

# Project Administration Manual

Project Number: 42285

Loan and/or Grant Number(s): {LXXXX; GXXXX}

October 2015

Kingdom of 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 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 Legal 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 Legal Agreements, the provisions of the Legal 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
AH	=	affected household
AP	=	Affected Person
ASEAN	=	Association of Southeast Asian Nations
CQS	=	consultant qualification selection
DMF	=	design and monitoring framework
EA	=	Executing Agency
EARF	=	environmental assessment and review framework
EMP	=	environmental management plan
GACAP	=	governance and anticorruption action plan
GDP	=	gross domestic product
GDPW	=	General Department of Public Works
GMS	=	Greater Mekong Subregion
ICB	=	international competitive bidding
IEE	=	initial environmental examination
IPPF	=	indigenous people planning framework
IRC	=	Inter-ministerial Resettlement Committee
JICA	=	Japan International Cooperation Agency
LAR	=	land acquisition and resettlement
MEF	=	Ministry of Economy and Finance
MPWT	=	Ministry of Public Works and Transport
NCB	=	national competitive bidding
NGOs	=	nongovernment organizations
O&M	=	operation and maintenance
PAM	=	project administration manual
PCA	=	procurement capacity assessment
PCC	=	Provincial Coordinating Committee
PDPWT	=	provincial departments of public works and transport
PIU	=	project implementation unit
PMIS	=	project management and implementation support
PMU	=	project management unit
PPCR	=	pilot program for climate resilience
PPMS	=	Project Performance Management System
PRSC	=	Provincial Resettlement Sub-Committees
PSC	=	Project Steering Committee
QBS	=	quality based selection
QCBS	=	quality- and cost based selection
RP	=	resettlement plans
SBD	=	standard bidding documents
SOE	=	statement of expenditure
SPS	=	Safeguard Policy Statement
SWM	=	solid waste management
TOR	=	terms of reference
TSUADF	=	Tonle Sap Urban Areas Development Framework

## I. PROJECT DESCRIPTION

### A. Rationale

1. The project will contribute to increased economic activities and environmental protection in towns in the Tonle Sap Basin. It responds to the need of municipal governments for integrated urban environmental management in urban areas around Tonle Sap Lake. The project will improve urban services and enhance 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 operation and maintenance (O&M).<sup>1</sup> The project follows the Tonle Sap Urban Areas Development Framework (TSUADF) and Kampong Chhnang and Pursat urban development strategies to 2030.<sup>2</sup>

2. Urbanization in Cambodia is taking place rapidly since 2004 with an average urban growth rate of 2.6% per year. In 2013, about 21.4% of Cambodia's population lived in urban areas. Urban areas are crucial to Cambodia's economic development and its integration into regional markets such as the Greater Mekong Subregion (GMS) and the Association of Southeast Asian Nations (ASEAN). However, urbanization has been taking place with minimal coordination and regulation, inadequate infrastructure and insufficient regard for the environmental impacts of development. This has resulted in unplanned growth, inefficient land use, damage and loss of natural resources, and inadequate access to urban services. Problems are attributable to poor urban management, little strategic spatial planning, poor integration of environmental management in urban planning, and insufficient investment in infrastructure and community services. Urban planning and investments are needed to accommodate expanding urban populations, sustain economic growth in urban areas, and protect the environment.

3. Urban areas in the Tonle Sap Basin have a direct and symbiotic relationship with their rural areas, which are based on agriculture, fisheries and manufacturing. About 12% of the population in the Tonle Sap provinces live in urban areas along Highways No. 5 and 6, which encompass the Tonle Sap Lake; the six largest urban areas had an estimated population of 480,000 in 2012 and is anticipated to grow to 670,000 by 2030.<sup>3</sup> The Tonle Sap, a designated biosphere reserve since 1997, contributes about 60% of the country's total inland fisheries production. It is the largest freshwater lake in Southeast Asia and covers 250,000–300,000 hectares (ha) in the dry season and 1.0 million–1.6 million ha in the wet season—nearly 9% of Cambodia's land area.

4. The TSUADF guides sustainable growth and climate resilient infrastructure development of urban areas in the Tonle Sap Basin. The Tonle Sap is at risk of being adversely affected by climate-induced changes to the Mekong River and its tributaries. About 62% of the Tonle Sap's water originates in the Mekong River and 38% in the Tonle Sap basin. It absorbs about 20% of the Mekong River's floodwaters. The Tonle Sap is connected to the Mekong River by the Tonle Sap River, which reverses its flow seasonally. Average water levels in the Tonle Sap may rise by 0.2 m and peak water levels may increase by up to 0.3 m by 2050, so floods may last 9% longer as a result of climate change impacts and the probability of river floods is likely to

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<sup>1</sup> ADB provided project preparatory technical assistance. ADB. 2011. *Technical Assistance to the Kingdom of Cambodia for Preparing the Integrated Urban Environmental Management in the Tonle Sap Basin Project*. Manila. (TA 7986-CAM, \$700,000, approved on 13 December 2011).

<sup>2</sup> The TSUADF is for approval by the government. Urban strategies approved on 31 July 2014 (MPWT Letter No. 009 PMU/MPWT/IEUMTB/14/30 July 2014/Kampong Chhnang and No. 008 PMU/MPWT/IEUMTB/14/30 July 2014/ Pursat).

<sup>3</sup> Includes municipalities of Kampong Chhnang, Pursat, Serei Saophoan, Siem Reap, Stueng Saen and Battambang. Urban growth figures are estimates based on national census and National Institute of Statistics projections.

increase.<sup>4</sup> Standard & Poor's ranked Cambodia's economy and creditworthiness as most vulnerable to the effects of climate change amongst the 116 nations measured as part of a vulnerability index.<sup>5</sup> The TSUADF prioritizes Kampong Chhnang and Pursat municipalities because of their strategic importance, climate change risk and environment protection needs, and synergies with ADB agriculture and rural development projects. Increased prosperity and greater climate resilient infrastructure will strengthen rural-urban regional linkages in these towns through an integrated approach to urban environmental management.<sup>6</sup>

5. The TSUADF includes an agreed long-term vision and strategic approach to integrated urban environmental management. It seeks to protect Tonle Sap ecosystems from environmental pollution and unregulated growth and urbanization via an agreed vision and approach.<sup>7</sup> It helps ensure coherence in implementation on issues of integrated spatial planning, urban management and governance, effective and efficient public services to residents, urban area competitiveness and growth, climate change adaption, social and economic well-being and inclusion, and green cities development. The project will improve urban services in Kampong Chhnang and Pursat municipalities by focusing on physical and non-physical investments.

6. Kampong Chhnang and Pursat urban development strategies, based on the TSUADF, recognize each municipality's role as a key economic center for agricultural production and manufacture, and its people's unique relationship with the Tonle Sap. Kampong Chhnang and Pursat government agencies listed poor environmental sanitation as their town's biggest infrastructure issue. Kampong Chhnang municipality prioritized alleviation of annual flooding from the Tonle Sap by raising and upgrading the existing embankment to the North and East of the town; and improvement of environmental sanitation for the large communities living on, and adjacent to, the Tonle Sap. Pursat municipality prioritized town center flood protection by raising and strengthening the Pursat river embankments with groynes to prevent embankment erosion, and rehabilitating and extending the existing drainage system with more road side drains; and improvement in solid waste management (SWM).<sup>8</sup>

7. Lack of climate resilient infrastructure, especially around the Tonle Sap, leaves residents vulnerable from flooding and climate-induced disasters. Kampong Chhnang and Pursat both suffer from flooding for 6 to 8 months in a year. In Kampong Chhnang, residents are affected by flooding from the Tonle Sap, which causes the most inundation damage, and the run-off from the hills around the town. The annual hydrological cycle of the Tonle Sap is the main cause of flooding.<sup>9</sup> The existing embankment along the Tonle Sap was overtopped in 2011 and resulted in severe flooding. It is the government's first priority for climate resilient infrastructure investment. In Pursat, residents are affected by flooding from both the Pursat River and lack of drainage, which causes the most inundation damage in the town center and affects 80% of the area. The town center lies in a depression and the natural slope of the town is away from the river towards old channels of the Pursat River. While the embankment along the Pursat River

<sup>4</sup> C.T. Hoanh, et al. 2010. Impacts of climate change and development on Mekong flow regime. First assessment—2009. *MRC Technical Paper No. 29 (June)*. Vientiane: Mekong River Commission; and K. Västilä, et al. 2010. Modeling Climate Change Impacts on the Flood Pulse in the Lower Mekong Floodplains. *Journal of Water and Climate Change*. 1(1): pp. 67-86.

<sup>5</sup> Floods in 2011 damaged about 10% of the country's total agricultural crops and \$200 million worth of infrastructure. E, Morton. 2014. *Cambodia most vulnerable to climate change: Study*. *The Phnom Penh Post*. 12 June.

<sup>6</sup> TSUADF, Kampong Chhnang Urban Development Strategy, Pursat Urban Development Strategy (accessible from the list of linked documents in Annex A).

<sup>7</sup> The Tonle Sap Authority (TSA) in the Ministry of Water Resources and Meteorology approved the feasibility study report for the project, including the TSUADF, on 16 January 2014.

<sup>8</sup> Kampong Chhnang and Pursat also prioritized wastewater treatment; this may be considered for investment in the next project phase.

<sup>9</sup> Climate Resilient Measures (paras. 26–32 and 42, accessible from the list of linked documents in Annex A).

was also overtopped by the 2011 floods, it occurs less frequently and can be managed through sandbags along the river edge.

8. Limited solid waste collection and poor management is a major environmental issue in flood-prone areas of the Tonle Sap and a major health concern for communities, especially women. The municipality is responsible for solid waste management. The Ministry of Environment has issued general guidelines on disposal, collection, transport, storage, recycling, minimization and dumping of household waste. Reduce, reuse, recycle for waste management is active in Kampong Chhnang and Pursat municipalities through junk shops and wastepickers, but only about 20% of the waste stream in Kampong Chhnang and 30% in Pursat is recycled. The responsibility for solid waste management falls with municipality. The situation is further exacerbated, as aspects of SWM are contracted out to the private sector without proper contract monitoring and supervision. The project will improve SWM in Kampong Chhnang and Pursat through institutional strengthening of urban service units, private sector contract management, closure of non-functioning open dumpsites, construction of new controlled landfills, and awareness on menstrual hygiene management.<sup>10</sup>

9. During the flooding season, poor and vulnerable ethnic communities are often cut-off from the town center, restricting their access to markets and social services. The poor and vulnerable often reside in low-lying areas near the Tonle Sap or with poor drainage, and have limited access to solid waste collection services and household sanitation. About 61% of households in Pursat and 50% in Kampong Chhnang have access to latrines, making human waste disposal a major environmental issue especially amongst the urban poor and vulnerable groups. The Identification of Poor Households Programme (IDPoor) identified 2,133 poor households in Kampong Chhnang and 3,456 poor households in Pursat project areas. The project will support community mobilization and action, which will provide information awareness to local communities, sanitation facilities to IDPoor 1 and 2 households, and community-driven improvements to floating communities and ethnic minorities.<sup>11</sup>

10. **Multiple agencies** are involved in the planning, execution and management of urban services and environmental protection: the Ministry of Public Works and Transport (MPWT), Ministry of Economy and Finance, Ministry of Water Resources and Meteorology, Tonle Sap Authority, Ministry of Industry and Handicrafts, and Ministry of Rural Development. The Ministry of Land Management, Urban Planning and Construction (MLMUPC) is responsible for spatial planning. The Ministry of Tourism encourages clean tourism city development. The Ministry of Environment oversees climate change adaptation activities, pollution control, green growth and environmental safeguard compliance, and SWM of household waste. The project will coordinate frequently with these agencies through existing coordination mechanisms in urban development and climate change resilience for greater knowledge exchange and improved quality services for the residents.

11. **The role of provincial and municipal governments** in decentralized urban management and service delivery is evolving with the gradual assignment of functions from line Ministries to subnational governments under the Law on the Administrative Management of the Capital City,

<sup>10</sup> A sanitary landfill is not feasible in Kampong Chhnang and Pursat because of the high initial and operating costs, low volumes of waste currently generated, high levels of technical expertise required, and people's low willingness to pay for collection.

<sup>11</sup> The Identification of Poor Households Program (IDPoor) is a nationwide identification and targeting program for the poor in Cambodia. Led by the Ministry of Planning, it identifies poor households, their levels of poverty and the rates of poverty in different areas. IDPoor 1 and 2 categories represent the poorest of households. Ministry of Planning. 2012. *ID Poor Atlas*. Phnom Penh. More information is available at <http://www.mop.gov.kh/projects/idpoor/tabid/154/default.aspx>

Provincial and District Towns (Organic Law 2008). The Ministry of Interior is responsible for public administration and subnational matters and the National Committee for Sub National Democratic Development is the inter-ministerial mechanism for promoting democratic development through decentralization and deconcentration reforms—both are accountable to the government on the implementation of the Organic Law. Provincial departments of line ministries (through municipalities) are responsible for O&M, private sector contract management, and service delivery, but responsibilities require coordination across different provincial departments, such as the provincial departments of public works and transport (PDPWT)s and PDWRAM for flood and embankment protection. Improved financial management, accounting and governance are also important for an agency that is responsible for revenue-generating infrastructure. Through the establishment of urban service units in the two municipalities, the project will help establish semi-autonomous agencies in providing sustainable and reliable urban services. It will address the larger issue of sustainability and knowledge transfer from MPWT to municipalities in accordance with the Organic Law.

12. **Related policies and strategies.** The project is in line with the government's Rectangular Strategy Phase III; the National Strategic Development Plan 2014-2018; the Organic Law and Sub-decrees; the Cambodia Climate Change Strategic Plan 2014-2023; the National Adaptation Programme of Action for Climate Change; and the ASEAN Clean Tourism City Standard initiative. It takes a comprehensive development approach to urban environmental management. It focuses on the Tonle Sap provinces, prioritized in 2013 for programming because of higher than national average poverty rates and incidence of female illiteracy. The project focuses on achieving sustainable and inclusive development by transforming the key urban areas into competitive and green urban centers. It is in line with the TSUADF and responds to priorities identified by government agencies in Kampong Chhnang and Pursat. The project has synergies with other ADB and development partner projects and is aligned with the country partnership strategy for Cambodia, 2014–2018; and the Country Operations Business Plan for Cambodia, 2015–2017. It demonstrates the importance of developing sustainable and urban economic growth centers on rural-urban subregion connectivity and linkages. The project is consistent with ADB's Urban Operational Plan, 2012–2020 under Strategy 2020, which fosters competitive, inclusive, and green cities by improving performance in economic, equity, and environment areas; and the Midterm Review of Strategy 2020.<sup>12</sup>

13. ADB has played a prominent role in the urban sector and assisted the government launch the Tonle Sap Initiative following development of the Tonle Sap Basin Strategy in 2005. Other partners in the urban sector that have been active for more than 13 years include the JICA, Agence Française de Développement, and German development cooperation through Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). The project will support development partner coordination through a proposed national urban development task force, chaired by MPWT. The national task force will facilitate the information exchange for government representatives in preparation for the annual GMS Urban Development Task Force meetings.

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<sup>12</sup> ADB. 2014. *Country Partnership Strategy: Cambodia, 2014–2018*. Manila; ADB. 2014. *Country Operations Business Plan 2015–2017*. Manila; Government of Cambodia. 2014. *National Strategic Development Plan 2014–2018*. Phnom Penh; ADB. 2013. *Urban Operational Plan, 2012–2020*. Manila; Government of Cambodia, Ministry of Environment. 2006. *National Adaptation Programme of Action for Climate Change (NAPA)*. Phnom Penh; Government of Cambodia, Ministry of Tourism. 2014. *ASEAN Clean Tourist City Standard*. Phnom Penh; Government of Cambodia. 2013. *Rectangular Strategy for Growth, Employment, Equity and Efficiency, Phase III*. Phnom Penh; Government of Cambodia, National Climate Change Committee. 2013. *Cambodia Climate Change Strategic Plan 2014–2023*. Phnom Penh; and Government of Cambodia, Ministry of Planning. 2013. *Integration of Demographic Perspectives in Development, Cambodia*. Phnom Penh.

14. Key lessons from ADB's experience in implementing urban development projects in Cambodia have been incorporated into the project design; they include the need for strengthening institutional capacity and skills in project implementation and management; implementing land acquisition and resettlement in partnership with the government; facilitating sector coordination meetings and regular stakeholder consultations during implementation; and establishing special utility units and accounts for O&M of decentralized urban services for improved sustainability, as in the case of ADB and Government's wastewater treatment experience in Siem Reap.<sup>13</sup>

15. Special or innovative features of the project include: (i) integrated urban environmental management framework for the Tonle Sap Basin and town urban development strategies for Kampong Chhnang and Pursat municipalities; (ii) significant climate resilience infrastructure investments; (iii) pilot demonstration on integrated menstrual hygiene management in solid waste management; (iv) national coordination mechanism to facilitate information exchange and knowledge management in urban development; (v) the establishment of semi-autonomous agencies in providing sustainable and reliable urban services through the establishment of urban service units, which will address the larger issue of the sustainability and knowledge transfer from the Ministry of Public Works and Transport to municipalities in accordance with the Organic Law 2008; and (vi) public-private partnerships in project implementation involving the Government, communities, nongovernmental organization, consulting firms, and ADB.

## B. Impact and Outcome

16. The impact will be increased economic growth and environmental protection in towns in the Tonle Sap Basin. The outcome will be improved urban services and climate change resilience in Kampong Chhnang and Pursat municipalities. The project will 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 two municipalities of Kampong Chhnang and Pursat. This will be achieved through an integrated program of physical and non-physical investments in priority infrastructure rehabilitation, improvement and extension; community small-scale infrastructure and behavior change and communication initiatives; organizational and institutional development; and capacity development in project implementation, and O&M. The project incorporates climate resilience measures in infrastructure development, with support from the Pilot Program Climate Resilience (PPCR).<sup>14</sup> The complete list of linked documents is listed in Annex A.

## C. Outputs

17. **Output 1: Kampong Chhnang urban area environmental improvements** includes flood protection totaling 15.1 km along Tonle Sap riverbank through improvement of the existing embankment and construction of a new embankment where required; construction of a new controlled landfill site of 10 ha at Phnom Tauch village (Pongro commune, Rolea Bier district) with increased capacity; provision of equipment for solid waste collection; and landfill management, including supervised closing of two open dumpsites in Kul Kuk village and Trork village (Sre

<sup>13</sup> Independent Evaluation Department. 2013. Validation Report: Mekong Tourism Development Project in the Greater Mekong Subregion (Cambodia, Lao People's Democratic Republic, and Viet Nam). Manila: ADB; ADB. 2013. Technical Assistance to the Kingdom of Cambodia for *Capacity Development for Urban Management*. Manila; Independent Evaluation Department. 2012. Validation Report: *Provincial Towns Improvement Project in Cambodia*. Manila: ADB; and ADB. 1997. *Technical Assistance Completion Report: Urban Development Strategy Study in Cambodia*. Manila.

<sup>14</sup> The PPCR is a targeted program of the SCF, which is one of two funds under the Climate Investment Fund. PPCR programs are country-led and build on they build on national adaptation programmes of action for climate change .

Thmei commune, Rolea Bier district). It complements the Japan International Cooperation Agency's drainage project in Kampong Chhnang and GIZ's support for development of an urban master plan. Embankment protection will prevent flooding from the Tonle Sap into Kampong Chhnang town, reducing its vulnerability to flooding and providing protection to 1 in 50 year high water levels. In the dry season, outlets will accommodate the natural streams flowing into the Tonle Sap and sluice gates will avoid backflow into the town as the water rises. In the wet season, natural retention areas will retain wet season flows. The embankment is imperative for resident to have continued access to social services and economic activities in the town (e.g., rice processing mills). Improved flood protection will assist farmers in the eastern part of the municipality to increase agricultural production from two to three crops per year.

18. **Output 2: Pursat urban area environmental improvements** includes construction of about 9.9 km of primary and secondary drains in the town center with associated road improvements and improved wastewater treatment; (ii) riverbank erosion protection in select locations along the Pursat River, including revetment and groins; (iii) development of a new controlled landfill of about 28 ha at Toul Mkak village (Roleap Sangkat, Pursat town) and associated access road of about 900 meters; (iv) provision of equipment for solid waste collection; and (v) landfill management, including equipment and closure of two old open dumpsites in Toul Mkak village (Roleap Sangkat, Pursat town) and Sras Srang village (Prey Gny Sangkat, Pursat town). It complements ADB's previous support to the Dhamnak Chheukrom Irrigation System Rehabilitation (located about 40 km upstream). About 20% of the town's roads have drains with National Highway No. 5 and other main roads lacking side drains. The construction of drains in the town center will improve and strengthen the stormwater drainage system to accommodate more intensive rainfall. It will support increased economic activities in the town center (e.g., marble process and carvings), and facilitate residents' continued access to social services.

19. **Output 3: the community mobilization and environmental improvements** aims to address the climate change and environmental needs of the urban poor and vulnerable, including 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, national government, and community.<sup>15</sup> The output will help extend project benefits to the poor and vulnerable groups. It will be implemented in partnership with an international non-governmental organization (NGO), which must demonstrate in its proposal experience working with Tonle Sap communities, including ethnic Cham and Vietnamese. See Annex B for details and the Annex C, Package IV for the terms of reference of the NGO.

20. **Output 4: Strengthened Sector Coordination and Operations** supports the MPWT to convene national urban development task force meetings with other ministries and development partners in the urban sector (about twice per year); strengthen climate change regulations, focusing on improved building codes in provincial towns around the Tonle Sap to reflect key climate resilience features, including appropriate sanitation; and support the establishment of urban service units (or special operating agencies) for improved delivery and management of decentralized urban services. If successful, USUs will demonstrate a mechanism for the sustainability and delivery of quality decentralized urban services, which could be replicated in other municipalities. Climate change financing will support the Government in implementing the TSUADF in partnership with subnational governments around the Tonle Sap by developing a

<sup>15</sup> Cost sharing principles, net of taxes is 80% project, 10% government and 10% beneficiaries,

consultation program and a plan for climate change adaptation in urban areas. It complements the MPWT parallel climate change initiatives in the transport sector.<sup>16</sup>

21. A condition for disbursement from ADB ADF loan account has been included, whereby no disbursements shall be made from the Loan Account for Category 1B or Category 1E relating to the solid waste management contracts for the Project until each relevant USU meets following condition: the adoption of Environmental Sanitation Fees by 1 January 2019, determined by ADB to be sufficient to recover full operations and maintenance costs and gradual depreciation over time of solid waste management, flood control and drainage. Based on the financial analysis completed during project preparation, the suggested fee includes a (a) flat fee for households to be increased by a minimum of 5% every 3 years starting 1 January 2019, taking into account affordability of the poor, and (b) progressive block fee for businesses to be increased by a minimum of 8% per annum starting 1 January 2019. See linked document 8 on financial analysis and supplementary document 31 on complete financial analysis. More details on the urban service units can be found in the urban institutional analysis (supplementary document 32). This fee structure will be reviewed and verified during project implementation to ensure it is sufficient to cover full operations and maintenance costs and gradual depreciation.<sup>17</sup>

22. **Output 5: Strengthened Capacity for Project Implementation and O&M** include project implementation support services for the project management (PMU) and project implementation units (PIUs) in design supervision; safeguards implementation; project and climate resilience monitoring; gender mainstreaming; community development; accounting and financial management; procurement; disbursement; review and expansion of existing strategies; and skills enhancement and on-the-job training in urban planning and development, SWM and O&M. Specifically, it will include skills enhancement and on-the-job training for project staff in urban planning and development, solid waste collection and landfill management, and operation and maintenance. Project implementation support services will review and expand existing flood mitigation strategy, stormwater drainage and flood mitigation strategy, SWM strategies, and disaster risk management strategies. The project implementation support services will also include assistance in preparing project progress reports, quarterly safeguards monitoring reports, and monitoring reports in accordance with pilot program on climate resilience (PPCR) results framework and PPCR monitoring and reporting toolkit.

<sup>16</sup> MPWT. 2012. *National Strategic Plan for Climate Change Adaptation and Greenhouse Gas Mitigation in Transport Sector*. Phnom Penh.

<sup>17</sup> For the avoidance of doubt, this disbursement condition required to be met by each USU shall not be conditional or dependent on the other USU meeting the Disbursement Condition and if one USU meets the Disbursement Condition, then disbursements from the Loan Account shall be permitted as to that relevant USU according to the terms set forth herein. Each USU shall undertake an annual assessment and will implement the aforesaid fee adjustments by January 1 of each year, starting 2019.

## II. IMPLEMENTATION PLANS

### A. Project Readiness Activities

Indicative Activities	2014					2015												Responsible Party
	Aug	Sept	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
Establishment of Project Management and Project Implementation Units																		MPWT
Approval of Safeguards Documents																		Government
Disclosure of 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

Source: Asian Development Bank and Executing Agency.

### B. Project Readiness Filters

Key Project Preparation Elements	Stage of Project Preparation						Current Status
	Identification/ Preparation (Mar-Sept 2013)	Loan Fact-Finding Jan 2014	Loan Fact-finding follow-up mission (June 2014)	Consultation mission (August and Sept 2014)	Negotiations (Oct 2014 – September 2015)	Effectiveness (Jan 2016)	(3 Sept 2015)
Governance risk plans, including a Complaints Handling Mechanism	Drafted completed in Draft Final Report	Discussed and finalized.	Discussed and finalized.	Discussed and finalized.	Completed and agreed. A Project Staff has been assigned as focal point person		None
PCA of executing agencies (EAs) and implementing agencies (IAs)	Included in Draft Final Report	Final draft discussed and finalized.	Final draft discussed and finalized.	Final draft discussed and finalized.	Start-up actions initiated	Start-up actions implemented	None
Advance Actions (AA) for 1st year Bidding Documents (BDs) for goods and works		MOU between DP and RG includes list of items, timetable and responsibility	MOU between DP and RG includes list of items, timetable and responsibility	No action	BD No objection obtained by the DP and issued.	Ready for signing (notably for goods)	AA for 1 <sup>st</sup> year bidding documents delayed.

