



# Report and Recommendation of the President to the Board of Directors

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Project Number: 43319-033  
as of 21 September 2012

## Proposed Loan and Administration of Grants and Loan Kingdom of Cambodia: Greater Mekong Subregion Southern Economic Corridor Towns Development Project

## CURRENCY EQUIVALENTS

(as of 21 September 2012)

Currency unit	–	riel (KR)
KR1.00	=	\$.00024
\$1.00	=	KR4,030

## ABBREVIATIONS

ADB	–	Asian Development Bank
AH		affected household
AP		affected person
DMF	–	design and monitoring framework
EMP	–	environmental management plan
EPZ		export processing zones
GAP	–	gender action plan
GMS	–	Greater Mekong Subregion
ICB	–	international competitive bidding
IEE	–	initial environmental examination
IR	–	involuntary resettlement
MPWT	–	Ministry of Public Works and Transport
MRF	–	materials recovery facility
NCB	–	national competitive bidding
O&M		operation and maintenance
PAM	–	project administration manual
PIU	–	project implementation unit
PPCR	–	Pilot Program for Climate Resilience
PDPWT	–	Provincial Department of Public Works and Transport
SCF	–	Strategic Climate Fund
SEC		Southern Economic Corridor
SLEDP	–	Strategic Local Economic Development Plan
SPS	–	safeguard policy statement
UEIF	–	Urban Environmental Infrastructure Fund
UFPF	–	Urban Financing Partnership Facility
WBI	–	water-borne illnesses

## WEIGHTS AND MEASURES

ha	–	hectare
km	–	kilometer
m	–	meter
m <sup>2</sup>	–	square meter

## NOTES

- (i) The fiscal year (FY) of the Government of Cambodia ends on 31 December.
- (ii) In this report, "\$" refers to US dollars.

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## PROJECT AT A GLANCE

<b>1. Project Name:</b> CAM: Greater Mekong Subregion Corridor Towns Development Project		<b>2. Project Number:</b> 43319-033	
<b>3. Country:</b> Cambodia		<b>4. Department/Division:</b> Southeast Asia Department/Urban Development and Water Division	
<b>5. Sector Classification:</b>			
		<b>Sectors</b>	<b>Primary</b>
		Water supply and other municipal infrastructure and services	√
			<b>Subsectors</b>
			Water supply and sanitation
			Urban sector development
			Waste management
<b>6. Thematic Classification:</b>			
		<b>Themes</b>	<b>Primary</b>
		Economic growth	√
		Environmental sustainability	
		Regional cooperation and integration	
		Capacity development	
			<b>Subthemes</b>
			Widening access to markets and economic opportunities
			Urban environmental improvement
			Trade and investments
			Institutional development
<b>6a. Climate Change Impact</b> No Climate Change Indicator available.		<b>6b. Gender Mainstreaming</b>	
		Gender equity theme (GEN)	
		Effective gender mainstreaming (EGM)	√
		Some gender benefits (SGB)	
		No gender elements (NGE)	
<b>7. Targeting Classification:</b>		<b>8. Location Impact:</b>	
<b>General Intervention</b>	<b>Targeted Intervention</b>		
	<b>Geographic dimensions of inclusive growth</b>	<b>Millennium development goals</b>	<b>Income poverty at household level</b>
	√		
		National	Medium
		Regional	Medium
		Urban	High
<b>9. Project Risk Categorization:</b> Complex			
<b>10. Safeguards Categorization:</b>			
		Environment	B
		Involuntary resettlement	A
		Indigenous peoples	C
<b>11. ADB Financing:</b>			
	<b>Sovereign/Nonsovereign</b>	<b>Modality</b>	<b>Source</b>
	Sovereign	Project loan	Asian Development Fund
	Total		37.0
			37.0
<b>12. Cofinancing:</b>			
	<b>Financier</b>	<b>Category</b>	<b>Amount (\$ Million)</b>
	Strategic Climate Fund - PPCR	Official-Others	5.0
	Strategic Climate Fund - PPCR	Official-Grant	4.4
	Urban Environmental Infrastructure Fund-UFPF Multi	Official-Grant	1.5
	Total		9.4
<b>13. Counterpart Financing:</b>			
	<b>Source</b>	<b>Amount (\$ Million)</b>	
	Government	6.87	
	Total	6.87	
<b>14. Aid Effectiveness:</b> No Aid Effectiveness available.			

## I. THE PROPOSAL

1. I submit for your approval the report and recommendation on (i) a proposed loan; (ii) the administration of a loan to be provided by the Asian Development Bank (ADB) Strategic Climate Fund;<sup>1</sup> (iii) the administration of a grant to be provided by the ADB Strategic Climate Fund; and (iv) the administration of a grant to be provided by the Urban Environmental Infrastructure Fund (UEIF),<sup>2</sup> under the Urban Financing Partnership Facility, to the Kingdom of Cambodia for the Greater Mekong Subregion (GMS) Southern Economic Corridor Towns Development Project. This is one of the three projects for GMS corridor towns. The other two will be in Lao People's Democratic Republic and Viet Nam.<sup>3</sup>

2. The project will enhance the competitiveness of towns along the Southern Economic Corridor (SEC). The project will transform the corridor towns of Battambang, Bavet, Neak Loeung, and Poipet in Cambodia into economic hubs by improving urban-environmental infrastructure and strengthening institutional capacities of provincial and local authorities. The productivity of economic enterprises in these towns will be significantly improved since there will be increased climate resilience through flood control measures. The environment will be improved through clean wastewater, disposal of solid waste, and enhanced mobility on improved urban roads. The project will provide environmental infrastructure for wastewater treatment and solid waste management, which will, among others, help to reduce the carbon footprint of these towns, making them cleaner and greener, and thus more livable. The project will finance 10 subprojects in these towns. The design and monitoring framework (DMF) of this project is in Appendix 1.

