for resettlement based on the approved updated resettlement plans and AH database, including the preparation of a consolidated quarterly internal monitoring report for involuntary resettlement (i.e., quarterly safeguard monitoring report for involuntary resettlement) as an attachment to the quarterly project progress reports;
- Design and deliver capacity development activities for the PMU, as needed, in the area of involuntary resettlement and resettlement plans.
- Assist the PMU in updating the public information booklets and translating them into Khmer.

Environment Specialist (National, 12 person months)

The national consultant will support the international consultant in carrying out the tasks below:

- Support the PMU in the conduct of the following for proposed Community Mobilization and Environmental Improvements (CMEI) subprojects, to include the: (i) review, finalization and confirmation of the results of the rapid environmental assessment (REA) and categorization; and (ii) basic environmental assessment and preparation of report for compliance with EARF and government requirements.
- Support the PMU in ensuring the incorporation of relevant mitigation measures in the detailed designs, coordinated public consultations and disclosure/information dissemination with the social/resettlement team, and that the government's environmental assessment requirements will not cause delay in the commencement of the construction phase.
- Finalize and update the IEEs and EMPs, as necessary, based on the detailed engineering designs, and ensure consistency, where applicable, with other safeguard plans.
- With the international specialist, finalize remediation and closure plans for all three dumpsites in coordination with the government/Municipality and monitor implementation
- Support the PMU in preparing for procurement by: (i) ensuring that the SPS-compliant EMP is part of the tender documents and civil works contracts; and (ii) establishing and incorporating environmental criteria, scoring and weight in the evaluation of bids in coordination and agreement with the procurement committee.
- Support the PMU in ensuring that contractors prepare their respective contractor's EMP (C-EMP) based on the SPS-compliant EMP and actual site conditions and in evaluating the contractor's EMPs (C-EMPs).
- Support the PMU in preparing for the activation of the grievance redress mechanism, undertaking pre-construction environmental quality monitoring as recommended in the EMP, and reviewing/evaluating Contractor's EMPs to ensure they are fully responsive to the SPS-compliant EMPs.
- Design a tool or system to facilitate effective consultations, monitoring/inspection and reporting by the PMU.
- Coordinate with the MOE and TSA on regulatory compliance issues—for water quality in the the Tonle Sap, noise and dust from construction sites, sanitation in workers campsite, etc.
- Provide training lectures/seminars on the EMP and its implementation.

- During construction and operation, guide the PMU in supervising, monitoring, and reporting EMP implementation.
- Assess the operation/observance of the grievance redress mechanism, and recommend improvements.
- Review the results of the environmental effects monitoring. Recommend investigations and recommend corrective actions, as necessary
- Support the PMU and PIUs in follow up consultations.
- Conduct visits to work sites to provide guidance to, and advise the PIUs and operators on environmental management concerns arising during project construction and operation, respectively, and recommend corrective measures.
- Prepare the necessary status reports for compliance with the conditions set out in approved Royal Government of Cambodia's IEE/IEIA Reports.
- Assist in the preparation of semi-annual environmental monitoring reports (EMRs) and finalize the monthly EMRs for input to the PMU's semi-annual safeguards monitoring report for submission to the ADB.
- Ensure that ADB's environment safeguard categorization remains B. Recommend measures to ensure effective EARF and EMP compliance/ implementation, as necessary.
- Ensure that capacity development in environmental management is carried out through "hands on" training during the implementation of the EARF and EMPs.

Financial Management/Accounting Specialist (National, 60 person months)

The national consultant will support the international consultant in carrying out the tasks below:

- To (i) assist in preparing good quality and timely submission of the monthly, quarterly and annual project financial statements; (ii) ensure that the PMU has taken proper actions to make sure that the auditor's TOR has been approved by the Government and ADB, the selection and the engagement of the auditor are in compliance with the guidelines, auditing arrangements have been made and monitored to support the good quality, complete and the timely submission of audited annual project financial statements, and if the government's audits were either not satisfactory or not applicable and/or not available, ensure that the PMU can allocate adequate funding to appoint private auditor; and (iii) ensure that the PMU provide good quality financial statements and help audit satisfactorily complete their assignment.
- Plan and organize financial management training seminars for the accounting staff in the PMU and two PIUs. The training will cover loan disbursement procedures and financial management practices for ADB financed projects including but not limited to ADB procedures and requirements as described in the Loan and Disbursement Handbook of ADB (2012).
- Install good practices and knowledge for project accounting by providing on job training.
- Identify any issues in the financial management system for project implementation in the PMUs and recommend measures to address the issues identified.
- Advise PIUs on organizational arrangements for effective financial management for project implementation.
- Assist PMU and PIUs to develop procedures for financial accounting, reporting and auditing and loan disbursement for the project.
- Guide and assist PMU to process loan withdrawal applications in accordance with ADB's procedures. Assist the executing agencies to coordinate with the PMUs and communicate with ADB in relation to financial management and loan withdrawal matters.

- Support PMU to prepare documents for loan withdrawal including certificates, advance account reconciliation statement, summary of expenditure sheets, and reporting formats for efficient and effective flow of funds between ADB, government, PMU, PIUs, other relevant local government departments and contractors.
- Assist PIUs to prepare and update continuously financial records, projections, and reports of the project in accordance with procedural requirements of ADB and the government.
- Review current budgeting, accounting, and financial reporting in the PMU and PIUs and Treasury agencies at the provincial and city levels, and recommend changes to improve the efficiency and accuracy of budgeting, accounting, and financial reporting systems.
- Review internal control systems in the PIUs and recommend improvements for internal control systems in the PIUs.
- Assist the PIUs to (i) develop and continuously improve monitoring system on financial statements and audited annual project financial and economic statements; (ii) communicate directly, or facilitates the EA's staff to communicate, with staff of implementing agencies (IAs), ADB resident mission, project team leader and other stakeholders on further actions; (iii) ensure compliance with ADB's financial management and audit requirements by reviewing, validating, monitoring and evaluating project teams' implementation status of audited recommendations; and (iv) act as PIU's focal point for all financial management, reporting and audit matters.

Procurement Specialist (National, 24 person months)

- Assist the PMU in establishing capacity to accomplish all procurement in accordance with the Royal Government of Cambodia and ADB policies and procedures, including the identification of responsibilities, requirements for approvals, oversight, documentation and reporting for all outputs, including CMEI.
- Support the PMU in the procurement of civil works, equipment purchase and installation, consulting services, and other contracts to implement the project for all outputs, including CMEI
- Assist the PMU in preparing the necessary bid documents required for local and international competitive bidding. The bid documents will include instruction to bidders; general and special conditions of contract, technical specifications, bills of quantities, tender drawings, and forms of contract. The specification will be detailed and use locally applicable standards as well as follow ADB procedures. The bill of quantities will be based on detailed calculations of quantities and costs estimates will be based on market prices. This shall be for all outputs, including CMEI
- Assist the PMU in preparing bid documents for design and contracts including input data and status, output requirements, technical specifications, bills of quantities, tender drawings for all outputs including CMEI.
- Assist the PMU in evaluation of bid proposals and preparing bid evaluation report, contract negotiations with the successful bidders and preparing contract documents for all outputs, including CMEI.
- Provide inputs for training and capacity development; coordinate with other team specialists to carry out the training program, and provide support to the capacity development activities for PMU, PIU and NGO staff.

Municipal Finance/Tariff/Economic Specialist (National, 24 person months)

- Assist in reviewing current institutional arrangements for the provision of solid waste management, flood protection, drainage and sanitation services.
- Assist in reviewing contracts currently ongoing for the different operating entities in operation of urban services with duration, incentives, due dates and termination conditions.
- Assist in identifying issues and problems and propose tariff structure in consideration of the affordable limits of target beneficiaries, operation & maintenance cost, economic efficiency, and sustainability.
- Collaborate with the social development/resettlement specialist to develop a willingness to pay survey for solid waste collection and management and drainage services component.
- Review the financial performance of service delivery and capacity of implementing agencies regarding cost recovery, borrowing capacity, collection of fees and taxes, accounts receivable, and subsidies, as appropriate.
- Assist in developing a tariff setting and subsidy methodology designed to achieve financial sustainability of the related urban services.
- Assist in monitoring project financial performance of the investments and the sector, considering the proposed financial structure and tariff setting methodology.
- Assist in drafting recommendations regarding an effective and appropriate regulatory mechanism to ensure requisite service quality and tariffs.
- Collaborate with social development/resettlement specialist to assess willingness to pay and affordability of the targeted population.
- Assist in developing a set of performance indicators that can be verified and monitored and draw up a project performance management system.
- Assist in determining synergies between the urban infrastructure and other municipal services, and the economic benefits of urban infrastructure and environmental improvements.

Human Resource/Training Coordinator (National, 24 person months)

The national consultant will support the international consultant in carrying out the tasks below:

- Carry out initial training needs assessment and participant identification in PMU and in the project towns to cover public infrastructure planning and implementation, operation and maintenance, financial management and cost recovery, procurement, social and environmental safeguards, monitoring, reporting and evaluation, solid waste management, environmental management and climate resilience.
- Select a representative set of participants for the training program, taking account of the need to focus on implementation staff, community leaders, social workers, subsequent operators and maintainers of facilities provided and general project coordination and implementation, but to also involve mass organizations, ward and district personnel plus relevant officials at city departmental levels.
- Prepare training course designs covering all the aspects mentioned above.
- Provide advice to PIUs on support management, including general administration, logistics and back-up services for the training courses.
- In collaboration with PIUs, undertake primary responsibility for administering the training functions, running the sessions and ensuring that all management support requirements are clearly communicated well in advance to respective PMUs and the other offices involved.
- Carry out course evaluations, customized for the different target groups making up the set of participant, and involving a mix of questionnaires and interviews.

- Identify the sources for potential future trainers with the capacity for undertaking subsequent long term capacity-building and suggest the level of additional training such trainers may require.
- Make recommendations for the type of operational and training manuals that may be required for implementing long term capacity-building programs, with an outline of the contents and the resources required for drafting such manuals.
- Based on the findings of the pilot activities, make outline recommendations for the form and content of a long term program and identify the options for enhanced sustainability and institutionalization of the proposed program.
- Engage local university and / or vocational training institute and / or any other local education institution for long term engagement on skill and capacity building.

4. **Package II: Climate Change Adaptation in Urban Development**

(i) Description

1. The overall objective of the consulting services is to strengthen resilience to climate change in the urban sector within and around the Tonle Sap Basin. Assistance will be provided to the six Tonle Sap provinces—Pursat, Kampong Chhnang, Kampong Thom, Banteay Meanchey, Siem Reap and Battambang, and to the Municipal Board of Governors of Pursat and Kampong Chhnang. Key objectives of the assistance are:

- To develop a strategic plan for climate change adaptation in the urban development sector in and in the Tonle Sap Basin.
- To quantify potential climate change impacts in all urban areas in the Tonle Sap Basin and to identify appropriate planning and design measures to address these impacts (as requested by the six provincial governments around the Tonle Sap).
- To revise building codes within all six Tonle Sap provinces to include latrine construction and standards, amongst others.
- To encourage effective debate on climate change adaptation.
- To ensure coordination with the PMIS consultant team and Package IV NGO teams in ensuring additional climate change measures are incorporated into the design of infrastructure interventions and community awareness programs, household sanitation and small-scale developments (Package II Team Leader).

1. The scope of the consulting services involves three main components: (i) provision of technical assistance to assist government prepare a strategic plan for climate change adaptation in the urban sector in and around the Tonle Sap; (ii) quantification of potential climate change impacts and identification of measures to address these impacts; (iii) capacity development and training to incorporate climate change adaptation and disaster risk reduction management aspects into the national building code, and (iv) to provide knowledge for an effective debate on climate change issues and resilience. One package is proposed for the consulting services.