Key Project Preparation Elements	Stage of Project Preparation						Current Status
	Identification/ Preparation (Mar-Sept 2013)	Loan Fact-Finding Jan 2014	Loan Fact-finding follow-up mission (June 2014)	Consultation mission (August and Sept 2014)	Negotiations (Oct 2014 – September 2015)	Effectiveness (Jan 2016)	(3 Sept 2015)
		ies for implementa tion of AA	es for implementati on of AA				
Advance Actions for consultants	Outline Terms of Reference (TORs) for project implementation consultants drafted and part of Draft Final Report (PAM)	Detailed TORs prepared, discussed and finalized.	Detailed TORs prepared, and discussed. A few TORs under development and will be finalized together with the EA.	Detailed TORs refined and finalized with EA.	Advertising, shortlisting and RFP issued (subject to TA savings for start-up consultant).	1. Technical and financial proposals evaluated. 2. Contract negotiations done. 3. Contracts ready for signing	
Financial Management Capacity Assessment (FMCA) of EAs/IAs	Drafted completed in Draft Final Report (PAM)	FMCA reviewed, discussed and finalized.	FMCA reviewed, discussed and finalized.	No action	Start-up actions initiated	Start-up actions implemented, including FM training within 2 months(subject to TA savings for start-up consultant and/or available ADB training at CARM).	None
Auditing arrangements including TOR	Drafted completed in Draft Final Report (PAM)	Audit arrangements reviewed, discussed and agreed to with EA.	Confirmed	No action	Confirmed.		None
Environment assessments and plans, social assessment and plans, including Indigenous People and Gender assessments and plans (where applicable)	Drafted completed and discussed in Draft Final Report (PAM)	Environment and social assessment plans reviewed, refined, discussed and agreed. Safeguard drafts will be disclosed once endorsement / approval is received from Ministry of Environment (MOE).	Social assessments plans reviewed, refined, discussed and agreed (IPs, gender and social).	Environment docs and MOE comments discussed; EARF and IEEs revised with the EA and MOE.  MOE approved IEEs approved (15 August 2014) and uploaded on ADB website	Approved (but updated during implementation following detailed design and clearance from MOE).	Action plans initiated and ongoing (n/a).	
Implementation of Resettlement Plan (at least for 1st year) with	Arrangements included in the RPs, prepared as part of Draft	Resettlement plans reviewed, refined,	Resettlement plans reviewed, refined,	Resettlement plans approved by IRC on 21	RPs approved (but updated during implementation	Start implementation (not applicable for project):	Revised RPs endorsed for disclosure on ADB website (3 Sept

Key Project Preparation Elements	Stage of Project Preparation						Current Status
	Identification/ Preparation (Mar-Sept 2013)	Loan Fact-Finding Jan 2014	Loan Fact-finding follow-up mission (June 2014)	Consultation mission (August and Sept 2014)	Negotiations (Oct 2014 – September 2015)	Effectiveness (Jan 2016)	(3 Sept 2015)
attention to: Sufficient budget for compensation and income restoration Coordination with IRC and EA Resettlement Units. Updating of Resettlement Plan	Final Report (feasibility studies)	discussed and agreed. Draft RPs will be uploaded following endorsement / approval from Inter-ministerial Resettlement Committee in Ministry of Economy and Finance (IRC/MEF)	discussed and agreed. Draft RPs will be uploaded following endorsement / approval from IRC/MEF	August 2014  PIBs translated in Khmer disclosed in September 2014  RPs will be uploaded on to ADB website	following detailed design and clearance from IRC/MEF). government budgets confirmed.	Recruiting a quality assurance specialist (resettlement) - within 3 months) Conducting detailed measurement survey within 6 months Conducting replacement cost study within 2 months Updating the RP within 2 months	2015)
Identification of Project Director and EA/IA project management team to be responsible for project implementation	MPWT to identify and assign staff to lead project preparation. Implementation arrangements (and TOR) defined in Draft Final Report (PAM)	PMU composition s reviewed, refined, discussed and agreed to the TORs and staffing requirements (including salary supplement s with MEF).	PMU compositions reviewed, refined, discussed and agreed to the TORs and staffing requirements (including salary supplements with MEF).	Some members of the PMU have been identified.	Issuance of formal appointment for project management and implementation teams.	"Rules-of-the-game" workshop done within 3 months	
Identification of staff at provincial, district and commune levels	MPWT to identify and assign staff to lead project preparation. Implementation arrangements (and TOR) defined in Draft Final Report (PAM)	PIUs composition s reviewed, refined, discussed and agreed to the TORs and staffing requirements (including salary supplement s with MEF).	PIUs compositions reviewed, refined, discussed and agreed to the TORs and staffing requirements (including salary supplements with MEF).	Some members of the PIU and PPSC have been identified.	Issuance of formal appointment for project management and implementation teams.		
Budget & funding from DP and government for the 1 <sup>st</sup> year of project implementation	Needs defined and budget proposed in Draft final report.	Reviewed, refined, discussed and agreed.	Reviewed, refined, discussed and agreed.	No action	Confirmed.	Available	None
M&E baselines	To be defined in the DMF as part of the Draft final report.	Baselines and indicators reviewed, refined, discussed	Baselines and indicators reviewed, refined, discussed	Baselines and indicators reviewed, refined, discussed and agreed.	Confirmed		

Key Project Preparation Elements	Stage of Project Preparation						Current Status
	Identification/ Preparation (Mar-Sept 2013)	Loan Fact-Finding Jan 2014	Loan Fact-finding follow-up mission (June 2014)	Consultation mission (August and Sept 2014)	Negotiations (Oct 2014 – September 2015)	Effectiveness (Jan 2016)	(3 Sept 2015)
		and agreed.	and agreed.				

AA= advance actions, ADB=Asian Development Bank, BD=bidding documents, DMF=design and monitoring framework, DP=developing partner, EA=executing agency, FMCA=Financial Management Capacity Assessment, IA=implementing agency, IRC=Interministerial Resettlement Committee, M&E=monitoring and evaluation, MEF=Ministry of Economy and Finance, MOE=Ministry of Environment, MPWT=Ministry of Public Works and Transport, PAM=project administration manual, PCA=procurement capacity assessment, MOWRAM=Ministry of Water and Meteorology, PMU=project management unit, PIU=project implementation unit, RP=resettlement plan, TOR=terms of reference, TSA=Tonle Sap Authority.

Source: Asian Development Bank.

### C. Overall Project Implementation

23. The Project is expected to be implemented over a period of seven years for completion by October 2022. The overall project implementation plan is shown in Table 3. The overall project implementation plan will be updated annually by MPWT and ADB based on actual physical progress.

Table 3: Detailed Implementation Plan

Item	2015	2016	2017	2018	2019	2020	2021	2022
<b>1.Kampong Chnnang Urban Area Environmental Improvements</b>								
<b>1.1 Improved, Reinforced and Raised River Embankment</b>								
Conduct topographical and soil surveys								
Update feasibility study and prepare appraisal report for ADB and government approval.								
Issue ICB bids, evaluate bids and submit to ADB for no objection								
Submit external resettlement M&E report to ADB (continuous, as per agreed RPs)								
Award contract and construct embankment from sections O to A, and C to D (Possible during higher lake levels)								
Transfer of O&M responsibilities for drainage and flood control systems to urban service unit (USU)								
Dry season 1, construct embankment from section A to C								
Dry season 2, construct embankment from section D to I								
Construct embankment from section I to M (Possible during higher lake levels)								
Road surfacing and supervision intermittent								
Final handover of works								
Internal monitoring of safeguards, including RPs and EMPs (continuous, as per agreed safeguard								
Defects liability period								
<b>1.2 Improved Solid Waste Management</b>								
Conduct topographical and soil surveys								
Update feasibility study and prepare appraisal report for ADB and government approval.								
Transfer of O&M responsibilities and tariff collection for solid waste management to USU								
Issue bids, evaluate bids and submit to ADB for no objection								
Submit external resettlement M&E report to ADB (continuous, as per agreed RPs)								
Award contract for landfill construction								
Procure Landfill Equipment								
Remediation of old dumpsites at Traok								
Landfill Construction & supervision								
Procure collection equipment								
Final handover of works								
Internal monitoring of safeguards, including RPs and EMPs (continuous, as per agreed safeguard documents)								
Defects liability period								

Item	2015	2016	2017	2018	2019	2020	2021	2022
<b>2. Pursat Urban Area Environmental Improvements</b>								
<b>2.1 Improved Town Centre Drainage</b>								
Conduct topographical and soil surveys								
Update feasibility study and prepare appraisal report for ADB and government approval (2 sets: one for drainage [ICB]).								
Issue ICB bids, evaluate bids and submit to ADB for no objection (drainage)								
Submit external resettlement M&E report to ADB (continuous, as per agreed RPs)								
Award contract for drainage works								
Transfer of O&M responsibilities for drainage to USU								
Construct drainage system starting at foot of system, construct pumping stations and WWTP with road rehabilitation as required.								
Supervise start-up and commissioning of WWTP								
Final handover of works								
Internal monitoring of safeguards, including RPs and EMPs (continuous, as per agreed safeguard documents)								
Defects liability period								
<b>2.2 Riverbank Erosion Protection</b>								
Conduct topographical and soil surveys								
Update feasibility study and prepare appraisal report for ADB and government approval (one set for riverbank protection [NCB]).								
Issue ICB bids, evaluate bids and submit to ADB for no objection (drainage)								
Submit external resettlement M&E report to ADB (continuous, as per agreed RPs)								
Award contract for riverbank erosion protection								
Construction of riverbank protection								
Final handover of works								
Internal monitoring of safeguards, including RPs and EMPs (continuous, as per agreed safeguard documents)								
Defects liability period								
<b>2.3 Improved Solid Waste Management</b>								
Conduct topographical and soil surveys								
Update feasibility study and prepare appraisal report for ADB and government approval.								
Transfer of O&M responsibilities and tariff collection for solid waste management to USU								
Issue bids, evaluate bids and submit to ADB for no objection								
Submit external resettlement M&E report to ADB (continuous, as per agreed RPs)								
Award contract for landfill construction								
Procure landfill equipment								
Remediation of old dumpsites at Srah Srang and Toul Makak Lech								
Landfill construction and supervision								
Procure collection equipment								
Final handover of works								
Internal monitoring of safeguards, including RPs and EMPs (continuous, as per agreed safeguard documents)								
Defects liability period								

Item	2015	2016	2017	2018	2019	2020	2021	2022
<b>3. Community Mobilisation &amp; Env. Improvements</b>								
Recruit International NGO								
Review and improve methodology through initial consultations								
Identify units from within the village development committees for project briefing and output training								
Climate change adaptation and sanitation needs assessments in poor communities								
Undertake community awareness programs on climate change and sanitation								
Needs assessments for small-scale infrastructure works on climate change adaptation and sanitation								
Assistance in planning, implementing & supervising community environmental improvements								
Prepare report on community environmental improvements and lessons								
Internal monitoring of safeguards, including RPs and EMPs (continuous, as per agreed safeguard documents)								
<b>4. Strengthened Sector Coordination and Operations</b>								
Recruit and mobilize climate change resilience consultants								
Review of existing climate change documents and their impact on urban environmental improvements								
Review and assessment of sanitation standards with respect to climate change adaptation in existing building codes in Tonle Sap provinces								
Program of consultation and implementation of the TSUADF with all Tonle Sap Provinces and Municipalities, including revised building codes and Plan for Climate Change Adaptation in Urban Areas								
Draft Plan for Climate Change Adaptation in Urban Areas (includes proposal for revised building codes)								
Final Plan for Climate Change Adaptation in Urban Areas is endorsed by Tonle Sap provinces								
Issuance of revised building codes in Tonle Sap provinces								
National task force for urban development coordination meetings								
Recruit and mobilize institutional specialists								
Preparation of institutional arrangements and legal documents for USUs								
Government approval of institutional arrangements for USUs								
Establishment and start-up of USUs								
Support for institutional strengthening of USUs								
<b>5. Strengthened Capacity for Project Implementation and Operation &amp; Maintenance</b>								
Recruit external resettlement monitor								
Appoint and update PMU and PIU units and members (completed in 2014)								
Recruit and mobilize project management, implementation and support (PMIS) consultants								
Develop PPMS (sex disaggregated indicators) and submit to ADB								
Review and update indicative capacity development plan								
Undertake training programs in project management, financial management, procurement, safeguards, gender mainstreaming, etc.								
Submit quarterly project progress reports (1 month after each quarter)								
Prepare annual PPME reports (31 January, 1 month after close of each calendar year)								
Establish grievance mechanism and appoint grievance focal person in PMU and PIUs								
Monitor grievances quarterly and include a summary in each progress report								
Submit Government completion and post-evaluation reports on resettlement activities								
Submit Government project completion report								

Note: Feasibility studies include detailed design updated cost estimates, economic and financial analyses, tender documents, socioeconomic data and safeguards documents.  
Source: Asian Development Bank and Ministry of Public Works and Transport.

### III. PROJECT MANAGEMENT ARRANGEMENTS

#### A. Project Implementation Organizations - Roles and Responsibilities

24. MPWT will be the executing agency (EA). The implementing agencies (IAs) will be the Provincial Department of Public Works and Transport (PDPWT) and Municipal Governments in Kampong Chhnang and Pursat. A Project Steering Committee (PSC) will be established by MPWT. The PSC will: (i) oversee implementation in conformity with the Project's development objectives and scope; (ii) assist in coordination among government agencies involved in Project implementation and policy reforms (in consultation with the PCU in Phnom Penh); (iii) ensure coordinated and efficient Project implementation activities; (iv) monitor the progress of all outputs, in particular, measuring the development impact and outcome envisaged under the Project; and (v) provide guidance and direction towards the accomplishment of the Project's impact and outputs. The PSC will be chaired by MPWT and members will include representatives from Ministry of Economy and Finance (MEF), Tonle Sap Authority (TSA), MPWT, and Ministry of Land Management Urban Planning and Construction (MLMUPC).

25. A project management unit (PMU) will be established with full time staff from MPWT. The PMU will include a PMU Project Director, Project Manager, two Supervisory Engineers, Social and Resettlement Officer, Environment Officer, Office Manager, Procurement Officer, Accounting Officer, Assistant Accountant and Secretary/Office Assistant. At least 30% of the PMU staff shall be women. The project management and implementation support (PMIS) consultants will be based in Phnom Penh and will work directly with the PMU. The consultant team leader and PMU Procurement Officer will verify all procurement and consulting service documents.

26. The PMU will be responsible for coordinating detailed preparation and implementation of project activities. More specifically it would (i) promote the Project to the targeted beneficiaries; (ii) assist in subproject development and implementation; (iii) evaluate the technical, financial and economic, social, and environmental viability of proposed subprojects; (iv) undertake Project supervision and monitoring; (v) establish and implement the Project Performance Management System (PPMS); (vi) prepare community action plans, bidding arrangements, and bid documents; (vii) evaluate bids; (viii) award and supervise construction contracts; (ix) exercise quality control; and (xi) recruit, manage and supervise project consultants. The PMU will report directly to the General Department of Public Works (GDPW) regarding project-related matters.

27. Project Implementation Units (PIUs) will be set up in Kampong Chhnang and Pursat. The PIU's will be staffed jointly by the Municipal government. Table 4 below shows the agreed composition for both PIUs based on discussions during project processing.

**Table 4: Project Implementation Unit Staffing Requirements**

<b>Kampong Chhnang PIU</b>				<b>Pursat PIU</b>			
*At least 30% of PIU staff will be women				*At least 30% of PIU staff will be women			
<b>No.</b>	<b>Position</b>	<b>Agency</b>	<b>Full-time / Part-time</b>	<b>No.</b>	<b>Position</b>	<b>Agency</b>	<b>Full-time / Part-time</b>
1.	Project Manager	PDPWT	Full-time	1.	Project Manager	PDPWT	Full-time
2.	Deputy Project Manager	Municipality	Full-time	2.	Deputy Project Manager	Municipality	Full-time
3.	Construction Engineer	PDPWT	Full-time	3.	Construction Engineer	PDPWT	Full-time
4.	Construction Engineer						
5.	Water Resources Engineer	PDWRAM	Full-time				
6.	Community Coordinator	Municipality	Full-time				
7.	Community Coordinator	PDPWT	Full-time	4.	Community Coordinator	To be determined	Full-time
8.	Procurement Officer	PDPWT	Part-time				
9.	Resettlement Officer	PDPWT	Part-time	5.	Procurement Officer	PDPWT	Part-time
10.	Project Accountant	PDPWT	Full-time	6.	Resettlement Officer	PDPWT	Part-time
11.	Office Manager	To be determined	Full-time	7.	Project Accountant	PDPWT	Full-time
				8.	Office Manager	To be determined	Full-time
12.	Driver	To be determined	Full-time				
				9.	Driver	To be determined	Full-time

Source: Discussions with EA, provincial and municipality representatives 24-25 June 2014.

28. A Provincial Coordinating Committee (PCC) will be established in each town to oversee the work of the PIUs. The PCC will include Provincial Governor (chair), deputy governors or municipality governors (deputy chair), select members of the provincial technical coordinating committee, and PMU project director (members), PIU manager (secretariat) with at least one woman in each committee.

### **Project Implementation Organizations – Roles and Responsibilities**

<b>Project Implementation Organizations</b>	<b>Management Roles and Responsibilities</b>
Ministry of Economy and Finance	<ul style="list-style-type: none"> <li>▪ Signing the loan and grant agreements for the financing required for the Project;</li> <li>▪ 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;</li> <li>▪ Allocating and releasing counterpart funds and oversight body for procurement, disbursements and resettlement matters;</li> <li>▪ Endorsing to ADB the authorized staff with approved signatures for withdrawal applications processing;</li> <li>▪ Submit withdrawal applications to ADB;</li> <li>▪ Chairs the Inter-ministerial Resettlement Committee (IRC);</li> <li>▪ IRC will recruit external monitoring organization for resettlement; and</li> </ul>

Project Implementation Organizations	Management Roles and Responsibilities
	<ul style="list-style-type: none"> <li>▪ Processing and submitting to ADB any request; when required, for reallocating the loan proceeds and extension of loan and grant closing dates.</li> </ul>
National Committee for Sub-national Democratic Development (NCDD)	<ul style="list-style-type: none"> <li>▪ Inter-ministerial mechanism for promoting democratic development through D&amp;D reforms throughout Cambodia</li> <li>▪ They are accountable to the Government on the implementation of the Organic Law.</li> </ul>
Ministry of Public Works and Transport (MPWT) - Executing Agency (EA) ; the project management unit (PMU) is located in MPWT.	<ul style="list-style-type: none"> <li>▪ Setup Project Steering Committee;</li> <li>▪ Assumes overall responsibility for Project implementation and establishment of Project Management Unit (PMU);</li> <li>▪ Approve medium term and annual rolling plans for Project implementation;</li> <li>▪ Ensure compliance with Loan and Grant Covenants;</li> <li>▪ Ensure Government counterpart fund allocation;</li> <li>▪ Establish and manage the Project's imprest accounts;</li> <li>▪ Submit contract awards and disbursement projections;</li> <li>▪ Submit audited project accounts and audited financial statements to ADB;</li> <li>▪ Recruit and monitor the performance of consulting packages I to IV;</li> <li>▪ Approve procurement plans, bidding documents, bid evaluation and contract awards in accordance with ADB and Government of Cambodia (Government) requirements;</li> <li>▪ Ensure compliance and attainment of relevant and applicable Government environmental permits and clearances prior to bidding;</li> <li>▪ Ensure project monitoring against the design and monitoring framework and submission of annual project performance monitoring and evaluation reports;</li> <li>▪ Submit regular quarterly and annual project progress reports to ADB</li> <li>▪ Update safeguard documents (e.g., resettlement plans and IEEs/EMPs) and submit to respective agencies for approval prior to sending to ADB concurrence prior to implementation;</li> <li>▪ Ensure output 3 is implemented to assist the poor and vulnerable communities, including ethnic Cham and Vietnamese benefit from the Project;</li> <li>▪ Coordinate capacity development activities and ensure equal opportunities are provided to qualified women;</li> <li>▪ Ensure the implementation and monitoring of the gender action plan.</li> <li>▪ Ensure that the stakeholder consultation and participation plan is implemented and monitored.</li> <li>▪ Ensure capabilities are built for operation and maintenance (O&amp;M) of completed infrastructure</li> <li>▪ Ensure compliance with ADB's social and environmental policies and guidelines during project implementation</li> <li>▪ Approve proposed actions in the event of adverse financial audits or monitoring and evaluation reports</li> <li>▪ Prepare withdrawal application for submission to ADB</li> <li>▪ Select Consultant for Project Implementation Support and Capacity Development</li> <li>▪ Provide project information to the pilot project climate resilience coordination unit (PPCR) for comprehensive monitoring of PPCR indicators against the results framework.</li> </ul>

Project Implementation Organizations	Management Roles and Responsibilities
Ministry of Land Management, Urban Planning and Construction (MLMUPC)	<ul style="list-style-type: none"> <li>▪ Responsible for governing land use, urban planning, construction projects, and the resolution of land use conflicts</li> <li>▪ Will be a member of the IRC.</li> <li>▪ Will be a member of the proposed PSC and National Task Force on Urban Development</li> <li>▪ 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).</li> </ul>
Ministry of Environment	<ul style="list-style-type: none"> <li>▪ Review environmental documents and issues environment certificates prior to construction (Department of Environment Impact Assessment).</li> <li>▪ Involved in local training activities related to environmental management, waste management, and energy at the provincial level.</li> <li>▪ The executing agency for the ADB TA on Mainstreaming Climate Resilience into Development Planning in Cambodia.</li> <li>▪ Climate Change Department in MOE serves as the National 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.</li> <li>▪ 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.</li> </ul>
Ministry of Interior	<ul style="list-style-type: none"> <li>▪ 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.</li> <li>▪ Will be a member of the proposed PSC and National Task Force on Urban Development.</li> <li>▪ Representatives of MOI are regular members of the PRSC-WG</li> <li>▪ Is responsible for approving changes in local administration boundaries in the provinces (i.e., municipality boundaries).</li> </ul>
Ministry of Water Resources and Meteorology	<ul style="list-style-type: none"> <li>▪ Has the mandate for river basin planning together with the Cambodia National Mekong Committee</li> <li>▪ Minister of MOWRAM is also the Chairperson of the Tonle Sap Authority</li> <li>▪ Will be members of the provincial coordination committee for the project in both towns</li> <li>▪ Will be a member of the PIU in Kampong Chhnang.</li> </ul>
Tonle Sap Authority (TSA)	<ul style="list-style-type: none"> <li>▪ The TSA has the mandate to protect the Tonle Sap Basin.</li> <li>▪ Will be a member of the proposed PSC</li> <li>▪ TSA has to coordinate closely with MOWRAM on project</li> </ul>

Project Implementation Organizations	Management Roles and Responsibilities
implementation at the national and subnational levels.	
Provincial Government	<ul style="list-style-type: none"> <li>Coordinate and monitor Project activities of the project implementation unit (PIU)</li> </ul>
Provincial Coordinating Committee (PCC)	<ul style="list-style-type: none"> <li>Support PIU in carrying out the approved annual rolling plans</li> <li>Coordinate in providing capacity development program for PIU</li> <li>Assist PMU/PMU in ensuring compliance and attainment of relevant and applicable government environmental permits and clearances prior to bidding.</li> <li>Obtain necessary approvals from respective Departments prior to awarding of civil works contracts</li> <li>Coordinate regular reporting of PIU to PMU on project implementation.</li> <li>Coordinate the implement the Project's Consultation and Participation Plan, Social Development Plan and Gender Action Plan (GAP)</li> <li>Work with PMU and PIUs to ensure regular quality control inspection of Project facilities is undertaken.</li> <li>Manage the handover of Project facilities to agencies responsible for operation and maintenance</li> <li>Oversee the monitoring in compliance with the Design and Monitoring Framework (DMF).</li> </ul>
Provincial Department of Public Works and Transport/Municipalities in Pursat and Kampong Chhnang	<ul style="list-style-type: none"> <li>Undertake day to day management of Project activities</li> <li>Implement approved annual rolling work and financial plans</li> <li>Prepare and submit regular quarterly and annual project progress reports</li> <li>Supervise civil works contractors</li> <li>Manage separate Project financial records and account, and prepare financial reports for submission to EA and PCA</li> </ul>
Project Implementation Unit (PIU)	<ul style="list-style-type: none"> <li>Work with PMU in complying and attaining relevant and applicable Government environmental permits and clearances prior to bidding.</li> <li>Ensure output 3 is implemented to assist the poor and vulnerable communities, including ethnic Cham and Vietnamese benefit from the Project.</li> <li>Ensure that EMPs are updated and revised (if necessary) and incorporated in the detailed designs and included in civil works contracts</li> <li>Ensure implementation of EMP, submit regular monitoring reports to IA and EA</li> <li>Ensure implementation of Capacity and Participation Plan, Social Development Plan and GAP</li> <li>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</li> <li>Undertake monitoring with disaggregation of data by sex and income group as required by the Project's design and monitoring framework.</li> <li>Establish and manage the sub-account</li> </ul>
Municipal Government (Kampong Chhnang and Pursat)	<ul style="list-style-type: none"> <li>The implementing agencies and members on the Project Implementation Units (PIUs)</li> <li>Ensure output 3 is implemented to assist the poor and vulnerable communities, including ethnic Cham and Vietnamese benefit from the Project.</li> <li>Responsible for ensuring effective Project implementation, particularly</li> </ul>

Project Implementation Organizations	Management Roles and Responsibilities
	<p>through effective construction supervision. PIUs will be established in Pursat and Kampong Chhnang, and their main roles and responsibilities are in implementation planning; project supervision, monitoring and reporting; and day to day management of all project implementation activities</p>
Urban service units (USU) in Kampong Chhnang and Pursat	<ul style="list-style-type: none"> <li>▪ 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.</li> <li>▪ Will operate and manage the SWM, drainage and flood protection in each respective town</li> <li>▪ The USUs will assume the roles and responsibilities of the PIUs</li> <li>▪ For solid waste management in Pursat and Kampong Chhnang.</li> <li>▪ USU Pursat will also cover town center drainage including the pumping station, wastewater stabilization ponds and the embankment,</li> <li>▪ USU Kampong Chhnang will also cover flood control river embankment works</li> <li>▪ 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.</li> <li>▪ Establishment based on the model used for the wastewater treatment and management in Siem Reap (i.e., special operating agency and account established).</li> <li>▪ A special account in the USU will be solely for depositing revenue collected from the environmental sanitation fee for USUs with strict replenishment measures.</li> </ul>
District Government Sangkat/Commune Council Village Development Committees	<ul style="list-style-type: none"> <li>▪ 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.</li> <li>▪ Ensure output 3 is implemented to assist the poor and vulnerable communities, including ethnic Cham and Vietnamese benefit from the Project.</li> <li>▪ Municipal/Sangkat/Village leaders have vital role in ensuring project information reaches target beneficiaries, especially women, ethnic minorities, the poor and other vulnerable households</li> <li>▪ Establishment and application of Project Grievance Redress Mechanism, as outlined in safeguard planning documents.</li> </ul>
ADB	<ul style="list-style-type: none"> <li>▪ Assists the PMU through timely guidance at each stage of project implementation following agreed implementation arrangements</li> <li>▪ Reviews all documents that require ADB approval</li> <li>▪ Approves procurement activities</li> <li>▪ Conducts periodic loan review missions, a mid-term review and a completion mission for the project</li> <li>▪ Review and monitoring of project implementation activities and ensures compliance of all loan covenants</li> <li>▪ Review and monitor compliance with the government partner agencies on safeguard compliance through project review missions.</li> <li>▪ Timely processing of withdrawal applications and release of eligible funds</li> </ul>