## II. THE PROJECT

### A. Rationale

3. **Strategic Economic Development.** Considerable investments of the government and the Asian Development Bank (ADB) in the development of priority transport corridors have established the physical connectivity among the GMS countries, providing the foundation for more efficient movement of people, goods, and services. The towns and cities along the SEC, which links Cambodia and Viet Nam, are well positioned to serve as dynamic centers of investment and inclusive economic growth for the country and the GMS region. The strategic location of the corridor towns provides the stimulus for increased trade and investments along the transport routes. Amidst these development opportunities, the rapid growth of the urban population, and the expansion of urban areas, several corridor towns are now faced with the daunting task of meeting the demands for urban infrastructure and essential support services.

4. The planned development of these towns will induce more regulated and sustainable growth, attracting public sector investments in urban environment infrastructures and encouraging private sector interest in urban economic infrastructures. The proposed project will strengthen the economic competitiveness and investment attractiveness of the towns. The functions of small- and medium-sized towns are crucial in terms of their role as markets and transport hubs for agricultural produce from rural areas, as well as centers for production and distribution of goods and services to urban areas.

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<sup>1</sup> Under the Pilot Program for Climate Resilience financed by the ADB Strategic Climate Fund.

<sup>2</sup> Contributor: Government of Sweden. Fund to be administered by ADB.

<sup>3</sup> The Asian Development Bank (ADB) provided project preparatory technical assistance. ADB. 2010. *Technical Assistance to the Greater Mekong Subregion for Preparing the Corridor Towns Development Project*. Manila.

5. This project is Phase 1 of a long-term engagement in towns of the GMS economic corridors, and is concurrent with the strategic framework of the Greater Mekong Subregion Economic Cooperation Program, 2012–2022, which was approved by the 4th GMS Summit on 19–20 December 2011. It is also in line with the Cambodia Country Partnership Strategy and supports the ADB Urban Operational Plan (under preparation) and the Water Operational Plan.

7. The participating corridor towns in Cambodia now face the pressing task of coping with the demands of rapidly growing and expanding urban areas. The ambition of local authorities is to plan and manage urban growth using an integrated approach, operate and maintain urban environmental and economic infrastructure, and efficiently deliver municipal services. Despite policy reforms to promote decentralization, local institutional capacity has not kept pace with the urban sector development and economic growth. With increasing trade and traffic flows, there is an urgent need to strengthen the capacities of the corridor towns to manage local economic development in an environmentally sustainable manner.

8. **Project Towns.** Four corridor towns along the SEC were selected as project areas based on their economic potential, infrastructure constraints, and expressed commitments:

9. **Battambang** is a traditional agricultural trading center. This market town of 143,000 (in 2010) has high potential to be transformed into an agro-industrial hub and tourism destination given its strategic location in West Cambodia, close to the Tonle Sap Lake and Thailand borders. Battambang can become a competitive and attractive town for increased trade, economic activities, and tourism through investments in urban infrastructure and capacity development.

10. **Bavet** is strategically located at the border crossing between Cambodia and Viet Nam. Since its establishment as a new town in 2008, Bavet, a town of 37,000 in 2010, has become the prime destination for large manufacturers as well as small and medium enterprises operating from newly established export processing zones (EPZ). The increasing number of industry locators has caused the influx of in-migrants working in the EPZs, or seeking employment opportunities. As a border town, Bavet benefitted from private investments in casino and recreational establishments that have stimulated growth. The town aims to become a dynamic regional industrial and manufacturing hub.

11. **Neak Loeung** is also a traditional agricultural trading area and a market town at the intersection of the SEC and the Mekong River. The second Mekong River Friendship Bridge, which is being constructed (completion date in 2014). It will improve linkages with other towns and cities along the SEC. With the new bridge, Neak Loeung, a town of 25,000 inhabitants in 2008, will aim to develop into an agro-industrial and trading center.

12. **Poipet** is an important border town situated at the crossing of the Cambodia and Thailand border. Poipet's strategic location has stimulated economic activities in the town center with the existence of several recreation and gaming establishments, hotels and restaurants, as well as banks and money exchange shops. Since the opening of the cross border trade in 1993, Poipet, a town of 84,000 in 2010, has emerged as a tourism destination and potential site for industrial development in its EPZ. Rapid growth is due to in-migration from neighboring towns propelled by economic opportunities.