Key tasks are:

- Assist in the development of the strategic plan for climate change adaptation focussing on the urban sector in the provinces in and around the Tonle Sap.
- Undertake a targeted analysis of tangible impacts of climate change in urban areas of the Tonle Sap Basin.
- Identify and quantify the potential effects of climate change on key towns in Tonle Sap Basin and assess the impact on the design of infrastructure to address these.
- Review the sustainability and capacity of current engineering designs, standards and guidelines in use by the various ministries involved in planning and infrastructure provision in view of climate change.
- Provide a comprehensive guide to the incorporation of climate change measures into spatial planning and the planning and design of infrastructure in the urban areas.
- Link the work to other ongoing initiatives including the national programme under the National Adaptation Programme of Action to climate change (NAPA), the Clean Cities programme, and projects supported by development partners, including work under

the ADB TA for Mainstreaming Climate Change Resilience into Development Planning in Cambodia.

- Review the National Building Code and those in use with all Tonle Sap provinces, and propose measures for the inclusion of climate change adaptation.
- Draft regulations for latrine construction and appropriate standards.
- Incorporation of the above regulations into the building codes of the six Ton Sap provinces.
- Assist in the preparation of climate resilient community actions plans in Kampong Chhnang and Pursat.
- Establish and populate data base on good practices on climate change adaptation and building resilience.
- Conduct a series of workshops on climate change adaptation for key stakeholders.
- Ensure coordination and provide information (and feedback) to the PMIS consultant team and to the Package IV NGO teams in ensuring additional climate change measures are incorporated into the design of infrastructure interventions and community awareness programs, household sanitation and small-scale developments.

(ii) Staffing and qualifications:

Person & Task	Person-Months	Minimum Qualifications	Minimum Work Experience
<i>International Consultants</i>			
Climate Change/Urban Planner & Team Leader	6	Master's degree in civil engineering, urban planning, architecture, environmental science or a related subject	10 years' experience of urban development projects, strategic urban planning, and the design of building codes and regulations, including work in climate change resilience and/or disaster risk reduction. At least 3 years of which should be as team leader in climate change resilience or disaster risk reduction projects, including the preparation of strategic plans for climate change adaptation. Experience in south east Asia and on urban development projects financed by multilateral development funding agencies is essential.
TOTAL	6	Person Months of International Consultants	

<i>National Consultants</i>			
Civil Engineer	3	Master's degree in civil or municipal engineering or a related discipline	8 years' experience of urban infrastructure and vertical structure aspects of building codes, and climate change resilience and disaster risk reduction. Experience on urban development projects funded by multilateral development funding agencies is desirable. Fluency in written and spoken English is required.
Environment/ Urban Climate Change Expert	4	Degree in environmental studies, meteorology or a related subject	5 years' experience of climate change and disaster risk reduction in the developed and developing world, including the preparation of strategic plans for climate change adaptation. Experience in south east Asia and on urban development projects financed by multilateral development funding agencies is desirable. Fluency in written and spoken English is required.
TOTAL	7	Person Months of National Consultants	
GRAND TOTAL	13	Person Months of International and National Consultants	

(iii) Detailed Terms of Reference

Urban Development Specialist/Team Leader (International, 6 person months)

- Lead the team of individual consultants and ensure that key tasks identified on previous page are delivered through the assignment.
- Carry out a review of policies, standards and manuals to review current provision for climate change in infrastructure planning and provision, and urban development generally
- Identify and quantify the potential effects of climate change on key towns in Tonle Sap Basin and assess the impact on the design of infrastructure to address these.
- Review and assessment of sanitation standards and the building code
- Review the specific needs of sanitation requirement for men and women
- Review the sustainability and capacity of current engineering designs, standards and guidelines in use by the various ministries involved in planning and infrastructure provision in view of climate change.
- Design and undertake a programme of consultations with all Tonle Sap Provinces and Municipalities
- Propose revisions to building code to include latrine construction and standards
- Provide a comprehensive guide to the incorporation of climate change measures into spatial planning and the planning and design of infrastructure in the urban areas.
- Prepare a Draft Plan for Climate Change Adaptation in Urban Areas
- Review comments and prepare Final Plan for Climate Change Adaptation in Urban Areas around the Tonle Sap
- Ensure coordination and provide information (and feedback) to the PMIS consultant team and to the Package IV NGO teams in ensuring additional climate change measures are incorporated into the design of infrastructure interventions and community awareness programs, household sanitation and small-scale developments

Civil Engineer (National, 3 person months)

Assist the Team leader to

- Carry out a review of policies, standards and manuals to review current provision for climate change in infrastructure planning and provision, and urban development generally
- Review and assessment of sanitation standards and the building code
- Review the specific needs of sanitation requirements for men and women
- Review the sustainability and capacity of current engineering designs, standards and guidelines in use by the various ministries involved in planning and infrastructure provision in view of climate change.
- Provide a comprehensive guide to the incorporation of climate change measures into spatial planning and the planning and design of infrastructure in the urban areas.
- Design and undertake a programme of consultations with all Tonle Sap Provinces and Municipalities
- Propose revisions to building code to include latrine construction and standards
- Prepare a Draft Plan for Climate Change Adaptation in Urban Areas
- Review comments and prepare Final Plan for Climate Change Adaptation in Urban Areas
- Coordinate and provide information (and feedback) to the PMIS consultant team and to the Package IV NGO teams in ensuring additional climate change measures are incorporated

into the design of infrastructure interventions and community awareness programs, household sanitation and small-scale developments

Environment/Urban Climate Change Expert (National, 4 person months)

- Carry out review and update of climate change policy and documentation
- Establish and populate data base on good practises on climate change adaptation and building resilience.
- Review the sustainability and capacity of current engineering designs, standards and guidelines in use by the various ministries involved in planning and infrastructure provision in view of climate change.
- Provide a comprehensive guide to the incorporation of climate change measures into spatial planning and the planning and design of infrastructure in the urban areas.
- Conduct a series of workshops on climate change adaptation for key stakeholders.
- Assist Team Leader to Prepare a Draft Plan for Climate Change Adaptation in Urban Areas
- Prepare climate resilient community actions plans.
- Coordinate and provide information (and feedback) to the PMIS consultant team and to the Package IV NGO teams in ensuring additional climate change measures are incorporated into the design of infrastructure interventions and community awareness programs, household sanitation and small-scale developments

5. Package III: Sector Strengthening and Capacity Development

(i) Description

1. By loan negotiations, the Project Implementation Units in Kampong Chhnang and Pursat will be established for the project. The estimated timing for these units to be converted into Urban Services Units (USUs)—special operating agencies in late 2017. Since the establishment of the USUs is essential for operations and maintenance, a package of institutional specialists will be recruited and mobilized in early 2015 to help develop a roadmap and details for such USUs. The USUs support the Government's national program for decentralized provision of urban services.

2. The goal of the proposed assistance to help the Ministry of Economy and Finance, the Ministry of Public Works and Transport (MPWT) and its provincial departments in Kampong Chhnang and Pursat, and the Municipalities of Kampong Chhnang and Pursat establish USUs. The objectives of the assistance are:

- To prepare all documentation required for the establishment of the USUs, based on the arrangements for the Siem Reap wastewater management (including an inter-ministerial prakas by MPWT and MEF).
- To define their mandates, roles and responsibilities.
- To prepare a road map and timetable for their establishment, and the staged assumptions of functions.
- To prepare the organizational and staffing structure for each USU, including its reporting arrangements
- To prepare detailed job descriptions for each proposed staff member in the USU and for its governing board (or equivalent).

(ii) Staffing and Qualifications

Person & Task	Person-Months	Minimum Qualifications	Minimum Work Experience
<i>International Consultants</i>			
Institutional Specialist	1.5	Master's degree in governance, institutional development, urban development, another related discipline or an equivalent professional qualification	At least 8 of years' experience should have been in developing countries, including Southeast Asia. Work experience in Cambodia or similar developing countries is an required. Experience in urban development and/or governance assignments funded by multilateral development financing institutions. Knowledge of institutional arrangement and urban development unit is GMS or in SEA. Experience in carrying out institutional assessments and establishing new units or agencies involved in the provision, operations and maintenance of urban services and infrastructure at the local level set within a decentralized context.

Person & Task	Person-Months	Minimum Qualifications	Minimum Work Experience
Local administration specialist	1.0	University degree in political science or related discipline	At least 8 of years' experience working on local administration reforms in developing countries, including Southeast Asia, with experience working in Cambodia. Knowledge and experience in establishing new units or agencies involved in the provision, operations and maintenance of urban services and infrastructure at the local level set within a decentralized context.
Municipal Finance / Accounting Specialist	1.0	University degree in accounting	At least 8 years of experience in designing and implementing accounting systems and developing simple spreadsheet tariff model. Work experience in Cambodia or similar developing countries is required.
National			
Legal/Institutional Specialist	2	Master's degree in human resource management, governance, or another related institutional development discipline or an equivalent professional qualification.	At least 5 years or more of working experience in consultancy assignments and/or at senior level within national or local government on the institutional and legal aspects of urban development and service delivery. Experience of urban development or related assignments funded by multilateral development financing institutions related to the decentralized provision of urban services, their operation and maintenance, is essential. Fluency in written and spoken English is required.

(iii) Detailed Terms of Reference

3. The consulting team will receive its final payment based on the EA and ADB's review of satisfactory transition of materials, information and support from this team to the institutional specialists on the PMIS.

6. Institutional Specialist / Team Leader (International, 1.5 person months)

4. The consultant will assist the governments establish USUs for the project (initially in PDPWT with a longer term vision of establishment in Kampong Chhnang and Pursat municipalities). The specialist shall work closely with each PIU, catering the establishment of USU to each town needs and situation.

Specific tasks include:

- Consolidate inputs from team members into two concrete proposals/roadmaps for the government and ADB's consideration by 1 December 2015
- Each separate roadmap should be developed in consultation with stakeholders and finalized after another round of discussions with stakeholders. Each shall include (at minimum) a short and long-term vision, time-bound implementation plan, human resources development plan (disaggregated by sex), recommended environmental sanitation fee and structure, and draft prakas for each USU – one separate for Pursat and the other for Kampong Chhnang.
- The proposal shall be translated in Khmer, and should ensure that each USU has at least 20% women on its staff.

- Review and refine the mandate for the USUs, and detail its roles and functions and reporting arrangements in consultation with the local authorities.
- Prepare a step-by-step implementation plan with timeline for the establishment of the USUs and their assumption of responsibilities in accordance with the project implementation schedule.
- Refine the organizational structure of USUs, including the agreement on the composition of their Board of Governors/Directors or the like.
- Outline the organizational and staffing structure of each USU.
- Propose measures to charge for urban services, and outline the arrangements for the collection and recording of fees and charges from beneficiaries.
- Prepare draft Prakas for the establishment of the USUs based on the establishment and examples of special operating agencies in Cambodia (urban and/health).
- Prepare necessary documents and advise on actions required to establish the USUs.
- Draft detailed job descriptions for all proposed staff members to include their roles and responsibilities, reporting arrangements, qualifications and experience required.
- Prepare a monitoring mechanism to document the progress for USU pilots.
- Other related tasks as assigned.

Local administration specialist (International, 1 person-month)

- Review and assess the impact of the ongoing decentralization and deconcentration (D&D) initiative (Organic Law) on delivery of decentralized urban services,
- Work with the institutional specialist to ensure the institutional recommendations for establishing USUs are in-line with the Government's D&D process and ADB's efforts in the process. Make recommendations (with solutions), as needed.
- Work with the institutional specialist and municipal finance/accounting specialist to ensure that the special accounts and levy of an environment sanitation fee are aligned with the D&D process. Make recommendations (with solutions), as needed.
- Work with the institutional specialist and municipal finance/accounting specialist to ensure that the vision of USU of becoming an autonomous utility is feasibility within the overall D&D framework.
- Work with the institutional specialist and municipal finance/accounting specialist to develop the necessary regulations for governing USU and specialist accounts.