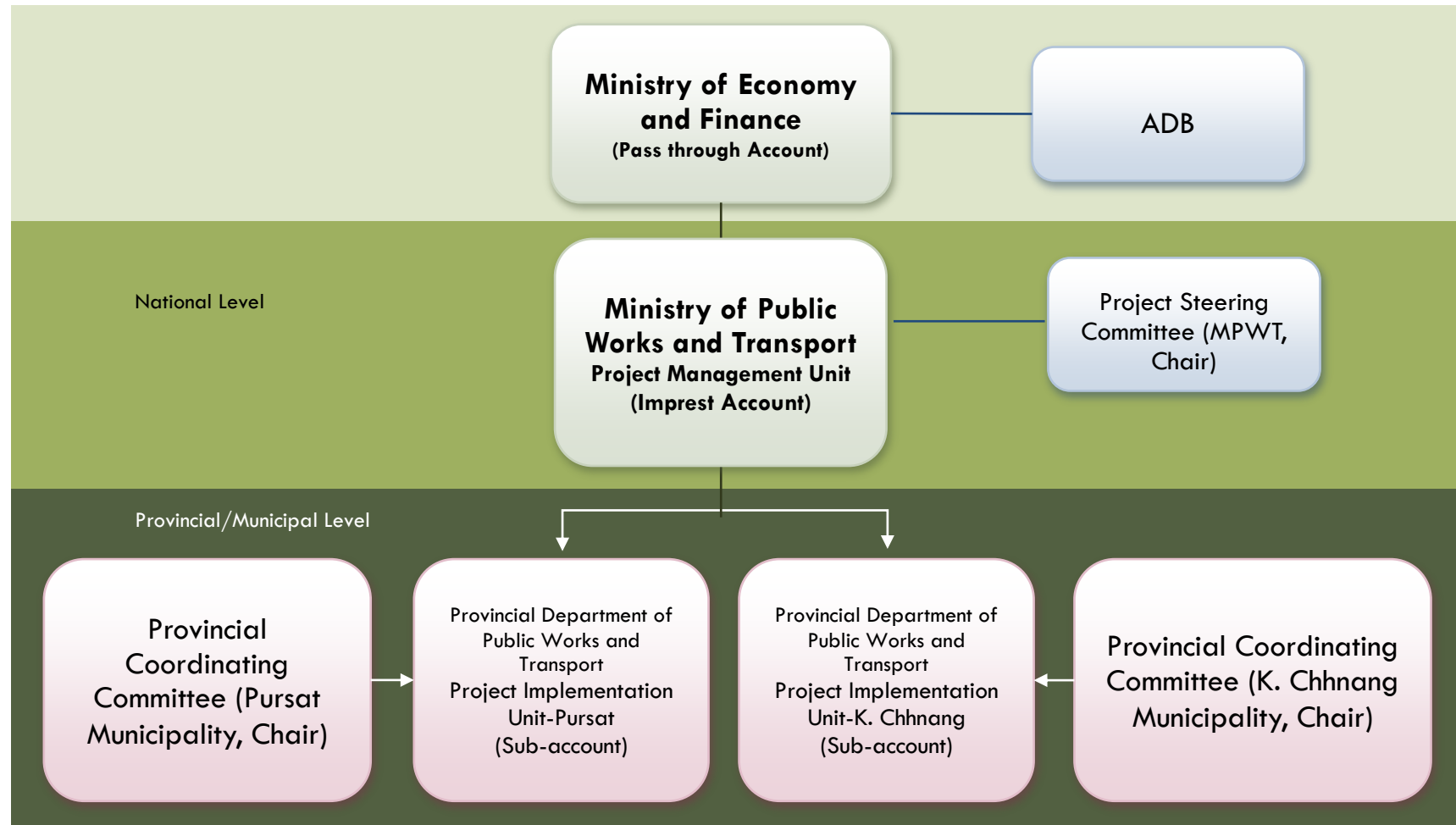
<b>Project Implementation Organizations</b>	<b>Management Roles and Responsibilities</b>
	<ul style="list-style-type: none"><li>▪ Ensures compliance of financial audit recommendations</li><li>▪ With assistance of MOP regularly updates the project performance review reports</li><li>▪ Regularly updates project information disclosure on the ADB website</li></ul>

## B. Key Persons Involved in Implementation

### Executing Agency

Ministry of Public Works and Transport (MPWT)	Officer's Name	:	H.E. Vong Pisith
	Position	:	Deputy Director General
	Office Address	:	MPWT, Phnom Penh
	Email address	:	vong_pisith@yahoo.com
	Telephone No.	:	+855 12 833 411
<b>Implementing Agency ( IA)</b> Provincial Department of Public Works and Transport  (Kampong Chhnang)	Officer's Name	:	Mr. Kang Penghak
	Position	:	Director, Provincial Department of Public Works and Transport (Kampong Chhnang)
	Office Address	:	Kampong Chhnang province
	Email address	:	Not available
	Telephone No.	:	+855 12 837 926
Provincial Department of Public Works and Transport  (Pursat)	Officer's Name	:	Mr. Keo Peo
	Position	:	Director, Provincial Department of Public Works and Transport (Pursat)
	Office Address	:	Pursat province
	Email address	:	Not available
	Telephone No.	:	+855 16 887 564
<b>Asian Development Bank</b>			
	Officer's Name	:	Ms. Tatiana Gallego-Lizon
	Position	:	Director, Urban Development and Water Division, Southeast Asia Department
	Office Address	:	6 ADB Avenue, Mandaluyong City 1550 Metro Manila, Philippines
	Email address	:	<a href="mailto:tgalladolid@adb.org">tgalladolid@adb.org</a>
	Telephone No.	:	+63 2 632 6379/5613
	Officer's Name	:	Ms. Anupma Jain
	Position	:	Senior Social Sector Specialist Urban Development and Water Division, Southeast Asia Department
	Office Address	:	6 ADB Avenue, Mandaluyong City 1550 Metro Manila, Philippines
	Email address	:	<a href="mailto:ajain@adb.org">ajain@adb.org</a>
	Telephone No.	:	+63 2 632 6360
	Officer's Name	:	Ms. Debra Ann D. Cruz
	Position	:	Project Analyst Urban Development and Water Division, Southeast Asia Department
	Office Address	:	6 ADB Avenue, Mandaluyong City 1550 Metro Manila, Philippines
	Email address	:	<a href="mailto:dacruz@adb.org">dacruz@adb.org</a>
	Telephone No.	:	+63 2 632 4503

### C. Project Organization Structure



Source: Asian Development Bank.

#### IV. COSTS AND FINANCING

**Table 5: Project Investment Plan  
(\$ million)**

Item	Amount
<b>A. Base Cost<sup>a</sup></b>	
1. Output 1: Kampong Chhnang Urban Area Improvements	22.9
2. Output 2: Pursat Urban Area Improvements	11.2
3. Output 3: Community Mobilization and Environmental Improvements	4.3
4. Output 4: Strengthened Sector Coordination and Operations	0.4
5. Output 5: Strengthened Capacity for Project Implementation, O&M	5.5
<b>Subtotal (A)<sup>b</sup></b>	<b>44.3</b>
<b>B. Contingencies<sup>c</sup></b>	<b>6.9</b>
<b>C. Financing Charges During Implementation<sup>d</sup></b>	<b>1.4</b>
<b>Total (A+B+C)</b>	<b>52.6</b>

ADB = Asian Development Bank, SCF = Strategic Climate Fund

<sup>a</sup> Includes taxes and duties of \$4.55 million to be financed by the government through exemptions, ADB and ADB SCF grant.

<sup>b</sup> In September 2015 prices.

<sup>c</sup> Physical contingencies computed at 10% for civil works, equipment and consulting services. Price contingencies computed at 1.8% to 2.2% on foreign exchange costs and 3.5% on local currency costs; includes provision for potential exchange rate fluctuations under the assumption of a purchasing power parity exchange rate.

<sup>d</sup> Includes interest estimated at \$1.40 million during implementation for the ADB loan and \$0.02 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

29. 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 will have 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. The ADB loan will finance 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 workshops.<sup>18</sup> The interest during implementation of the ADB loan will be capitalized as part of the loan.

30. The ADB Strategic Climate Fund (ADB SCF) will provide a grant of \$5.0 million and a loan for \$5.0 million. The proposed ADB SCF grant will help finance the project, including taxes and duties for workshops.<sup>19</sup> The proposed ADB SCF loan will have 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 will be front loaded.<sup>20</sup> The ADB SCF service charge will be capitalized as part of the loan.

31. The government will provide counterpart financing of \$5.4 million equivalent to cover its 10% contribution to output village grants, costs for land acquisition and resettlement, salary

<sup>18</sup> 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.

<sup>19</sup> 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.

<sup>20</sup> ADB loan and ADB SCF financing may finance local transportation and insurance costs.

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 6: Financing Plan**

<b>Source</b>	<b>Amount (\$ million)</b>	<b>Share of Total (%)</b>
Asian Development Bank ADF Loan	37.0	70.4
ADB Strategic Climate Fund loan <sup>a</sup>	5.0	9.5
ADB Strategic Climate Fund grant <sup>a</sup>	5.0	9.5
Royal Government of Cambodia	5.4	10.2
Community	0.2	0.4
<b>Total</b>	<b>52.6</b>	<b>100.0</b>

ADB = Asian Development Bank, ADF = Asian Development Fund, SCF = Strategic Climate Fund.

<sup>a</sup> Under the Pilot Program for Climate Resilience financed by the Strategic Climate Fund. Administered by the Asian Development Bank.

Source: Asian Development Bank estimates.

## A. Detailed Cost Estimates by Expenditure Category

Item	(US\$ Million)				
	Foreign	Local Currency			Total
		Non-Tax	Taxes	Total	
<b>A. Investment Costs</b>					
<b>1. Civil Works</b>					
a. Kampong Chnnang Flood Protection	8.50	10.63	2.13	12.75	21.25
b. Kampong Chnnang Solid Waste Management	0.19	0.24	0.05	0.29	0.48
c. Pursat Drainage	3.26	4.07	0.81	4.89	8.15
d. Pursat Flood Protection	0.26	0.34	0.07	0.41	0.67
e. Pursat Solid Waste Management	0.45	0.57	0.11	0.68	1.14
f. Kampong Chnnang Household Sanitation Improvements	0.23	0.28	0.06	0.34	0.57
g. Pursat Household Sanitation Improvements	0.23	0.28	0.06	0.34	0.57
h. Kampong Chnnang Small-scale Infrastructure Works	0.42	0.53	0.11	0.63	1.05
i. Pursat Small-scale Infrastructure Works	0.42	0.53	0.11	0.63	1.05
<b>Subtotal</b>	13.96	17.47	3.49	20.97	34.93
<b>2. Equipment</b>					
a. Kampong Chnnang Solid Waste Management	0.73	0.00	0.24	0.24	0.98
b. Pursat Solid Waste Management	0.82	0.00	0.27	0.27	1.09
c. Kampong Chnnang Embankment Manual Equipment for Maintenance	0.02	0.02	0.00	0.02	0.04
d. Pursat Flood Protection Manual Equipment for Maintenance	0.02	0.02	0.00	0.02	0.04
e. Pursat Drainage Manual Equipment for Maintenance	0.02	0.02	0.00	0.02	0.04
<b>Subtotal</b>	1.60	0.06	0.53	0.59	2.19
<b>3. Workshops</b>					
a. Sector Strengthening & Capacity Development	0.00	0.01	0.00	0.01	0.01
b. Project Management & Implementation Support	0.08	0.45	0.05	0.50	0.58
c. Climate Change Adaptation in Urban Development	0.00	0.01	0.00	0.01	0.01
d. NGO Support to Community-led Environmental Improvements	0.08	0.10	0.02	0.12	0.20
<b>Subtotal</b>	0.16	0.57	0.07	0.64	0.80
<b>4. Resettlement Support</b>	-	0.19	0.02	0.21	0.21
<b>5. Consulting Services</b>					
a. Sector Strengthening & Capacity Development	0.09	0.00	0.00	0.00	0.10
b. Project Management & Implementation Support	1.97	1.45	0.16	1.61	3.58
c. Climate Change Adaptation in Urban Development	0.17	0.03	0.00	0.04	0.20
d. NGO Support to Community-led Environmental Improvements	-	0.81	0.09	0.90	0.90
e. External Resettlement Monitoring	-	-	-	-	-
f. Surveys and Investigations	0.04	0.13	0.02	0.15	0.19
<b>Subtotal</b>	2.27	2.43	0.27	2.70	4.97
<b>6. Incremental Administration</b>					
a. Salaries	-	0.54	0.06	0.60	0.60
b. Office and Travel Expenses	-	0.36	0.04	0.40	0.40
c. Vehicles	0.15	-	0.05	0.05	0.20
d. Equipment	0.01	-	0.00	0.00	0.02
<b>Subtotal</b>	0.16	0.90	0.15	1.05	1.22
<b>Total Base Cost (A) a/</b>	18.16	21.62	4.55	26.17	44.32
<b>B. Contingencies b/</b>					
1. Physical					5.10
2. Price					1.76
<b>Subtotal (B)</b>					6.85
<b>C. Financing Charges During Implementation c/</b>					
Interest During Implementation					1.41
<b>Total Project Cost</b>					52.59

ADB = Asian Development Bank, SCF = Strategic Climate Fund

Note: Numbers may not sum precisely because of rounding.

<sup>a</sup> In September 2015 prices. Includes taxes and duties of \$4.55 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.

<sup>b</sup> Physical contingencies computed at 10% for civil works, equipment and consulting services. Price contingencies were computed at rates ranging from 1.8% to 2.2 on foreign currency costs and 3.5% on local currency costs. The rates used include provisions for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

<sup>c</sup> Includes interest estimated at \$1.40 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 \$0.02 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 Estimates.

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

### ADB ADF LOAN FINANCING

		ALLOCATION AND WITHDRAWAL OF LOAN PROCEEDS		ADB ADF FINANCING	
		Integrated Urban Environmental Management in the Tonle Sap Basin		Percentage and Basis for	
		Total Amount Allocated for ADB Financing (SDR) in \$ equivalent		Withdrawal from the Loan Account	
No.	Item	Category	Subcategory		
1	<b>Works</b>	<b>16,079,000</b>			
	1A Kampong Chhnang Flood protection		10,087,000	100.0%	of total expenditure claimed* **
	1B Kampong Chhnang Solid Waste Management***		308,000	100.0%	of total expenditure claimed*
	1C Pursat Flood Protection		429,000	100.0%	of total expenditure claimed*
	1D Pursat Drainage		3,475,000	100.0%	of total expenditure claimed* **
	1E Pursat Solid Waste Management***		730,000	100.0%	of total expenditure claimed*
	1F Kampong Chhnang Small-scale Infrastructure Development		525,000	80.0%	of total expenditure claimed*
	1G Pursat Small-scale Infrastructure Development		525,000	80.0%	of total expenditure claimed*
2	<b>Equipment</b>	<b>1,184,000</b>			
	2A Kampong Chhnang Solid Waste Management		523,000	100.0%	of total expenditure claimed*
	2B Pursat Solid Waste Management		583,000	100.0%	of total expenditure claimed*
	2C Kampong Chhnang Embankment Manual Equipment for Maintenance		26,000	100.0%	of total expenditure claimed*
	2D Pursat Flood Protection Manual Equipment for Maintenance		26,000	100.0%	of total expenditure claimed*
	2E Pursat Drainage Manual Equipment for Maintenance		36,000	100.0%	of total expenditure claimed*
3	<b>Workshops</b>	<b>422,000</b>			
	3A Project Management and Implementation Support		415,000	100.0%	of total expenditure claimed
	3B Sector Strengthening & Capacity Development		7,000	100.0%	of total expenditure claimed
4	<b>Consulting services</b>	<b>2,554,000</b>			
	4A Project Management and Implementation Support		2,437,000	100.0%	of total expenditure claimed*
	4B Sector Strengthening & Capacity Development		69,000	100.0%	of total expenditure claimed*
	4C Surveys and Investigations		48,000	100.0%	of total expenditure claimed* **
5	<b>Incremental Administration</b>	<b>404,000</b>			
	5A Office and Travel Expenses		285,000	100.0%	of total expenditure claimed
	5B Vehicles		108,000	100.0%	of total expenditure claimed*
	5C Equipment		11,000	100.0%	of total expenditure claimed
6	<b>Interest During Implementation</b>	<b>995,000</b>		<b>100% of total amount due</b>	
7	<b>Unallocated</b>	<b>4,744,000</b>			
	<b>Total</b>	<b>26,382,000</b>			

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.

\*\* ADB SCF Loan and Grant will be front loaded.

\*\*\* Subject to the disbursement condition in Loan Agreement, Schedule 3, para. 8.

Source: Asian Development Bank.

# ADB STRATGIC CLIMATE FUND GRANT FINANCING<sup>21</sup>

ALLOCATION AND WITHDRAWAL OF GRANT PROCEEDS				
Integrated Urban Environmental Management in the Tonle Sap Basin				
N o.	Item	Total Amount Allocated for ADB Financing in \$		ADB SCF GRANT FINANCING Percentage and Basis for Withdrawal from the Grant Account
		Category	Subcategory	
<b>1</b>	<b>Civil Works</b>	<b>3,480,000</b>		
	1A Pursat Drainage		2,460,000	100.0% of total expenditure claimed* **
	1B Kampong Chhnang Sanitation Improvements		510,000	100.0% of total expenditure claimed*
	1C Pursat Sanitation Improvements		510,000	100.0% of total expenditure claimed*
<b>2</b>	<b>Workshops</b>	<b>210,000</b>		
	2A NGO Support to Community-led Environmental Improvements		200,000	100.0% of total expenditure claimed
	2B Climate Change Adaptation in Urban Development		10,000	100.0% of total expenditure claimed
<b>3</b>	<b>Consulting services</b>	<b>1,110,000</b>		
	3A Climate Change Adaptation in Urban Development		200,000	100.0% of total expenditure claimed*
	3B NGO Support to Community-led Environmental Improvements		810,000	100.0% of total expenditure claimed*
	3C Surveys and Investigations		100,000	100.0% of total expenditure claimed* **
<b>4</b>	<b>Unallocated</b>	<b>200,000</b>		
	<b>Total</b>	<b>5,000,000</b>		

ADB = Asian Development Bank; SCF = Strategic Climate Fund; PPCR =pilot program for climate resilience.

\* Exclusive of taxes and duties within the territory of the Recipient.

\*\* ADB SCF Grant will be front loaded.

Source: Asian Development Bank estimates.

<sup>21</sup> Under the Pilot Program for Climate Resilience financed by the Strategic Climate Fund. Administered by the Asian Development Bank.

**ADB STRATEGIC CLIMATE FUND LOAN FINANCING<sup>22</sup>**

<b>ALLOCATION AND WITHDRAWAL OF LOAN PROCEEDS</b>				
<b>Integrated Urban Environmental Management in the Tonle Sap Basin</b>				
<b>No.</b>	<b>Item</b>	<b>Total Amount Allocated for ADB Financing in \$</b>		<b>ADB SCF LOAN FINANCING Percentage and Basis for Withdrawal from the Loan Account</b>
		<b>Category</b>	<b>Subcategory</b>	
<b>1</b>	<b>Kampong Chhnang Flood Protection</b>	<b>4,982,000</b>		<b>100.0%</b>
	<b>Service charge During Construction</b>			<b>of total expenditure claimed* **</b>
<b>2</b>	<b>Implementation</b>	<b>18,000</b>		<b>100.0%</b>
	<b>of total amount due</b>			
	<b>Total</b>	<b>5,000,000</b>		

ADB = Asian Development Bank; SCF = strategic climate fund

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

\*\* ADB SCF Loan will be front loaded.

Source: Asian Development Bank estimates.

<sup>22</sup> Under the Pilot Program for Climate Resilience financed by the Strategic Climate Fund. Administered by the Asian Development Bank

## C. Detailed Cost Estimates by Financier

\$ million																		
Item	ADB ADF Loan				ADB PPCR Grant <sup>d</sup>				ADB PPCR Loan <sup>d</sup>		Government of Cambodia				Community Beneficiaries		Total Cost	
	Non-Tax Amount	Taxes	Subtotal Amount	% of Cost Category	Non-Tax Amount	Taxes	Subtotal Amount	% of Cost Category	Amount	% of Cost Category	Non-Tax Amount	Taxes	Subtotal Amount	% of Cost Category	Amount	% of Cost Category		
<b>A. Investment Costs<sup>a</sup></b>																		
<b>1. Civil Works</b>																		
a. Kampong Chhnang Flood Protection	14.15		14.15	66.56	0.00		0.00	0.00	4.98	23.44	0.00	2.13	2.13	10.00	0.00	0.00	21.25	
b. Kampong Chhnang Solid Waste Management	0.43		0.43	90.00	0.00		0.00	0.00	0.00	0.00	0.00	0.05	0.05	10.00	0.00	0.00	0.48	
c. Pursat Drainage	4.87		4.87	59.81	2.46		2.46	30.19	0.00	0.00	0.00	0.81	0.81	10.00	0.00	0.00	8.15	
d. Pursat Flood Protection	0.60		0.60	89.76	0.00		0.00	0.00	0.00	0.00	0.00	0.07	0.07	10.24	0.00	0.00	0.67	
e. Pursat Solid Waste Management	1.02		1.02	90.00	0.00		0.00	0.00	0.00	0.00	0.00	0.11	0.11	10.00	0.00	0.00	1.14	
f. Kampong Chhnang Household Sanitation Improvements	0.00		0.00	0.00	0.51		0.51	90.00	0.00	0.00	0.00	0.06	0.06	10.00	0.00	0.00	0.57	
g. Pursat Household Sanitation Improvements	0.00		0.00	0.00	0.51		0.51	90.00	0.00	0.00	0.00	0.06	0.06	10.00	0.00	0.00	0.57	
h. Kampong Chhnang Small-scale Infrastructure Development	0.74		0.74	70.00	0.00		0.00	0.00	0.00	0.00	0.11	0.11	0.21	20.00	0.11	10.00	1.05	
i. Pursat Small-scale Infrastructure Development	0.74		0.74	70.00	0.00		0.00	0.00	0.00	0.00	0.11	0.11	0.21	20.00	0.11	10.00	1.05	
<b>Subtotal</b>	<b>22.55</b>	<b>0.00</b>	<b>22.55</b>	<b>64.56</b>	<b>3.48</b>	<b>0.00</b>	<b>3.48</b>	<b>9.97</b>	<b>4.98</b>	<b>14.26</b>	<b>0.21</b>	<b>3.49</b>	<b>3.70</b>	<b>10.61</b>	<b>0.21</b>	<b>0.60</b>	<b>34.93</b>	
<b>2. Equipment</b>																		
a. Kampong Chhnang Solid Waste Management	0.73		0.73	75.00	0.00		0.00	0.00		0.00	0.00	0.24	0.24	25.00	0.00	0.00	0.98	
b. Pursat Solid Waste Management	0.82		0.82	75.00	0.00		0.00	0.00		0.00	0.00	0.27	0.27	25.00	0.00	0.00	1.09	
c. Kampong Chhnang Embankment Manual Equipment for Maintenance	0.04		0.04	90.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	10.00	0.00	0.00	0.04	
d. Pursat Flood Protection Manual Equipment for Maintenance	0.04		0.04	90.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	10.00	0.00	0.00	0.04	
e. Pursat Drainage Manual Equipment for Maintenance	0.04		0.04	90.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	10.00	0.00	0.00	0.04	
<b>Subtotal</b>	<b>1.66</b>	<b>0.00</b>	<b>1.66</b>	<b>75.82</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.53</b>	<b>0.53</b>	<b>24.18</b>	<b>0.00</b>	<b>0.00</b>	<b>2.19</b>	
<b>3. Workshops</b>																		
a. Sector Strengthening & Capacity Development	0.01	0.00	0.01	100.00			0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	
b. Project Management & Implementation Support	0.53	0.05	0.58	100.00			0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58	
c. Climate Change Adaptation in Urban Development	0.00		0.00	0.00	0.01	0.00	0.01	100.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	
d. NGO Support to Community-led Environmental Improvements	0.00		0.00	0.00	0.18	0.02	0.20	100.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	
<b>Subtotal</b>	<b>0.54</b>	<b>0.05</b>	<b>0.59</b>	<b>73.88</b>	<b>0.19</b>	<b>0.02</b>	<b>0.21</b>	<b>26.12</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.80</b>	
<b>4. Resettlement Support</b>																		
<b>Subtotal</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.19</b>	<b>0.02</b>	<b>0.21</b>	<b>100.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.21</b>	
<b>5. Consulting Services</b>																		
a. Sector Strengthening & Capacity Development	0.10		0.10	99.67	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.10	
b. Project Management & Implementation Support	3.42		3.42	95.49	0.00		0.00	0.00	0.00	0.00	0.00	0.16	0.16	4.51	0.00	0.00	3.58	
c. Climate Change Adaptation in Urban Development	0.00		0.00	0.00	0.20		0.20	98.16		0.00	0.00	0.00	0.00	1.84	0.00	0.00	0.20	
d. NGO Support to Community-led Environmental Improvements	0.00		0.00	0.00	0.81		0.81	90.00	0.00	0.00	0.00	0.09	0.09	10.00	0.00	0.00	0.90	
e. Surveys and Investigations	0.07		0.07	35.95	0.10		0.10	54.05	0.00	0.00	0.00	0.02	0.02	10.00	0.00	0.00	0.19	
<b>Subtotal</b>	<b>3.58</b>	<b>0.00</b>	<b>3.58</b>	<b>72.13</b>	<b>1.11</b>	<b>0.00</b>	<b>1.11</b>	<b>22.35</b>	<b>#</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.27</b>	<b>0.27</b>	<b>5.52</b>	<b>0.00</b>	<b>0.00</b>	<b>4.97</b>
<b>6. Incremental Administration</b>																		
a. Salaries	0.00		0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.54	0.06	0.60	100.00	0.00	0.00	0.60	
b. Office and Travel Expenses	0.36	0.04	0.40	100.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40	
c. Vehicles	0.15		0.15	75.00	0.00		0.00	0.00	0.00	0.00	0.00	0.05	0.05	25.00	0.00	0.00	0.20	
d. Equipment	0.01	0.00	0.02	100.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	
<b>Subtotal</b>	<b>0.52</b>	<b>0.04</b>	<b>0.57</b>	<b>46.48</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.54</b>	<b>0.11</b>	<b>0.65</b>	<b>53.52</b>	<b>0.00</b>	<b>0.00</b>	<b>1.22</b>	
<b>Total Base Cost (A)</b>	<b>28.86</b>	<b>0.09</b>	<b>28.95</b>	<b>65.32</b>	<b>4.78</b>	<b>0.02</b>	<b>4.80</b>	<b>10.84</b>	<b>4.98</b>	<b>11.24</b>	<b>0.94</b>	<b>4.43</b>	<b>5.37</b>	<b>12.13</b>	<b>0.21</b>	<b>0.47</b>	<b>44.32</b>	
<b>B. Contingencies<sup>b</sup></b>																		
<b>Subtotal</b>	<b>6.65</b>		<b>6.65</b>	<b>97.08</b>	<b>0.20</b>		<b>0.20</b>	<b>2.92</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>6.85</b>	
<b>C. Financing Charges During Implementation<sup>c</sup></b>																		
<b>Subtotal</b>	<b>1.40</b>		<b>1.40</b>	<b>98.71</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>	<b>0.02</b>	<b>1.29</b>			<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>1.41</b>	
<b>Total Project Cost</b>	<b>36.91</b>	<b>0.09</b>	<b>37.00</b>	<b>70.36</b>	<b>4.98</b>	<b>0.02</b>	<b>5.00</b>	<b>9.52</b>	<b>5.00</b>	<b>9.51</b>	<b>0.94</b>	<b>4.43</b>	<b>5.37</b>	<b>10.22</b>	<b>0.21</b>	<b>0.40</b>	<b>52.59</b>	
<b>% to Total Project Cost</b>																		

ADB = Asian Development Bank, SCF = Strategic Climate Fund

Note: Numbers may not sum precisely because of rounding.

<sup>a</sup> In September 2015 prices. Includes taxes and duties of \$4.55 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 workshop costs; and resettlement costs subject to change and will be confirmed once resettlement plans are approved; cost of annual audit of project accounts will be borne by the government through recruitment of a single audit agency for all ADB projects.

<sup>b</sup> Physical contingencies computed at 10% for civil works, equipment and consulting services. Price contingencies were computed at rates ranging from 1.8% to 2.2 on foreign currency costs and 3.5% on local currency costs. The rates used include provisions for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

<sup>c</sup> Includes interest estimated at \$1.40 million during implementation of the ADB Loan and service charge of \$0.02 million for the ADB SCF Loan.