13. **Related Policies and Strategies.** The project will support the sustainable and inclusive development of Cambodia's urban centers, which is recognized by the government in the National Strategic Development Plan (NSDP) in its efforts to promote balanced regional

distribution of strategically located small- and medium-sized towns. ADB will integrate its urban interventions with other priority areas, particularly for agriculture and natural resources development, adaptation to climate change, water, sanitation, and transport. The required integration of urban sector needs may be achieved by defining mutually reinforcing objectives.<sup>4</sup>

14. **ADB leadership.** ADB will provide leadership for urban sector development with an innovative urban strategy relevant for economic development and poverty reduction. It will primarily have multisector interventions that will incorporate rural-urban linkages. Moreover, implementation should emphasize cooperation with other development partners, as well as partnerships between (local) government and the private sector. The government's strategy is also reflected in ADB's Cambodia Urban Sector Assessment, Strategy and Road Map, 2011.<sup>5</sup>

15. **Lessons Learned.** The important lessons from official development assistance (ODA) and from ADB's experience in urban development include the need to (i) strengthen institutional capacities and skills in project implementation and management as part of project start up activities; (ii) provide support in project management, financial management, and procurement procedures; (iii) reduce time to finalize designs and bidding documents; (iv) implement advance action for land acquisition and resettlement; and (v) develop project coordination mechanism and networking with government agencies, and private sector groups (Linked Document). These are included in the Project design. ADB's lessons in wastewater treatment in Seam Reap and Sihanoukville, under the GMS Tourism Development Project, will be very valuable to design a sustainable mechanism for the operation and maintenance of revenue-earning subprojects like wastewater treatment and solid waste management.

16. **Special Features.** The project has four special features: (i) it supports regional development in the GMS (and ASEAN) by creating growth engines in corridor towns; (ii) it supports climate resilience of towns through adaptation initiatives to reduce the adverse impact of climate risk on infrastructure investment, with cofinancing from the Strategic Climate Fund under its PPCR; (iii) it pursues recycling of solid waste through the innovative materials recovery facilities for waste segregation, with cofinancing from the Urban Environmental Infrastructure Fund of the UFPF; and (iv) it supports decentralization through capacity development of local authorities to ensure sustainability of subprojects.<sup>6</sup>

## B. Impact and Outcome

17. The impact of the project is to develop the project towns of Battambang, Bavet, Neak Loeung, and Poipet to become centers of economic activity in the SEC, thereby contributing to the transformation of transport corridors to economic corridors within the GMS. The expected outcome is improved urban infrastructure and enhanced climate resilience in the project towns.

## C. Outputs

18. The key outputs of the project are as follows: (i) adoption and implementation of Strategic Local Development Plans (SLEDPs) in the project towns; (ii) implementation of priority urban infrastructure investments (including climate resilience measures); and (iii) strengthened institutional capacities. The priority subprojects were selected based on criteria such as (i) consistency with the project's overall goals and objectives; (ii) potential impact in contributing to

<sup>4</sup> ADB. 2011. *Cambodia: Country Partnership Strategy*. Manila.

<sup>5</sup> ADB. 2012. *Cambodia: Urban Sector Assessment, Strategy and Road Map*. Manila.

<sup>6</sup> The project stimulates private sector investments in economic infrastructure (dry ports, logistics facilities, and markets). TA 7644-REG has supported preparation of prefeasibility studies for these facilities.

economic growth and level of competitiveness; and (iii) the expressed interest and commitment of the executing agency to provide necessary resources.

19. Table 1 outlines the outputs the project will provide in the four corridor towns. (Linked Documents for more details on these subprojects).

**Table 1: Subprojects**

<b>Subproject Name and Location</b>	<b>Subproject Justification</b>
1. Battambang Wastewater Treatment	The subproject will provide wastewater treatment services to the large majority of the town's population and will help boost tourism and other development initiatives. The facility will be adapted to mitigate impacts of climate change.
2. Battambang Flood Control	The subproject will help to reduce flooding within this city of trade and tourism and is an important initiative of climate resilience.
3. Battambang Materials Recovery Facility	This waste separation facility will support waste recycling operations and will help to reduce waste accumulation in the existing dumpsite. (This facility will be the first of their kind to receive ADB's financial assistance.)
4. Bavet Wastewater Treatment	The subproject will provide wastewater treatment services to the large majority of the town's population and will help boost tourism and other development initiatives. The facility will be adapted to possible impacts of climate change.
5. Bavet Urban Roads	The subproject will help decongest the Southern Economic Corridor near the town center and will stimulate growth of business and commercial investments.
6. Bavet Materials Recovery Facility	This waste separation facility will support waste recycling operations and will help to reduce waste accumulation in the existing dumpsite.
7. Neak Loeung Flood Control	This subproject will stimulate land subdivisions and urbanization of this small town. The subproject is an important measure for climate resilience.
8. Poipet Wastewater Treatment	The subproject will provide wastewater treatment services to the large majority of the town's population and will help boost tourism and other development initiatives. The facility will be adapted to mitigate impacts of climate change.
9. Poipet Solid Waste Management	The subproject will promote sound environmental practices in solid waste disposal in this emerging industrial town and tourism destination.
10. Poipet Materials Recovery Facility	This waste separation facility will support waste recycling business and will help to reduce waste accumulation in the existing dumpsite.

Source: Asian Development Bank.

20. **Implementation Support and Capacity Development.** The project will provide consulting services for project implementation support, which will assist the executing agency during project implementation. This will help to ensure that project implementation will fully comply with ADB's policies and operational requirements in terms of procurement procedures, construction supervision, financial management and disbursement, social and environmental safeguards, and operation and maintenance (O&M). Consulting services will also be engaged for capacity building covering the above areas. Monitoring of the social and environmental safeguards will be separate services.