Municipal Finance / Accounting Specialist (International, 1 person-month)

- Review accounting system and procedures as they affect the recording and reporting of SWM and drainage revenues and expenses.
- Recommend measures to ensure proper and adequate recording and reporting of SWM and drainage revenue and expenses, including proper revenue and expenses classification and establishment of cost centers (e.g. preliminary treatment, pump station, waste collection, transfer station, landfill, etc.) to facilitate meaningful analysis of financial data
- Develop a simple Excel spreadsheet model to determine adequate level of SWM and drainage fees under different options of cost recovery (O&M only, O&M plus partial depreciation of equipment, O&M plus full depreciation of equipment, etc.)
- Prepare a proposal on the environmental sanitation fee and structure for each Kampong Chhnang and Pursat, with consideration for the poorest households (i.e., IDpoor 1 and 2)
- Determine the current level of SWM and drainage fee under different options of cost recovery.

- Train the accounts staff in the use of the SWM and drainage fee model

Institutional/Legal Specialist (National, 2 person months)

5. The consultant will assist the team leader on the tasks needed to establish USUs in Kampong Chhnang and Pursat municipalities. Specific responsibilities include:

- Assist in the international institutional specialist perform the above tasks.
- Prepare drafts in Khmer and English of all legal documents needed to establish the USUs.
- Propose legal remedies and draft necessary documentation to enforce the collection of fees and charges from beneficiaries of urban services.
- Support the team to prepare necessary documents and advise on actions required to establish the USUs.

7. Package IV: NGO Support for CMEI

A. Introduction

1. The project management unit for the proposed Integrated Urban Environmental Management in the Tonle Sap Basin (the Project) will recruit an international nongovernment organization (NGO) in accordance with ADB *Guidelines for the Use of Consultants* (2013, as amended from time to time). The NGO will work in partnership with the Government, ADB, communities and project management and implementation consultation.

B. Project Background and Description

2. The Project will contribute to the increased economic growth and environmental protection in towns around the Tonle Sap. It responds to the need of the municipal governments for integrated urban environmental management in urban areas around the Tonle Sap. The project will improve urban services and climate change resilience in Kampong Chhnang and Pursat municipalities through urban area environmental improvements; community mobilization and environmental improvements; strengthened sector coordination and operations; and strengthened capacity for project implementation, and operations and maintenance (O&M). The project contributes to the Tonle Sap Urban Areas Development Framework (TSUADF) and Kampong Chhnang and Pursat urban development strategies to 2030.

3. The Project includes five outputs:

- a. Output 1: Kampong Chhnang Urban Environmental Improvements,
- b. Output 2: Pursat Urban Environmental Improvements,
- c. Output 3: Community Mobilization and Environmental Improvements,
- d. Output 4: Strengthened Sector Coordination and Operations, and
- e. Output 5: Strengthened Capacity for Project Implementation, and Operation and Maintenance (O&M).

4. The Project will provide investment for environmental improvements to the municipalities of Pursat, and Kampong Chhnang. Both play an important role as service centers for surrounding agriculture and value chain development. It will help support implementation of the Tonle Sap Urban Areas Development Framework (TSUADF) to guide future urban development in Serei Saophoan, Siem Reap, Stueng Saen, Battambang, Pursat, and Kampong Chhnang. The project will be in line with an urban development strategy for Pursat and Kampong Chhnang (for approval). The project is estimated at \$52.7 million, with a proposed \$37.0 million loan to be financed from ADB's Asian Development Fund resources and cofinancing from the Strategic Climate Fund (SCF) in the amount of \$5.0 million grant and \$5.0 million loan. The remaining \$5.5 million is estimated government and community counterpart financing.

C. Scope of Assignment

5. The assignment includes development and implementation of project awareness activities, implementation of project Output 3, and support in facilitating community understanding, support and partnership in the project.

6. Output 3, Community Mobilization and Environmental Improvements (CMEI), specifically aims to address the climate change and environmental needs of the urban poor and vulnerable, including poor, vulnerable and ethnic Cham and Vietnamese in Kampong Chhnang and Pursat—

making the project more inclusive by extending benefits from large infrastructure investments. It includes improved household sanitation for IDPoor 1 and 2 in the current municipality area; climate change and hygiene awareness and action; and community small-scale infrastructure improvements in pre-identified poor and vulnerable areas in each municipality. Small-scale infrastructure improvements will be prioritized by the communities and will be financed by the project (80%), national government (10%), and community (10%), net of taxes. The output will help extend project benefits to the poor and vulnerable groups, including poor, vulnerable and ethnic Cham and Vietnamese. It will be implemented in partnership with an international nongovernmental organization (NGO).

7. The CMEI will help translate Project principles into community action. This includes support for community planning and prioritization, and provision of community-driven climate-resilient urban environmental infrastructure. The involvement of local communities in planning, decision-making and supervision of the works will encourage local solutions and greater accountability of the services delivered. It will help to create ownership and provide benefits to those often marginalized and vulnerable.

8. The output includes the following detailed sub-outputs and activities:

- a. Household sanitation grants for IDPoor 1 and IDPoor 2 households within the defined municipality area). Any proposal that triggers safeguard categorization of A or B will not be eligible. This sub-output will be 100% financed by the project (or as otherwise agreed to in advance with ADB and the Government);
- b. Information, Education and Communication (IEC) activities to promote project awareness hygiene awareness, initiate behavioural change and disseminate climate change information to men and women. The project area for the IEC efforts will include sangkats in the existing municipal boundary and adjacent urban sangkats. This sub-output will be 100% financed by the project (or as otherwise agreed to in advance with ADB and the Government). It will generate information and opportunities for knowledge management to further strengthen the knowledge management aspects of the project; and,
- c. Small-scale infrastructure improvements in sangkats that are pre-identified by the project survey as being poor and vulnerable to poor urban environmental conditions (e.g., community sanitation, improved drainage with access roads, or community collection points for solid waste management). These components will connect directly with Output 1 and 2 investments to ensure that local communities are also direct beneficiaries. Communities residing in the urban sangkats of the existing municipal boundary area will be eligible for assistance. Proposal must be ADB safeguard categorization C for involuntary resettlement and environment and must benefit the poor, vulnerable and/or ethnic Cham or Vietnamese communities in order for it to qualify and be eligible for support. This sub-output will be 80% financed by the project, 10% by the government, and 10% by the community, net of taxes. In case the communities are unable to provide the required cash, the government may fill the shortfall;

9. The sangkats that have been pre-identified for inclusion in the small-scale infrastructure improvements are listed in the Table below. Additional communities during implementation may be identified based on an in-depth needs assessment. The assessment and proposal will form part of the terms of reference of an international NGO, with experience in Cambodia,

urban/environment/sanitation and community development. The NGO will be contracted for the implementation of this output.

8. Table: Pre-identified Sangkhats for Output 3 (iii)

Municipality	Village	Sangkat	No of Households (No. of People)	Pre-identified Need
Kampong Chhnang Municipality (Total 7,928 households or 40,360 people. Covers 26 villages in 4 sangkats)	Chong Kaoh	Phsar Chhnang	352 (1,862 people)	• Presence of vulnerable group: ethnic Cham • Top environmental issue identified by SES respondents is flooding, which coincides with the objectives of Output 1 of the Project. • Had specific request for small-scale infrastructure during project preparatory consultations (e.g., access road to mosque that they can use even during flood season) that is linked to Output 1 of the Project
	Kandal	Phsar Chhnang	• 211 (1,061 people) • According to Vietnamese: 685 HHs including them (approx. 3,425 people)	• Presence of highly vulnerable group -- ethnic Vietnamese⁵⁰ • Relatively high percentage of poor HHs (36%) identified by the SES during project preparation.
	Samroang	Phsar Chhnang	419 (2,188 people)	Highest percentage of poor among villages covered in the SES (38% of respondents are poor)
Pursat Municipality (Total 13,314 households or 63,773 people. Covers 66 villages in 7 sangkats)	Kbal Hong	Pteah Prey	220 (1,013 people)	• Highest percentage of poor among villages covered in the SES (45% of respondents are poor) • Top environmental issue identified by SES respondents is air pollution linked with garbage burning, which coincides with the objectives of Output 2 of the Project.
	Kaoh	Lolork Sar	219 (980 people)	Relatively high percentage of poor HHs (36%) identified
	Tuol Mkak	Roleap	301 (1,432 people)	• Relatively high percentage of poor HHs (27%) identified • Top environmental issue identified by SES Respondents is flooding, which coincides with the objectives of Output 2 of the Project.

Note: Based on existing municipal boundaries for Kampong Chhnang and Pursat. Source: Asian Development Bank and Executing Agency.

D. Time Schedule and Resources

10. The Project implementation period is seven years and the international NGO assignment is for six years months. However, interested organizations should indicate how long they will

⁵⁰ ADB's Tonle Sap Basin Strategy (2005) identifies the Vietnamese and Muslim Cham as the ethnic minorities present in the region. It further states that ethnic minorities are disadvantaged due to insufficient representation at management and legislative levels; with the Vietnamese floating village residents experiencing additional deprivation due their language barriers, their classification as immigrants, and their lack of property rights. PPTA activities including FGDs have supported this information.

need in each position to work to achieve the successful completion of the assignment during the project duration. The NGO will be funded under ADB's SCF grant.

E. Expertise Required

11. The NGO recruited will work with the Government in developing and delivering project, hygiene and environmental sanitation awareness information. It will assist in implementing Output 3 of the project, specifically community mobilization and development activities, ranking of community priorities in urban environmental improvements, and preparation of a simplified feasibility study in coordination with the project implementation unit (PIU) and the project management and implementation support (PMIS) consultant team. The PIU and PMIS consultants (together with PMU) will be responsible for seeking clearance from the EA and ADB on the feasibility studies for small-scale community infrastructure, preparing bid documents and evaluation reports, monitoring the contracts, and supervising the construction. The NGO will facilitate flow of project information, mobilize and the community, and help the government generate project support and reach resolution on any grievances in a prompt manner. The NGO will work as a project partner with the Government, ADB and consultants.

12. The interested NGO will supply and assign coordination personal and national teams to the PIU in Kampong Chhnang and Pursat either from its own resources or in partnership with a specialized national NGO. Interested NGOs should determine the number and nature of experts they will require to achieve the objectives of the contract. Each NGO team placed in Kampong Chhnang and Pursat shall include expertise in climate change, technical/engineering, gender, hygiene, and community development. Each team in each province shall comprise of at least 30% women. The technical proposal shall include composition of the proposed NGO team for each province and the comparative advantage it has in working in each province, especially within the local administrative and community structures. For instance, ongoing or completed projects with the local government (e.g., PDPWT or municipality), and/or expertise or experience working with any of the vulnerable groups identified in the table, and/or synergies with other development partner or NGO projects in the municipality. Submitted proposals will be evaluated against these specific requirements and criteria.

13. ADB requires the following two full-time key experts:

- a. A community development manager/ team leader, and
- b. A project administer, and

14. The quality of the facilitation and mobilization skills of the NGO teams will have a significant influence on how beneficiary householders and communities are able to internalize the value of collective action for long-term maintenance of household sanitation and small-scale infrastructure environmental improvements. The NGO teams shall generate self-confidence and team building amongst community members for collective benefit. NGO teams will act as catalyst and facilitator to beneficiary households and communities. The NGO teams will work closely and in coordination with the PIU and the PMIS in day-to-day project implementation activities. They will provide specific inputs, including information on project progress for consolidation and inclusion into the overall progress report. The national gender and development specialist from the PMIS consultant team (Package I) will also assist the NGO as needed in the area of gender mainstreaming.

15. The NGO Team in each province will add value by facilitating the following community awareness tasks:

- a. community mobilization to enhance the quality of project implementation;

- b. awareness raising on the importance of climate change, health and hygiene in urban areas; and
- c. awareness raising to enhance the quality of improved hygiene leading to the improved health of communities (i.e., behavior-change efforts will focus on (a) stopping open defecation, encouraging proper use and maintenance of household latrines, and promoting personal hygiene practices such as hand washing, clean bodies, and menstrual hygiene management).

16. The NGO team shall have experience in participatory rural appraisal methodology as communities will be fully involved in (i) the conduct of small-scale infrastructure feasibility studies; and (ii) prioritization and selection of small-scale urban environmental improvements based on informed choice. These informed choices will take into consideration: (i) beneficiary needs; (ii) cost effectiveness; (iii) social equity; (iv) land acquisition and environmental issues; and (v) ease and costs of operation and maintenance. Small-scale improvements shall correspond to the needs and wishes of the community and household, with a realistic assessment of the beneficiary's abilities to finance and manage the facilities.