<sup>d</sup> Under the Pilot Program for Climate Resilience financed by the Strategic Climate Fund. Administered by the Asian Development Bank

Source: Asian Development Bank estimates.

## D. Detailed Cost Estimates by Outputs/Components

Item	Output 1: Kampong Chhnang Urban Area Improvements			Output 2: Pursat Urban Area Improvements			Output 3: Community Mobilization and Environmental Improvements	Output 4: Sector Coordination and Operations	Output 5: Strengthened Capacity for Project Implementation, Operation and	
	Embankment/ Flood	Solid Waste Management		Embankment Flood	Drainage	Solid Waste Management			Project Management and Implementation Support	Incremental Administration
	Total	Protection	Management	Protection	Drainage	Management				
<b>A. Investment Costs</b>										
<b>1. Civil Works</b>										
a. Kampong Chhnang Flood Protection	21.25	21.25	-	-	-	-	-	-	-	-
b. Kampong Chhnang Solid Waste Management	0.48	-	0.48	-	-	-	-	-	-	-
c. Pursat Drainage	8.15	-	-	-	8.15	-	-	-	-	-
d. Pursat Flood Protection	0.67	-	-	0.67	-	-	-	-	-	-
e. Pursat Solid Waste Management	1.14	-	-	-	-	1.14	-	-	-	-
f. Kampong Chhnang Sanitation Improvements	0.57	-	-	-	-	-	0.57	-	-	-
g. Pursat Sanitation Improvements	0.57	-	-	-	-	-	0.57	-	-	-
h. Kampong Chhnang Small-scale Infrastructure Works	1.05	-	-	-	-	-	1.05	-	-	-
i. Pursat Small-scale Infrastructure Works	1.05	-	-	-	-	-	1.05	-	-	-
<b>Subtotal</b>	<b>34.93</b>	<b>21.25</b>	<b>0.48</b>	<b>0.67</b>	<b>8.15</b>	<b>1.14</b>	<b>3.24</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>2. Equipment</b>										
a. Kampong Chhnang Solid Waste Management	0.98	-	0.98	-	-	-	-	-	-	-
b. Pursat Solid Waste Management	1.09	-	-	-	-	1.09	-	-	-	-
c. Kampong Chhnang Embankment Manual Equipment for Maintenance	0.04	0.04	-	-	-	-	-	-	-	-
d. Pursat Flood Protection Manual Equipment for Maintenance	0.04	-	-	0.04	-	-	-	-	-	-
e. Pursat Drainage Manual Equipment for Maintenance	0.04	-	-	-	0.04	-	-	-	-	-
<b>Subtotal</b>	<b>2.19</b>	<b>0.04</b>	<b>0.98</b>	<b>0.04</b>	<b>0.04</b>	<b>1.09</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>3. Workshops</b>										
a. Sector Strengthening & Capacity Development	0.01	-	-	-	-	-	-	0.01	-	-
b. Project Management & Implementation Support	0.58	-	-	-	-	-	-	-	0.58	-
c. Climate Change Adaptation in Urban Development	0.01	-	-	-	-	-	-	0.01	-	-
d. NGO Support to Community-led Environmental Improvements	0.20	-	-	-	-	-	0.20	-	-	-
<b>Subtotal</b>	<b>0.80</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.20</b>	<b>0.02</b>	<b>0.58</b>	<b>-</b>
<b>4. Resettlement Support</b>										
<b>Subtotal</b>	<b>0.21</b>	<b>0.17</b>	<b>-</b>	<b>0.04</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>5. Consulting Services</b>										
a. Sector Strengthening & Capacity Development	0.10	-	-	-	-	-	-	0.10	-	-
b. Project Management & Implementation Support	3.58	-	-	-	-	-	-	-	3.58	-
c. Climate Change Adaptation in Urban Development	0.20	-	-	-	-	-	-	0.20	-	-
d. NGO Support to Community-led Environmental Improvements	0.90	-	-	-	-	-	0.90	-	-	-
e. Surveys and Investigations	0.19	-	-	-	-	-	-	0.10	0.09	-
<b>Subtotal</b>	<b>4.97</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.90</b>	<b>0.40</b>	<b>3.66</b>	<b>-</b>
<b>6. Incremental Administration</b>										
a. Salaries	0.60	-	-	-	-	-	-	-	-	0.60
b. Office and Travel Expenses	0.40	-	-	-	-	-	-	-	-	0.40
c. Vehicles	0.20	-	-	-	-	-	-	-	-	0.20
d. Equipment	0.02	-	-	-	-	-	-	-	-	0.02
<b>Subtotal</b>	<b>1.22</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.22</b>
<b>Total Base Cost (A)<sup>a</sup></b>	<b>44.32</b>	<b>21.46</b>	<b>1.46</b>	<b>0.76</b>	<b>8.19</b>	<b>2.23</b>	<b>4.34</b>	<b>0.42</b>	<b>4.25</b>	<b>1.22</b>
<b>B. Contingencies<sup>b</sup></b>										
1. Physical	5.10	2.14	0.15	0.10	0.82	0.22	0.43	0.01	0.42	0.12
2. Price	1.76	1.17	0.06	0.05	0.21	0.09	0.18	-	-	(0.00)
<b>Subtotal (B)</b>	<b>6.85</b>	<b>3.31</b>	<b>0.20</b>	<b>0.15</b>	<b>1.03</b>	<b>0.31</b>	<b>0.61</b>	<b>0.01</b>	<b>0.42</b>	<b>0.12</b>
<b>C. Financing Charges During Implementation<sup>c</sup></b>										
<b>Total Project Cost</b>	<b>52.59</b>	<b>24.78</b>	<b>1.66</b>	<b>0.91</b>	<b>9.22</b>	<b>2.54</b>	<b>4.96</b>	<b>0.43</b>	<b>4.67</b>	<b>1.34</b>

ADB = Asian Development Bank; SCF = Strategic Climate Fund

Note: Numbers may not sum precisely because of rounding.

- <sup>a</sup> In September 2015 prices. Includes taxes and duties of \$4.55 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.
- <sup>b</sup> Physical contingencies computed at 10% for civil works, equipment and consulting services. Price contingencies were computed at rates ranging from 1.8% to 2.2 on foreign currency costs and 3.5% on local currency costs. The rates used include provisions for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.
- <sup>c</sup> Includes interest estimated at \$1.40 million during implementation for the ADB Loan and a service charge of \$0.02 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.

## E. Detailed Cost Estimates by Year

Source of Funds	\$ million							
	Total	1	2	3	4	5	6	7
<b>I. ADB Asian Development Fund Loan</b>								
<b>A. Investment Costs<sup>a</sup></b>								
<b>1. Civil Works</b>								
a. Kampong Chhnang Flood Protection	14.15	-	0.71	2.12	5.66	4.24	-	1.41
b. Kampong Chhang Solid Waste Management	0.43	-	0.04	0.19	0.15	0.04	-	-
c. Pursat Drainage	4.87	-	0.24	0.73	1.95	1.46	-	0.49
d. Pursat Flood Protection	0.60	-	0.03	0.09	0.24	0.18	-	0.06
e. Pursat Solid Waste Management	1.02	-	0.10	0.46	0.36	0.10	-	-
f. Kampong Chhnang Household Sanitation Improvements	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
g. Pursat Household Sanitation Improvements	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
h. Kampong Chhnang Small-scale Infrastructure Development	0.74	0.15	0.11	0.11	0.11	0.11	0.07	0.07
i. Pursat Small-scale Infrastructure Development	0.74	0.15	0.11	0.11	0.11	0.11	0.07	0.07
<b>Subtotal</b>	<b>22.55</b>	<b>0.29</b>	<b>1.35</b>	<b>3.82</b>	<b>8.58</b>	<b>6.25</b>	<b>0.15</b>	<b>2.11</b>
<b>2. Equipment</b>								
a. Kampong Chhnang Solid Waste Management	0.73	-	-	0.37	-	-	0.37	-
b. Pursat Solid Waste Management	0.82	-	-	0.41	0.41	-	-	-
c. Kampong Chhnang Embankment Manual Equipment for Maintenance	0.04	-	-	-	-	-	0.04	-
d. Pursat Flood Protection Manual Equipment for Maintenance	0.04	-	-	-	-	-	0.04	-
e. Pursat Drainage Manual Equipment for Maintenance	0.04	-	-	-	-	-	0.04	-
<b>Subtotal</b>	<b>1.66</b>	<b>-</b>	<b>-</b>	<b>0.78</b>	<b>0.41</b>	<b>-</b>	<b>0.48</b>	<b>-</b>
<b>3. Workshops</b>								
a. Sector Strengthening & Capacity Development	0.01	0.00	0.01	-	-	-	-	-
b. Project Management & Implementation Support	0.58	0.12	0.12	0.12	0.12	0.06	0.06	-
c. Climate Change Adaptation in Urban Development	0.00	-	-	-	-	-	-	-
d. NGO Support to Community-led Environmental Improvements	0.00	-	-	-	-	-	-	-
<b>Subtotal</b>	<b>0.59</b>	<b>0.12</b>	<b>0.13</b>	<b>0.12</b>	<b>0.12</b>	<b>0.06</b>	<b>0.06</b>	<b>0.00</b>
<b>4. Resettlement Support</b>								
	-	-	-	-	-	-	-	-
<b>5. Consulting Services</b>								
a. Sector Strengthening & Capacity Development	0.10	0.01	0.09	-	-	-	-	-
b. Project Management & Implementation Support	3.42	0.68	0.68	0.68	0.68	0.34	0.34	-
c. Climate Change Adaptation in Urban Development	0.00	0.00	0.00	-	-	-	-	-
d. NGO Support to Community-led Environmental Improvements	-	-	-	-	-	-	-	-
e. External Resettlement Monitoring	-	-	-	-	-	-	-	-
f. Surveys and Investigations	0.07	0.01	0.02	0.02	0.02	-	-	-
<b>Subtotal</b>	<b>3.58</b>	<b>0.70</b>	<b>0.79</b>	<b>0.70</b>	<b>0.70</b>	<b>0.34</b>	<b>0.34</b>	<b>-</b>
<b>6. Incremental Administration</b>								
a. Salaries	-	-	-	-	-	-	-	-
b. Office and Travel Expenses	0.40	0.04	0.08	0.08	0.08	0.08	0.04	-
c. Vehicles	0.15	0.15	-	-	-	-	-	-
d. Equipment	0.02	0.02	-	-	-	-	-	-
<b>Subtotal</b>	<b>0.57</b>	<b>0.21</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.04</b>	<b>-</b>
<b>B. Contingencies<sup>b</sup></b>	<b>6.65</b>	<b>0.30</b>	<b>0.54</b>	<b>1.26</b>	<b>2.27</b>	<b>1.55</b>	<b>0.24</b>	<b>0.48</b>
<b>C. Interest During Implementation<sup>c</sup></b>	<b>1.40</b>	<b>0.02</b>	<b>0.05</b>	<b>0.11</b>	<b>0.23</b>	<b>0.32</b>	<b>0.33</b>	<b>0.34</b>
<b>Total ADB Asian Development Fund Loan</b>	<b>37.00</b>	<b>1.64</b>	<b>2.93</b>	<b>6.87</b>	<b>12.40</b>	<b>8.60</b>	<b>1.64</b>	<b>2.93</b>

Source of Funds	\$ million							
	Total	1	2	3	4	5	6	7
<b>II. ADB Strategic Climate Fund Loan</b>								
<b>A. Investment Costs<sup>a</sup></b>								
<b>1. Civil Works</b>								
a. Kampong Chhnang Flood Protection	4.98	-	0.25	0.75	1.99	1.49	-	0.50
b. Kampong Chhang Solid Waste Management	-	-	-	-	-	-	-	-
c. Pursat Drainage	-	-	-	-	-	-	-	-
d. Pursat Flood Protection	-	-	-	-	-	-	-	-
e. Pursat Solid Waste Management	-	-	-	-	-	-	-	-
f. Kampong Chhnang Household Sanitation Improvements	-	-	-	-	-	-	-	-
g. Pursat Household Sanitation Improvements	-	-	-	-	-	-	-	-
h. Kampong Chhnang Small-scale Infrastructure Development	-	-	-	-	-	-	-	-
i. Pursat Small-scale Infrastructure Development	-	-	-	-	-	-	-	-
<b>Subtotal</b>	<b>4.98</b>	<b>-</b>	<b>0.25</b>	<b>0.75</b>	<b>1.99</b>	<b>1.49</b>	<b>-</b>	<b>0.50</b>
<b>2. Equipment</b>								
a. Kampong Chhnang Solid Waste Management	-	-	-	-	-	-	-	-
b. Pursat Solid Waste Management	-	-	-	-	-	-	-	-
c. Kampong Chhnang Embankment Manual Equipment for Maintenance	-	-	-	-	-	-	-	-
d. Pursat Flood Protection Manual Equipment for Maintenance	-	-	-	-	-	-	-	-
e. Pursat Drainage Manual Equipment for Maintenance	-	-	-	-	-	-	-	-
<b>Subtotal</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>3. Workshops</b>								
a. Sector Strengthening & Capacity Development	-	-	-	-	-	-	-	-
b. Project Management & Implementation Support	-	-	-	-	-	-	-	-
c. Climate Change Adaptation in Urban Development	-	-	-	-	-	-	-	-
d. NGO Support to Community-led Environmental Improvements	-	-	-	-	-	-	-	-
<b>Subtotal</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>4. Resettlement Support</b>								
<b>Subtotal</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>5. Consulting Services</b>								
a. Sector Strengthening & Capacity Development	-	-	-	-	-	-	-	-
b. Project Management & Implementation Support	-	-	-	-	-	-	-	-
c. Climate Change Adaptation in Urban Development	-	-	-	-	-	-	-	-
d. NGO Support to Community-led Environmental Improvements	-	-	-	-	-	-	-	-
e. External Resettlement Monitoring	-	-	-	-	-	-	-	-
f. Surveys and Investigations	-	-	-	-	-	-	-	-
<b>Subtotal</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>6. Incremental Administration</b>								
a. Salaries	-	-	-	-	-	-	-	-
b. Office and Travel Expenses	-	-	-	-	-	-	-	-
c. Vehicles	-	-	-	-	-	-	-	-
d. Equipment	-	-	-	-	-	-	-	-
<b>Subtotal</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>B. Contingencies<sup>b</sup></b>								
<b>C. Interest During Implementation<sup>c</sup></b>	<b>0.02</b>	<b>-</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>Total ADB Strategic Climate Fund Loan</b>	<b>5.00</b>	<b>-</b>	<b>0.25</b>	<b>0.75</b>	<b>2.00</b>	<b>1.50</b>	<b>0.00</b>	<b>0.50</b>

Source of Funds	\$ million							
	Total	1	2	3	4	5	6	7
<b>III. ADB Strategic Climate Fund Grant</b>								
<b>A. Investment Costs<sup>a</sup></b>								
<b>1. Civil Works</b>								
a. Kampong Chhnang Flood Protection	-	-	-	-	-	-	-	-
b. Kampong Chhang Solid Waste Management	-	-	-	-	-	-	-	-
c. Pursat Drainage	2.46	-	0.12	0.37	0.98	0.74	-	0.25
d. Pursat Flood Protection	-	-	-	-	-	-	-	-
e. Pursat Solid Waste Management	-	-	-	-	-	-	-	-
f. Kampong Chhnang Household Sanitation Improvements	0.51	0.10	0.08	0.08	0.08	0.08	0.05	0.05
g. Pursat Household Sanitation Improvements	0.51	0.10	0.08	0.08	0.08	0.08	0.05	0.05
h. Kampong Chhnang Small-scale Infrastructure Development	-	-	-	-	-	-	-	-
i. Pursat Small-scale Infrastructure Development	-	-	-	-	-	-	-	-
<b>Subtotal</b>	<b>3.48</b>	<b>0.20</b>	<b>0.28</b>	<b>0.52</b>	<b>1.14</b>	<b>0.89</b>	<b>0.10</b>	<b>0.35</b>
<b>2. Equipment</b>								
a. Kampong Chhnang Solid Waste Management	-	-	-	-	-	-	-	-
b. Pursat Solid Waste Management	-	-	-	-	-	-	-	-
c. Kampong Chhnang Embankment Manual Equipment for Maintenance	-	-	-	-	-	-	-	-
d. Pursat Flood Protection Manual Equipment for Maintenance	-	-	-	-	-	-	-	-
e. Pursat Drainage Manual Equipment for Maintenance	-	-	-	-	-	-	-	-
<b>Subtotal</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>3. Workshops</b>								
a. Sector Strengthening & Capacity Development	-	-	-	-	-	-	-	-
b. Project Management & Implementation Support	-	-	-	-	-	-	-	-
c. Climate Change Adaptation in Urban Development	0.01	0.01	0.01	-	-	-	-	-
d. NGO Support to Community-led Environmental Improvements	0.20	0.04	0.04	0.03	0.03	0.03	0.03	-
<b>Subtotal</b>	<b>0.21</b>	<b>0.05</b>	<b>0.05</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.00</b>
<b>4. Resettlement Support</b>								
<b>5. Consulting Services</b>								
a. Sector Strengthening & Capacity Development	-	-	-	-	-	-	-	-
b. Project Management & Implementation Support	-	-	-	-	-	-	-	-
c. Climate Change Adaptation in Urban Development	0.20	0.10	0.10	-	-	-	-	-
d. NGO Support to Community-led Environmental Improvements	0.81	0.16	0.16	0.12	0.12	0.12	0.12	-
e. External Resettlement Monitoring	-	-	-	-	-	-	-	-
f. Surveys and Investigations	0.10	0.01	0.03	0.03	0.03	-	-	-
<b>Subtotal</b>	<b>1.11</b>	<b>0.27</b>	<b>0.29</b>	<b>0.15</b>	<b>0.15</b>	<b>0.12</b>	<b>0.12</b>	<b>-</b>
<b>6. Incremental Administration</b>								
a. Salaries	-	-	-	-	-	-	-	-
b. Office and Travel Expenses	-	-	-	-	-	-	-	-
c. Vehicles	-	-	-	-	-	-	-	-
d. Equipment	-	-	-	-	-	-	-	-
<b>Subtotal</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>B. Contingencies<sup>b</sup></b>	<b>0.20</b>	<b>0.01</b>	<b>0.02</b>	<b>0.04</b>	<b>0.07</b>	<b>0.05</b>	<b>0.01</b>	<b>0.01</b>
<b>C. Interest During Implementation<sup>c</sup></b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total ADB Strategic Climate Fund Grant</b>	<b>5.00</b>	<b>0.53</b>	<b>0.63</b>	<b>0.74</b>	<b>1.39</b>	<b>1.09</b>	<b>0.26</b>	<b>0.36</b>

Source of Funds	\$ million							
	Total	1	2	3	4	5	6	7
<b>IV. Government of Cambodia</b>								
<b>A. Investment Costs<sup>a</sup></b>								
<b>1. Civil Works</b>								
a. Kampong Chhnang Flood Protection	-	-	-	-	-	-	-	-
b. Kampong Chhnang Solid Waste Management	-	-	-	-	-	-	-	-
c. Pursat Drainage	-	-	-	-	-	-	-	-
d. Pursat Flood Protection	-	-	-	-	-	-	-	-
e. Pursat Solid Waste Management	-	-	-	-	-	-	-	-
f. Kampong Chhnang Household Sanitation Improvements	-	-	-	-	-	-	-	-
g. Pursat Household Sanitation Improvements	-	-	-	-	-	-	-	-
h. Kampong Chhnang Small-scale Infrastructure Development	0.11	0.02	0.02	0.02	0.02	0.02	0.01	0.01
i. Pursat Small-scale Infrastructure Development	0.11	0.02	0.02	0.02	0.02	0.02	0.01	0.01
<b>Subtotal</b>	<b>0.21</b>	<b>0.04</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.02</b>	<b>0.02</b>
<b>2. Equipment</b>								
a. Kampong Chhnang Solid Waste Management	-	-	-	-	-	-	-	-
b. Pursat Solid Waste Management	-	-	-	-	-	-	-	-
c. Kampong Chhnang Embankment Manual Equipment for Maintenance	-	-	-	-	-	-	-	-
d. Pursat Flood Protection Manual Equipment for Maintenance	-	-	-	-	-	-	-	-
e. Pursat Drainage Manual Equipment for Maintenance	-	-	-	-	-	-	-	-
<b>Subtotal</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>3. Workshops</b>								
a. Sector Strengthening & Capacity Development	0.00	-	-	-	-	-	-	-
b. Project Management & Implementation Support	0.00	-	-	-	-	-	-	-
c. Climate Change Adaptation in Urban Development	0.00	-	-	-	-	-	-	-
d. NGO Support to Community-led Environmental Improvements	0.00	-	-	-	-	-	-	-
<b>Subtotal</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>4. Resettlement Support</b>	<b>0.19</b>	<b>-</b>	<b>0.04</b>	<b>0.06</b>	<b>0.06</b>	<b>0.04</b>	<b>-</b>	<b>-</b>
<b>5. Consulting Services</b>								
a. Sector Strengthening & Capacity Development	-	-	-	-	-	-	-	-
b. Project Management & Implementation Support	-	-	-	-	-	-	-	-
c. Climate Change Adaptation in Urban Development	-	-	-	-	-	-	-	-
d. NGO Support to Community-led Environmental Improvements	-	-	-	-	-	-	-	-
e. External Resettlement Monitoring	-	-	-	-	-	-	-	-
f. Surveys and Investigations	-	-	-	-	-	-	-	-
<b>Subtotal</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>6. Incremental Administration</b>								
a. Salaries	0.54	0.05	0.11	0.11	0.11	0.11	0.05	-
b. Office and Travel Expenses	-	-	-	-	-	-	-	-
c. Vehicles	-	-	-	-	-	-	-	-
d. Equipment	-	-	-	-	-	-	-	-
<b>Subtotal</b>	<b>0.54</b>	<b>0.05</b>	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	<b>0.05</b>	<b>-</b>
<b>B. Contingencies</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Taxes</b>	<b>4.43</b>	<b>0.20</b>	<b>0.36</b>	<b>0.84</b>	<b>1.51</b>	<b>1.03</b>	<b>0.16</b>	<b>0.32</b>
<b>C. Interest During Implementation</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total Government of Cambodia</b>	<b>5.37</b>	<b>0.30</b>	<b>0.54</b>	<b>1.04</b>	<b>1.71</b>	<b>1.21</b>	<b>0.24</b>	<b>0.34</b>

Source of Funds	\$ million							
	Total	1	2	3	4	5	6	7
V. Community Beneficiaries								
A. Investment Costs <sup>a</sup>								
1. Civil Works								
a. Kampong Chhnang Flood Protection	-	-	-	-	-	-	-	-
b. Kampong Chhang Solid Waste Management	-	-	-	-	-	-	-	-
c. Pursat Drainage	-	-	-	-	-	-	-	-
d. Pursat Flood Protection	-	-	-	-	-	-	-	-
e. Pursat Solid Waste Management	-	-	-	-	-	-	-	-
f. Kampong Chhnang Household Sanitation Improvements	-	-	-	-	-	-	-	-
g. Pursat Household Sanitation Improvements	-	-	-	-	-	-	-	-
h. Kampong Chhnang Small-scale Infrastructure Development	0.11	0.02	0.02	0.02	0.02	0.02	0.01	0.01
i. Pursat SmaI-scale Infrastructure Development	0.11	0.02	0.02	0.02	0.02	0.02	0.01	0.01
Subtotal	0.21	0.04	0.03	0.03	0.03	0.03	0.02	0.02
2. Equipment								
a. Kampong Chhnang Solid Waste Management	-	-	-	-	-	-	-	-
b. Pursat Solid Waste Management	-	-	-	-	-	-	-	-
c. Kampong Chhnang Embankment Manual Equipment for Maintenance	-	-	-	-	-	-	-	-
d. Pursat Flood Protection Manual Equipment for Maintenance	-	-	-	-	-	-	-	-
e. Pursat Drainage Manual Equipment for Maintenance	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-
3. Workshops								
a. Sector Strengthening & Capacity Development	0.00	-	-	-	-	-	-	-
b. Project Management & Implementation Support	0.00	-	-	-	-	-	-	-
c. Climate Change Adaptation in Urban Development	0.00	-	-	-	-	-	-	-
d. NGO Support to Community-led Environmental Improvements	0.00	-	-	-	-	-	-	-
Subtotal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4. Resettlement Support								
Subtotal	-	-	-	-	-	-	-	-
5. Consulting Services								
a. Sector Strengthening & Capacity Development	-	-	-	-	-	-	-	-
b. Project Management & Implementation Support	-	-	-	-	-	-	-	-
c. Climate Change Adaptation in Urban Development	-	-	-	-	-	-	-	-
d. NGO Support to Community-led Environmental Improvements	-	-	-	-	-	-	-	-
e. External Resettlement Monitoring	-	-	-	-	-	-	-	-
f. Surveys and Investigations	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-
6. Incremental Administration								
a. Salaries	-	-	-	-	-	-	-	-
b. Office and Travel Expenses	-	-	-	-	-	-	-	-
c. Vehicles	-	-	-	-	-	-	-	-
d. Equipment	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-
B. Contingencies								
Subtotal	-	-	-	-	-	-	-	-
C. Interest During Implementation								
Subtotal	-	-	-	-	-	-	-	-
Total Community Beneficiaries	0.21	0.04	0.03	0.03	0.03	0.03	0.02	0.02
Total Project Cost	52.59	2.51	4.38	9.43	17.52	12.43	2.16	4.16
% of Total Project Cost	100.0	4.8	8.3	17.9	33.3	23.6	4.1	7.9

ADB = Asian Development Bank; SCF = Strategic Climate Fund.

Note: Numbers may not sum precisely because of rounding.

<sup>a</sup> In September 2015 prices. Includes taxes and duties of \$4.55 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; and ADB SCF grant financing of taxes and duties for workshops costs.