#### **D. Investment and Financing Plans**

21. The total cost of the project is estimated at \$54.78 million equivalent, including taxes, duties, and physical and price contingencies (Table 2).

**Table 2: Cost Estimates by Outputs (\$ million)**

<b>Item</b>	<b>Amounts<sup>a</sup></b>
<b>A. Base Cost<sup>b</sup></b>	
1. Battambang Town Subprojects	17.68
2. Bavet Town Subprojects	12.11
3. Neak Loeung Town Subprojects	4.24
4. Poipet Town Subprojects	7.70

Item	Amounts <sup>a</sup>
5. Project Implementation Support	1.57
6. Capacity Development and Training	1.49
7. Independent Monitoring	0.11
<b>Subtotal (A)</b>	<b>44.90</b>
<b>B. Contingencies<sup>c</sup></b>	
1. Physical contingencies	4.43
2. Price contingencies	4.54
<b>Subtotal (B)</b>	<b>8.97</b>
<b>C. Financing Charges during Implementation<sup>d</sup></b>	<b>0.91</b>
<b>Total (A+B+C)</b>	<b>54.78</b>

<sup>a</sup> Includes taxes and duties of \$5.22 million and involuntary resettlement and land acquisition of \$1.65 million, to be financed from Government sources. ADB loan, SCF loan and grant, and UEIF grant may finance transportation and insurance costs.

<sup>b</sup> In December 2011 prices.

<sup>c</sup> Physical contingencies computed at 10% for civil works, equipment, involuntary resettlement, training, and consultancy. Price contingencies computed on the basis of domestic and international price escalation factors, which include a provision for potential exchange rate fluctuation assuming purchasing power parity exchange rates. Annual rates are as follows:

Annual Rates	2012	2013	2014	2015	2016	2017	2018
Foreign Currency	-1.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%

<sup>d</sup> Includes interest during implementation for ADB loan computed at 1% per annum during the grace period. For the SCF loan a service charge of 0.1% per annum is charged during the grace period.

Source: Asian Development Bank estimates.

22. The government has requested a loan equivalent to \$37.0 million from ADB's Special Funds to help finance the project. The 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, equipment, consulting services, interest during construction on the ADB loan, and contingencies.

23. The Urban Environmental Infrastructure Fund (UEIF), through its UFPF, will provide US dollar denominated cofinancing of \$1.5 million equivalent, while the Strategic Climate Fund (SCF), through its PPCR, will provide \$9.4 million equivalent. The UEIF grant will solely finance three subprojects involving construction of material recovery facilities for solid waste recycling. The ADB SCF and ADB will co-finance five subprojects, with the ADB SCF financing with a \$5 million loan and a \$4.4 million grant. The ADB SCF loan will have a 40-year term, including a grace period of 10 years, an interest rate of 0.1% per annum on the disbursed and outstanding loan amount. The ADB SCF loan and grant and UEIF grant will be administered by ADB. ADB SCF service charge will be capitalized. About \$6.87 million equivalent will be provided by the Royal Government of Cambodia through the Ministry of Economy and Finance to cover taxes and duties and involuntary resettlement costs. The financing plan is summarized in Table 3.

**Table 3: Financing Plan (\$ million)**

Source	Total Cost	Share of Total (%)
Asian Development Bank	37.00	67.6
ADB Strategic Climate Fund (Loan) <sup>a</sup>	5.00	9.1
ADB Strategic Climate Fund (Grant) <sup>a</sup>	4.40	8.0
Urban Environmental Infrastructure Fund under the Urban Financing Partnership Facility <sup>b</sup>	1.50	2.7
Royal Government of Cambodia	6.88	12.6
<b>Total</b>	<b>54.78</b>	<b>100.0</b>

<sup>a</sup> Under the Pilot Program for Climate Resilience financed by the ADB Strategic Climate Fund.

<sup>b</sup> Contributor: Government of Sweden. Fund to be administered by ADB.



27. The national government introduced a new system of governance to the provinces, municipalities, and districts. The strategic goals of the decentralization and deconcentration (D&D) process are to strengthen and expand local governance, promote local economic development, and reduce poverty in the countryside. The Organic Law on the Management and Administration of Province, Municipality, and District is intended to improve the effectiveness and efficiency of the delivery of local services. Local authorities, however, do not have adequate institutional capacity to plan and manage urban sector development, implement and operate urban infrastructure, and deliver essential urban services. The project will provide capacity development and training support in line with the D&D program.

## **B. Economic and Financial**

28. Economic analysis was undertaken for all subprojects. In undertaking the cost-benefit analysis, the quantification of economic benefits depended on the nature of the subproject. Benefits that were quantified included savings in vehicle operating costs and travel time for the road subproject; reduction in flood damages and economic productivity loss by drainage and flood control subprojects; quantifiable economic benefits from the drainage and flood control subprojects include health benefits, reduction in flood damages and reduction in economic productivity time loss; economic efficiency of recovering recyclable wastes and reduction in costs of disposal for the materials recovery facilities (MRFs); and willingness to pay for the wastewater system and solid waste management. The expected beneficiaries of the overall project constitute a diverse group. They include road users, business establishments, tourism service providers, property owners, and households. The base case results indicate all components are economically viable with an estimated economic internal rate of return exceeding the assumed economic opportunity cost of capital of 12%. Results ranged from 12% to 30%. Except for the Neak Loeng flood protection subproject where two of the sensitivity tests were below 12%, all the other subprojects were viable under adverse scenarios in which costs were higher and/or benefits lower by 10% than the base case (Linked Document).

