



GEF-6 PROJECT IDENTIFICATION FORM (PIF)

PROJECT TYPE: Full-sized Project

TYPE OF TRUST FUND: Special Climate Change Fund

For more information about GEF, visit TheGEF.org

PART I: PROJECT INFORMATION

Project Title:	Resilient and Integrated Urban Development for Greater Colombo		
Country(ies):	Sri Lanka	GEF Project ID: ¹	9107
GEF Agency(ies):	AsDB (select) (select)	GEF Agency Project ID:	
Other Executing Partner(s):	Ministry of Mahaweli Development and Environment with the Climate Change Secretariat as lead department / agency	Submission Date:	2015-03-30
GEF Focal Area(s):	Climate Change	Project Duration (Months)	60
Integrated Approach Pilot	IAP-Cities <input type="checkbox"/> IAP-Commodities <input type="checkbox"/> IAP-Food Security <input type="checkbox"/>	Corporate Program: SGP <input type="checkbox"/>	
Name of parent program:	[if applicable]	Agency Fee (\$)	390,411

A. INDICATIVE FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES²

Objectives/Programs (Focal Areas, Integrated Approach Pilot, Corporate Programs)	Trust Fund	(in \$)	
		GEF Project Financing	Co-financing
(select) CCA-1 (select)	SCCF-A	1,369,863	128,000,000
(select) CCA-2 (select)	SCCF-A	1,369,863	
(select) CCA-3 (select)	SCCF-A	1,369,863	
(select) (select) (select)	(select)		
(select) (select) (select)	(select)		
(select) (select) (select)	(select)		
(select) (select) (select)	(select)		
(select) (select) (select)	(select)		
(select) (select) (select)	(select)		
Total Project Cost		4,109,589	128,000,000

B. INDICATIVE PROJECT DESCRIPTION SUMMARY

Project Objective: To enhance climate resilience, water management and integrated sustainable urban development for Greater Colombo, Sri Lanka						
Project Components	Financing Type ³	Project Outcomes	Project Outputs	Trust Fund	(in \$)	
					GEF Project Financing	Co-financing
Component 1: Establishing an Integrated Urban Resilience and Sustainability Planning Framework	TA	1.1 Sector coordinating mechanisms for climate resilient urban planning and management established 1.2 City and sector level adaptation investment and performance targets approved, with	1.1.1 Climate risk and vulnerability assessment for Greater Colombo conducted 1.2.1 Agreement on Interagency sector coordinating mechanism finalized 1.2.2 Enhanced inter-	SCCF-A	321,798	3,000,000

¹ Project ID number will be assigned by GEFSEC and to be entered by Agency in subsequent document submissions.

² When completing Table A, refer to the excerpts on [GEF 6 Results Frameworks for GETF, LDCF and SCCF](#).

³ Financing type can be either investment or technical assistance.

		emphasis on addressing flash flood occurrences in Greater Colombo	agency coordinating mechanism for climate resilient urban planning and management established 1.3.1 City and sector-level investment and performance targets and priorities for climate change adaptation defined, including flash flood concerns (linked to investments in 3.1.3)			
Component 2: Strengthening the Management of Natural Ecosystems and Resilience in Urban Areas and Associated Watersheds	TA	2.1 Ecosystem-based adaptation options for urban resilience assessed and prioritized	2.1.1 Climate risk and ecosystems assessments undertaken to identify potential priority projects 2.1.2 Criteria for selection of proposed ecosystem restoration projects established 2.1.3 Options and cost/benefit analysis for proposed projects undertaken (linked to Outcome 3.2)	SCCF-A	552,038	7,000,000
Component 3: Investments in Improved Urban Water Management and Resilience	Inv	3.1 Investments in demonstration projects which incorporate climate resilience measures and technologies for urban water and flood management 3.2 Ecosystem-based adaptation options, including ecosystem protection and restoration within urban areas, demonstrated 3.3 Strengthened environmental and climate impact monitoring and performance framework in place for Greater Colombo	3.1.1 Criteria for proposed investment projects determined 3.1.2 Pre-feasibility and feasibility assessments conducted for selected investment projects 3.1.2 Due diligence for proposed investments undertaken, and administrative mechanisms in place 3.1.3 Investment projects in urban water and flood management initiated 3.2.1 Biophysical and	SCCF-A	2,437,711	110,000,000

			<p>ecosystems resource assessment conducted for Greater Colombo</p> <p>3.2.2 Ecosystem protection and restoration / rehabilitation investments initiated</p> <p>3.3.1 Gap analysis on environment and climate monitoring systems for Greater Colombo undertaken</p> <p>3.3.2 Capacity development needs and technical / scientific data / information parameters defined</p> <p>3.3.3 Technical assistance for environmental and climate impact monitoring and performance framework for Greater Colombo delivered</p>			
<p>Component 4: Development of Financial Mechanisms for Sustainable Urban Investments and Climate Change Responses</p>	TA	<p>4.1 Financial mechanisms to support climate responsive urban investments established, including those identified in the NAP process.</p> <p>4.2 Improved capacity for financial management and administration to support urban resilience planning and implementation</p> <p>4.3 Increased flow of investments from governments, donors and private sector sources in identified priority urban and peri-urban programs and projects Investments in demonstration projects</p>	<p>4.1.1 Finance sector assessment / gap analysis relevant to climate change adaptation conducted</p> <p>4.1.2 Priority needs to integrate climate change adaptation and resilience into financial management mechanisms identified and internalized into capacity development programs</p> <p>4.2.1 Capacity development and training provided to multiple agencies and stakeholders, including financial institutions</p> <p>4.3.1 Investment instruments,</p>	SCCF-A	368,026	3,500,000