<sup>b</sup> Physical contingencies computed at 10% for civil works, equipment and consulting services. Price contingencies were computed at rates ranging from 1.8% to 2.2 on foreign currency costs and 3.5% on local currency costs. The rates used include provisions for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

<sup>c</sup> Includes interest estimated at \$1.40 million during implementation for the ADB loan and a service charge of \$0.02 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. Estimated Interest and Service Charge Calculations

### Asian Development Fund Loan (Interest during Implementation)

Year		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	
Loan		1.62	2.88	6.76	12.16	8.28	1.31	2.59	35.60
Interest (1%)	1%	0.02	0.05	0.11	0.23	0.32	0.33	0.34	1.40

Note: The numbers may not add up due to rounding off.  
Source: Asian Development Bank

### ADB Strategic Climate Fund Loan (Service Charge)

Year		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	
Loan		0.000	0.250	0.750	1.990	1.490	0.000	0.500	4.980
Interest (0.1%)	0.1%	0.000	0.000	0.001	0.003	0.004	0.004	0.005	0.020

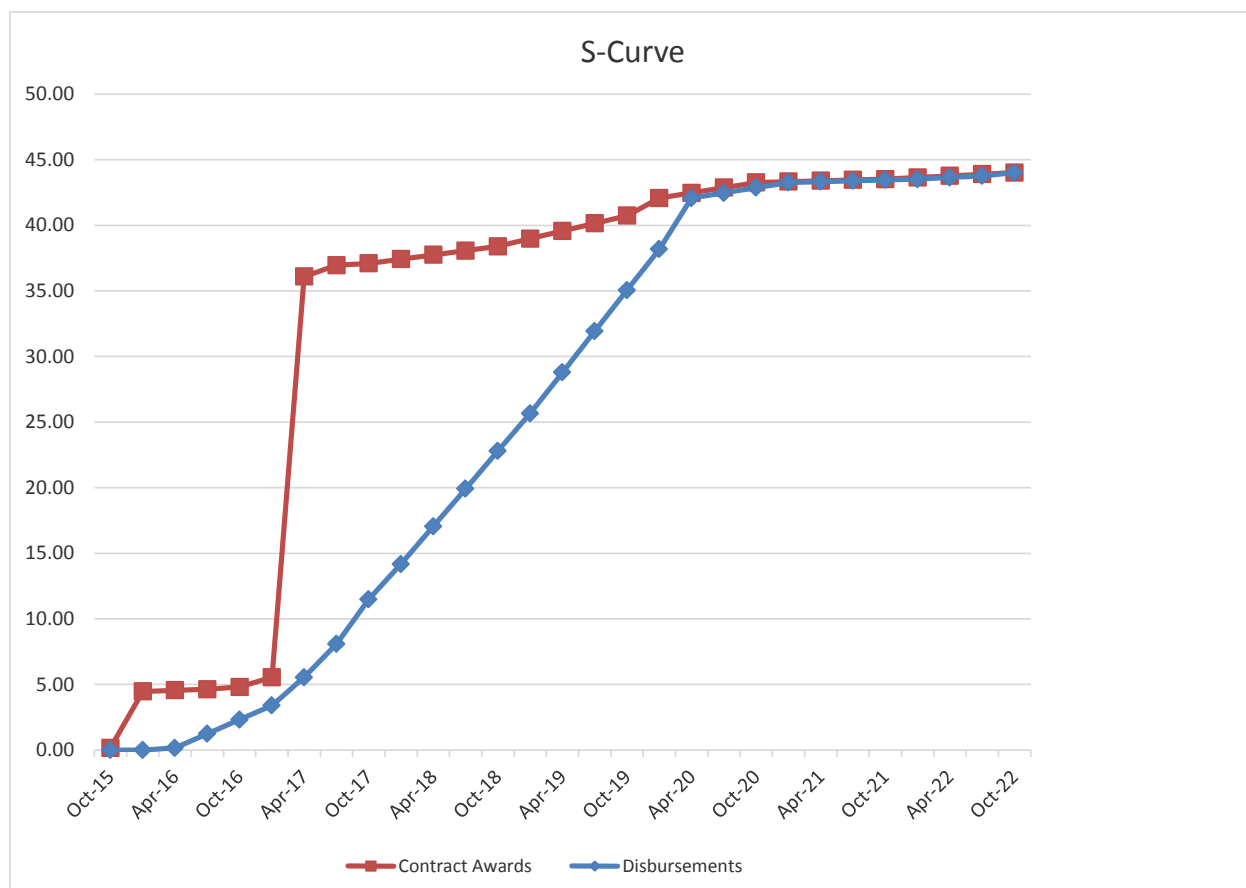
Note: Numbers may not sum precisely because of rounding.  
Under the Pilot Program for Climate Resilience financed by the Strategic Climate Fund. Administered by the Asian Development Bank  
Source: Asian Development Bank

## G. Contract and Disbursement S-curve

### S-Curve: Contract Awards and Disbursement Schedule

Date	Cumulative Disbursements (\$ million)	Cumulative Contract Awards (\$ million)
Oct-15	0.00	0.17
Jan-16	0.00	4.47
Apr-16	0.17	4.55
Jul-16	1.24	4.63
Oct-16	2.32	4.80
Jan-17	3.40	5.54
Apr-17	5.54	36.10
Jul-17	8.09	36.96
Oct-17	11.50	37.10
Jan-18	14.18	37.42
Apr-18	17.05	37.75
Jul-18	19.93	38.07
Oct-18	22.80	38.40
Jan-19	25.67	38.98
Apr-19	28.80	39.57
Jul-19	31.93	40.15
Oct-19	35.06	40.74
Jan-20	38.19	42.07
Apr-20	42.07	42.47
Jul-20	42.47	42.87
01-Oct	42.87	43.27
Jan-21	43.27	43.33
Apr-21	43.33	43.40
Jul-21	43.40	43.46
Oct-21	43.46	43.52
Jan-22	43.52	43.65
Apr-22	43.65	43.77
Jul-22	43.77	43.90
Oct-22	44.02	44.02

Source: Asian Development Bank



Source: Asian Development Bank

### ADB Loan, ADB SCF Loan and ADB SCF Grant (\$ million)

#### Contract Awards Schedule

Date	Annual Contract Awards (\$ million)	Cumulative Contract Awards (\$ million)
Oct-15	0.17	0.17
Jan-16	4.31	4.47
Apr-16	0.08	4.55
Jul-16	0.08	4.63
Oct-16	0.18	4.80
Jan-17	0.74	5.54
Apr-17	30.55	36.10
Jul-17	0.86	36.96
Oct-17	0.14	37.10
Jan-18	0.33	37.42
Apr-18	0.33	37.75
Jul-18	0.33	38.07
Oct-18	0.33	38.40
Jan-19	0.59	38.98
Apr-19	0.59	39.57
Jul-19	0.59	40.15
Oct-19	0.59	40.74
Jan-20	1.34	42.07
Apr-20	0.40	42.47
Jul-20	0.40	42.87
01-Oct	0.40	43.27
Jan-21	0.06	43.33
Apr-21	0.06	43.40
Jul-21	0.06	43.46
Oct-21	0.06	43.52
Jan-22	0.12	43.65
Apr-22	0.12	43.77
Jul-22	0.12	43.90
Oct-22	0.12	44.02

Source: Asian Development Bank

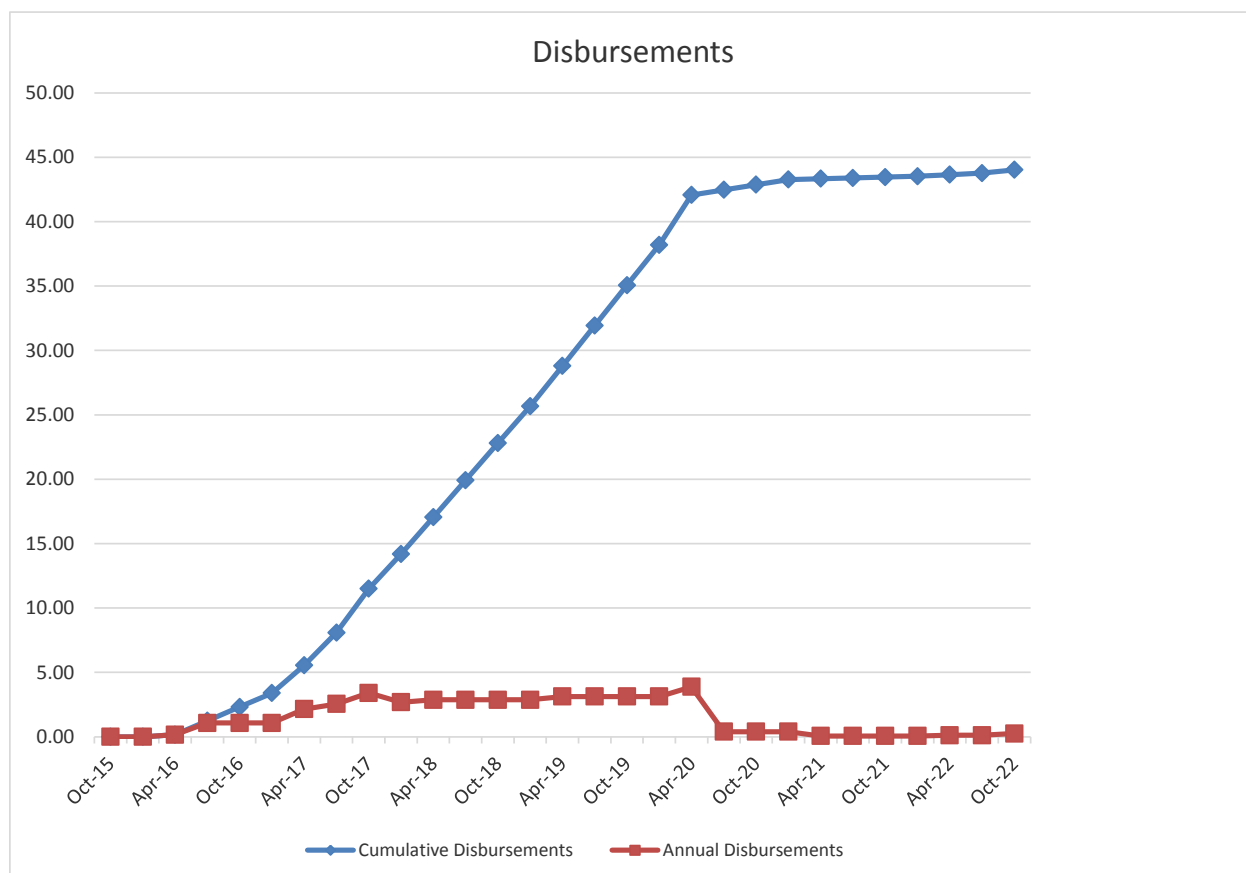


Source: Asian Development Bank

**Disbursement Schedule**

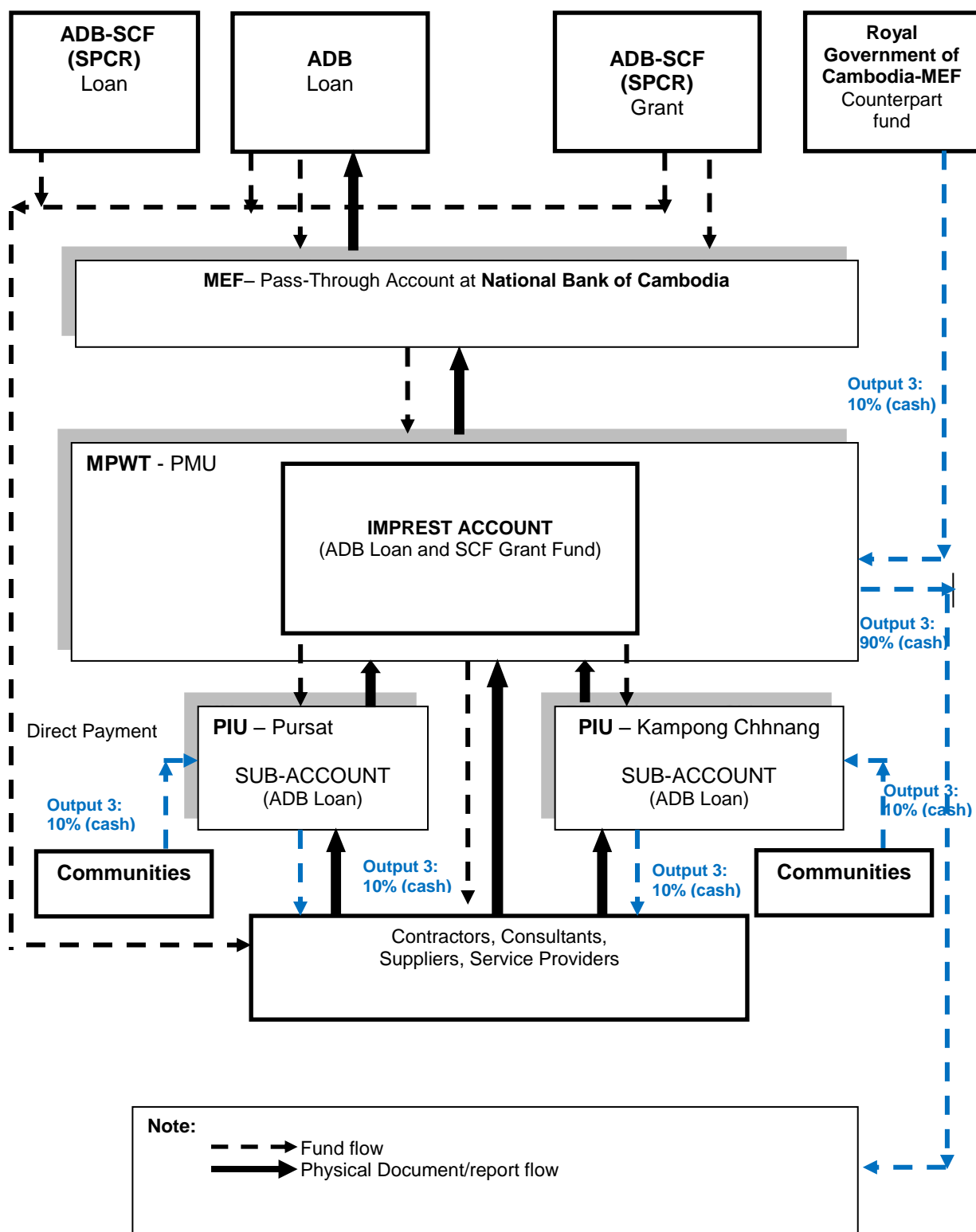
Date	Annual Disbursements (\$ million)	Cumulative Disbursements (\$ million)
Oct-15	0.00	0.00
Jan-16	0.00	0.00
Apr-16	0.17	0.17
Jul-16	1.08	1.24
Oct-16	1.08	2.32
Jan-17	1.08	3.40
Apr-17	2.15	5.54
Jul-17	2.55	8.09
Oct-17	3.41	11.50
Jan-18	2.68	14.18
Apr-18	2.87	17.05
Jul-18	2.87	19.93
Oct-18	2.87	22.80
Jan-19	2.87	25.67
Apr-19	3.13	28.80
Jul-19	3.13	31.93
Oct-19	3.13	35.06
Jan-20	3.13	38.19
Apr-20	3.88	42.07
Jul-20	0.40	42.47
01-Oct	0.40	42.87
Jan-21	0.40	43.27
Apr-21	0.06	43.33
Jul-21	0.06	43.40
Oct-21	0.06	43.46
Jan-22	0.06	43.52
Apr-22	0.12	43.65
Jul-22	0.12	43.77
Oct-22	0.25	44.02

Source: Asian Development Bank



Source: Asian Development Bank

## H. Fund Flow Diagram



Source: Asian Development Bank. Based on discussions with Ministry of Economy and Finance and Ministry of Public Works and Transport on 25 August 2014

## V. FINANCIAL MANAGEMENT

### A. Financial Management Assessment

32. Financial management assessments (FMAs) have been completed of the executing agency and implementing agencies:

- (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.

33. The assessments have been prepared in accordance with ADB's Guidelines for the Financial Management and Analysis of Projects. The FMA incorporates the Financial Management Internal Control and Risk Management Assessment and the FMA questionnaire required by ADB. The financial management and procurement capacity assessment completed for the executing and implementing agencies confirm the project implementation and financial management arrangements.

34. **Country-level assessment.**<sup>23</sup> An assessment of the country's financial management systems was completed for Promoting Economic Diversification Subprogram 2 (PED-SP2). It aimed to improve the understanding of fiduciary risks and determine appropriate fiduciary arrangements. It was based on ADB's the sector work of the proposed public financial management for rural development (PFMRD). It was also based on the World Bank's Integrated Fiduciary Assessment and Public Expenditure Review (IFAPER) for 2003, and the Country Procurement Assessment for 2004.

35. These assessments identified core areas to address. The IFAPER determined that the fiduciary risk in the use and management of public funds was high. As a consequence, the Government developed and began implementing a medium-term public financial management reform program (PFMRP) from 2004 to 2012, supported by development partners. This program increases the amount of public resources allocated to planning and management to overcome the significant weaknesses in the basic systems and processes for budget preparation, execution and control, reporting, and oversight. It comprises a series of four sequenced platforms, of which platform one was completed in 2007 and platform two beginning in 2008 with the rollout of public financial management reforms to the line ministries.

36. ADB, World Bank, and other development partners are working closely with the Government to implement improved public sector financial management systems. ADB has supported the Government's program through debt management technical assessment at MEF and the PFMRD to support the rollout of the second platform.

37. **The Ministry of Public Works and Transport (MPWT)** is the executing agency for the proposed project. MPWT was established by Royal Krom<sup>24</sup> to administer and regulate the public

<sup>23</sup> Information is sourced from the project administration manual for the Greater Mekong Subregion Southern Economic Corridor Towns Development Project. November 2012. <http://www.adb.org/projects/documents/gms-southern-economic-corridor-towns-development-project-rfp>

<sup>24</sup> The Royal Krom NS/RKM/0196/03 was issued by the King of Cambodia on 24 January 1996.

works and transport sections of the Kingdom of Cambodia. The organization and functions of MPWT were established under the sub-decree.<sup>25</sup> MPWT is responsible for: (i) managing the implementation of the national policy concerning all public works construction by establishing the principles of law and cooperating with various organizations to develop the country; (ii) building, maintaining and managing all the transportation infrastructure such as roads, bridges, ports, railways, waterways and buildings; (iii) establishing the regulations for the development of the roads, ports, railways and waterways infrastructure; (iv) establishing the regulations and control the transport by road, railway and waterway; (v) participating and cooperating in the establishment of laws, regulations, diverse standards concerning the construction of transport infrastructure; (vi) realizing the other constructions entrusted to it by the Royal Government of Cambodia; and (vii) cooperating with the Secretariat of Civil Aviation concerning all airport construction works.

38. **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.

39. The knowledgeable and experienced officers of the GDPW comprise the PMU ensuring experience in implementation, financial analysis, and management accounting prevails. The PMU has experience through the GMS Mekong Tourism Development Project, in establishing a special operating agency with MEF on the operations and management of wastewater treatment in Siem Reap. 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).<sup>26</sup>

40. The PMU in the GDPW/MPWT is the management unit for this project, which has also implemented the Provincial Towns Improvement Project and the GMS Mekong Tourism Development Project. It has been implementing various ADB-financed projects (e.g., the GMS Southern Economic Corridor Towns Development Project, and the GMS Tourism Infrastructure for Inclusive Growth). For instance, the GMS Southern Economic Corridor Towns Development Project has provided capacity development support for Financial and Procurement Management. The training programs will be anchored on the existing systems and procedures of the national government on ODA projects and the ADB guidelines on financial management. The indicative list of capacity development and training programs on financial management include: (i) financial procedures and practices, (ii) imprest account and fund disbursement, (iii) internal finance controls, (iv) financial status and audit reporting, and (v) financial cost recovery for revenue generating subprojects. It is noted that the capacity development interventions on financial management will be closely coordinated with the Ministry of Economy and Finance and measures will be development on the long term sustainability of the financial management capacity measures. Hence to avoid duplication in capacity development support, it has been agreed with the EA and MEF that training of trainer manuals will be developed through the GMS Southern Economic Corridor Towns Development Project, which will be rolled out to other project staff in the PMU and in each PIUs. A training or briefing will also be provided to the Project Steering Committee and each provincial coordination

<sup>25</sup>The Anukrit/Sub-decree no. 14/ANK/BK was issued by of the Royal Government of Cambodia on 3 March 1998.

<sup>26</sup> 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>

committee. During implementation, a separate financial management program will be developed and catered to the needs of the special operating agency (i.e., urban service units).<sup>27</sup>

41. 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 imprest accounts are recommended and part of the project management and implementation support consultants terms of reference.

## RISK ASSESSMENT AND RISK MANAGEMENT PLAN

Risk Description	Risk Assessment	Mitigation Measures or Risk Management Plan
<b>Financial Management Arrangements</b>		
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.
The project implementation units (PIUs) in Kampong Chhnang and Pursat are new entities and may have difficulty in managing project sub-accounts and adhering to accounting policies and procedures.	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 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.
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/</i>

<sup>27</sup> Information is sourced from the project administration manual for the Greater Mekong Subregion Southern Economic Corridor Towns Development Project. November 2012. <http://www.adb.org/projects/documents/gms-southern-economic-corridor-towns-development-project-rpp>

Risk Description	Risk Assessment	Mitigation Measures or Risk Management Plan
Inadequate external audit	Medium	<i>Programs in Cambodia</i> (May 2012) outline the requirements for internal audit—reducing the risk to low–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.
<b>Overall</b>	<b>Medium</b>	

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

42. ADB loan proceeds and Strategic Climate Fund (SCF) loan and grant will be disbursed in accordance with ADB's Loan Disbursement Handbook (2015, as amended from time to time), 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 Figure 2. Online training for project staff on disbursement policies and procedures is available at: [http://wpqr4.adb.org/disbursement\\_elearning](http://wpqr4.adb.org/disbursement_elearning). Project staff are encouraged to avail of this training to help ensure efficient disbursement and fiduciary control.

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

44. The fund flow is based on the GMS Southern Economic Corridor Towns Development Project (approved 2012); the Project will further include two (2) sub-accounts at the PIU level.

45. 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.

46. The MPWT, in consultation with MEF, will open two separate imprest accounts—one for the ADB loan and the other for the SPCR grant. The ceiling of each imprest account is 10% of the respective ADB loan and SPCR grant. The currency of the imprest accounts will be the US dollars. The imprest accounts will be established, managed, replenished, and liquidated in accordance with ADB's *Loan Disbursement Handbook* (2015, as amended from time to time) and the financial regulations of the Government. The MPWT who established the imprest accounts in its name is accountable and responsible for proper use of advances to the imprest accounts, including advances to the sub-accounts.

47. Request for initial and additional advance to the imprest accounts should be accompanied by an Estimate of Expenditure Sheet<sup>28</sup> setting out the estimated expenditures for the forthcoming six (6) months of project implementation. For every liquidation and replenishment request of the imprest account, the borrower will furnish to ADB (a) Statement of Account (Bank Statement) where the imprest account is maintained, and (b) the Imprest

<sup>28</sup> Refer to Appendix 10B of ADB's *Loan Disbursement Handbook* (2015, as amended from time to time). Available online: <http://www.adb.org/documents/loan-disbursement-handbook>

Account Reconciliation Statement (IARS)<sup>29</sup> reconciling these above mentioned bank statement against the EA's records.

48. 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 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 imprest and sub-accounts.

49. The SOE procedure<sup>30</sup> may be used for reimbursement and to liquidate and replenish the imprest 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.

50. All withdrawal applications will be consolidated by the Ministry of Public Works and Transport (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 imprest fund procedure, unless otherwise accepted by ADB.

51. 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.

52. The project will provide 80% of the total contract value (net taxes) for civil works under output 3.3 (small-scale infrastructure improvements). 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 3.3. MEF will provide its 10% contribution (net taxes) directly to the PMU for payment to the contractors.<sup>31</sup>

<sup>29</sup> Refer to Appendix 10C of ADB's *Loan Disbursement Handbook* (2015, as amended from time to time). Available online: <http://www.adb.org/documents/loan-disbursement-handbook>

<sup>30</sup> Checklist for SOE procedures and formats are available at Appendix 9B of the Loan Disbursement Handbook

<sup>31</sup> Confirmed with the Ministry of Economy and Finance and Ministry of Public Works and Transport in a meeting on 25 August 2014.

### C. Accounting

53. 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 consistent with international accounting principles and practices.

54. 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).<sup>32</sup>

### D. Auditing

55. 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).

56. The annual audit report will include an audit management letter and audited financial statements on the use of the imprest 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 imprest 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.

57. 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.

58. 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.

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<sup>32</sup> Ministry of Economy and Finance (MEF): Standard Operating Procedures, Financial Management Manual and Procurement Manual Volume I and II- May 2012 for the Externally Financed 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>

59. 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

### A. Advance Contracting

60. The EA requested for advance action for the recruitment of consultants. This is intended to facilitate Project start-up activities and avoid significant project implementation delays due to the limited capacity and experience in undertaking essential pre-Project implementation arrangements. The procurement of services for advance contracting will be undertaken in accordance with ADB's *Procurement Guidelines* (2015, as amended from time to time). Since the project is financed with ADB-administered cofinancing resources as well as ADF resources, universal procurement will apply to all contract packages financed under the project.<sup>33</sup> The issuance of the invitation to bid will be subject to the approval of ADB. ADB's approval of advance contracting will not commit ADB to subsequently approve the project or to finance the procurement costs; and ADB will not finance expenditures paid by the borrower prior to loan or grant effectiveness.

61. The EA requested for TA 7986-CAM savings to help support a project implementation specialist to assist in the start-up activities. The scope of services for advance contracting will include recruitment of the project management and implementation specialist, initial institutional development specialists, non-governmental organization, and climate change resilience consultants.

### B. Procurement of Goods, Works and Consulting Services

62. All procurement of goods and works will be undertaken in accordance with ADB's *Procurement Guidelines* (2015, as amended from time to time).

63. 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.

64. 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. A list of equipment is in Annex D.

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

66. All consultants will be recruited according to ADB's *Guidelines on the Use of Consultants* (2013, as amended from time to time).<sup>34</sup> The terms of reference for all consulting services are detailed terms of reference is in Annex C.

67. There are four packages to be recruited:

- (i) Project management and implementation support services. A consulting firm with estimated 506 persons months of consultants—78 person-months of

<sup>33</sup> ADB. 2013. *Blanket Waiver of Member Country Procurement Eligibility Restrictions in Cases of Cofinancing for Operations Financed from Asian Development Fund Resources*. Manila

<sup>34</sup> Checklists for actions required to contract consultants by method available in e-Handbook on Project Implementation at: <http://www.adb.org/documents/handbooks/project-implementation/>

international and 428 person-months of national consultants will be required. The consulting firm for the PMIS services will be engaged by the EA and ADB using the quality-and cost-based selection (QCBS) method with a standard quality: cost ratio of 80:20. The higher quality-cost ratio is proposed due to the nature of Project implementation where two PIUs work under the coordination and oversight of four implementing agencies.

- (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 will be required. The consulting firm will be engaged by the EA and ADB using the consultant qualification selection (CQS) procedures in accordance with ADB *Guidelines on the Use of Consultants* (2013, as amended from time to time).
- (iii) Initial institutional development support. A consulting firm with estimated 5.5 person-months of consultants—3.5 person-months of international and 2.0 person-months of national consultant will be required. The consulting firm will be engaged by the EA and ADB using the consultant qualification selection (CQS) procedures in accordance with ADB *Guidelines on the Use of Consultants* (2013, as amended from time to time).
- (iv) Non-governmental organization support for output 3. An international NGO will be required to support the implementation of the output 3 on community mobilization and environmental improvements. The international NGO will be engaged by the EA and ADB using a quality-based (QBS) selection where shortlists may comprise of NGOs and firms; and QCBS (80:20) where shortlists may entirely comprise of NGOs through a performance-based contract in accordance with ADB *Guidelines on the Use of Consultants* (2013, as amended from time to time).

68. Within a year of Loan effectiveness, the EA shall submit a revised procurement plan to ADB for approval. This revised plan contains all ongoing procurement activities and those that are planned for the succeeding 18 months. The plan shall be updated annually or as required after every loan review mission or after award of each major ICB contract.

69. 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. ADB will be responsible for posting the initial procurement plan and subsequent updates on the ADB website.