17. The PMU will consult with the PIU Manager and Deputy Project Manager in Kampong Chhnang and Pursat during recruitment of the NGO. The NGO teams will work with assigned PMU and PIU staff to help ensure successful implementation of the output. The PIUs will verify the performance of NGO staff prior to progress payments made by the PMU. The PMU will be responsible for the overall recruitment and management of the international NGO.

18. The Community Development Manager/Team Leader will be an individual with regional and country-specific experience who shall have the following minimum qualifications:

- a. A minimum of 8 years' experience overseeing and implementing community mobilization projects in urban development, sanitation and hygiene; preference will be given to candidates with previous demonstrated experience in climate change activities working around the Tonle Sap in Cambodia.
- b. Background in anthropological or sociological training to be able to understand the vulnerability context of the ethnic people in Kampong Chhnang and Pursat and their livelihood dependence on the Tonle Sap (e.g., ethnic Cham and Vietnamese);
- c. Management experience of at least 3 years, with demonstrated ability to supervise a team and project staff;
- d. Familiarity with community development, sanitation and hygiene promotion and gender mainstreaming of projects in communities;
- e. Ability to work with multiple stakeholders, including local governments, communities, civil society organizations, government, private sector and ADB;
- f. Excellent English language skills, including ability to produce regular high quality written reports, power-point presentations, and project updates;
- g. Responsible for developing and implementing a specific monitoring and evaluation system for CMEI output and activities.
- h. The Team Leader will be responsible for providing progress updates to the PMU for inclusion into the quarterly project progress reports, project liquidation of advances with supporting documentation, including the coordination and timely submission of feasibility reports and workshop and training records (disaggregated by sex and with specific outcomes listed).

19. The Project Administrator will be in charge of all administrative responsibilities of the NGO's assignment for the project, and will ensure all documentation required by the PMU and

ADB is kept and is in accordance with ADB's procedures. This includes both financial documentation and administrative matters. The Project Administrator will be an individual with the following minimum qualifications:

- a. A minimum of 3 years' experience in accounting and record keeping for development projects;
- b. An understanding of the challenges of recordkeeping at the subnational governments and strategies for adapting to local situations while keeping within ADB regulations. This will be particularly important, given the proposed cost-sharing proposal for small-scale infrastructure investments;
- c. Have a willingness to review other ADB projects in Cambodia and in the region on how cost-sharing arrangements have been managed following good governance principles.
- d. Excellent computer skills (MS WORD and EXCEL);
- e. Strong English language skills, with demonstrated ability to prepare financial reports;
- f. Familiarity with ADB or World Bank regulations is an advantage.

20. In addition to the above required key experts, the proposing NGO should also include in their technical proposal, in the Personnel Workplan and in their financial proposal, all other "non-key experts" required in accordance with their proposed Approach and Methodology. The proposing NGO shall also determine and indicate the number of person-months for which key or non-key expert will be required.

21. All experts engaged under the contract, whether key or non-key experts, must be citizens of one of the ADB member countries.

F. Supervision

22. Interested NGOs should indicate the management structure proposed of the team. The Community Development Manager/Team Leader will be under the supervision of the PMU Project Director (or designated to the PMU project manager). The Community Development Manager/Team Leader will keep the supervisor informed regularly by email of the progress in implementation of this assignment, identify any issues or possible delays to the accomplishment of this assignment, and propose and implement solutions to address such issues or possible delays. The Community Development Manager/Team Leader will support the supervisor in promoting and sharing information about the assignment and its implementation through preparation of presentations, progress reports, or data information.

G. Other Requirements

23. By the end of month 2 of the assignment, the Team Leader will submit an inception report, detailing the progress of the assignment in relation to the overall project. The assignment should not be implemented in a vacuum; instead, it should be closely coordinated and timed with the overall project implementation. The inception report should indicate any proposed changes to the implementing arrangements, additional communities in the municipality for support, or changed circumstances affecting the project. It should also include a format / outline for future quarterly and annual cumulative assignment progress reports, with an agreed timeline for submission to the PMU and ADB.

24. The Team Leader shall also include in the inception report a proposed monitoring and evaluation system specifically for CMEI output and activities. Indicators and data shall be

disaggregated by sex and a summary shall be provided to the PMU for inclusion in each quarterly project progress report. A report with approach and methodology shall be provided in the technical proposal. It shall be confirmed with submission of the inception report, a progress update at project mid-term, and a final report at project end.

25. The draft final report is due 3 months before completion of the assignment in a format agreed to with the PMU Project Director and ADB in advance. The final report will incorporate comments from the Government and ADB, and shall be submitted in time for it to be attached to the project completion report, submitted by the Government to ADB.

H. Facilities to be provided by ADB and other Administrative Matters

26. The NGO team members will be field-based, highly mobile and will visit the different communities along the project sites in accordance with the specific needs. The NGO team members will establish an office in each province for daily activities. The Team Leader and Project Administrator will be required to work closely with the PMU Project Director. They shall be based in Phnom Penh and may work from the interested NGO office.

I. Travel and Accommodation

27. The NGO team members are expected to arrange and pay their own accommodation and travel as agreed to in advance with the PMU project director, in consultation with ADB. Reimbursement will be subject to and in line with ADB's terms and conditions of the contract.

J. Preparation of the Proposal

28. Interested NGOs are requested to prepare a detailed description of how they propose to deliver on the specific outputs of the contract in the section of their proposal called "Approach and Methodology." In this narrative, bidding NGOs shall be explicit in explaining **how** they will achieve the outputs, and include any information on their existing activities upon which they may eventually build, as well as the detail of what staff will comprise the NGO teams. The suggested page limit of this section is 20 pages. It is strongly recommended that the interested NGO meet and discuss the assignment with the PMU and undertake a reconnaissance visit to Kampong Chhnang and Pursat; any such meetings or visits should be reflected in the proposal.

29. Interested NGOs **must also describe** their experience in working with the Tonle Sap communities, in particular the Vietnamese, the Cham, the floating communities and the poor in Kampong Chhnang and Pursat. Experience working with the same groups in other Tonle Sap provinces will also be considered. Interested NGOs shall effectively communicate the vulnerable context, specific considerations (if any) and the importance of environmental and hygiene awareness activities amongst these groups.

30. Proposals will be evaluated based on the approach to meet the above consultancy requirements, desired NGO team expertise, necessary tasks and ensure coordination with the other consulting packages, especially Package I (project management and implementation support consultants) and Package II (climate change and urban development).¹⁶⁷ One curriculum vitae (CV) **only** must be submitted for each key and non-key expert included in the proposal. Only the CVs of key experts (community development manager/team leader and the project administrator) will be scored as part of the technical evaluation of proposals. The CVs of non-key experts will not be scored; however, the EA and ADB will review and individually approve/reject each CV for each position in the proposal.

31. All positions under the contract, key as much as non-key experts, **must** be included and budgeted for in the financial proposal in accordance with the person-months allocation required for each as defined by the proposing NGO.

II. External Monitoring Organization (to be recruited by the Government)

1. The IRC will recruit an external monitoring organization (EMO) to conduct external monitoring and evaluation of voluntary land donation, involuntary land acquisition and resettlement for the Project, focusing on the social impacts of the Project and whether affected persons (APs) are able to restore, and improve, compared to their pre-project living standards, incomes and productive capacity. The EMO will be a qualified expert/ consulting firm with recognized experience in Cambodia; the terms of reference (TOR) for the EMO and the EMO qualifications must be acceptable to both IRC and the ADB.

2. The EMO will be appointed prior to or during detailed measurements survey (DMS) and will continue until resettlement objectives are met. The implementing agency (IA) and Provincial Resettlement Sub-committee (PRSC) will ensure full cooperation of the relevant project stakeholders with the EMO. The EMO will participate in and monitor the DMS and other fieldwork, all consultations, payment of compensation and, as required, relocation and income restoration activities. All data collected during DMS and socio-economic surveys will be made available to the EMO, as will all signed voluntary contribution forms; the EMO will also conduct its own periodic surveys. Monitoring reports will be uploaded on ADB's website.

- (i) The key indicators for external monitoring and evaluation include chapters on:
 - compliance with Project policies and procedures;
 - the level of satisfaction of APs with implementation of RPs including compensation and assistance levels and grievance procedures;
 - the level of income and livelihood restoration of APs;
 - income restoration strategy (that lists all measures, and assessment of the extent that explanation of the measures to APs and eligibility criteria).
- (ii) The EMO will consistently and regularly monitor all activities related to the updating of the resettlement plans, consultations, payment of compensation and, as required, relocation and income restoration activities for all project components involving involuntary land acquisition.
- (iii) The EMO will carry out a post-resettlement evaluation six (6) – twelve (12) months after completion of all land acquisition and compensation activities, for all project components involving voluntary and involuntary land acquisition. The post-resettlement evaluation will assess the degree to which APs have been successful in restoring, maintaining or improving their living standards, incomes and productive capacity.

3. The EMO will carry out periodic (quarter) diligence activities up through the period when APs affected by involuntary land acquisition receive compensation. Due diligence will be used to verify and confirm internal monitoring findings, identify any gaps in the RP implementation and recommend corresponding corrective actions, as needed. EMO will submit quarterly monitoring reports, including recommendations for corrective actions, to IRC and then IRC will forward to ADB

and copy to MPWT.

Reporting:

- Resettlement completion report
- Quarterly resettlement monitoring reports until payment of compensation to APs
- Post-resettlement evaluation report for all resettlement activities

APPENDIX 3 – REVISED GENDER ACTION PLAN

Revised Gender Action Plan (MTR Revisions)			
Gender Objective	Activities / Indicators / Targets	Responsibilities	Timeline
Output 1: Policy and Regulatory Environment Improved.			
1.1 Policy and regulatory environment reflects the different urban development, sanitation and waste management needs and experiences of men and women	1.1.1 Women's sanitation issues are incorporated in updated building code applications for six provincial towns around Tonle Sap (e.g., space in public bathrooms and separate toilets).	PMU, municipal, sangkat (sub-district), and village authorities, PMIS consultants, institutional specialist, and PDOWA	Project close
	1.1.2 Women's climate change needs and issues are incorporated in the proposed climate change adaption regulations for urban environmental improvements.		Project close
	1.1.3 At least 1 sector coordination meeting, chaired by MPWT, will include a discussion related to women's needs in integrated urban environmental management over project implementation.		Dec 2021
	1.1.4 Tonle Sap Urban Areas Development Framework and individual urban development strategies for Kampong Chhnang and Pursat are explained to women's groups.		June 2021
	1.1.5 Sanitation and waste management units in Kampong Chhnang and Pursat municipality are established and become operational (at least 20% of staff in each unit are women).		Project close
Output 2: Urban Infrastructure improved.			
2.1 Urban infrastructure better responds to the specific design considerations of all intended project beneficiaries (men, women, boys, girls, people with disabilities and other marginalized groups)	2.1.1 Sanitation grants to IDPoor 1 and 2, including at least 20% female-headed households if categorized as IDPoor 1 or IDPoor 2.	PMU, PIUs, PMIS consultants, PDOWA, contractors, IRC/MEF, and WCCC	Project close
	2.1.2 Meaningful consultation with women on detailed designs to ensure their needs and preferences are incorporated, and to include woman and child safety measures (e.g., sidewalk and drainage covers during construction, lighting during night work, appropriate construction barriers, child-safe stormwater drain covers, fencing around wastewater treatment lagoons, kitchen, bathroom, lockers and changing facilities & PPE at landfill sites where waste pickers may present).		June 2021
	2.1.3 Incorporate menstrual hygiene management features in communities for improved solid waste management (e.g., bins in separate public toilet stalls). Specific support to schools to restore on-site sanitation facilities where these are degraded or non-functional, including appropriate sanitation for girls.		Project close
	2.1.4 Meaningful consultations with women in Kampong Chhnang and Pursat on priority small scale infrastructure improvements (e.g., gender-specific requirements for public infrastructure, such as separate latrines for women with trash bins, if appropriate).		June 2021
	2.1.5 PIU and NGO to work closely with PDOWA and WCCCs on ensuring women's participation in project activities.		Dec 2022
	2.2.1 Equal pay for men and women for work of equal type.		Project Close