29. For the three towns with urban road subprojects, the provincial authority has to provide funds to the PDPWT, through annual budgetary allocations, to cover the required operations and maintenance costs and ensure project sustainability. The financial analysis is focused on historical annual budget allocations to the PDPWT. The wastewater treatment, solid waste management, materials recovery facility, and Mekong River embankment protection are considered revenue-generating, thus financial internal rates of return (FIRRs) are computed taking into consideration the level of fees or income that can be generated from their operations. Resulting FIRRs ranged from 4.2% to 7.3%, all higher than the computed weighted average cost of capital (WACC) (Linked Document).

## **C. Governance**

30. An assessment of the financial management and fund disbursement system, and procurement capacity indicated that the MPWT adhered to the transparency and accountability elements to good governance. Through their direct participation and involvement in undertaking procurement procedures of ADB-financed project, the MPWT developed the institutional capacity to undertake international and national competitive bidding for civil works. However, given the limited experience of the province and district authorities in ODA-funded projects, the project will be implemented by the PMU of the MPWT, with support from its provincial offices. Capacity development assistance will provide training on financial management, fund disbursement, and harmonized procurement guidelines of the government and ADB. A good governance framework is attached to the PAM.

## **D. Poverty and Social Analysis**

### **1. Urban Poverty**

31. The proportion of poor in the towns ranges from 11% in Battambang to 23% in Poipet. The poor mostly live in areas without adequate running water supply, wastewater and solid waste collection and treatment services, and roads and drainage. They often suffer from serious water supply shortages, poor water quality, wastewater pollution, and poor urban environmental sanitation. They have less capacity to cope with the pollution and degraded environments and, in turn, suffer from increased exposure and risks to surface and ground water and air pollution, which further add to their poverty situation. Through the implementation of the subprojects, the project will improve the living environment and health status of the urban residents, especially of the poor (Linked Document).

### **2. Gender Analysis**

32. The subprojects will provide benefits to women at an individual and household level. Street vending is one of the primary sources of income for women. Improving roads will improve access and mobility, making women's travel more convenient and comfortable. Installing flood control structures and improving drainage and wastewater treatment will reduce flooding (reducing physical damage) and exposure to waterborne infections (WBIs) from the over-flow of drains, which often carry run-off and wastewater. Women will benefit eliminating the need for cleanup that takes them away from other productive activities. This will also reduce exposure to WBIs, decreasing the need to care for sick household members and minimizing women's own exposure.

33. The project will provide benefit both women and men, but some of the negative impacts that could disproportionately affect women will be addressed through measures included in the gender action plan (GAP) (Linked Document). The GAP also includes activities that will enhance the benefits to women by implementing training and awareness raising programs that focus on wastewater; environmental sanitation and diseases; solid waste management and recycling; and health education and promotion, including human immunodeficiency virus and sexually transmitted infection awareness and prevention.

34. The effects of involuntary resettlement (IR) on women and female headed households and required mitigations are discussed in each of the resettlement plans (RPs) prepared. The DMF includes gender specific targets and the key features of the GAP are incorporated into the DMF and PAM.

## **E. Safeguards**

### **1. Environment**

35. The project is Environment Category B, as the proposed sub-projects are not expected to cause irreversible adverse environment impacts. The IEEs conducted for all the project cities, identified potential impacts and mitigation measures to be implemented through environment management plans (EMPs). The IEEs are in accordance with the ADB's Safeguard Policy Statement (SPS), and the applicable environment regulations of the government. The IEEs indicate that the potential impacts of the sub-projects are primarily construction related and can be mitigated with good practices in construction outlined in the EMPs. At the detailed design stage, when the EMPs are updated, the final receiving environments for the wastewater

treatment plants and landfill will be reviewed to ensure that local groundwater and human uses of the affected areas are not adversely affected. Estimated costs for implementing the EMP have been integrated in the project costs. The EMPs will be finalized during the detailed design stage of the project. The final EMPs, cleared by the ADB, shall form part of the contract bidding documents. The adequate incorporation of environmental considerations during design and allocation of sufficient budget for O&M/R will mitigate the potential adverse impacts during operation. Effective environment monitoring at all stages of the sub-project implementation will be ensured. In compliance with ADB's information disclosure and consultation requirements, the safeguard documents will be posted on ADB's website. A grievance redress mechanism was developed and included in the safeguard document to facilitate resolution of complaints regarding the performance of the project (Linked Document).