## C. Procurement Plan

### Basic Data

<b>Project Name: Integrated Urban Environmental Management in the Tonle Sap Basin</b>		
Project Number: 42285-013	Approval Number:	
Country: Cambodia	Executing Agency: MPWT	
Project Procurement Classification: B	Implementing Agencies: PDPWT and Municipality, Kampong Chhnang PDPWT and Municipality, Pursat	
Procurement Risk: Moderate		
Project Amount: \$52.6 million	Project Closing Date:	
Financing: \$37.0 million		
ADB Financing: \$5 million		
SCF Loan: \$5 million		
SCF Grant: \$5.4 million		
Government: \$0.2 million		
Community:		
Date of First Procurement Plan: 14 October 2014	Date of this Procurement Plan: 15 September 2015	

## 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 (ICB) for Works	Above \$3,000,000	Prior. All bid documents, evaluations and contracts.
International Competitive Bidding for Goods	Above \$1,000,000	Prior. All bid documents, evaluations and contracts.
National Competitive Bidding (NCB) for Works	Beneath that stated for ICB, Works	Prior/post. Prior review for first set of bid documents for EA and post review for succeeding packages
National Competitive Bidding for Goods	Beneath that stated for ICB, Goods	Prior/post. Prior review for first set of bid documents for EA and post review for succeeding packages
Shopping for Works	Below \$100,000	3 quotations required
Shopping for Goods	Below \$100,000	3 quotations required
Works Contracts for Community-driven Environmental Improvements	Below \$120,000 NCB/Shopping	NCB / Shopping

Consulting Services	
Method	Comments
Quality and Cost Based Selection (QCBS)	Prior. Request for proposal, evaluations and contracts.
Quality Based Selection (QBS)	Prior. Request for proposal, evaluations and contracts.
Consultants' Qualifications Selection (CQS)	Prior. Expression of interest, evaluations and contracts.
Individual Consultants	Prior. All expressions of interest, evaluations, and contracts.

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

The following table lists goods and works contracts for which 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

## 3. Consulting Services Contracts Estimated to Cost More Than \$100,000

The following table lists consulting services contracts for which procurement 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
	Project Management and Implementation Support	\$4,672,987	QCBS (80:20)	Prior	Q4/2015	Full	One contract covering MPWT and both towns
	Strengthening Sector Development	\$129,415	CQS	Prior	Q4/2015	BTP	One contract covering MPWT and both towns
	Climate Change Adaptation in Urban Development	\$345,180	CQS	Prior	Q3/2016	BTP	One contract covering MPWT and both towns
	NGO Support for Output 3 (CMEI)	\$990,000	QBS or QCBS (80:20)	Prior	Q3/2016	STP	International; One contract covering MPWT and both towns

<sup>2</sup> As suggested by Paragraph 2.38 of the Guidelines on The Use of Consultants by Asian Development Bank and Its Borrowers March 2013.

## 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 groups smaller-value goods, works and consulting services contracts for which procurement 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
	Supply of 5 units 4WD double cabin pick-up trucks	\$208,657	1	NCB	Prior	-	Q4/2015	Gov't SOP dated May 2012
	Supply of 8 motorcycles	\$13,179	1	Shopping	Prior	-	-	Gov't SOP dated May 2012
	Office equipment for PMU and PIUs (Kampong Chhang and Pursats)	\$8,786	1	Shopping	Post	-	-	Gov't SOP dated May 2012
	Computers & peripherals for PMU and PIUs	\$16,474	1	Shopping	Post	-	-	Gov't SOP dated May 2012

<b>Goods and Works</b>								
<b>Package Number</b>	<b>General Description</b>	<b>Estimated Value</b>	<b>Number of Contracts</b>	<b>Procurement Method</b>	<b>Review (Prior / Post)</b>	<b>Bidding Procedure</b>	<b>Advertisement Date (quarter/year)</b>	<b>Comments</b>
	(Kampong Chhnang and Pursat)							
	Manual Equipment for Pursat Drainage Maintenance and Flood Protection	\$91,967	1	Shopping	Post	-		Gov't SOP dated May 2012
	Manual Equipment for Kampong Chhnang Embankment	\$46,204	1	Shopping	Post	-		Gov't SOP dated May 2012

<sup>1</sup> Total amount is above the \$3,000,000 for works, but no individual contract to be more than \$120,000.

<sup>2</sup> Usually NCB, but if a contract is less than USD 100,000, then shopping for works can be used.

<sup>3</sup> As per SOP, MPWT has to advertise for shopping for contract above \$25,000 (to verify the exact amount).

<b>Consulting Services</b>							
<b>Package Number</b>	<b>General Description</b>	<b>Estimated Value</b>	<b>Recruitment Method</b>	<b>Review (Prior / Post)</b>	<b>Advertisement Date (quarter/year)</b>	<b>Type of Proposal</b>	<b>Comments</b>

## **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 the previous sections (i.e., those expected beyond the current period).

<b>Goods and Works</b>								
<b>Package Number</b>	<b>General Description</b>	<b>Estimated Value (cumulative)</b>	<b>Estimated Number of Contracts</b>	<b>Procurement Method</b>	<b>Review (Prior / Post)</b>	<b>Bidding Procedure</b>	<b>Comments</b>	
	Supply of Kampong Chhnang Solid Waste Management Equipment	\$1,115,182	2	NCB	Prior		Q3/2018 Gov't SOP dated May 2012	
	Supply of Pursat Solid Waste Management Equipment	\$1,243,512	2	NCB	Prior		Q3/2018 Gov't SOP dated May 2012	
	Construction of Kampong Chhnang Embankment	\$24,550,988	1	ICB	Prior	1 Stage/1 Envelope	Q4/2017 No prequalification; Standard bidding documents – Large works	
	Construction of Pursat Drainage	\$9,171,218	1	ICB	Prior	1 Stage/1 Envelope	Q4/2017 No prequalification; Standard bidding documents - Small works	
	Construction of Pursat Landfill Site	\$1,296,273	1	NCB	Prior		Q1/2018 Gov't SOP dated May 2012	
	Construction of Pursat River Embankment Protection	\$758,458	1	NCB	Prior		Q4/2017 Gov't SOP dated May 2012	
	Construction of Kampong	\$546,268	1	NCB	Prior		Q1/2018	

<b>Goods and Works</b>							
<b>Package Number</b>	<b>General Description</b>	<b>Estimated Value (cumulative)</b>	<b>Estimated Number of Contracts</b>	<b>Procurement Method</b>	<b>Review (Prior / Post)</b>	<b>Bidding Procedure</b>	<b>Comments</b>
	Chhnang Landfill Site						Gov't SOP dated May 2012
	Kampong Chhnang and Pursat Community-driven Environment Improvements	\$3,965,547	6 (or multiple)	NCB	Prior/ Post	-	Q3/2017 Bidding will be done by PMU. NGO will assist in preparing the proposal and implementing the community activities under Output 3. Gov't SOP dated May 2012

<b>Consulting Services</b>							
<b>Package Number</b>	<b>General Description</b>	<b>Estimated Value (cumulative)</b>	<b>Estimated Number of Contracts</b>	<b>Recruitment Method</b>	<b>Review (Prior / Post)</b>	<b>Type of Proposal</b>	<b>Comments</b>

### **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 On-going Contracts**

<b>Goods and Works</b>							
<b>Package Number</b>	<b>General Description</b>	<b>Estimated Value</b>	<b>Awarded Contract Value</b>	<b>Procurement Method</b>	<b>Advertisement Date (quarter/ year)</b>	<b>Date of ADB Approval Contract Award</b>	<b>Comments</b>

## 2. Completed Contracts

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

### D. Non-ADB Financing

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

Goods and Works				
General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Procurement Method	Comments

Consulting Services				
General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Procurement Method	Comments

### E. National Competitive Bidding

#### 1. 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 No. 74 ANK BK dated 22 May 2012 with the clarifications and modifications described in the following paragraphs required for compliance with the provisions of the Procurement Guidelines.

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

## **F. 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 changes to the mode of procurement from those provided in the Procurement Plan shall be made through updating of the Procurement Plan, and only with prior approval of ADB.

### **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.

## **D. Bidding Documents**

### **1. Use of Bidding Documents**

6. 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.

### **2. Bid Evaluation**

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

8. 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.

### **3. Employer's Right to Accept or Reject Any or All Bids**

9. 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.

#### **4. ADB Policy Clauses**

10. 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.

11. 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.

12. 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.

**E. Consultant's Terms of Reference**

70. See Annex C.

## VII. SAFEGUARDS

71. Relevant Safeguards Documents include (i) Environment (Category B) - the initial Environmental examinations (IEE) for Kampong Chhnang and Pursat, environmental management plans (EMPs) for flood embankment and solid waste management in Kampong Chhnang, and drainage, riverbank erosion protection, and solid waste management in Pursat, an environment assessment and review framework (EARF) (ii) Resettlement (Category B) – Resettlement Plans (RP) for Kampong Chhnang and Pursat subprojects; (iii) Indigenous Peoples (Category B) – Indigenous Peoples Plan elements integrated into the project design, Participation Plan and Resettlement Documents to ensure social inclusiveness and meaningful participation of all ethnic groups, including the ethnic Cham and Vietnamese. Refer to the respective safeguard action plans for detailed implementation guidance.<sup>35</sup> The provincial government of Kampong Chhnang and Pursat provided their commitment to adhering to ADB and the government's safeguard policies on environment, involuntary resettlement and indigenous peoples (ethnic minorities) on 31 July 2014. The resettlement documents were approved by the Inter-ministerial Resettlement Committee on behalf of MPWT on 21 August 2014; and the revised resettlement documents were approved for disclosure on 3 September 2015 (RP versions dated April 2015; email of 27 August 2015). The environmental documents were principally approved on 15 August 2014 and endorsed by the MPWT on 25 September 2014. See Section VIII.B for safeguard monitoring.

### A. Environmental Safeguards

72. The project is classified as **Category B** for environment in accordance with the ADB's SPS 2009. Environmental impacts are related to siting, design, construction, and operation, and mitigation measures are incorporated in the environment management plans (EMPs). EMPs have been prepared for SWM, embankment protection, drainage, and riverbank erosion protection. The EMPs will form part of the bidding and contract documents. The potential adverse impacts during construction are expected to be temporary and will be mitigated through implementation of and compliance with the EMP. The project includes budget and institutional arrangements for EMP implementation and monitoring. Initial environmental examinations (IEEs) for two (2) subprojects (*Kampong Chhnang* and *Pursat*) will be revised to reflect design changes. Likewise, the Environmental Assessment and Review Framework (EARF) for the Community Mobilization and Environmental Improvements (Output 3) will also be updated. Potential impacts of climate change and/or natural hazards on the project were integrated as part of project design (e.g., flood risk management), and in the IEEs with recommendations for consideration during the design stage.

73. Mitigation measures (including any additional requirements) for identified impacts will be incorporated into the Environmental Management Plans (EMPs) – which were prepared individually for each of the components. Costing for developing and implementing the EMPs will be refined for inputs to project costing. At the detailed design stage, as IEEs/EMPs will be updated and finalized, the proposed mitigating measures will be reviewed to ensure that environmental receptors are not adversely affected.

74. The grievance redress mechanism for environment is detailed in the EARF for Output 3 and IEEs for Kampong Chhnang and Pursat, and will be followed accordingly.

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<sup>35</sup> Under the streamlined business processes these are linked documents 13–17.

## **B. Social and Resettlement Safeguards**

75. Pursuant to ADB's Safeguard Policy Statement (2009) (SPS), ADB funds may not be applied to the activities described in the ADB Prohibited Investment Activities List. All EA and IAs will ensure that their investments are in compliance with applicable national laws and regulations and will apply the prohibited investment activities list to subprojects financed by ADB.

### **1. Involuntary Resettlement Safeguards**

76. The safeguard category for involuntary resettlement is B. Two Resettlement Plans (RP) are prepared for each participating town to guide the expected Land Acquisition and involuntary resettlement (LAR) impacts of the Project. An estimated 78,815.25 m<sup>2</sup> of land (56,945.75 m<sup>2</sup> [public] and 21,869.50 m<sup>2</sup> [private]) will be acquired for the project. About 139 affected households (AHs) with 576 Affected Persons (APs) have been identified in the participating towns – 123 AHs (515 APs) in Kampong Chhnang Town, and 16 AHs (61 APs) in Pursat Town. There are 23 severely affected households (102 APs) in Kampong Chhnang; one (1) AH (5 APs) will be severely affected by acquisition of private agricultural land equal to 10% or more of their total productive (income-generating) assets, and the remaining 22 AHs (97 APs) will be severely affected due to permanent loss of land use equivalent to 10% or more of their total productive (income-generating) assets. Two (2) AHs (6 APs) 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.

77. 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 21 August 2014) is \$257,393.53 (about \$203,618.84 in Kampong Chhnang, and \$ 534,774.69 in Pursat). This includes the base costs, allowances for severely affected and vulnerable APs, external monitoring organisation, contingencies and administrative costs. Project information was disclosed throughout the project preparation through continued consultations and focus group discussions with the affected people and will be continued during the entire project cycle. A draft project information booklet in Khmer has been prepared and will be updated and distributed to identified AHs in participating towns as part of RP updating. The draft RPs will be disclosed on ADB website prior to project appraisal, and updated/final RPs will be disclosed following detailed design. The establishment of a grievance redress mechanism will be accessible to displaced persons without cost and retribution.

78. The grievance redress mechanism for involuntary is detailed in the RPs for Kampong Chhnang and Pursat, and will be followed accordingly. The provincial grievance redress committee will be established in accordance with the resettlement plans. They will:

- (i) Receive and act on the complaints and grievances of AHs in accordance with the Project resettlement policy; and
- (ii) Maintain a record of all public meetings, grievances, and actions taken to address complaints and grievances

79. **Project Management Unit (PMU) and Project Implementation Units (PIU).** The PMU is responsible for the overall management (coordination, planning, implementation reporting) of the Project. It will report directly to the EA on developments about the Project. Both Pursat and Kampong Chhnang will set up a Project Implementation Unit (PIU). A resettlement officer will be assigned to the PMU and one in each PIU in order to coordinate implementation of the RP. Its resettlement-related tasks will include the following:

- (i) Secure the approval of the RP from the Inter-ministerial Resettlement Committee (IRC) in the Ministry of Economy and Finance;
- (ii) Secure prior approval by IRC and the ADB for any variations in the approved RP;
- (iii) Update the RP after the detailed measurement survey (DMS)/consultation with AHs during actual implementation.
- (iv) Secure the data base of affected households and assets that will be gathered during the preparation and updating of the RP.
- (v) Prepare progress reports/internal monitoring on overall project implementation including the RP implementation and submit to the IRC and ADB

80. **Inter-ministerial Resettlement Committee (IRC).** The IRC is a collective entity composed of representatives from relevant line ministries, such as the MPWT (Project Executing Agency), the Ministry of Land Management, Urban Planning and Construction (MLUPC), and Ministry of Water Resources and Meteorology (MOWRAM). The IRC has emerged as the decision making body on resettlement issues and has since been involved in other foreign-assisted government infrastructure projects with involuntary resettlement. The MEF is the permanent Chair of the IRC and represents it for all development projects. The IRC will assume the function of a quasi-regulatory body, ensuring that funds for resettlement are spent properly and that the RP is carried out as intended. The technical arm of the IRC is its working group. The Resettlement Department of MEF is acting as the secretariat of IRC and is tasked to assist the IRC in carrying out the following:

- (i) Reviewing and approving the RP, ensuring that the RP is consistent with the law and regulations of Cambodia and ADB's 2009 Safeguard Policy Statement (SPS) and the loan agreement;
- (ii) Endorsing the approved RP to ADB;
- (iii) Manage and supervise the RP implementation at the Project areas, such as DMS, negotiation and contracting making with AHs, public consultation with AHs, information disclosure, etc; based on the agreed policy and principles of the RPs;
- (iv) Convening the establishment of the Provincial Resettlement Committee (PRSC) and its Working Group (WG);
- (v) Orienting, as needed, the PRSC and its working group (PRSC-WG) on their tasks relative to RP preparation and implementation;
- (vi) Securing from the national treasury the budget for carrying out the RP, ensuring that funds are available in a timely manner and in sufficient amounts;
- (vii) Approving all disbursements connected with the implementation of the RP, such as payment of compensation and other entitlements, acquisition and preparation of replacement plots, operational expenses of personnel, etc.;
- (viii) Ensuring that funds for resettlement are spent judiciously; and
- (ix) Monitoring the implementation of the RP, ensuring that this is carried out in compliance with the Project resettlement policy and with the loan agreement

81. **Provincial Resettlement Sub-committee (PRSC).** The PRSC is a collegial body at the provincial level headed by the Provincial Governor or Deputy Governor of the Provinces where the Project located. The members of the PRSC are provincial department directors of line

ministries represented in the IRC, and also the chiefs of the districts and communes where the Project located.

82. The technical arm of the PRSC is the Working Group (PRSC-WG). The PRSC-WG is headed by the Chief or Deputy Chief of the Provincial Cabinet, with a Director (or a representative) of the Provincial Department of Public Works and Transport (PDPWT) as members. The PRSC-WG has a counterpart at the district level and commune level composed of personnel from various line agencies.

83. The PRSC, through the provincial, municipal and sangkat working groups, will have the following functions:

- (i) Facilitate a sustained public information campaign, ensuring that the public, especially the AHs, are updated on any developments regarding the Project and resettlement activities;
- (ii) Cooperate with IRC-WG in conducting the implementation of RPs and assist with public consultation and information disclosure meetings; Assist the IRC-WG in the selection. Acquisition and preparation of replacement plots, including preparation of a coordinated schedule of delivery of compensation and other entitlements, the relocation of people, harvesting of standing crops, and the start of civil works in a particular section of the Project; and
- (iii) Manage the delivery of compensation and other entitlements to the AHs.

84. **Project Management and Implementation Support Consultants (PMIS).** The Project Management and Implementation Support Consultants (PMIS) will be recruited by MPWT in accordance with ADB's Guidelines on the Use of Consultants (2013, or as amended time from time). The PMIS consultants will assist PMU in updating the RPs based on the results of the DMS and the RCS and in implementation of the Project. The PMIS will likewise provide capacity-building orientation and skills training, as needed, to concerned personnel of the PMU. The PMIS will include one international social development/resettlement specialist (6 person-months, intermittent), two local resettlement specialists (one per project town, for a total of 24 person-months, intermittent)

85. Together with the PMU, the PMIS will supervise civil works activities to ensure that the contractors adhere with the terms of their contract relative to avoiding and/or minimizing resettlement impacts, in addition to ensuring that contractors provide the necessary compensation and/or assistance to the AHs during construction as described in the entitlement matrix. Compensation and assistance will be provided by civil work contractor prior to and/or during construction activities, depending on when the temporary impacts are identified.

## 2. Indigenous Peoples Safeguards

86. Ethnic Cham and Vietnamese were identified and meaningfully consulted in some Kampong Chhnang villages. They live alongside the Khmer majority and are well integrated within the larger community. The project includes specific design features to ensure that the ethnic Cham and Vietnamese are project beneficiaries and are meaningfully consulted during project implementation, such as: the Kampong Chhnang river embankment in some parts will be constructed parallel to the existing alignment to avoid significant resettlement impacts; and Output 3 (Community Mobilization and Environmental Improvements) targets poor and vulnerable

households, including ethnic Cham and Vietnamese. The NGO recruited also will be required to demonstrate in its proposal its experience in working with the ethnic Cham and Vietnamese.<sup>36</sup>

87. The project design will benefit all residents in the project area in Kampong Chhnang and Pursat, including ethnic Cham and Vietnamese groups. Output 3 pre-identifies villages where ethnic Cham and Vietnamese are an overwhelming majority of project beneficiaries. As such, the elements of an indigenous peoples plan are integrated in project design in lieu of a stand-alone indigenous peoples plan.

88. Meaningful and culturally appropriate participation and consultation with ethnic Cham and Vietnamese will be ensured and fully documented by the PMU, with support from the Project Management and Implementation Support Consultants (e.g., the international resettlement and social development specialist). It will also be closely monitored for compliance by the EA and ADB during project implementation.

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<sup>36</sup> The elements of an indigenous peoples plan (IPP) are included in the overall project design in lieu of a separate IPP.

### VIII. GENDER AND SOCIAL DIMENSIONS

89. **Gender Action Plan.** The proposed Project is classified as ‘Effective Gender Mainstreaming’ (EGM) under the Asian Development Bank’s (ADB) guidelines (March 2010). The Project impact is increased economic activities and environmental protection in towns in the Tonle Sap Basin and the outcome of the project will be improved urban services and enhanced climate change resilience in Kampong Chhnang and Pursat municipalities. The Project has five outputs: Kampong Chhnang urban area environmental improvements; Pursat urban area environmental improvement; community mobilization and environmental improvements (CMEI); (iv) strengthened sector coordination and operations; and strengthened capacity for project implementation, and operations and maintenance. 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.<sup>37</sup> 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.

90. **Legal and institutional framework.** The Constitution of Cambodia, adopted in 1993, clearly states that “men and women have equal rights before the law and enjoy equal participation in political, economic, social and cultural life; equality in marriage and family; employment and equal pay for the same work. It also includes measures to prevent and eliminate all forms of discrimination and exploitation of women”. Furthermore, the government recognizes the link between its poverty reduction efforts and strengthening gender equality in the Country, and the National Institute of Statistics (NIS) of the Ministry of Planning has produced its information booklet “Women and Men in Cambodia” with the intention of “making the situation for women and men more visible” and through this, contributing to development in the country. Additionally, the government has expressed its strong commitment to achieving gender equality in several national policies, including the National Strategic Development Plan (NSDP) 2006–2009, which clearly defined gender mainstreaming as strategic to all sectors, and the NSDP Update 2009–2013 (approved in May 2010), which recommended strengthening national capacity for gender analysis, research, and advocacy. The NSDP Update 2009–2013 further recognized that altering mindsets and behavior regarding gender equality and women’s rights necessitates long-term commitment from all stakeholders.<sup>38</sup> The government also ratified the Convention on the Elimination of All Forms of Discrimination against Women in 1992.

91. Cambodia’s institutional framework for the promotion of gender equity involves the Ministry of Women’s Affairs (MOWA); the Cambodia National Council for Women; the Technical Working Group on Gender (chaired by MOWA, and co-facilitated with the United Nations Development Programme and the Japan International Cooperation Agency); and gender mainstreaming action groups of government line ministries (including the MPWT gender working group). Women and children’s consultative committees (WCCCs) were also established at all levels of subnational government as per a Ministry of Interior decree issued in December 2009.

92. **Summary gender analysis for Kampong Chhnang.** Women’s active participation is vital for the project to achieve its EGM objectives. Identified constraints to women’s active participation in broader community matters in Kampong Chhnang include a perception that women are not

<sup>37</sup> RGC. Ministry of Planning. National Institute of Statistics. 2011. *Women and Men in Cambodia*. Phnom Penh.

<sup>38</sup> ADB. 2012. *Country Gender Analysis (Cambodia)*. Manila.

equal to their male counterparts when it comes to community and business matters. Women's level of participation also depends on the accessibility of information from the local authorities and availability of activities where they are able to freely share their opinions. This, and women's workloads in and outside the home, must be considered when arranging consultations and capacity building activities at times and places accessible to female members of the community. It was pointed out by key informants from the Provincial Department of Women's Affairs (PDOWA) that majority of participants during community-based environmental sanitation training activities are women and that these are very beneficial for local women and should be supported by the Project. It is recommended that the Project obtain PDOWA support to ensure participation of female community members in project activities. The PIU should also work closely with female elected local officials such as sangkat chiefs or village heads, and with local WCCCs.

93. **Summary gender analysis for Pursat.** Focus group discussion participants in Pursat identified their greater share of work at home as one constraint to their more active participation in broader community matters. Participants agreed that it is important for village authorities to increase awareness and encourage participation of women in employment and other roles in the community. This was supported during an interview at the Pursat PDOWA, where it was mentioned that the best avenue to ensure participation of women in project activities is to work closely with sangkat chiefs and gender groups at the village level.<sup>39</sup> These circumstances will have to be considered when scheduling consultations with women stakeholders and designing IECs.

94. It is also recommended that PDOWA representatives from provincial to village levels be involved in all future activities including training and capacity development activities. It is important to secure their support and assistance in ensuring the participation of female community members, as well as that of their partners such as the village health support group, which has been identified as PDOWA's partner in conducting trainings at the village level on waste, sanitation and HIV. Key informant interviews underscored the importance of putting in place protective measures during construction activities, including separate latrine facilities for women and men and equal pay for equal work regardless of the laborer's sex. It is also important to encourage contractors to properly integrate information about HIV-awareness among their workers and in the local communities.

95. **Key gender challenges in urban environmental improvements.** Flood events and inefficient waste management often disproportionately impact women, as they are usually the ones who remain at home to care for family members during prolonged periods of flood and are given the primary responsibility for maintaining the home environment. The Project includes outputs that aim to enhance urban infrastructure and develop capacity. Project activities will significantly improve the quality of life of women by directly addressing their flood and waste management issues in the project areas (e.g., menstrual hygiene management). The Project also includes measures to ensure that women are informed and actively participate in project activities. These measures will facilitate the sharing of information and will assist to empower women that are in decision making positions.

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<sup>39</sup> It may be assumed that this refers to women and children's consultative committees, which are supposed to be established at all levels of subnational government as per a decree of the Ministry of Interior in December 2009.

### Project Gender Action Plan

Outputs	Actions	Responsibilities
<b>Output 1: Kampong Chhnang Urban Environmental Improvements</b>	Meaningfully consultation with women on detailed designs to ensure their needs and preferences are incorporated, and to include woman and child safety measures (e.g., embankment railing, solar lamp posts, emergency help buttons, and awareness on personal night safety).	PMU, PIUs, PMIS consultants, PDOWA, contractors, IRC/MEF, and WCCC
	Incorporate menstrual hygiene management features in communities for improved solid waste management (e.g., bins in separate public toilet stalls).	
	Equal pay for men and women for work of equal type.	
	Safe working conditions for men and women construction workers (e.g., separate toilet facilities for men and women).	
	Households irrespective of income, ethnicity or sex of household head receives equal compensation and payment for any land acquisition or resettlement losses.	
	PIU and NGO to work closely with PDOWA and WCCCs on ensuring women's participation in project activities in Kampong Chhnang.	
<b>Output 2: Pursat Urban Environmental Improvements</b>	Meaningfully consultation with women on detailed designs to ensure their needs and preferences are incorporated, and to include woman and child safety measures (e.g., sidewalks and drainage covers).	PMU, PIUs, PMIS consultants, PDOWA, and contractors, IRC/MEF, and WCCC
	Incorporate menstrual hygiene management features in communities for improved solid waste management (e.g., bins in public toilet stalls).	
	Equal pay for men and women for work of equal type.	
	Safe working conditions for men and women construction workers (e.g., separate toilet facilities for men and women).	
	Households irrespective of income, ethnicity or sex of household head receives equal compensation and payment for any land acquisition or resettlement losses.	
	PIU and NGO to work closely with PDOWA and WCCCs on ensuring women's participation in project activities in Pursat.	
<b>Output 3: Community Mobilization and Environmental Improvements (CMEI)</b>	Sanitation grants to IDPoor 1 and 2, including female-headed households if categorized as IDPoor 1 or IDPoor 2.	PMU, PIUs, PMIS consultants, NGOs, municipal, sangkat (sub-district), commune and village authorities, PDOWA, and WCCC
	Meaningfully 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).	
	At least 40% of participants in CMEI activities and training are women	
	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).	
	Capacity development and IEC materials will be gender-sensitive.	
<b>Output 4: Strengthened sector coordination and operations</b>	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
	Women's climate change needs and issues are incorporated in the proposed climate change adaption regulations for urban environmental improvements.	
	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.	
	Tonle Sap Urban Areas Development Framework and individual urban development strategies for Kampong Chhnang and Pursat are explained to women's groups.	
	Semi-autonomous urban service units in Kampong Chhnang and Pursat municipality are established and become operational (at least 20% of staff in each unit are women).	