2.2 Infrastructure activities support equal and safe employment opportunities for men and women	2.2.2 Safe working conditions for men and women construction workers (e.g., separate toilet facilities for men and women).		Project Close
Output 3: Institutional Effectiveness Improved			
3.1 Project activities enhance general knowledge around good hygiene practices and promote the inclusive participation of local women, men and other marginalized groups	3.1.1 Sanitation and waste management units established in the participating municipalities and become operational (20% of staff are women) (2020 baseline: n/a) DMF 3a.	PMU, PIUs, PMIS consultants, NGOs,municipal, sangkat (sub-district), commune and village authorities, PDOWA, and WCCC	Project Close
	3.1.2 Capacity development program adopted for sanitation and solid waste management units in the participating municipalities, with at least 50 staff trained (30% women) (2020 baseline: n/a) DMF 3b.		Project Close
	3.1.3 Gender-sensitive hygiene promotion campaigns conducted in each participating municipality with women accounting for at least 40% of participants (2020 baseline: n/a) DMF 3c.		Dec 2021
	3.1.4 At least 40% of participants in CMEI activities and training are women		Project close
	3.1.5 Hygiene IEC campaigns covers topics that are important for women (e.g., at least 30% of hygiene campaigns focus on menstrual hygiene and solid waste management).		Dec 2021
	3.1.6 Capacity development and IEC materials will be gender-sensitive.		Dec 2021
	3.1.7 At least 20% of technical training participants are qualified women.		Project close
4. Project Management and Gender Specific Activities			
4.1 At least 30% of PMU and 30% of staff in both PIUs are women (2014 Baseline: PMU=1 woman; PIUs have not been established).			
4.2 Project management and implementation consultants include an international social development /resettlement specialist (6 person-months) and a national gender specialist (6 person-months).			
4.3 Gender sensitivity and mainstreaming training is administered to all project staff (PSC, PMU, PIUs, and PCC).			
4.4 A resettlement/social development officer is appointed in the PMU			
4.5 At least 1 member of the Project Steering Committee is a woman.			
4.6 The NGO appoints at least 30% women as part of their team for each town in Kampong Chhnang and Pursat.			
4.7 A government community coordinator is appointed in Pursat PIU and two government community coordinators are in Kampong Chhnang PIU.			
4.8 Project performance monitoring system includes sex-disaggregated data.			
4.9 The annual project performance monitoring and evaluation reports will include progress against these indicators.			
4.10 Progress reports (e.g., quarterly, safeguards, annual project performance monitoring and evaluation, and PPCR reports) include information on gender activities. The GAP monitoring table is updated and attached to the project progress report (twice a year).			
4.11 GAP performance included in mid-term and final project reviews.			

CMEI = community mobilization and environmental improvements, PDPWT = provincial department of public works and transport, PDOWA = provincial department of women's affairs, GAP = gender action plan, IEC = information education and communication, IRC = Inter-ministerial Resettlement Committee, MEF = Ministry of Economy and Finance, MPWT = Ministry of Public Works and Transport, NGO = nongovernmental organizations, PCC = provincial coordination committee, PIU = project implementation unit, PMIS = project management and implementation support, PMU = project management unit, WCCC = women and children's consultative committee.

Source: Asian Development Bank.

APPENDIX 4 - REVISED DESIGN AND MONITORING FRAMEWORK

Impact the Investment Program is Aligned with Increased economic activities and environmental protection in towns in the Tonle Sap basin (Tonle Sap Urban Development Strategic Framework 2014-2030) ^a			
Results Chain	Performance Indicators	Data Sources and Reporting Mechanisms	Risks and Critical Assumptions
Outcome Improved urban services and enhanced climate change resilience in participating municipalities	By 2024: a. At least 31,500 people consistently using safe sanitation services (at least 15,000 women) (2020 baseline: 0) b. At least 76,500 people consistently using safe solid waste management services (2020 baseline: 0) c. At least 3,000 households benefit from reduced flooding through improved drainage (2020 baseline: n/a) d. Sanitation and solid waste management units are funded as per the agreed budgets from the provincial governments (Baseline: not applicable)	a. – c. Annual reports and project performance monitoring reports by PIUs and MPWT, ADB loan missions, and PCR d. Provincial and municipal financial statements and payroll information, provincial government budget commitment letters	A: Households are willing to connect to centralized sewer. A: Sufficient revenues collected, and government budget made available for sustained operations
Outputs 1. Policy and regulatory environment improved 2. Urban infrastructure improved	By 2024: 1a. Building code proposals incorporating climate resilient recommendations and gender-responsive and inclusive climate adaptation action plan developed (Baseline: not applicable) 1b. Recommendations on wastewater treatment standards and sludge disposal regulations (Baseline: Sub decree 27 (1999) and Sub decree 235 (2017)) By 2024: 2a. Two wastewater treatment plants with capacity of at least 6 MLD constructed and made operational (2020 baseline: 0)	1a. Report and attendance records of national workshop to present proposals 1b. Recommended wastewater and sludge management standards submitted to MoE by MPWT and draft sanitation law 2a. – d. Annual reports and project performance monitoring reports by PIUs and MPWT, ADB	R: Construction delays from delayed approval and implementation of the resettlement plan

Results Chain	Performance Indicators	Data Sources and Reporting Mechanisms	Risks and Critical Assumptions
3. Institutional effectiveness improved	2b. Two controlled landfills with a capacity of 60,000 tonnes of municipal waste constructed and operational (2020 baseline: 0)	loan missions, and PCR	A: Municipal departments have sufficient female staff to meet the 30% training target.
	2c. 87 km of stormwater drains newly rehabilitated and constructed (2020 baseline: 0 km)		
	2d. At least 5,400 ID Poor 1 & 2 households (20% female headed) have pour-flush toilets (2020 baseline: 4,000)		
	3a. Sanitation and waste management units established in the participating municipalities and become operational (20% of staff are women) (2020 baseline: 0 dedicated units operating)		
	3b. Capacity development program adopted for sanitation and solid waste management units in the participating municipalities, with at least 50 staff trained (30% women) (2020 baseline: n/a)		
	3c. Gender-sensitive hygiene promotion campaigns conducted in each participating municipality with women accounting for at least 40% of participants (2020 baseline: n/a)	3b. – c. Annual reports and project performance monitoring reports by PIUs and MPWT, ADB loan missions, PMC, NGO and PCR	
Key Activities with Milestones Policy and regulatory environment improved 1.1. Prepare climate adaptation plan and building code recommendations by Q4 2018 (completed) 1.2. Submit recommendations on wastewater treatment standards and sludge disposal regulations to MoE by Q2 2021 Urban infrastructure improved 2.1. Complete feasibility studies, infrastructure appraisals, and surveys by Q3 2020 (completed) 2.2. Complete design, bidding documents, safeguard activities, and compensation for urban infrastructure in Pursat by Q3 2020 (completed) 2.3. Complete design, bidding documents, safeguard activities, and compensation for urban infrastructure in Kampong Chhnang by Q2 2021 2.4. Complete community-based works by Q1 2022 2.5. Complete construction of urban infrastructure by Q2 2023 Institutional effectiveness improved 3.1. Staffing details published for sanitation and solid waste management units by Q4 2021			

Results Chain	Performance Indicators	Data Sources and Reporting Mechanisms	Risks and Critical Assumptions
3.2. Capacity development program developed by Q2 2022 3.3. Hygiene promotion campaigns completed by Q3 2022			
Project Management Activities Launch bidding process for PMC by Q1 2016 (completed) Award PMC contract by Q3 2016 (completed) Mobilize PMC by Q4 2016 (completed) Evaluate bids and award contracts for drainage and WWTP in Pursat by Q4 2019 (completed) Evaluate bids and award contract for controlled landfills by Q2 2020 (completed) Evaluate bids and award contracts for Sewer, Stormwater and WWTP in Kampong Chhnang by Q3 2021			
Inputs ADB: \$37,139,000 (loan) Government: \$5,358,000 SCF: \$5,000,000(loan) and \$5,000,000 (grant)			

ADB = Asian Development Bank, CSO = civil society organization, ha=hectare, IDPoor = Identification of Poor Households Programme, km = kilometer, MPWT=Ministry of Public Works and Transport, NGO = nongovernmental organization, O&M = operation and maintenance, PIU = project implementation unit, PMU = project management unit, PPME = project performance monitoring system, PPMS = project performance management system, Q = quarter, SCF = Strategic Climate Fund, SWM = solid waste management, TSUADF = Tonle Sap Urban Areas Development Framework, USU = urban services unit, WWTP = wastewater treatment plant.

^a Government of Cambodia, Ministry of Public Works and Transport. *Tonle Sap Urban Areas Development Framework 2014-2030*. Phnom Penh.

APPENDIX 5 – SOCIAL SAFEGUARDS MONITORING REPORT TEMPLATE

Social Monitoring Report

{Semiannual/Quarterly} Report
{Month Year}

{Short Country Name}: {Project Title-Subproject}

Prepared by {complete and accurate name of implementing agency or external monitoring agency} for the {complete name of the borrower} and the Asian Development Bank.

CURRENCY EQUIVALENTS

(as of {Day Month Year})

{The date of the currency equivalents must be within 2 months from the date on the cover.}

Currency unit	–	{currency name in lowercase (Symbol)}
{Symbol}1.00	=	\${ }
\$1.00	=	{Symbol_____}

ABBREVIATIONS

{AAA}	–	{spell out (capitalize only proper names)}
{BBB}	–	{spell out}
{CCC}	–	{spell out}

{WEIGHTS AND MEASURES}

{symbol 1 (full name 1)}	–	{Definition 1}
{symbol 2 (full name 2)}	–	{Definition 2}
{symbol 3 (full name 3)}	–	{Definition 3}

{GLOSSARY}

{Term 1}	–	{Definition 1}
{Term 2}	–	{Definition 2}
{Term 3}	–	{Definition 3}

NOTE{S}

- (i) The fiscal year (FY) of the Government of {name of borrower} {and its agencies} ends on {day month}. FY before a calendar year denotes the year in which the fiscal year ends, e.g., FY2011 ends on {day month} 2011. {Note: If FYs are not referred to within the text, delete the entire note and change NOTES to NOTE.}
- (ii) In this report, "\$" refers to US dollars. {Note: If a second \$ currency is referred to in the text, e.g., NZ\$ or S\$, add: unless otherwise stated. In the text, use "\$" for US dollars and the appropriate modifier, e.g., NZ\$ or S\$, for other currencies that use the "\$" symbol.}

This **social** monitoring report is a document of the borrower. The views expressed herein do not necessarily represent those of ADB's Board of Directors, Management, or staff, and may be preliminary in nature.

In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.

Introduction and Project Overview²⁷

Project Number and Title:		
Social Safeguards Category	Indigenous Peoples	
	Involuntary Resettlement	
Reporting period:		
Last report date:		
Key sub-project activities since last report:		

²⁷ For projects categorized as A or B in Involuntary Resettlement and/or Indigenous People, the Borrowers/clients are required to submit semiannual/quarterly monitoring reports for ADB review and disclosure. This template can be used for periodic monitoring report (semiannual) and RP/REMDP/EMDP completion report to start the civil works in the impacted areas. The level of detail and comprehensiveness of a monitoring report is commensurate with the complexity and significance of social safeguards impacts (IR and IP) and with the recent status of project implementation phase. The project team can adjust the contents of the report as relevant with the project activity.

A. Executive Summary

This section provides a concise statement of project scope and impacts, key findings and recommended actions.