## **2. Involuntary Resettlement**

36. The safeguard category for involuntary resettlement (IR) is A as one of the subprojects (flood control in Neak Loeung) has significant IR impacts. Three resettlement plans (RPs) have been prepared for the subprojects, which will trigger land acquisition and resettlement (LAR) impacts. They are (i) Battambang wastewater treatment and flood protection; (ii) Poipet wastewater treatment and (iii) Neak Loeung flood control. Six due diligence studies were also prepared for sub-projects without LAR impacts, which include (i) Urban Road, Bavet, (ii) Wastewater, Bavet, (iii) Solid Waste Management, Poipet, (iv) MRF, Bavet, (v) MRF, Poipet (vi) MRF, Battambang. A total area of 12.9 hectares will be acquired and 1,249 households (6,582 affected persons [APs]) will be affected by the priority subprojects. Of these, 315 affected households (AHs) (1,671 APs) belong to the subproject of Neak Loeung, 185 AHs (787 APs) from the subprojects in Poipet, and 744 AHs (4091 APs) in Battambang. However, flood protection subproject in Neak Loeung will have significant impacts with 63 AHs (298 APs) losing more than 10% of their productive land. Battambang flood protection will have 5 AHs (33 APs) requiring relocation, while 1 AH (5 APs) will require relocation under the Poipet flood protection. All other impacts are partial and temporary. The cost is estimated to be \$1.65 million, which includes base costs, allowances, and contingencies. Project information was disclosed to affected persons throughout the project preparation, and a project information booklet will be updated and distributed during a detailed measurement survey (DMS). Resettlement documents were prepared in consultation with local communities according to ADB's SPS and Cambodian laws and regulations. In compliance with ADB's information disclosure and consultation requirements, the RPs will be posted on the ADB website. A grievance redress mechanism will help to facilitate resolution of complaints regarding project performance. The RPs will be updated and disclosed after detailed design and cleared by ADB prior to contract awards (Linked Document).

## **3. Indigenous People**

37. The Cambodian population consists of Khmer, Cham, Chinese, Vietnamese, and a smaller number of Lao and hill tribes. In the Cambodian language. None of the 24 indigenous people (IP) groups are resident in the participating corridor towns. For all the project towns, the surveys undertaken for the poverty and social assessments (PSAs) identified that the subproject areas are predominantly Khmer. The beneficiary communities, which include some non-indigenous minorities, are supportive of the subprojects, can see clear and direct benefits for them, and understand that the adverse impacts are manageable and can be properly mitigated. The social assessment confirms the conclusion that the project categorization is C, which does not require the preparation of an IP development plan.

## F. Risk and Mitigation Measures

38. The major risk elements associated with the project are presented in detail in the risk management plan (Linked Document) and summarized in Table 5:

**Table 5: Summary of Risks and Mitigating Measures**

<b>Major Risks</b>	<b>Mitigation Measures</b>
Corridor towns unable to collect revenues on wastewater treatment plants, sanitary landfill and solid waste management.	The executing agency will pursue the planned establishment of local authorities for the collection of fees and charges for urban environment infrastructure to recover the cost for operation and maintenance expenditures.
Government regulations do not fully support a sustainable decentralized operation and maintenance of urban infrastructure.	The project towns will introduce business plans and a cost recovery concept to service provision.
Local authorities do not recognize the need for continued capacity development.	Capacity building interventions and training programs will be provided during project implementation.
Delayed or incomplete settlement of land acquisition and resettlement entitlements.	Resettlement plans provide clear entitlements. Independent monitoring organization will be engaged.
Lack of quality control and performance evaluation at municipalities.	Capacity development assistance will increase local capacity.

Source: Asian Development Bank.

## IV. ASSURANCES AND CONDITIONS

39. The government assured ADB that implementation of the project shall confirm to all applicable ADB policies, including these concerning anticorruption measures, safeguards, gender, procurement, consulting services, and disbursements as described in detail in the PAM and loan documents. The government agreed with ADB on the covenants and conditions for the project, which are set forth in the loan and grant agreements.

## V. RECOMMENDATION

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

- (i) the loan in various currencies equivalent to SDR (XXX) to the Kingdom of Cambodia for the Greater Mekong Subregion Southern Economic Corridor Towns Development Project from ADB's Special Funds resources with an interest charge at the rate of 1.0% per annum during the grace period and 1.5% per annum thereafter; for a term of 32 years, including a grace period of 8 years, and such other terms and conditions as are substantially in accordance with those set forth in the draft loan agreement presented to the Board;
- (ii) the administration by ADB of the loan not exceeding the equivalent of \$5,000,000 to the Kingdom of Cambodia for the Greater Mekong Subregion Economic Corridor Towns Development Project, to be provided by the ADB Strategic Climate Fund;
- (iii) the administration by ADB of a grant not exceeding the equivalent of \$4,400,000 million to the Kingdom of Cambodia for the Greater Mekong Subregion Southern Economic Corridor Towns Development Project, to be provided by the Strategic Climate Fund; and
- (iv) the administration by ADB of a grant not exceeding the equivalent of \$1,500,000 million to the Kingdom of Cambodia for the GMS Corridor Towns Development Project, to be provided by the Urban Environmental Infrastructure Fund under the Urban Financing Partnership Facility.