Outputs	Actions	Responsibilities
<b>Output 5: Strengthened Capacity for Project Implementation, and Operations and Maintenance</b>	At least 1 member of the Project Steering Committee is a woman.	MPWT/PDPWT, PMU, PMIS consultants, and PDOWA
	At least 30% of PMU and 30% of staff in both PIUs are women (2014 Baseline: PMU=1 woman; PIUs have not been established).	
	Project management and implementation consultants include an international social development /resettlement specialist (6 person-months) and a national gender specialist (6 person-months).	
	Gender sensitivity and mainstreaming training is administered to all project staff (PSC, PMU, PIUs, and PCC).	
	A resettlement/social development officer is appointed in the PMU	
	The NGO appoints at least 30% women as part of their team for each town in Kampong Chhnang and Pursat.	
	A government community coordinator is appointed in Pursat PIU and two government community coordinators are in Kampong Chhnang PIU.	
	A representative from the PDOWA is appointed to the provincial coordination committee in Pursat and Kampong Chhnang.	
	Project performance monitoring system includes sex-disaggregated data.	
	The annual project performance monitoring and evaluation reports will include progress against these indicators.	
	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).	
	GAP performance included in mid-term and final project reviews.	
	At least 20% of technical training participants are qualified women.	

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

96. **Implementation Arrangements.** The PMU will be responsible for the implementation and monitoring of the GAP and will appoint staff to complete associated tasks. The project management and implementation support consultants will include a resettlement and social development specialist who will provide support to the PMU, PIUs and the NGO teams. Tasks will include facilitating the participation of women in Project activities and strengthening gender-mainstreaming capacity of MPWT/PDPWT by conducting gender sensitivity and awareness training for EA staff, other PMIS consultants, contractors, NGO, and community institutions connected with project implementation. At least 30% of the PMU staff and each PIU staff will be women based on staffing requirements (Note: MPWT has 13.76% women as staff.) The consultants and NGO will ensure all that capacity development materials are gender-sensitive.

97. The NGO will work in partnership with the project implementation unit in PDPWT in the project areas, sangkhat and village authorities including gender groups at the village levels to disseminate project awareness and hygiene awareness information, and complete the tasks in Output 3. The NGO will coordinate with the project management and implementation support consultants and the climate change adaptation in urban development consultants. NGO teams will coordinate with the PDOWA, and other civil society organizations to implement project-related training and capacity development programs.

98. The implementation costs for the GAP is part of the overall Project cost estimates. It includes budget gender awareness training for EA staff, other consultants, contractors, and

community-level institutions. The budget for solid waste management capacity development sessions for women has been incorporated in the overall budget for information education and communication in solid waste management, including for waste pickers.

99. Monitoring and evaluation of GAP implementation will be done regularly and the GAP monitoring table will be updated at least twice a year. 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.

100. **Stakeholders Participation.** A Project Participation Plan has been prepared and describes measures to share information and strengthen participation of stakeholders in project components and activities with beneficiaries as per ADB's Guide to Participation. Strategies to ensure participation of the poor and vulnerable have been incorporated in resettlement documents to ensure their effective participation throughout the project cycle. Screening for community-driven infrastructure will ensure these were selected with full participation of marginalized groups that may experience negative impacts. Additional mitigation measures that may be identified during implementation will be decided via meaningful consultation with affected persons (APs). Preferential hiring for poor and other vulnerable affected households during project construction activities will be required from contractors. Contractor compliance will be monitored by MPWT and ADB during implementation.

101. The Project will collaborate with civil society organizations/NGOs working with women at the village and sangkat levels to strengthen women's participation and benefits.

102. **Addressing Other Social Risks.** Employment opportunities will be created for flood protection, landfill and community-led infrastructure civil works. All contracts will forbid hiring of minors. Health and safety standards will be adopted in all construction sites. HIV-awareness and anti-human trafficking training will be conducted for workers and local communities prior to construction activities. Other labor laws and regulations will be followed that are in the general conditions of contract of bid documents for ICB. Special conditions may be added, as required, to the NCB bid documents based on clear risk identification and assessments.

## IX. PERFORMANCE MONITORING, EVALUATION, REPORTING AND COMMUNICATION

### A. Project Design and Monitoring Framework

Impact the Project is Aligned with			
Increased economic activities and environmental protection in towns in the Tonle Sap basin (Tonle Sap Urban Development Strategic Framework 2014–2030) <sup>a</sup>			
Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
<b>Outcome</b> Improved urban services and enhanced climate change resilience in Kampong Chhnang and Pursat municipalities.	By 2023: a. At least 100,000 residents benefit from the project in Kampong Chhnang and Pursat municipalities (2013: 42,500 residents in Kampong Chhnang and 51,400 residents in Pursat). b. Households affected by floods in Kampong Chhnang reduced by 80% (2013: 5,400 households). c. Households affected by flooding in Pursat town center reduced by 50% (2013: 2,860 households). d. At least 19,600 households served by improved SWM in Kampong Chhnang and Pursat (2013: 1,500 households in Kampong Chhnang; 400 households in Pursat). e. At least 90% sanitation coverage achieved (2013: 50% in Kampong Chhnang and 61% in Pursat). f. Strengthened institutional framework and adaptive capacities of USUs in climate resilience infrastructure and climate change and hygiene awareness (baseline: not applicable)	a.–f. PMU's annual PPME reports, quarterly project progress, and project completion reports. f. National Committee for Disaster Management announcements and reports	Economic activities are adversely affected by natural disasters and lack of climate change impacts. Municipalities are not prepared to collect revenues for O&M of urban infrastructure.
<b>Outputs</b> 1. Kampong Chhnang urban area environmental improvements	By 2022: (Baseline: not applicable, if not otherwise stated) 1a. At least 15.1 km of embankment and road improved and constructed to a once in 50 years frequency flood level or 1:50 year flood levels (2013: range 1:1–1:20) 1b. 365 ha of urban land in 14 villages, and 950 ha of agricultural land in 14 villages are free from flooding from Tonle Sap. 1c. About 10 ha is converted into a controlled landfill. 1d. Two open dumpsites are closed and capped. 1e. Household collection increases to at least 60% in the municipality of Kampong Chhnang (2013: 4% or 400 households)	1a.–1e. PMU's annual PPME, quarterly project progress, and project completion reports.	Project start-up delays increase the number of affected people along the embankment alignment. CSOs and/or NGOs raise concerns during project implementation.
2. Pursat urban area environmental improvements	By 2022: (Baseline: not applicable, if not otherwise stated) 2a. At least 9.89 km of drains are improved and extended (2013: 5.64 km of drains) 2b. At least 9.49 km of sidewalks along associated drainage-roads are installed (2013: 0). 2c. At least 1.5 ha of the wastewater stabilization pond facility (anaerobic and facultative ponds) is rehabilitated to produce installed capacity of 5,700 m <sup>3</sup> /day (2013: not functioning). 2d. 200 mm of Pursat riverbank is reinforced. 2e. About 28 ha are developed for a new	2a.–2g. PMU's annual PPME, quarterly project progress, and project completion reports.	Dhamnak Chheukrom Irrigation System Rehabilitation works (upstream) does not lower flood levels of Pursat river in town center after completion. CSOs and/or

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
	controlled landfill. 2f. Two open dumpsites are closed and capped (2013: 1 of 2 landfill sites is closed) 2g. Household collection increases to at least 60% in Pursat municipality (2013: 11%)		NGOs raise concerns during project implementation.
3. Community mobilization and environmental improvements	By 2022: (Baseline: 0) 3a. At least 40% of participants in output activities and training are women. 3b. At least 5,200 IDPoor 1 and 2 households in Kampong Chhnang and Pursat have pour-flush toilets. 3c. At least 30% of hygiene campaigns focus on menstrual hygiene and SWM. 3d. At least 2,000 poor and vulnerable households benefit from community-driven climate resilience infrastructure.	3a.–3d. PMU's annual PPME, quarterly project progress, and project completion reports. 3b. Government of Cambodia, Ministry of Planning's IDPoor Atlas	CSOs and/or NGOs raise concerns during project implementation.
4. Strengthened sector coordination and operations	By 2022: (Baseline: not applicable) 4a. A plan for climate change adaptation in urban areas around the Tonle Sap is adopted by Tonle Sap provinces 4b. Building codes with refined latrine standards are adopted by Tonle Sap provinces. 4c. MPWT chairs at least two coordination meetings per year 4d. Semi-autonomous USUs in Kampong Chhnang and Pursat municipalities are established and become operational (20% of staff are women).	4a.–4d. PMU's annual PPME, quarterly project progress, and project completion reports.	
5. Strengthened capacity for project implementation, and operations and maintenance	By 2022: 5a. At least 20% of training participants are qualified women (2013: 5%-10%) 5b. A capacity development program is adopted by each municipality (baseline: not applicable).	5a.–5b. PMU's annual PPME, quarterly project progress, and project completion reports; and sex-disaggregated training records.	

### Key Activities with Milestones

#### 1. Kampong Chhnang urban area environmental improvements

- 1.1. Conduct topographical and soil surveys (Q1, 2017)
- 1.2. Update feasibility study<sup>b</sup> and appraisal report for ADB and government approval (Q1–Q3, 2017).
- 1.3. Issue bids, evaluate bids, and submit to ADB for no objection (Q4, 2017–Q3, 2018).
- 1.4. Transfer O&M and tariff collection for SWM to USU (Q4, 2017–Q2, 2018)
- 1.5. Award landfill civil works contract, procure landfill equipment and construct landfill (Q2, 2018–Q3, 2019)
- 1.6. Transfer O&M responsibilities for drainage and flood control systems to USU (Q3, 2018)
- 1.7. Remediate old open dumpsites and construct controlled landfill (Q4, 2018–Q2, 2019)
- 1.8. Award civil works contract and construct embankment (Q2, 2018–Q4, 2019)
- 1.9. Dry season 1, Construct embankment segments A to C (Q1–Q3, 2019)
- 1.10. Procure solid waste collection equipment (Q4, 2019)
- 1.11. Hand over works of landfill site and defects liability period (Q4, 2019–Q4, 2020)
- 1.12. Dry season 2, Construct embankment segments D to I (Q1–Q3, 2019 and Q1–Q3, 2020)
- 1.13. Construct embankment segments I to M during higher lake levels (Q1, 2019–Q4, 2020)
- 1.14. Road surfacing and supervision intermittent (Q1–Q2, 2020 and Q1–Q2, 2021)
- 1.15. Handover embankment works and defects liability period (Q3, 2021–Q3, 2022)
- 1.16. Internal and external monitoring of safeguard documents (2017–2022, quarterly)

#### 2. Pursat urban area environmental improvements

- 2.1. Conduct topographical and soil surveys (Q1, 2017)

<b>Key Activities with Milestones</b>
<ul style="list-style-type: none"> <li>2.2. Update feasibility study<sup>b</sup> and appraisal report for ADB and government approval (Q1–Q3, 2017)</li> <li>2.3. Transfer O&amp;M and tariff collection for SWM to USU (Q4, 2017–Q2, 2018)</li> <li>2.4. Issue bids, evaluate bids, and submit to ADB for no objection (Q4, 2017–Q2, 2018)</li> <li>2.5. Award contract for drainage and embankment works (Q3, 2018)</li> <li>2.6. Procure landfill equipment (Q2–Q3, 2018)</li> <li>2.7. Award contract for landfill construction (Q4, 2018)</li> <li>2.8. Remediate old open dumpsites and construct controlled landfill (Q4, 2018–Q3, 2019)</li> <li>2.9. Construction of riverbank protection (Q3, 2018–Q2, 2019)</li> <li>2.10. Transfer O&amp;M responsibilities for drainage and flood control systems to USU (Q3, 2018)</li> <li>2.11. Procure solid waste collection equipment (Q4, 2019)</li> <li>2.12. Hand over works for landfill and defects liability period (Q4, 2019–Q4, 2020)</li> <li>2.13. Construct drainage system starting at foot of system, construct pumping stations and WWTP with road rehabilitation as required (Q4, 2018–Q2, 2020)</li> <li>2.14. Supervise start-up and commissioning of WWTP (Q3–Q4, 2020)</li> <li>2.15. Hand over of drainage and embankment works and defects liability period (Q3, 2019–Q1, 2022)</li> <li>2.16. Internal and external monitoring of safeguard documents (2017–2022, quarterly)</li> <li><b>3. Community mobilization and environmental improvements</b></li> <li>3.1. Recruit International NGO (Q2–Q4, 2016)</li> <li>3.2. Train village development committee units for project briefing and output training (Q2–Q3, 2017)</li> <li>3.3. Climate change adaptation and sanitation needs assessments (Q1–Q2, 2017)</li> <li>3.4. Undertake community awareness programs (Q3, 2017–Q3, 2018 and intermittent)</li> <li>3.5. Needs assessments for small-scale infrastructure works on climate change adaptation and sanitation (Q1–Q3, 2017)</li> <li>3.6. Assist in planning, implementing, and supervising community environmental improvements (Q3, 2017–Q4, 2021)</li> <li>3.7. Prepare report on community environmental improvements and lessons (Q4, 2021)</li> <li>3.8. Internal and external monitoring of safeguard documents (2017–2022, quarterly)</li> <li><b>4. Strengthened sector coordination and operations</b></li> <li>4.1. Recruit and mobilize climate change resilience consultants (Q3–Q4, 2016)</li> <li>4.2. Recruit and mobilize institutional development consultants (Q1–Q2, 2016)</li> <li>4.3. Prepare, approve, establish, and strengthen USU institutions (Q2, 2016–Q3, 2022)</li> <li>4.4. Review climate change and urban development documents, and sanitation standards in building codes (Q1, 2017)</li> <li>4.5. Implement TSUADF, including revising building codes and developing the plan for climate change adaptation in urban areas (Q2, 2017–Q1, 2019)</li> <li>4.6. Plan for climate change adaptation in urban areas is endorsed, including revised building codes in Tonle Sap provinces (Q4, 2018–Q1, 2019)</li> <li>4.7. National task force for urban development meetings (Q1, 2017–Q1, 2022)</li> <li><b>5. Strengthened capacity for project implementation, and O&amp;M</b></li> <li>5.1. Appoint and update PMU and PIU members, including grievance focal points (Q1, 2016 and Q4, 2016)</li> <li>5.2. Recruit and mobilize project management and implementation support consultants (Q4, 2015–Q4, 2016)</li> <li>5.3. Recruit external resettlement monitor (Q3–Q4, 2016)</li> <li>5.4. Develop project performance management system and capacity development plan (sex-disaggregated) (Q2, 2017)</li> <li>5.5. Undertake training programs in project and financial management, procurement, safeguards, gender mainstreaming, and others (Q1, 2017–Q1, 2022)</li> <li>5.6. Submit quarterly project progress reports (1 month after each quarter, starting in Q1, 2017)</li> <li>5.7. Prepare annual PPME reports (31 January, 1 month after close of calendar year)</li> <li>5.8. Submit Government completion and post-evaluation reports on resettlement activities (Q2, 2019 and Q1, 2020)</li> <li>5.9. Submit government project completion report and resettlement report (Q3, 2022)</li> </ul>
<p><b>Inputs</b></p> <p>ADB: \$37.00 million (loan)</p> <p>Government: \$5.37 million</p> <p>Note: The government will provide counterpart support to cover its 10% contribution to output village grants, costs for land acquisition and resettlement, salary supplements, taxes and duties (through exemption), and annual audit of project accounts.</p> <p>ADB Strategic Climate Fund: \$5.00 million (loan) and \$5.00 million (grant)</p>
<p><b>Assumptions for Partner Financing</b></p> <p>Not Applicable.</p>

ADB = Asian Development Bank, CSO = civil society organization, EMP = environment management plan, ha=hectare, IDPoor = Identification of Poor Households Programme, km = kilometer, MPWT=Ministry of Public Works and Transport, NCB = national competitive bidding, 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,

TA = technical assistance, TSUADF = Tonle Sap Urban Areas Development Framework, USU = urban services unit, WWTP = wastewater treatment plant.

<sup>a</sup> Government of Cambodia, Ministry of Public Works and Transport. Forthcoming. *Tonle Sap Urban Areas Development Framework 2014–2030*. Phnom Penh.

<sup>b</sup> Feasibility studies include detailed engineering design and updated cost estimates, economic and financial analyses, bid and tender documents, socioeconomic data and safeguards documents.

Source: Asian Development Bank.

## B. Monitoring

103. **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.

104. 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.

105. 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.

106. 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 analysing 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.

107. 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.

108. **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) <sup>40</sup> 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.

109. **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.

110. **Environmental Safeguards monitoring.** PMU environmental officer will oversee and monitor the implementation of Environmental Management Plans (EMPs). The PMIS environmental specialists will provide technical advice, guidance and support to the PMU environmental officer in overseeing EMP implementation.

111. The PMIS consultants will work with the PMU to update the EMPs following detailed design. The PMU will primarily be responsible for monitoring the EMPs during planning, construction, operation and maintenance.

112. The PMU will assess (i) compliance with the Project's environmental policies and procedures and (ii) the availability and efficient use 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 shall report against these internal monitoring aspects in the quarterly project progress reports.

113. **Involuntary Resettlement monitoring.** *Internal monitoring* by the MPWT through the PMU, with support from the PMIS consultants, will serve to evaluate (i) compliance with the Project's social safeguards policies and procedures, including resettlement; (ii) timely availability of personnel, material, and financial resources and efficient use of these to implement land acquisition and resettlement activities; and, (iii) identification of problems, if any, and development of remedial actions to address these.

114. The PMU will review and confirm the suggested internal monitoring indicators below, procedures and reporting requirements for all project components that involve resettlement and will report on resettlement implementation progress as part of quarterly project progress reports submitted to IRC and ADB.

115. Internal monitoring indicators will include:

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<sup>40</sup> [www.climateinvestmentfunds.org/cif/measuringresults](http://www.climateinvestmentfunds.org/cif/measuringresults). The PPCR Results Framework Monitoring and Reporting Toolkit is available at <https://www.climateinvestmentfunds.org/cif/measuring-results/ppcr-results-framework-and-monitoring-toolkit>. Excel sheets of scorecards are available at: <https://www.climateinvestmentfunds.org/cif/content/ppcr-core-indicator-monitoring-and-reporting-tools>

- Compensation and entitlements computed at rates and procedures as provided in the RPs agreed between the government and ADB;
- Timely and complete disbursement of compensation to AHs in accordance with the agreed RPs, and as per agreement with Project authorities;
- Timely and complete delivery of relocation, income restoration and rehabilitation allowances and measures;
- Public information, public consultation and grievance redress procedures are followed as described in the approved RPs;
- Attention given to the priorities of AHs regarding the options offered;
- Public facilities and infrastructure affected by the Project are restored promptly; and,
- The transition between resettlement and civil works is smooth (i.e. completion of resettlement activities required before the award of civil works contracts)

116. 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.

117. *External Monitoring.* The External Monitoring Organization (EMO) will be recruited by the IRC and will commence its work prior to or during the DMS, and will carry out independent quarterly reviews of RP to determine whether intended goals are being achieved, and if not, what corrective actions are needed and will likewise conduct a post-resettlement evaluation study 6 -12 months after the completion of RP implementation. A part from reviewing and assessing the activities during RP updating, the general objective for external monitoring is to verify results and findings of the internal monitoring. Essentially the verification includes an assessment of: (i) the achievement of resettlement objectives, (ii) changes in living standards and livelihoods, (iii) the restoration of the economic and social conditions of the AHs, (iv) the effectiveness, impact and sustainability of assistance measures, (v) the need for further mitigation measures, if any; and, (vi) to identify strategic lessons for future policy formulation and planning.

118. The EMO will be responsible for checking the procedures and resolutions of grievances and complaints. The EMO may recommend further measures to be taken to redress unresolved grievances in compliance with the resettlement plans. The EMO will submit quarterly external monitoring reports to IRC, and then IRC will forward to MPWT and ADB. The EA and IRC shall work closely to ensure that resettlement activities are completed in accordance with the updated RPs.

119. **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 3 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.

120. 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.

121. 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.

122. **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 has been attached to Annex E, and shall be completed and attached to project progress reports for Quarters 2 and 4.

### C. Evaluation

123. 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.

124. 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.
- (xii) Evaluation of the closure and remediation of existing dumpsites to ensure that these have been achieved to acceptable environmental standards

125. 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**

126. 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.

127. 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.

128. 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.

129. 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) <sup>41</sup> 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).

<sup>41</sup> [www.climateinvestmentfunds.org/cif/measuringresults](http://www.climateinvestmentfunds.org/cif/measuringresults). The PPCR Results Framework Monitoring and Reporting Toolkit is available at <https://www.climateinvestmentfunds.org/cif/measuring-results/ppcr-results-framework-and-monitoring-toolkit>. Excel sheets of scorecards are available at: <https://www.climateinvestmentfunds.org/cif/content/ppcr-core-indicator-monitoring-and-reporting-tools>

## E. Stakeholder Communication Strategy

130. 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 (linked document 23).

**Table 6: 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

131. ADB reserves the right to investigate, directly or through its agents, any violations of the Anticorruption Policy relating to the Project.<sup>42</sup> 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.<sup>43</sup>

132. 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.<sup>44</sup>

133. 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.

134. 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.

135. 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.

<sup>42</sup> Available at: <http://www.adb.org/Documents/Policies/Anticorruption-Integrity/Policies-Strategies.pdf>

<sup>43</sup> ADB's Integrity Office web site is available at: <http://www.adb.org/integrity/unit.asp>

<sup>44</sup> 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

136. 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.<sup>45</sup>

137. 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:<sup>46</sup>

- (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.

<sup>45</sup> For further information see: <http://www.adb.org/Accountability-Mechanism/default.asp>.

<sup>46</sup> 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**

138. All revisions/updates during course of implementation should retained in this Section to provide a chronological history of changes to implemented arrangements recorded in the PAM.

### LIST OF LINKED DOCUMENTS

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

1. Loan Agreement: Special Operations
2. Loan Agreement: ADB Strategic Climate Fund
3. Grant Agreement: ADB Strategic Climate Fund
4. Sector Assessment (Summary): Water and Other Urban Infrastructure and Services
5. Project Administration Manual (current document)
6. Contribution to the ADB Results Framework
7. Development Coordination
8. Financial Analysis
9. Economic Analysis
10. Country Economic Indicators
11. Summary Poverty Reduction and Social Strategy
12. Gender Action Plan
13. Initial Environmental Examination: Kampong Chhnang
14. Initial Environmental Examination: Pursat
15. Environmental Assessment and Review Framework
16. Resettlement Plan: Kampong Chhnang
17. Resettlement Plan: Pursat
18. Risk Assessment and Risk Management Plan

### Supplementary Documents

19. Tonle Sap Urban Areas Development Framework
20. Kampong Chhnang Urban Development Strategy
21. Pursat Urban Development Strategy
22. Poverty and Social Analysis
23. Stakeholder Consultation and Participation Plan
24. Climate Resilience Measures
25. Technical Options
26. Technical Feasibility for Kampong Chhnang Flood Protection
27. Technical Feasibility for Pursat Drainage and Embankment
28. Technical Feasibility for Kampong Chhnang Solid Waste Management
29. Technical Feasibility for Pursat Solid Waste Management

### Output 3 – Community Mobilization and Environmental Improvements

1. The Community Mobilization and Environmental Improvements (CMEI) output will 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, including poor, vulnerable and ethnic Cham and Vietnamese, 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.

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

- (i) 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);
- (ii) 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,
- (iii) 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 and 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;

3. 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 (NGO), with experience in Cambodia, urban/environment/sanitation and community development. The NGO will be contracted for the implementation of this output.<sup>47</sup>

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<sup>47</sup> The international NGO is encouraged to partner with national NGOs through joint-venture and/or association.

**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)	<ul style="list-style-type: none"> <li>• Presence of vulnerable group: ethnic Cham</li> <li>• Top environmental issue identified by SES respondents is flooding, which coincides with the objectives of Output 1 of the Project.</li> <li>• 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</li> </ul>
	Kandal	Phsar Chhnang	<ul style="list-style-type: none"> <li>• 211 (1,061 people)</li> <li>• According to Vietnamese: 685 HHs including them (approx. 3,425 people)</li> </ul>	<ul style="list-style-type: none"> <li>• Presence of highly vulnerable group -- ethnic Vietnamese<sup>48</sup></li> <li>• Relatively high percentage of poor HHs (36%) identified by the SES during project preparation.</li> </ul>
	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)	<ul style="list-style-type: none"> <li>• Highest percentage of poor among villages covered in the SES (45% of respondents are poor)</li> <li>• 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.</li> </ul>
	Kaoh	Lolork Sar	219 (980 people)	Relatively high percentage of poor HHs (36%) identified
	Tuol Mkak	Roleap	301 (1,432 people)	<ul style="list-style-type: none"> <li>• Relatively high percentage of poor HHs (27%) identified</li> <li>• Top environmental issue identified by SES Respondents is flooding, which coincides with the objectives of Output 2 of the Project.</li> </ul>

Note: Based on existing municipal boundaries for Kampong Chhnang and Pursat.

Source: Asian Development Bank and Executing Agency.

<sup>48</sup> 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 to their language barriers, their classification as immigrants, and their lack of property rights. PPTA activities including FGDs have supported this information.

## **Consulting Services and Detailed 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.

### **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 imprest 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 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
<b><i>International Consultants</i></b>			
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.
<b>TOTAL</b>	<b>78</b>	<b>Person Months of International Consultants</b>	
<b>National Consultants</b>			
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.

<b>Person &amp; Task</b>	<b>Person-Months</b>	<b>Minimum Qualifications</b>	<b>Minimum Work Experience</b>
<b>TOTAL</b>	<b>428</b>	Person Months of National Consultants	
<b>GRAND TOTAL</b>	<b>509</b>	Person Months of International and National Consultants	

**(iv) 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, oblique 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.

**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 3 (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-EMP).
- 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, imprest 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.

## 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 (iii) 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
<b><i>International Consultants</i></b>			
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.
<b>TOTAL</b>	<b>6</b>	Person Months of International Consultants	

<b><i>National Consultants</i></b>			
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.
<b>TOTAL</b>	<b>7</b>	Person Months of National Consultants	
<b>GRAND TOTAL</b>	<b>13</b>	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 assesment of sanitation standards and the building code
- Review the specific needs of santation 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 assesment of sanitation standards and the building code
- Review the specific needs of santiation 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

### 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 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
<b><i>International Consultants</i></b>			
<b>Institutional Specialist</b>	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
<b>Local administration specialist</b>	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.
<b>Municipal Finance / Accounting Specialist</b>	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.
<b>National</b>			
<b>Legal/Institutional Specialist</b>	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.

#### **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.

## **Package IV: NGO Support for CMEI**

### **A. Introduction**

139. 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**

140. 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.

141. The Project includes five outputs:

- (i) Output 1: Kampong Chhnang Urban Environmental Improvements,
- (ii) Output 2: Pursat Urban Environmental Improvements,
- (iii) Output 3: Community Mobilization and Environmental Improvements,
- (iv) Output 4: Strengthened Sector Coordination and Operations, and
- (v) Output 5: Strengthened Capacity for Project Implementation, and Operation and Maintenance (O&M).

142. 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**

143. 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.

144. 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).

145. 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.

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

- (i) 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);
- (ii) 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,
- (iii) 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;

3. 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.