B. Background of the Report and Project Description

This section provides a general description of the project, including:

- Background/context of the monitoring report which includes the information on the project, project components, safeguards categorizations and general scope of the social safeguards impacts.
- Information on the implementation progress of the project activities, scope of monitoring report and requirements, reporting period, including frequency of submission and changes in project scope and adjusted safeguard measures, if applicable
- Summary table of identified impacts and the mitigation actions.

C. Scope of Impacts

This section outlines the detail of

- Scale and scopes of the project's safeguards impacts,
- Vulnerability status of the affected people/communities,
- Entitlements matrix and other rehabilitation measures, as applicable, as described in the approved final RP(s) /IPP(s).

D. Compensation and Rehabilitation²⁸

This section describes the process and progress of the implementation of the safeguards plan and other required activities as determined in the plan. This includes:

- Payment of the affected assets compensation, allowances, loss of incomes, etc. to the entitled persons;
- Provisions of other types of entitlement as described in the matrix and implementation of livelihood rehabilitation activities as determined in the plan
- Provision of specific development activities as indicated in the approved IPP/REMDP.

Quantitative as well as qualitative results of the monitoring parameters, as agreed in the plan, should be provided.

1. General Progress in Resettlement Implementation

Table 1. General Progress in Land Clearance and Handing Over of Land for Civil Works

Project Component/Location [District]	Total Affected Land Area (m2)	Land handed Over (m2)			Land that still has to be acquired/handed over (m2)		Remaining encumbrances [yes/no]	Remarks
		Land Handed over this reporting period	Cumulative amount of land handed over					
			Amount in m2	% of total affected land	Amount in m2	% of total affected land		
District 1								
District 2								
TOTAL								

Table 2. General Progress in Compensation

Project component/Location	AHs (APs) eligible for compensation ^a and/or assistance/allowances ^b		
	Total Number of AHs (APs)	Number of AHs (APs) fully paid	% Progress

AH = affected household AP = affected person IP = Indigenous Peoples

a. All forms of compensation, including affected assets (land/ non-land, crops, etc.) or loss of income

b. Includes all types of allowances and assistance except income restoration, which is presented separately in Section III below

²⁸ Depending on the status of the final detail design during the submission of the report this activity might not yet started. Provide the information on the expected date the activity to be conducted instead. For IPP/EGDP, this might entail the progress of the implementation of IPP/EGDP

Table 3. Progress in Compensation of Vulnerable AHs

Project component/Location	Total Number of Vulnerable AHs (APs)					Number of Vulnerable AHs (APs) fully paid					% Progress
	Total	Poor	Ethnic Minority	FHH with dependents	Others	Total	Poor	Ethnic Minority	FHH with dependents	Others	

Table 4. General Progress in Relocation

Project component/Location	AHs (APs) required to relocate		
	Total Number of AHs (APs)	Number of AHs resettled ^c	% Progress

AH = affected household AP = affected person

c. Includes households (HHs) provided interim measures agreed in RP such as rental assistance while waiting for completion of resettlement site

Table 5. Disbursement and Use of Funds

Component/Location	LAR Budget Requirement	Source of Funding ²⁹	Funds Disbursed this Reporting Period	Specific Resettlement activities funded this Reporting Period ³⁰	Timeliness of Fund Disbursement		Cumulative Funds Disbursement
					Delay in targets for fund disbursement? (Y/N)	Reasons for delay	

LAR = land acquisition and resettlement

1. Other Remarks on Resettlement

- Describe the issue with land title (Land Use Right Certificate) adjustment (for the non-relocating households) and allocation (for relocating households). For example, how many relocating households got LURC allocated, how many partially affected households got LURC adjusted.
-
- [Describe issues identified along with planned and completed remedial actions. Also provide additional information regarding delays in completing resettlement sites, if any, including actions to be taken.]

²⁹ E.g. Central Government, Province, Loan Funds, etc.

³⁰ E.g. Number of resettlement sites developed, number and type of community facilities constructed, number of AHs fully compensated, livelihood restoration activities implemented

I. Updated Resettlement Impacts

Table 6: Updated Number of Affected Households

Location	Total No. of Affected Households	Change in Number of affected households Compared to Updated RP

Table 7: Updated Number of Severely Affected Households

Location	No. of Severely Affected Households due to loss of productive assets	Change in Number of severely affected households Compared to Updated RP

Table 8: Updated Number of Vulnerable Affected Households

Location	No. of Vulnerable Affected Households due to loss of productive assets	Change in Number of vulnerable affected households Compared to Updated RP

Table 9: Updated Physically Displaced Households

Location	AHs with Affected Houses	AHs with Fully Affected Houses	Partially Affected AHs	Change in Number of AHs with Fully Affected Houses Compared to Updated RP

		Total	House Built on Land Eligible for Compensation	Of which Vulnerable ³¹		

II. Relocation

Table 10: Confirmed Resettlement Preferences for Households with Fully Affected Houses

Location	# of AHs with Fully Affected Houses	# of AHs Required to Relocate	# of AHs Opting for Replacement Land	# of AHs Opting for Self Relocation (HHs)	# of AHs that Can Rebuild on Remaining Land	# of AHs that opt for relocation apartment in relocation building

Table 11: Resettlement Solutions Implemented for Vulnerable Households

	Indigenous People (HHs)	Landless (HHs)	Poor (HHs)	Female Headed Households	Other [add as needed]
Rebuilt on remaining land					
Rebuilt on another plot of land already owned					
Rebuilt (e.g. moved back) out of COI but on public land					
Rebuilt on other person's land (e.g. relative)					
Purchased replacement land elsewhere themselves					
Provided with plot at resettlement site					
Provided with replacement residential plot (non-resettlement site)					
Solution Pending					

COI = corridor of impact

Table 12: Status of Resettlement Sites

Resettlement Site* / Location	Actual completion date	Scheduled completion date	Current status (briefly describe status of completion of infrastructure, etc.)	No. of plots allocated for project	No. of AHs to be allocated plots	No. of plots handed over to AHs	# AHs issued title	# AHs rebuilt houses	# AHs living in relocation site as of reporting period

* Include also separate residential plots to be provided to AHs even if these are not included in resettlement sites.

2. General Progress in Ethnic Minority Development Plan (EMDP) Implementation

³¹ E.g. Number of female-headed with dependents; number of poor; number of IPs, etc.

Project Component/Location [District]	List of EM living in the area	EM Development Activities	Implementation status]	Remarks
District 1				
District 2				
TOTAL				

2. Other Remarks on EMDP implementation

- [Describe issues identified along with planned and completed development actions. Also provide additional information regarding delays/ obstacles in completing the agreed actions, if any, including remedial actions to be taken.]

III. Income Restoration Program³²

{Income/livelihood Restoration Program approaches may vary significantly from each project, and the types of questions asked and data requirements may vary considerably depending on the RP/REMDP/EMDP. As such, below is intended as a very general guide.}

1. Status of Income/livelihood Restoration Program

[Provide updated details of income restoration activities to be provided, institutional/implementation arrangements, resource requirements and schedule.] For REMDP, prepare specific section on the status of the program prepared for affected EM groups of the projects.

2. Consultation with Eligible APs and EMs

[What consultation activities were undertaken during the reporting period to assess needs and preferences of eligible APs/ Ems groups? Describe how EM groups, women and other vulnerable APs have been included in the consultation process.]

Table 13: Program Participation (Cumulative)

Location	No. of eligible APs	Participation in Livelihood Restoration Activities Disaggregated by Gender and ethnicity ³³ of AP [examples provided below, revise as appropriate for specific Income Restoration Program]					Total # of APs	Of which vulnerable ³⁴
		No. of APs in Agricultural Extension	No. of APs in Mechanic Course	No. of APs in Sewing Course	No. of APs in Small Business Training	[other]		
Village 1								
Village 2								
Village 3								

³² Depending on the status of the final detail design during the submission of the report this activity might not yet started. Provide the information on the expected date the activity to be conducted instead. For IPP/ EMDP, this might entail the progress of the implementation of IPP/EMDP

³³ In projects where there are IP issues

³⁴ E.g. No. of female-headed with dependents, no. of poor; no. of IP

Table 14: Effectiveness of Income/ Livelihood Restoration Program Activities

Location	No. of eligible APs	No. of APs employed in project-related jobs as of this monitoring period			# of APs employed in other jobs as of this monitoring period (post-resettlement)		Total # of employed APs ³⁵	Of which vulnerable ³⁶
		(Specify type of Project-related job)	(Specify type of Project-related job)	(Specify type of Project-related job)	(Specify type of job)	(Specify type of job)		
Village 1								
Village 2								
Village 3								

3. Other Remarks on Livelihood Restoration

[Please describe any issues encountered and approaches taken to resolve these.]

E. Disclosure, Consultation & Participation

This section describes public participation and consultations activities during the project implementation as agreed in the plan. This includes final consultations with APs during RP finalization after the completion of detail design; the numbers of activities conducted; issues raised during consultations and responses provided by the project team, implementing NGOs, project supervision consultants, contractors, etc. The idea here is for the PMU to demonstrate how the URP/UREMDP/UREMDP has been disclosed to APs and/or affected EMs. The column headings would represent what ever is indicated in the updated RP as the means of disclosure.

Table 15: Means of Disclosure of URP/UREMDP/UREMDP by Location

Location [Village]	Translated approved URP/UREMDP/UREMDP disseminated to village office? (yes/no)	PIB disseminated to AHs (date/ method*)	PIB posted in public place? (yes/no)	Public meeting to present approved URP/UREMDP/UREMDP (date)	Target date to complete disclosure (date)	Community board support required (Yes/No)
Village 1						
Village 2						

* Dissemination method such as handed out in public meeting, distributed house-to-house, etc.

1. Consultations

Table 16: Consultation/Information Dissemination Meetings Conducted During Reporting Period

³⁵ From those who participated in income restoration program

³⁶ E.g. No. of female-headed households with dependents; no. of poor; no. of IP etc.

Date	Venue	Participants [Disaggregated by gender]	Consultation content	Meeting Minutes with PMU

1. Other Remarks on Public consultation and participation

[Please describe any issues encountered and approaches taken to resolve these.]

F. Operation of Grievance Redress Mechanism (GRM)

This section described the implementation of project GRM as design in the approved RP/IPP. This includes evaluations of its effectiveness, procedures, complaints receive, timeliness to resolve issues/ complaints and resources provided to solve the complaints. Special attentions should be given if there are complaints received from the affected people or communities.

Table 17: Summary of Grievance Cases by Level of GRM

{Subject to EA's confirmation that they would like to use such a table}

Location	No. of pending grievance from previous reporting period	No. of new grievance cases for reporting period	Total no. of cases received	No. of cases resolved	No. of cases progressed to next level
Level 1					
Level 2					
Level 3					

42. Narrative Summary of Grievances

[Provide a narrative summary of grievance cases by type of issue and location, for example...]
[Where resolution of grievance resulted in any cases of land/assets compulsorily acquired, provide details along with information regarding relevant court or administrative decision and confirmation whether funds due from compensation and assistance have been placed in escrow account or provided to AP.]

G. Other Issues

43. Resolution of Issues

[Provide information on status and/or resolution of issues raised in previous internal monitoring report; ADB monitoring; external monitoring report, etc.]

44. New Issues

[Provide information on other newly identified issues impacting the implementation of RP. These may include resource constraints, changes in scope of impacts, etc.]

45. Institutional Matters and Capacity Training

[Report on the following as applicable]

- (i) Deployment of safeguards-related staff within PMUs. Key activities conducted by PMU safeguards staff during reporting period.
- (ii) Capacity development training provided: type and number of trainings, number of staff/officers trained (disaggregated by gender).
- (iii) Activities of community based organizations (CBOs)/mass organizations (as applicable)
- (iv) Adequacy of resources for PMU staff and consultants
- (v) Issues in undertaking roles/responsibilities of different agencies

46. Temporary Impacts during Civil Works

[Describe temporary impacts during implementation, including quantities of impacts, #AHs, location, types, etc. and status of restoring temporarily affected assets as appropriate and the responsible agency.]