Haruhiko Kuroda  
President

## DESIGN AND MONITORING FRAMEWORK<sup>1</sup>

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
<p><b>Impact</b> The towns of Battambang, Bavet, Neak Loeung, and Poipet will become centers of economic activity in the Southern Economic Corridor</p>	<p>By 2023</p> <p>In project towns (represented by provincial data) , trade services from 8.4% of GDP in 2007 to 18.4%; Transport and communication services increase from 6.9% of GDP in 2007 to 16.9%; Hotels and restaurant services from 4.3% in 2007 to 14.3% of GDP</p> <p>Employment opportunities for women will increase from 52% in 2013 to 53.5% (nationally)</p> <p>Flood-affected persons in Battambang and Neak Loeung reduced by 15,120 persons (= 30%) of regularly affected population (50,400 = 30%)</p>	<p>National statistics</p> <p>Annual socioeconomic data of the government, i.e. National Institute of Statistics, 2009. General Population Census of Cambodia, 2008</p> <p>National business data</p> <p>Project progress reports with employment impact data of female participants</p> <p>Labor data school attendance records (reported incidence of sick days i.e., missed work and missed school)</p> <p>Annual socioeconomic surveys disaggregated by sex</p>	<p><b>Assumption</b> Government remains fully committed to this Project</p> <p><b>Risk</b> Corridor towns unable to collect revenues on wastewater treatment plants, sanitary landfill and solid waste management.</p>
<p><b>Outcome</b> Urban infrastructure improved and climate resilience enhanced in Battambang, Bavet, Neak Loeung, and Poipet</p>	<p>Between 2013- 2018</p> <p>Improved access to urban infrastructure affects 558,220 inhabitants (cumulative figure) in four project towns</p> <p>Annual economic impact of poor sanitation, accounting to a loss of \$33 in 2005 per capita per year, reduced by 40%</p> <p>Urban areas affected by perennial flooding reduced by 30%</p>	<p>Provincial and district and town statistics</p>	<p><b>Assumption</b> The government remains committed to sustainable management of urban infrastructure sector as a national development priority</p> <p><b>Risk</b> Government regulations do not fully support a sustainable decentralized operation and maintenance of urban infrastructure.</p>
<p><b>Outputs</b> 1.SLEDP adopted and implemented in Battambang, Bavet, Neak Loeung, and Poipet</p>	<p>By 2018</p> <p>SLEDPs with sex specific and climate resilience measures incorporated, adopted and disclosed, updated as required. [Baseline: 2010 no such Development Plans available]</p> <p>Gender awareness and sensitization training for 30 EAs/IAs staff conducted</p>	<p>Local development plans of IAs and corridor towns</p>	<p><b>Assumptions</b> Local authorities endorse the SLEDPs and associated budgets</p> <p>Women's participation in SLEDP preparation increased, women's needs identified through participatory processes and reflected in SLEDPs Environmental and social</p>

<sup>1</sup> Refer to data sources in hidden comments.

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
			risks can be mitigated
<p>2. Priority urban infrastructure investments implemented</p> <p><u>Battambang</u></p> <p>1.Wastewater Treatment (PPCR)</p> <p>2.Flood Control (PPCR)</p> <p>3.Materials Recovery Facility</p> <p><u>Bavet</u></p> <p>4. Wastewater Treatment (PPCR)</p> <p>5. Urban Roads</p> <p>6. MRF</p> <p><u>Neak Loeung</u></p> <p>7.Flood Protection (PPCR)</p> <p><u>Poipet</u></p> <p>8.Wastewater treatment (PPCR)</p> <p>9. Solid Waste Management</p> <p>10. MRF</p>	<p>Priority infrastructure operational by 2018</p> <p>30% of construction workers to be hired under the Project to be female</p> <p>1. 52,000 residents serviced by a new and rehabilitated waste water treatment plants (capacity 2,800 cubic meters/day). Flood events of facility reduced (based on 50 year flood frequency)</p> <p>2. Flooding events of city centre, near river, reduced (based on 50 year flood frequency), benefiting 15.120 persons</p> <p>3. 30 cubic meters of recyclables per day segregated benefiting 128,000 residents</p> <p>4. 29,000 residents serviced by waste water treatment plant (capacity 255 cubic meters/day). Flood events of facility reduced (based on 50 year flood frequency)</p> <p>5. 8 km main urban road upgraded with drainage structures, benefiting 37,100 residents</p> <p>6. 30 cubic meters of recyclables per day segregated, benefiting 24,000 residents</p> <p>7. 5.4 km flood protection dike constructed; 363 ha of residential and commercial areas protected from annual flooding (based on 50 year flood frequency), benefiting 24,700 residents</p> <p>8. 65,000 residents serviced by waste water treatment plants (capacity 16,400 cubic meters/day). Flood events of facility reduced (based on 50 year flood frequency)</p> <p>9. 20 tons/day of solid waste deposited in sanitary landfill, benefiting 58,600 residents</p> <p>10. 30 cubic meters of recyclables from dry sources</p>	<p>Subproject completion reports of IAs</p> <p>Quarterly and annual progress reports of IAs</p> <p>Local authorities' statistical data</p>	<p>Priority infrastructure will promote gender equality and/or women's empowerment by improving women's access to, and use of opportunities, services, resources, assets, and contribute to increased participation in decision making</p> <p>Capacity development activities take gender balance into account</p> <p>Specific training on gender aspects/issues provided to all staff of EA, IAs and PIUs</p> <p><b>Risks</b></p> <p>Local authorities do not recognize the need for continued capacity development.</p> <p>Required budgets for sustaining operations are not allocated</p>