**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)	<ul style="list-style-type: none"> <li>• Presence of vulnerable group: ethnic Cham</li> <li>• Top environmental issue identified by SES respondents is flooding, which coincides with the objectives of Output 1 of the Project.</li> <li>• 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</li> </ul>
	Kandal	Phsar Chhnang	<ul style="list-style-type: none"> <li>• 211 (1,061 people)</li> <li>• According to Vietnamese: 685 HHs including them (approx. 3,425 people)</li> </ul>	<ul style="list-style-type: none"> <li>• Presence of highly vulnerable group -- ethnic Vietnamese<sup>49</sup></li> <li>• Relatively high percentage of poor HHs (36%) identified by the SES during project preparation.</li> </ul>
	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)	<ul style="list-style-type: none"> <li>• Highest percentage of poor among villages covered in the SES (45% of respondents are poor)</li> <li>• 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.</li> </ul>
	Kaoh	Lolork Sar	219 (980 people)	Relatively high percentage of poor HHs (36%) identified
	Tuol Mkak	Roleap	301 (1,432 people)	<ul style="list-style-type: none"> <li>• Relatively high percentage of poor HHs (27%) identified</li> <li>• Top environmental issue identified by SES Respondents is flooding, which coincides with the objectives of Output 2 of the Project.</li> </ul>

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

#### **D. Time Schedule and Resources**

147. 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

<sup>49</sup> 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**

148. 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.

149. 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.

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

- (i) A community development manager/ team leader, and
- (ii) A project administer, and

151. 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.

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

- (i) community mobilization to enhance the quality of project implementation;

- (ii) awareness raising on the importance of climate change, health and hygiene in urban areas; and
- (iii) 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).

153. 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.

154. 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.

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

- (i) 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.
- (ii) 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);
- (iii) Management experience of at least 3 years, with demonstrated ability to supervise a team and project staff;
- (iv) Familiarity with community development, sanitation and hygiene promotion and gender mainstreaming of projects in communities;
- (v) Ability to work with multiple stakeholders, including local governments, communities, civil society organizations, government, private sector and ADB;
- (vi) Excellent English language skills, including ability to produce regular high quality written reports, power-point presentations, and project updates;
- (vii) Responsible for developing and implementing a specific monitoring and evaluation system for CMEI output and activities.
- (viii) 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).

156. 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:

- (i) A minimum of 3 years' experience in accounting and record keeping for development projects;
- (ii) 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;
- (iii) 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.
- (iv) Excellent computer skills (MS WORD and EXCEL);
- (v) Strong English language skills, with demonstrated ability to prepare financial reports; and
- (vi) Familiarity with ADB or World Bank regulations is an advantage.

157. 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.

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

## **F. Supervision**

159. 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**

160. 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.

161. 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.

162. 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

163. 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

164. 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

165. 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.

166. 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.

167. 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).<sup>167</sup> 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.

168. 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.

*Timeline and Reporting*

- Consultant recruitment: Q4/2016 – Q1/2017
- Resettlement completion report: Q1/2019
- Quarterly resettlement monitoring reports until payment of compensation to APs: Ranges from Q2/2017 to Q1/2019.
- Post-resettlement evaluation report for all resettlement activities: Ranges from Q3/2019 – Q4/2019.

### **III. Audit of Project Accounts** (to be recruited by the Government)

#### **Sample Terms of Reference for the Audit of Project Financial Statements**

#### **1. Objective**

1. The objective of the audit of the Project Financial Statement (PFS) is to enable the auditor to express a professional opinion on the financial position of [\_\_\_\_\_] project at the end of each fiscal year and of the funds received and expenditures for the accounting period ended mm/dd/yy, as reported by the PFS, [as well as an opinion on the Statement of Expenditures].

2. The project accounts (books of account) provide the basis for preparation of the PFS and are established to reflect the financial transactions in respect of the project, as maintained by the project implementing agency [\_\_\_\_\_].

#### **2. Scope**

3. The audit will be carried out in accordance with International Standards of Auditing, and will include such tests and controls as the auditor considers necessary under the circumstances. In conducting the audit, special attention should be paid to the following:

- All external funds have been used in accordance with the conditions of the relevant financing agreement, with due attention to economy and efficiency, and only for the purposes for which the financing was provided. Relevant financing agreements are (-----name of loan agreement);
- Counterpart funds have been provided and used in accordance with the relevant financing agreements, with due attention to economy and efficiency, and only for the purposes for which they were provided;
- Goods and services financed have been procured in accordance with the relevant financing agreements;
- All necessary supporting documents, records, and accounts have been kept in respect of all project ventures [including expenditures reported via SOEs or IAs]. Clear linkages should exist between the books of account and reports presented to the Bank.
- Where Imprest Accounts have been used, they have been maintained in accordance with the provisions of the relevant financing agreements.
- The project accounts have been prepared in accordance with consistently applied International Accounting Standards and give a true and fair view of the financial situation of the project at mm/dd/yy and of resources and expenditures for the year ended on that date.

#### **3. Project Financial Statements**

4. The Project Financial Statements should include:

- a Summary of Funds received, showing the ADB, project funds from other donors, and counterpart funds separately;

- a Summary of Expenditures shown under the main project headings and by main categories of expenditures, both for the current fiscal year and accumulated to date; and
- a Balance Sheet showing Accumulated Funds of the Project, bank balances, other assets of the project, and liabilities, if any.

5. As an annex to the Project Financial Statements, the auditor should prepare a reconciliation between the amounts shown as “received by the project from the ADB” and that shown as being disbursed by the Bank. As part of that reconciliation, the auditor should indicate the mechanism for the disbursement, i.e. Imprest Accounts, Statements of Expenditures, or direct reimbursement.

#### **4. Statements of Expenditures**

6. In addition to the audit of the PFS, the auditor is required to audit all SOEs used as the basis for the submission of withdrawal applications. The auditor should apply such tests and controls as the auditor considers necessary under the circumstances. These expenditures should be carefully compared for project eligibility with the relevant financing agreements. Where ineligible expenditures are identified as having been included in withdrawal applications and reimbursed against, these should be separately noted by the auditor. Annexed to the Project Financial Statements should be a schedule listing individual SOE withdrawal applications by specific reference number and amount. The total withdrawals under the SOE procedure should be part of the overall reconciliation of Bank disbursements described above.

#### **5. Imprest Accounts**

7. In conjunction with the audit of the Project Financial Statements, the auditor is also required to audit the activities of the Imprest Account associated with the Project. The Imprest Accounts usually comprise

- deposits and replenishments received from the Bank
- payments substantiated by withdrawal applications
- interest that may be earned from the balances and which belong to the borrower; and
- the remaining balances at the end of each fiscal year.

8. The auditor must form an opinion as to the degree of compliance with the Bank’s procedures and the balance of the Imprest Account at year-end. The audit should examine the eligibility and correctness of financial transactions during the period under review and fund balances at the end of such a period, the operation and use of the IA in accordance with the financing agreement, and the adequacy of internal controls for this type of disbursement mechanism.

9. For this project, the Imprest Accounts are referred to in [cite references] of the relevant financing agreements. Imprest Accounts statements and the auditor’s report should be attached with the Project Financial Statements.

#### **6. Audit Opinion**

10. Besides a primary opinion on the Project Financial Statements, the annual audit report of the Project Accounts should include a separate paragraph commenting on the accuracy and propriety of expenditures withdrawn under SOE procedures and the extent to which the Bank can rely on SOEs as a basis for loan disbursement. The financial statements, including the audit report, should be received by the Bank no later than [three to six] months after the end of the accounting period to which the audit refers. The auditor should submit the report to the borrower's designated agent rather than to any staff member of the project entity. The agent should then promptly forward two copies of the audited accounts and report to the Bank.

## **7. Management Letter**

11. In addition to the audit reports, the auditor will prepare a "management letter," in which the auditor will:

- give comments and observations on the accounting records, systems, and controls that were examined during the course of the audit;
- identify specific deficiencies and areas of weakness in systems and controls and make recommendation for their improvement;
- report on the degree of compliance of each of the financial covenants on the financing agreement and give comments, if any, on internal and external matters affecting such compliance;
- communicate matters that have come to attention during the audit which might have a significant impact on the implementation of the project; and
- bring to the borrower's attention any other matters that the auditor considers pertinent.

## **8. General**

12. The auditor should be given access to all legal documents, correspondence, and any other information associated with the project and deemed necessary by the auditor. Confirmation should also be obtained of amounts disbursed and outstanding at the Bank [and of amounts disbursed under [specify other donor, loan or grant, if any]. Bank Project Officer can assist in obtaining these confirmations.

13. It is highly desirable that the auditor become familiar with a copy of the Bank's Guidelines on Financial Governance and Management of Investment Projects Financed by the Asian Development Bank, which summarizes the Bank's financial reporting and auditing requirements. The auditor should also be familiar with the Bank's Loan Disbursement Handbook. Both documents will be provided by the Project Officer.

**List of Equipment Proposed**

List of Equipment and Vehicles			Unit	Qty	Rate	Total
C. PMU Project Office						
	PMU Project Office	Pick-up Truck (1-PMU; 2 Consultants)	item	3	38,000	114,000
		Office equipment-computers, printers, photocopy// others	LS	1	5,000	5,000
		Office furniture	LS	1	2,000	2,000

Note: Unit rates for equipment are estimated based on 2014 prices  
Source: Asian Development Bank and Executing Agency.

List of Equipment and Vehicles		Unit	Qty	Rate \$	Total \$
<b>A. Kampong Chhnang</b>					
1. Landfill Operating Equipment					
	Dozer (Caterpillar D4 D5 or equivalent with landfill blade)	item	1	300,000	300,000
	Excavator/ end Loader - assume Caterpillar D320 or equivalent	item	1	250,000	250,000
	10 wheeler tipping dump truck	item	1	110,000	110,000
	8,000L Water tank with pump	item	1	12,000	12,000
2. Waste Collection Fleet and Equipment					
	Waste compactor collection trucks (20m3 capacity - 10t)	item	2	120,000	240,000
	Waste compactor collection trucks (5m3 capacity - 2.5t)	item	2	52,000	104,000
	10 wheeler tipping dump truck	item	1	110,000	110,000
	Hook lift waste collection trucks (prime mover)	item	1	120,000	120,000
	Hook lift bins (12 m3 or 3 tonnes)	item	30	3,000	90,000
	Small motorised carts	item	2	13,000	26,000
	Pushcarts	item	30	700	21,000
3. Manual Embankment Maintenance Equipment	Tool Set for Gabion maintenance:				
	Heavy Duty Pliers	Number	50	30	1,500
	Wire Cutters	Number	20	40	800
	Mesh Welder	Set	4	250	1,000
	Wheelbarrows	Set	30	150	4,500
	Industrial Protection Gloves	Pair	200	30	6,000
	Industrial Protection Boots	Pair	200	80	16,000
	Mobile Scaffolding	Set	2	5,000	10,000
4. PIU Project Office	Pick-up truck	item	1	38,000	38,000
	Motorcycles	item	4	1,500	6,000
	Office equipment-computers, printers/ photocopy, others	LS	1	5,000	5,000
	Office furniture	LS	1	3,000	3,000

Note: Unit rates for equipment are estimated based on 2014 prices

Source: Asian Development Bank and Executing Agency.

List of Equipment and Vehicles		Unit	Qty	Rate	Total
<b>B. Pursat</b>					
1. Landfill Operating Equipment Cost					
	Dozer (Caterpillar D4 D5 or equivalent with landfill blade)	item	1	350,000	350,000
	Excavator/ end Loader - assume Caterpillar D320 or equivalent	item	1	250,000	250,000
	10 wheeler tipping dump truck	item	1	110,000	110,000
	8,000L Water tank with pump	item	1	12,000	12,000
2. Waste Collection Fleet and Equipment					
	Waste compactor collection trucks (20m3 capacity - 10t)	item	2	120,000	240,000
	Waste compactor collection trucks (5m3 capacity - 2.5t)	item	5	52,000	260,000
	10 wheeler tipping dump truck	item	1	110,000	110,000
	Hook lift waste collection trucks (prime mover)	item	1	120,000	120,000
	Hook lift bins (12 m3 or 3 tonnes)	item	30	3,000	90,000
	Small motorised carts	item	2	13,000	26,000
	Pushcarts	item	40	700	28,000
4. Manual Drainage Maintenance Equipment	Sewer Maintenance:				
	Extendable rod and brush sets to 30 meters	Number	10	3,000	30,000
	Safety clothing	Sets	50	250	12,500
5. PIU Project Office	Pick-up truck	item	1	38,000	38,000
	Motorcycles	item	4	1,500	6,000
	Office equipment-computers, printers, photocopy/ others	LS	1	5,000	5,000
	Office furniture	LS	1	3,000	3,000

Note: Unit rates for equipment are estimated based on 2014 prices

Source: Asian Development Bank and Executing Agency.

**Gender Action Plan Monitoring Table**

(To be attached to every six monthly report – End of Quarter 2 and Quarter 4)

**Date of Update:**

**Project Title:**

**Country:**

**Project No.**

**Type of Project (Loan/Grant/TA):**

**Approval and Timeline:**

**Gender Category:**

**PMU Project Director:**

**ADB Project Officer:**

**Project Impact:**

**Project Outcome:**

**Project Outputs:**

<b>Gender Action Plan</b> <b>(GAP Activities, Indicators and Targets, Timeframe and Responsibility)</b>	<b>Progress to Date</b> (This should include information on period of actual implementation, sex-disaggregated qualitative and quantitative updates (e.g. number of participating women, women beneficiaries of services, etc.). However, some would be in process - so explain what has happened towards meeting this target.	<b>Issues and Challenges</b> (Please include reasons why an activity was not fully implemented, or if targets fall short, or reasons for delay, etc.)
<b>Overall</b>		
<b>Action:</b>  <b>Responsibility:</b> <b>Time:</b>		
<b>Output 1:</b>		
<b>Action:</b>  <b>Responsibility:</b> <b>Time:</b>		
<b>Action:</b>  <b>Responsibility:</b> <b>Time:</b>		
<b>Output 2:</b>		
<b>Action:</b>  <b>Responsibility:</b> <b>Time:</b>		

<b>Gender Action Plan (GAP Activities, Indicators and Targets, Timeframe and Responsibility)</b>	<b>Progress to Date</b> (This should include information on period of actual implementation, sex-disaggregated qualitative and quantitative updates (e.g. number of participating women, women beneficiaries of services, etc.). However, some would be in process - so explain what has happened towards meeting this target.	<b>Issues and Challenges</b> (Please include reasons why an activity was not fully implemented, or if targets fall short, or reasons for delay, etc.)
<b>Action:</b>  <b>Responsibility:</b> <b>Time:</b>		
<b>Action:</b>  <b>Responsibility:</b> <b>Time:</b>		
<b>Output 3:</b>		
<b>Action:</b>  <b>Responsibility:</b> <b>Time:</b>		
<b>Action:</b>  <b>Responsibility:</b> <b>Time:</b>		

<b>Gender Action Plan</b> <b>(GAP Activities, Indicators and Targets, Timeframe and Responsibility)</b>	<b>Progress to Date</b> (This should include information on period of actual implementation, sex-disaggregated qualitative and quantitative updates (e.g. number of participating women, women beneficiaries of services, etc.). However, some would be in process - so explain what has happened towards meeting this target.	<b>Issues and Challenges</b> (Please include reasons why an activity was not fully implemented, or if targets fall short, or reasons for delay, etc.)
<b>Output 4:</b>		
<i>Action:</i>  <i>Responsibility:</i> <i>Time:</i>		
<i>Action:</i>  <i>Responsibility:</i> <i>Time:</i>		
<i>Action:</i>  <i>Responsibility:</i> <i>Time:</i>		
<b>Output 5:</b>		
<i>Action:</i>  <i>Responsibility:</i> <i>Time:</i>		

<b>Gender Action Plan (GAP Activities, Indicators and Targets, Timeframe and Responsibility)</b>	<b>Progress to Date</b> (This should include information on period of actual implementation, sex-disaggregated qualitative and quantitative updates (e.g. number of participating women, women beneficiaries of services, etc.). However, some would be in process - so explain what has happened towards meeting this target.	<b>Issues and Challenges</b> (Please include reasons why an activity was not fully implemented, or if targets fall short, or reasons for delay, etc.)
<b>Action:</b>  <b>Responsibility:</b> <b>Time:</b>		

**Comments/ Remarks:**

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**Accomplished by:** \_\_\_\_\_

**Date Accomplished:** \_\_\_\_\_

### GOOD GOVERNANCE FRAMEWORK

169. In all instances, the Loan and Grant Agreements shall be the overriding legal document. Asian Development Bank's (ADB) Procurement Guidelines (March 2013, as amended from time to time) (ADB's Procurement Guidelines)<sup>50</sup> and ADB's Guidelines on the Use of Consultants (March 2013, as amended from time to time) (ADB's Guidelines on the Use of Consultants)<sup>51</sup> and its Borrowers, shall be applied pursuant to the Loan and Grant Agreements as they may be modified by the Loan and Grant Agreements. The Government of Cambodia's policies and procedures shall be applicable to the extent there is no discrepancy with the Loan and Grant Agreements or ADB's Procurement Guidelines and Consulting Guidelines. In the event there is a discrepancy, then the Loan and Grant Agreements, the Procurement Guidelines and the Consulting Guidelines shall apply.

No.	Issue	Action to Mitigate Risk	Responsibility	Target/ Frequency	Progress Against Actions (date)
<b>Element 1: Procurement</b>					
1.a	Risks of corruption and fraud in the procurement process: <ul style="list-style-type: none"> <li>• Collusion during bidding process</li> <li>• Biased bid evaluation</li> <li>• Suppliers/ contractors offering incentives for favorable treatment.</li> </ul>	The executing agency (EA) and implementing agencies (IAs) to establish procurement committee under the Project, in accordance with the Government's SOP/Procurement Manual, mandated on 26 February 2007 (updated to 22 May 2012), both of which are in line with Asian Development Bank (ADB) guidelines. The Anti-Corruption Law was promulgated on 17 April 2010 and is now in effect. The "Anti- Corruption Institution" Unit headed by Senior Minister was established in the Prime Minister's Office. However, actual enforcement function for anti-corruption has not yet been in effect.	The executing agency is the Ministry of Public Works and Transport (MPWT) and the implementing agencies are Provincial Department of Public Works and Transport (PDPWT) and Municipal Governments in Kampong Chhnang and Pursat	Before loan Negotiation	
1.b	Insufficient compliance with Procedures	The EA and IAs are to adhere strictly to the procedures and guidelines set forth in the Loan and Grant Agreements, ADB's Procurement Guidelines, and SOP/procurement manual that also cover international competitive bidding, and national competitive bidding and shopping.	EA/IAs  Ministry of Economy and Finance (MEF) to monitor for compliance with the Loan and Grant Agreements, ADB's Procurement Guidelines and the SOP/procurement manual.	Throughout Project duration	

<sup>50</sup> Available at: <http://www.adb.org/Documents/Guidelines/Procurement/Guidelines-Procurement.pdf>

<sup>51</sup> Available at: <http://www.adb.org/Documents/Guidelines/Consulting/Guidelines-Consultants.pdf>

No.	Issue	Action to Mitigate Risk	Responsibility	Target/ Frequency	Progress Against Actions (date)
		<p>The EA has accumulated comprehensive experiences of ADB funded projects through road, transport and urban projects (e.g., Loan 1945: Cambodia Road Improvement Project, and Loan 2539: Cambodia Northwest Provincial Road Improvement Project).</p> <p>The PMU for the proposed project has accumulated comprehensive experiences of ADB funded project through the GMS Southern Economic Corridors Project and a JFPR grant on GMS Livelihoods Support for Corridor Towns (2013). The PMU has also supported Ministry of Tourism on urban development works on GMS Mekong Tourism Development Project (2002) and proposed GMS Tourism Development for Inclusive Growth (forthcoming).</p>			
1.c	Weak procurement Capacity	A procurement capacity assessment was undertaken as part of the project preparatory technical assistance for preparation of the Project. The assessment found that the procurement capacity is adequate. The EA and IAs will receive continued hands-on training and technical support from consultants recruited under the Project. The Government SOP/procurement manual will be used under the Project.	EA/IAs	Throughout Project duration	
		Recruitment of well-experienced Procurement Officer in PMU is the key to avoid delays in procurement process which may lead to the overall delay of the project.	EA	Prior to signing of Loan and Grant Agreements	



No.	Issue	Action to Mitigate Risk	Responsibility	Target/ Frequency	Progress Against Actions (date)
<b>Element 2: Financial Management</b>					
2.a	Weak internal controls	Strengthen financial management system and internal controls function by ensuring that the Project uses SOP including procedures in the FMM, which cover: <ul style="list-style-type: none"> <li>•Financial policies and standards;</li> <li>•Elements of internal control;</li> <li>•Financial accounting system, ledgers, journals;</li> <li>•Bank accounts and credit/grant withdrawals;</li> <li>•Project expenditure, payroll, petty cash, advances; and</li> <li>•Financial management reports, audit, counterpart funds withdrawals.</li> </ul>	EA and IAs  MEF to monitor for compliance with SOP/FMM, as well as Loan and Grant Agreement and ADB's Anticorruption Policy	Throughout Project duration	
2.b	Weak financial management capacity	The EA and IAs to receive continued hands-on training and technical support from project management and implementation support consultants recruited under the Project. The Government's FMM and Financial Management Activities, which was issued in September 2006 (updated on 22 May 2012). The SOP will be used under the Project, as well as relevant provisions of the Loan Agreement and ADB's Procurement Guidelines and Consulting Guidelines.  Project to closely monitor and review financial management conduct and make necessary improvements as required	EA, IAs and ADB	Throughout Project duration	
2.c	Minimize cash transactions	Project to make all progress payments to contractors, suppliers and consultants – firms, individuals, national and international – by check or transfer to bank accounts, and retain evidence for audit and donor supervision missions.  A subaccount of \$5,000 will be established at	EA, IAs, and MEF	Throughout Project duration	

No.	Issue	Action to Mitigate Risk	Responsibility	Target/ Frequency	Progress Against Actions (date)
		each PIU level on a pilot basis.		Throughout Project duration	
2.d	Delayed or non-existent reconciliation of advances for operating costs and expenses	<p>Project to reconcile operating expenses to staff or field offices within one week of the end of each month.</p> <p>No further advances to be paid until previous advance reconciled and cleared against documentary evidence.</p> <p>The subaccount in the PIUs may be discontinued if expenses are not reconciled on time.</p>	EA and IAs	Throughout Project duration	
<b>Element 3: Disclosure</b>					
3.a	Conflict of interest among Project staff	Project staff to disclose private and public affiliations or personal interest before becoming involved in any Project-related transaction, such as contract award. EA to prepare a declaration statement for staff's signature.	EA and IAs to ensure all Project staff sign the disclosures	Throughout Project duration	
3.b	Inadequate transparency and disclosure	<p>For all contracts subject to prior review, within two weeks of receiving ADB's no-objection letter to the recommendation of contract award, the EA will publish on its website the results of the bid evaluation, identifying the bid and lot numbers, and providing information on:</p> <ul style="list-style-type: none"> <li>•Name of each bidder who submitted a bid;</li> <li>•Bid prices as read out at bid opening;</li> <li>•Name and evaluated prices of each bid that was evaluated;</li> </ul> <p>Name of bidders whose bids were</p>	EA and IAs to arrange Disclosure	Throughout Project duration	

No.	Issue	Action to Mitigate Risk	Responsibility	Target/ Frequency	Progress Against Actions (date)
		<ul style="list-style-type: none"> <li>•Rejected and the reasons for their rejection; and</li> <li>•Name of the winning bidder, and the price it offered, as well as the duration and summary scope of the contract awarded.</li> </ul> <p>For contracts subject to post review, MPWT will publish the bid evaluation results no later than the date of contract award.</p> <p>At a minimum, the Project will disclose the information required by the Loan Agreement.</p>			
<b>Element 4: Complaints and Remedies Mechanism</b>					
4.a	Inadequate complaints and remedies mechanisms	<p>Project to build well-defined complaints and remedies mechanism into Project documents</p> <p>Complaints procedures regarding procurement to follow process set out in the project administration manual (PAM) and contracts.</p> <p>Following established publication of evaluation and awards, debriefing mechanism is also necessary not only to enhance transparency but also for the losing bidders to know their weak points.</p>	EA and IAs in consultation with ADB	At effectiveness	
<b>Element 5: Code of Ethical Conduct</b>					
5.a	Poor enforcement of the Code of Conduct for civil servants	<p>Project to provide copies of the relevant laws and articles on Code of Conducts for civil servants to all Project staff, including contracted staff. Project will maintain signed declaration of receipt of these documents by all Project staff, including contracted staff.</p> <p>Similarly, all members of the procurement committee undertaking the evaluation shall sign</p>	EA and IAs	<p>At Inception with monitoring throughout Project duration</p> <p>Throughout</p>	

No.	Issue	Action to Mitigate Risk	Responsibility	Target/ Frequency	Progress Against Actions (date)
		<p>the Declaration on Ethical Conduct.</p> <p>The Anti-corruption Law was promulgated on 17 April 2010. The Anti-Corruption Unit headed by Senior Minister was established in the Prime Minister's Office in 2010. Need to observe its effect.</p>	<p>EA, IAs, and MEF</p> <p>MEF and ADB</p>	<p>Project duration</p> <p>At effectiveness</p>	
<b>Element 6: Sanctions</b>					
6.a	Inadequate sanctions for fraudulent and corrupt activity by Project staff, contractors, suppliers and consultants	<p>The Project to identify and apply sanctions available under current law and regulations of Cambodia, ADB's Loan Regulations, the Loan and Grant Agreements, and ADB's Procurement Guidelines and Consulting Guidelines. Sanctions for individuals may include transfer of duties, retraining, suspension, dismissal, re-grading, and prosecution under Cambodian Law. Sanctions for firms may include: (i) termination of contract, debarment or blacklisting under ADB's Procurement Guidelines and Consulting Guidelines, or (ii) prosecution under Cambodian Law.</p>	EA and IAs and in consultation with ADB	Effectiveness	
<b>Element 7: Project Specific Elements</b>					
7.a	Poor enforcement of contract terms and need to conduct contractors performance evaluation	EA to ensure that contract terms are strictly enforced and the loan consultant will be a party to ensuring quality control of contract outputs, include acceptance of completion of works and services. The EA to conduct performance evaluation of all contractors providing all types of services under the Project (also see 7c).	<p>EA and IAs</p> <p>MEF oversight function to monitor the progress and constraints</p>	Throughout Project duration	
7.b	Poor quality of design	EA and IAs to ensure that approved	EA and IAs, and with ADB NOL	Throughout	

No.	Issue	Action to Mitigate Risk	Responsibility	Target/ Frequency	Progress Against Actions (date)
	and works construction	<p>infrastructure's design standards and specification developed by the respective agencies are utilized for the design of structures under the Project.</p> <p>Project management and implementation support consultant team leader to sign off on all construction design and quality of works. Supervision consultants – one per town will provide continuous supervision.</p> <p>Project to recruit experienced design consultant (as part of the project management and implementation support consultants) on a timely basis to assist the Project.</p>	<p>EA, IAs and MEF</p> <p>EA and ADB</p>	<p>Project duration</p> <p>Throughout Project duration. Sign off required upon submission of detailed feasibility studies, updated designs (prior to contract awards), on progress payments, and prior to final payment to contractor.</p> <p>Advanced action will be requested from ADB management to facilitate recruitment. A start-up consultant will be recruited to assist the EA.</p>	
7.c	Risk of low quality construction supervision and	<p>Project to recruit experienced site supervision consultants to assist EA and IAs</p> <p>Regular technical audit is to be undertaken with any adverse findings to be acted upon immediately.</p> <p>Project to evaluate contractors' performance with</p>	<p>EA and IAs, and with ADB NOL</p> <p>EA and IAs</p>	<p>Prior to award of first works contract.</p> <p>Throughout Project duration.</p>	

No.	Issue	Action to Mitigate Risk	Responsibility	Target/ Frequency	Progress Against Actions (date)
		poor performing contractors declared ineligible to bid for at least one year.	EA and IAs	Annually in July	