H. Institutional Arrangement

This section describes the actual implementation or any adjustment made to the institutional arrangement for managing the social safeguards issues in the projects. This includes the establishment of safeguards unit/ team and appointment of staff in the EA/IA; implementation of the GRM and its committee; supervision and coordination between institutions involved in the management and monitoring of safeguards issues, the roles of NGO and women's groups in the monitoring and implementation of the plan, if any.

I. Monitoring Results - Findings

This section describes the summary and key findings of the monitoring activities. The results are compared against previously established benchmarks and compliance status (e.g., adequacy of IR compensation rates and timeliness of payments, adequacy and timeliness of IR rehabilitation measures including serviced housing sites, house reconstruction, livelihood support measures, and training; budget for implementing URP/UREMDP, or UEMDP, timeliness and adequacy of capacity building, etc.). It also compared against the objectives of safeguards or desired outcomes documented (e.g. IR impacts avoided or minimized; livelihood restored or enhanced; IP's identity, human right, livelihood systems and cultural uniqueness fully respected; IP not suffer adverse impacts, environmental impacts avoided or minimized, etc.). For FI projects this includes the effectiveness of the Environmental and Social Management System (ESMS) managed by the FI and its participating institutions³⁷. If noncompliance or any major gaps identified, include the recommendation of corrective action plan.

J. Compliance Status

This section will summarize the compliance status of the project activities with the loan covenants, ADB SPS (2009) on SR 2 and SR 3 and the approved final RP(s)/ REMDP/EMDP.

K. Follow up Actions, Recommendation and Disclosure

This section describes recommendations and further actions or items to focus on for the remaining monitoring period. It also includes lesson learned for improvement for future safeguards monitoring activities. Disclosure dates of the monitoring report to the affected communities should also be included. A time-bound summary table for required actions should be included.

³⁷ Specific for the FI projects, external agency may be required to conduct an audit of the project ESMS.

Appendix 1

- i. List of Affected Persons and Entitlements
- ii. Summary of RP/IPP with entitlement matrix

Appendix 2

- i. Copies of AP's certification of payment (signed by the APs)
- ii. Summary of minutes of meetings during public consultations
- iii. Summary of complaints received and solution status

APPENDIX 6 - ENVIRONMENTAL SAFEGUARDS MONITORING REPORT TEMPLATE

Semi-Annual Environmental Monitoring Report

COUNTRY [complete]**Ministry of [complete]**

[Project Number/Name]**Reporting Period:** *[date covered by this report]***Date:** *[date of issue of this report]***SEMR Report Number:** *[1, 2 or 3 ... – depending on how many SEMRs issued before]*

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No table of figures entries found.

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Notes on this template:

[Advice: text in red] - this gives the PMU help on what information to add into the sections of the report. **Delete** the red text when the report is complete.

[text in yellow] - delete this text and add the relevant answer. **Delete** the text in yellow when the answers are completed.

XIII. ENVIRONMENTAL SAFEGUARDS SUMMARY

[Advice: Complete this summary under each heading. This summary can be copied directly into the main report to support with the Main Report preparation]

1. The [1st, 2nd, 3rd etc] Semi-annual Environment Monitoring Report (SEMR) covers the period of [start month – end month and year] for [Project Name]. The SEMR has been prepared to fulfil the safeguard policy requirement of ADB.
2. The SEMR is prepared by [name of organisation and function e.g. External Monitoring Consultant or Support Consultant] and checked by [PMU or Ministry].

A. Summary of Project Progress

[Advice: Complete the summary table below. Section 2 gives more detail Project Progress]

3. The following table gives a brief summary of the project progress for contract award, construction and key activities in this reporting period:

Table 2 Project Progress Summary

Safeguards Category	Environment	B	
Reporting Period:	[Months/ Year]	Date Last Report Issued:	[Month/ Year]
Contracts Awarded to Date:	[Advice: For each Civil Works Contract to be awarded, give progress to date] CW1 [contractor name, award date, subproject] CW2 [contractor name, award date, subproject]		
Construction Progress to Date:	[Advice: For each Civil Works Contract to be awarded, at END of Reporting Period] As of [Month/Year of this reporting period] the physical construction progress is as follows: CW1 [x %] construction completed CW2 [x %] construction completed		
Key Sub-project Activities in this Reporting Period:	[Advice: For each Civil Works (CW) Contract, write the key activities that have taken place on construction sites during the 6 months covered in this report] Construction Activities CW1 [e.g. ground clearance and preparation, excavation of site] CW2 [e.g. ground clearance and preparation, excavation of site] [Advice: Include any consents or permissions in this section such as UXO clearance, EIA Approval, Waste disposal permission – include any issued during the 6 months covered in this report] Permits or Consents Issued: Permit / Consent for [activity] issued by [Authority] on [date]		

B. Summary of EMP Implementation

[Advice: This section gives a high level summary of how the progress on implementing the EMP and the mitigation measures is progressing, in this reporting period. Consider any main issues – the detail will be in the EMP Implementation section of the main report]

4. EMP implementation is summarised in the following points, for this reporting period:

- [mitigation measures in use]
- [overall progress and performance of contractors]
- [other issues affecting project environmental performance?]

C. Summary of EMP Monitoring

[Advice: This section gives a high level summary of how the EMP has been monitored in this reporting period. This includes site visits by PIU, PMU, Construction Supervision Contractor, Independent Monitoring Organisation. The EMP will say who should be monitoring and when. Detail will be in the EMP Monitoring section of the main report]

5. EMP monitoring is summarised in the following points, for this reporting period:

- Number of Monitoring Visits to Construction Site and wider area:
 - [Number of] visits by PMU/PIU
 - [Number of] visits by [others e.g. Independent Monitoring Organisation, MoE, CSC]
- Number of Environmental Samples Tested:
 - [Number of] water quality samples tested
 - [Number of] air quality samples tested
 - [Number of] water quality samples tested

D. Summary of Complaints, Issues and Corrective Action

[Advice: This section informs the Project and ADB of any potential problems that have been addressed or need to be addressed. It can include formal complaints through project Grievance Redress Mechanism. This is main issues only – the detail will be in the Corrective Actions/GRM part of the main report]

6. Any complaints, issues and corrective action that has been identified or implement is summarised in the following points, for this reporting period:

- Issues Raised: [issues on construction sites e.g. dust, noise, traffic]
- Grievances Raised with GRM: [Number of] grievances
- Corrective Action issued by project to Contractor:
 - [problem that needed corrective action]
 - problem that needed corrective action]

XIV. SAFEGUARDS STAFF, TRAINING AND DOCUMENTATION

A. Implementation Arrangements

[Advice: This section confirms if all roles have staff allocated, or if there are more people to recruit. It confirms if there are resources available for the project for Environmental Safeguards. If resources are not available e.g. cannot find the skills, or people have no time, say so here]

7. The EMP defines the Environmental Safeguards roles and responsibilities. The roles are required to be filled in order to meet the EMP requirements. The following table gives the status of the key roles for EMP implementation:

Table 3. Status of Environmental Safeguard Roles

Safeguards Role	Status & Comment			
[see EMP for list of roles required e.g. Project Consultant Environmental Specialist]	Date Started:	[date]	Full Time/ Part Time	[FT/PT]
	Comment	[Person Identified? Problems identifying person? No time available?]		
[e.g. PMU- Environmental Control Officer (ECO)]	Date Started:	[date]	Full Time/ Part Time	[FT/PT]
	Comment	[Person Identified? Problems identifying person? No time available?]		
[e.g. PIU Environmental And Social Safeguards Staff]	Date Started:	[date]	Full Time/ Part Time	[FT/PT]
	Comment	[Person Identified? Problems identifying person? No time available?]		
[e.g. PIU GRM Focal Point]	Date Started:	[date]	Full Time/ Part Time	[FT/PT]
	Comment	[Person Identified? Problems identifying person? No time available?]		
[e.g. CSC]	Date Started:	[date]	Full Time/ Part Time	[FT/PT]
	Comment	[Person Identified? Problems identifying person? No time available?]		
[e.g. Environmental Monitoring Consultant (EMC)]	Date Started:	[date]	Full Time/ Part Time	[FT/PT]

	Comment	[Person Identified? Problems identifying person? No time available?]		
[e.g. Contractor Environment Health & safety Staff]	Date Started:	[date]	Full Time/ Part Time	[FT/PT]
	Comment	[Person Identified? Problems identifying person? No time available?]		
[others? E.g Contractor GRM Person]	Date Started:	[date]	Full Time/ Part Time	[FT/PT]
	Comment	[Person Identified? Problems identifying person? No time available?]		

8. The project concludes that the environmental safeguards roles are [conclusion – enough people? Enough budget for staff? Other conclusion or comment?]

B. Training & Capacity Building

[see EMP for list of training required]

9. The following table gives the environmental safeguards training courses that have been completed during this reporting period and the planned training courses for the next six months:

Table 4. Environmental Safeguards Training Provided and Planned

Training Course Title	Training Date	Participants	Training Provider
[E.g CEMP /EMP preparation]	[date – completed or future]	[e.g. No. of PIU/PMU, Contractors]	[e.g. Support consultants, MoE, Independent trainer]

C. ADB Approvals

[Advice: This section updates ADB with the current progress on the EMP and IEE for the project. Ensure the up to date documents are available and it is clear which is the latest version of each document]

10. The following table gives information on the status of the safeguards documents.

Table 5. Status of Environmental Safeguard Documents

Safeguards Documents	Update Issued (Latest Version)	Submitted to MoE	Submitted to ADB
[e.g. IEE]	[date]	[date or Not Applicable]	[date]
[e.g. EMP subproject 1]	[date]	[date or Not Applicable]	[date]
[e.g. EMP Subproject 2]	[date]	[date or Not Applicable]	[date]
[e.g. EMP Subproject 3]	[date]	[date or Not Applicable]	[date]

D. National Approvals

[Advice: This section updates ADB with the current progress on any national approvals and/or certifications needed such as final Environmental Impact Assessment (EIA), IEIA, ECC, Environmental Protections Contract, etc. (varies from country to country) or EMP approvals from the relevant Ministry. If there is no change between this reporting period and the last, the table in the previous report can be used here]

11. The following table gives an update on the necessary national approvals required for the project to proceed.

Table 6. Status of National Approvals for Environmental Documents

Documents	Submitted to MoE	Approved By MoE:	Status – if not approved	Comment
[e.g. EIA]	[date or Not Applicable]	[date]	[e.g. on going, expected July 2020]	[add any further comment/ suggestion here]
[e.g. EMP subproject 1]	[date or Not Applicable]	[date]	[e.g. on going, expected July 2020]	
[e.g. EMP Subproject 2]	[date or Not Applicable]	[date]	[e.g. on going, expected July 2020]	
[e.g. EMP Subproject 3]	[date or Not Applicable]	[date]	[e.g. on going, expected July 2020]	

E. Construction Environmental Management Plan (CEMP) Approvals

[Advice: This section updates ADB on whether the contractor's have submitted the CEMP for each civil works package, and if the quality of the CEMP is suitable. ADB would also need assurance that the CEMPs have updated health and safety plans in line with national legislation and any WHO best practices to ensure the necessary COVID-19 mitigation and safety measures are in place to ensure workers health and safety.]

12. The following table confirms the status of the Construction Environmental Management Plan (CEMP) for each CW package:

Table 7. Status of CEMP Approvals

Civil Works Package/ Subproject	CEMP Given to PMU	Approved By PMU:	Comment:
[e.g. CW01 Wastewater]	[date]	[Yes & Date or No]	[E.g. quality of CEMP? Good quality? Easy to monitor, generally complies with ADB?]
[e.g. CW02 Landfill]	[date]	[Yes & Date or No]	
[e.g. CW03 Drainage]	[date]	[Yes & Date or No]	

XV. EMP IMPLEMENTATION

A. Environmental Performance

[Advice: This is the most important table showing if the Safeguard requirements are being followed. This section is summarised for Section 1: Summary. The summary will be included in the main 6 monthly report for the entire project. Use all the monthly reports from PIU, PMU, GRM, Contractor, construction supervision consultant etc to complete this table.]