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
	segregated, benefiting 58,600		
<b>3. Institutional capacities strengthened</b>	<p>By 2018</p> <p>2,000 persons trained in project management and implementation, financial management, procurement and social and environment safeguards trained, gender targets achieved: Staff quota of 30% female in PMU and PIU, increased role in decision making</p> <p>MOA signed between IAs and District/Corridor town authorities on subproject O&amp;M and climate resilience measures</p> <p>30% of overall staff positions and 30% of the management positions in the PMU and PIU are female</p>	<p>EA and IA records of capacity building and training events (disaggregated by sex); Numbers of staff (by gender) before and after project implementation</p> <p>Community level capacity building for increased gender awareness and participation of women in local decision-making</p>	<p><b>Risks</b></p> <p>Delayed or incomplete settlement of land acquisition and resettlement entitlements.</p> <p>Lack of quality control and performance evaluation at municipal levels</p>
<b>Activities with Milestones</b>			<b>Inputs</b>
<b>Output 1: Four SLEDPs Adopted and Implemented</b>			<b>Item</b> <b>Amount</b> (\$ million)
1.1 Four SLEDPs, with gender specific measures incorporated, adopted by 2014			<b>ADB: \$37</b>
1.2 SLEDPs updated as required by 2018			Civil Works - \$28.41
<b>Output 2: Urban Infrastructure Investments Implemented</b>			Consulting Services - \$4.40
2.1 Detailed design completed by Q4 2013			Contingencies - \$3.28
2.2 Complete land acquisition and resettlement by Q2 2014			Interest during
2.3 Conduct prequalification and bidding by Q3 2013			Construction - \$0.90
2.4 Sign contract by Q4 2013			<b>SCF- PPCR Loan: \$5</b>
2.5 Civil works completed by Q4 2016			Civil Works - \$3.78
<b>Output 3: Institutional Capacities Strengthened</b>			Consulting Services - \$0.76
3.1. Conduct capacity needs assessment and update capacity development plan Q3 2013			Contingencies - \$0.45
3.2. Conduct public awareness and information campaign program Q2 2014			Interest during
3.3. Conduct training needs assessment related to female employment opportunities triggered by the project, by 2014			Construction - \$0.01
3.4. Prepare capacity building modules and training manuals for project management, procurement and financial disbursement, and monitoring and evaluation by Q2 2014			<b>SCF-PPCR Grant: \$4.4</b>
3.5. Establish networks and coordination with training institutions and Human Resource Development learning centers for capacity development			Civil Works - \$3.27
3.6. Implement institutional capacity development plan from 2013 to 2016			Consulting Services - \$0.73
			Contingencies - \$0.40
			<b>UEIF-UFPF: \$1.5</b>
			Civil Works - \$1.25
			Consulting Services - \$0.11
			Contingencies - \$0.14
			<b>RGC: \$6.87</b>
			Civil Works - \$4.08
			Consulting Services - \$0.67
			LAR - \$1.55

ADB = Asian Development Bank, EA = executing agency, GAP = gender action plan, ha = hectare, IA = implementing agency, kg = kilogram, km = kilometers, MOA = memorandum of agreement, MRF = materials recovery facility, O&M = operations and maintenance, ODA = official development assistance, PIU = project implementation unit, PMU = project management unit, PPCR = Pilot Program for Climate Resilience, Q = quarter, RGC = Royal Government of Cambodia, SCF = Strategic Climate Fund, SLEDP = Strategic Local Economic Development Plan, UEIF = Urban Environmental Infrastructure Fund, WWTP = wastewater treatment plant.

## LIST OF LINKED DOCUMENTS

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

1. Loan Agreement: Special Operations
2. Loan Agreement: Strategic Climate Fund
3. Grant Agreement: Urban Environmental Infrastructure Fund under the Urban Financing Partnership Facility
4. Grant Agreement: Strategic Climate Fund
5. Sector Assessment (Summary): Water, Sanitation, and Other Municipal Services
6. Project Administration Manual
7. Contribution to the ADB Results Framework
8. Development Coordination
9. Summary Financial Analysis
10. Summary Economic Analysis
11. Country Economic Indicators
12. Summary Poverty Reduction and Social Strategy
13. Summary Gender Action Plan
14. Initial Environmental Examination: Battambang, Bavet, Neak Loeung, and Poipet Subprojects
15. Resettlement Plan: Battambang Wastewater Treatment
16. Resettlement Plan: Neak Loeung Flood Control
17. Resettlement Plan: Poipet Wastewater Treatment Plant and Solid Waste Management
18. Risk Assessment and Risk Management Plan

## SUPPLEMENTARY DOCUMENTS

19. Climate Resilience
20. Initial Environmental Examination: Environmental Management Plan for Battambang Subproject
21. Initial Environmental Examination: Environmental Management Plan for Bavet Subproject
22. Initial Environmental Examination: Environmental Management Plan for Neak Loeung Subproject
23. Initial Environmental Examination: Environmental Management Plan for Poipet Subproject
24. Resettlement Plan: Battambang Flood Control
25. Resettlement Plan: Due Diligence: Battambang Materials Recovery Facility
26. Resettlement Plan: Due Diligence: Bavet Wastewater Treatment Plant
27. Resettlement Plan: Due Diligence: Bavet Urban Road
28. Resettlement Plan: Due Diligence: Bavet Materials Recovery Facility
29. Resettlement Plan: Due Diligence: Poipet Materials Recovery Facility