13. The following table gives the environmental impact mitigation measures in the Borrower (Project) EMP and the corresponding CEMP and how the project is progressing with implementing the mitigation measures, for each subproject.

14. The evidence for the compliance is through a combination of:

- Site visits to observe site practices;
- Consultation with affected people;
- Regular environmental reporting from [CSC, Contractor, others, according to EMP requirements].

[Advice: This table needs to be repeated for each sub-project. Each subproject can EMP has different Mitigation Measures & progress to report on. **Health & safety** Mitigation measures are reported separately]

Table 8. Status of EMP Compliance [subproject]

	EMP Requirement (Mitigation Measure)	Compliance & Description (Yes, No, Partial)	Comment or Further Explanation if Needed	Reasons for Not Full Compliance
1	Example 1. Worker Camp Sanitation	Yes	Camp includes septic tank which is installed	-
2	Example 2. Noise and Dust Management	Partial	Contractor given corrective action issued 21-07-19: -Spray 3x daily -Start work 7am	-Water is not sprayed 2x daily; -Working outside allowed hours, starting at 6:30am
1	[mitigation measure]	[Yes/No/Partial]	[comment on evidence of compliance if needed – any additional information]	[give reason/evidence for non- compliance]
2				
3				
4				
5				
6	[continue]			

15. For all 'Partial' or 'No' compliance issues in the table above, the actions needed to solve the compliance issues are in the table below:

[Advice: For any Partial or Not Compliance issues in the table above, the table below shows ADB what actions will be taken to ensure compliance]

Table 9. EMP– Actions Needed for Compliance [subproject]

	EMP Requirement	Further Action to Take	Date for Action	Who will Implement Action
02	Noise and dust management	Contractor should not start work before 7am Contractor should spray water minimum 3x daily	End of Sep. 2020	Contractor
	[requirement from table above for non-compliant issues]	[action needed to make issue compliant]	[deadline for action]	[who implements action]

16. The following table gives information on environmental performance issues from previous Environmental Monitoring Reports. This table confirms that the action was completed or that the action is outstanding.

[Advice: This table shows the result/outcome of Actions needed to be taken in the previous report (this means follow up Table 8, above, of previous EMR)]

Table 10. EMP Compliance Outstanding Issues from Previous Report(s) [subproject]

EMP Requirement	Further Action to Take	Responsibility and Timing	Resolution	Required Action
Example 1. Water pollution from sediment	Change construction drainage	Contractor – by 2 April 2020	Completed – Action was taken and confirmed by PIU visit 4 th April 2020	None
[complete for each issue]				

B. Health and Safety Performance

[Advice: This reports on any health and safety requirements for the project that the contractor needs to fulfil. This can be combined for all subprojects with similar H&S requirements. Due to the COVID-19 reporting on specific measures that are in place in line with national legislation and requirements for the pandemic need to be included. ADB would also need assurance that the CEMPs have updated health and safety plans in line with national legislation and any WHO best practices to ensure the necessary COVID-19 mitigation and safety measures are in place.]

17. The following table gives the Health and Safety impact mitigation measures in the Borrower EMP and how the project is progressing with implementing the mitigation measures, for all subprojects.

Table 11. Status of Health and Safety Compliance - ALL subprojects

	Health and Safety Requirement	Compliance & Description (Yes, No, Partial)	Comment or Further Explanation if Needed	Reasons for Not Full Compliance
1	Example 1. Workers Need to wear protective clothing	Partial	Subproject: Landfill Workers are not all wearing hard hats and high visibility Workers seen without safety boots	- Re-issue safety clothing to those without -Training on staff to remind them to wear it 18 th August 2020
2	Example 2. First Aid kit needed on site	Yes	Subproject: All First Aid Kit available in site offices	None
	[complete for each issue]			

18. For all 'Partial' or 'No' compliance issues in the table above, the actions needed to solve the compliance issues are in the table below:

[Advice: For any Partial or Not Compliance issues in the table above, the table below shows ADB what actions will be taken to ensure compliance]

Table 12. Status of Health and Safety Actions Needed for Compliance - ALL subprojects

	Health and Safety Requirement	Further Action to Take	Date for Action	Who will Implement Action
1	Example 1. Workers Need to wear protective clothing	All workers to be given and wear safety clothing	25th August 2020	Contractor
	[complete for each issue]			

19. The following table follows up on Health and Safety performance issues from previous Environmental Monitoring Reports for this subproject. This table confirms that the action was completed or that the action is outstanding.

[Advice: This table shows the result/outcome of Actions needed to be taken in the previous report (this means follow up Table 11, above, of previous EMR)]

Table 13. EMP Compliance Outstanding Issues from Previous Report(s) – ALL subprojects

Issue	Required Action	Responsibility and Timing	Resolution	Required Action
Example 1. Water pollution from sediment	Change construction drainage	Contractor – by 2 September 2020	Completed – Action was taken and confirmed by PIU visit 4 th April 2020	None

XVI. EMP MONITORING

[Advice: This section should show the progress made against the monitoring that is required in the EMP for each subproject. This is a combination of environmental quality monitoring (e.g. taking samples or water, noise measurements) and monitoring the EMP performance by consulting affected people.]

A. Environmental Quality Monitoring

20. Environmental quality monitoring requirements are defined in the Monitoring Plan section of the EMP. The following table gives a summary of the environmental quality monitoring requirements for each subproject

Table 14. EMP Environmental Quality Monitoring Requirements

Subproject	Environmental Issue Monitored	Location	Parameters	Responsible Organisation	Frequency
[use EMP to complete this table e.g Subproject 1]	[noise]	[primary school]	[DbA]	[Contractor]	[every 3 months]
[Subproject 1]	[water]	[stream]	[chemicals/temp]	[Contractor]	[every 3 months]
[Subproject 2]	[noise]	[hospital]	[DbA]	[Contractor]	[every 3 months]

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21. The following table gives information on the environmental quality monitoring implemented, during this reporting period. Detailed results compared to relevant national / international standards are in Annex 1.

Table 15. EMP Environmental Quality Monitoring implemented

Subproject	Environmental Issue Monitored	Location	Monitoring Date
[Subproject 1]	[Noise]		
[Subproject 1]	[Surface Water Quality]		
[Subproject 1]	[Groundwater Quality]		

22. **Summary of Results – Noise.** [one paragraph summary on the results – eg. do they meet national standards, international standards? Does it show a good quality or poor quality environment?].

23. **Summary of Results – Surface Water quality.** [one paragraph summary on the results – eg. do they meet national standards, international standards? Does it show a good quality or poor quality environment?].

24. **Summary of Results – Groundwater quality.** [one paragraph summary on the results – eg. do they meet national standards, international standards? Does it show a good quality or poor quality environment?].

25. **Summary of Results – Air quality.** [one paragraph summary on the results – eg. do they meet national standards, international standards? Does it show a good quality or poor quality environment?].

B. Construction Phase Affected People Consultation

[Advice: Complete the table below with the consultations undertaken during construction site monitoring. This is usually undertaken by project staff e.g. PIU or PMU]

26. During the construction phase, the following table gives information on the consultations that were undertaken in order to understand the impact of the project on Affected People and how effective the EMP Mitigation measures are for residents, businesses and other affected people around the construction sites.

Table 16. Construction Phase Affected People Consultation

Subproject	Consultation Date	Person Consulted / Location	Outcome / Issues	Corrective Action Needed	Action Implemented by (person/date)
[Subproject 1]	[date]	[e.g. group of 5 residents, outside commune office]	[Issues raised or General comment from person on project]	[Describe how this issue will be solved]	[e.g Contractor, by June 14 2020]

XVII. COMPLAINTS, ISSUES, CORRECTIVE ACTION

A. Information Disclosure

[Advice: In this section, provide information on any public meetings, dissemination of information that has taken place to give information to the public. Some of this will take place in the ‘before construction’ phase, when the project is being prepared. For the FIRST SEMR, include information on pre-construction disclosure activities such as GRM dissemination.]

27. The following table gives information on any information disclosure activities undertaken;:

Table 17. Information Disclosure

Topic / Reason for Information	Disclosure Date	Method of Disclosure	Outcome / Results
[e.g. new project schedule, update on GRM, change to construction plans]	[date]	[e.g. information board, meeting, leaflet]	[Issues raised or outcome of meeting]

B. Grievance Redress Mechanism

[Advice: In this section include any complaints made through the GRM INCLUDING those made during any consultation with Affected People – such as issued raised in Table 16 . Include any complaints made that have already been resolved e.g. resolved during time of consultation]

28. The following table gives information on complaints about the project the Project Team is aware of, during this reporting period. The table includes:

- Complaints made thorough GRM entry points
- Issues raised in consultation;
- Issues raised any other way that the project team is aware of.

29. For issues that have already been solved, this is confirmed in the final column of the table. Where possible the project tries to solve all issues as quickly as possible through informal discussions between the affected people and the contractor.

Table 18. Project Complaints or Issues

Details of Complaint / Issue Raised	Detail of Person (Date, Name, Contact Details)	Action Needed & Date	Comment / Resolved?
[e.g. noise/dust, poor access to house, affected water supply]	[date , Name of Person, Phone number/village location]	[e.g. contractor to reinstate water supply by 19 th June 2020]	[Issue solved. Action has been taken and Affected Person is satisfied. PIU followed up.]

30. The following table gives information on all issues raised in previous SEMRs which are not yet resolved:

Table 19. Project Complaints or Issues – Not resolved from previous reports

Details of Complaint	Detail of Person (Date, Name, Contact Details)	Action Needed & Date	Reason this is still not resolved
[e.g noise/dust, poor access to house, affected water supply]	[date , Name of Person, Phone number/village location]	[e.g. contractor to reinstate water supply by 19 th June 2020]	[explain why the problem continues.]

C. Corrective Action

[Advice: In this section, provide information on any formal corrective action that had to be issued to change practices on the construction site] being

31. The following table gives information on any formal corrective action that has been issued to the contractor in order to improve environmental performance:

Table 20. Corrective Action Issued

Reason for Corrective Action	Date Issued	Outcome	Comment / Follow Up
[e.g. water supply damaged to village]	[date]	[e.g. Contractor formally requested to repair water supply and compensate people. This was undertaken.]	[PIU will monitor the water supply monthly]

XVIII. CONCLUSION & RECOMMENDATION

[Advice: Summarise if the EMP is being followed and if the Environmental Safeguards are adequate. Make recommendations on what will happen to improve the project environmental performance in the next reporting period]

32. Conclusion: [on general environmental progress]

33. Recommendations: [on next steps and actions to take to make improvements in environmental performance of the project]

Annex 1 Environmental Quality Monitoring Results

[Insert Table of results and relevant national/international standard]

Annex 2 Photo Record – Visits, Monitoring, Consultation

Photographs of Site Visits

Photographs of Environmental Quality Monitoring

Photographs of Consultation

APPENDIX 7 - GENDER ACTION PLAN MONITORING TABLE**GENDER ACTION PLAN (GAP) MONITORING TABLE****Date of Update:****Project Title:****Country:****Project No.:****Type of Project (Loan/Grant/TA):****Approval and Timeline:****Gender Category:****Mission Leader:****Project Impact:****Project Outcome:**

Gender Action Plan (GAP Activities, Indicators and Targets, Timeframe and Responsibility)	Progress to date (as of _____) (This should include information on period of actual implementation, sex-disaggregated quantitative updates (e.g. number of participating women, women beneficiaries of services, etc.), and qualitative information. However, some would be on-going - so explain what has happened so far towards meeting the target.	Issues and Challenges (Please include reasons why an activity was not fully implemented, or if targets fall short, or reasons for delay, etc., and provide recommendations on ways to address issues and challenges)
Output 1: Capacity of human resources for agricultural research improved		
1. Human capacity strengthening for female scholars: at least 10% of the total trainees (55 persons) will be women	Achieved: 13 out of 55 staff (24%) were appointed to study abroad for Masters, PhD or postdoctoral degrees	
2.		
3.		
Output 2:		
1.		
2.		
3.		
Output 3:		

Comments/ Remarks:

Accomplished by : _____

Date Accomplished: _____