		which incorporate climate resilience measures and technologies for urban water and flood management (Linked to Outcome 3.1)	modalities and options for climate-linked finance identified and assessed 4.3.2 Investments in demonstration projects initiated (link to Outcome 3.1) 4.3.3 Monitoring and evaluation of investment performance undertaken			
Component 5: Improving Knowledge Management and Partnership Development for Sustainable Cities	TA	5.1 Good practices and models for urban resilient planning and management shared with other cities in Sri Lanka and within the South Asian region	5.1.1 Knowledge management strategy developed 5.1.2 Knowledge products finalized and disseminated 5.1.3 Participation of key Greater Colombo stakeholders in various national and international fora, events and networks 5.1.4 Project level monitoring and evaluation system developed with tracking tools	SCCF-A	230,016	4,500,000
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
Subtotal					3,909,589	128,000,000
Project Management Cost (PMC) ⁴				SCCF-A	200,000	
Total Project Cost					4,109,589	128,000,000

For multi-trust fund projects, provide the total amount of PMC in Table B, and indicate the split of PMC among the different trust funds here: ()

C. INDICATIVE SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND BY TYPE, IF AVAILABLE

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount (\$)
GEF Agency	Asian Development Bank (AsDB)	Loans	128,000,000

⁴ For GEF Project Financing up to \$2 million, PMC could be up to 10% of the subtotal; above \$2 million, PMC could be up to 5% of the subtotal. PMC should be charged proportionately to focal areas based on focal area project financing amount in Table D below.

(select)		(select)	
Total Co-financing			128,000,000

D. INDICATIVE TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES) AND THE PROGRAMMING OF FUNDS ^{a)}

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	(in \$)		
					GEF Project Financing (a)	Agency Fee (b) ^{b)}	Total (c)=a+b
AsDB	SCCF-A	Sri Lanka	Climate Change	(select as applicable)	4,109,589	390,411	4,500,000
(select)	(select)		(select)	(select as applicable)			0
(select)	(select)		(select)	(select as applicable)			0
(select)	(select)		(select)	(select as applicable)			0
(select)	(select)		(select)	(select as applicable)			0
Total GEF Resources					4,109,589	390,411	4,500,000

a) Refer to the [Fee Policy for GEF Partner Agencies](#).

E. PROJECT PREPARATION GRANT (PPG)⁵

Is Project Preparation Grant requested? Yes No If no, skip item E.

PPG AMOUNT REQUESTED BY AGENCY(IES), TRUST FUND, COUNTRY(IES) AND THE PROGRAMMING OF FUNDS

Project Preparation Grant amount requested: \$91,324					PPG Agency Fee: 8,676		
GEF Agency	Trust Fund	Country/ Regional/Global	Focal Area	Programming of Funds	(in \$)		
					PPG (a)	Agency Fee ⁶ (b)	Total c = a + b
AsDB	SCCF-A	Sri Lanka	Climate Change	(select as applicable)	91,324	8,676	100,000
(select)	(select)		(select)	(select as applicable)			0
(select)	(select)		(select)	(select as applicable)			0
Total PPG Amount					91,324	8,676	100,000

⁵ PPG requested amount is determined by the size of the GEF Project Financing (PF) as follows: Up to \$50k for PF up to \$2m (for MSP); up to \$100k for PF up to \$3m; \$150k for PF up to \$6m; \$200k for PF up to \$10m; and \$300k for PF above \$10m. On an exceptional basis, PPG amount may differ upon detailed discussion and justification with the GEFSEC.

⁶ PPG fee percentage follows the percentage of the Agency fee over the GEF Project Financing amount requested.

F. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS⁷

Provide the expected project targets as appropriate.

Corporate Results	Replenishment Targets	Project Targets
1. Maintain globally significant biodiversity and the ecosystem goods and services that it provides to society	Improved management of landscapes and seascapes covering 300 million hectares	<i>Hectares</i>
2. Sustainable land management in production systems (agriculture, rangelands, and forest landscapes)	120 million hectares under sustainable land management	<i>Hectares</i>
3. Promotion of collective management of transboundary water systems and implementation of the full range of policy, legal, and institutional reforms and investments contributing to sustainable use and maintenance of ecosystem services	Water-food-ecosystems security and conjunctive management of surface and groundwater in at least 10 freshwater basins;	<i>Number of freshwater basins</i>
	20% of globally over-exploited fisheries (by volume) moved to more sustainable levels	<i>Percent of fisheries, by volume</i>
4. Support to transformational shifts towards a low-emission and resilient development path	750 million tons of CO _{2e} mitigated (include both direct and indirect)	<i>metric tons</i>
5. Increase in phase-out, disposal and reduction of releases of POPs, ODS, mercury and other chemicals of global concern	Disposal of 80,000 tons of POPs (PCB, obsolete pesticides)	<i>metric tons</i>
	Reduction of 1000 tons of Mercury	<i>metric tons</i>
	Phase-out of 303.44 tons of ODP (HCFC)	<i>ODP tons</i>
6. Enhance capacity of countries to implement MEAs (multilateral environmental agreements) and mainstream into national and sub-national policy, planning financial and legal frameworks	Development and sectoral planning frameworks integrate measurable targets drawn from the MEAs in at least 10 countries	<i>Number of Countries:</i>
	Functional environmental information systems are established to support decision-making in at least 10 countries	<i>Number of Countries:</i>

PART II: PROJECT JUSTIFICATION

1. *Project Description.* Briefly describe: 1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed; 2) the baseline scenario or any associated baseline projects, 3) the proposed alternative scenario, GEF focal area⁸ strategies, with a brief description of expected outcomes and components of the project, 4) [incremental/additional cost reasoning](#) and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and [co-financing](#); 5) [global environmental benefits](#) (GEFTF) and/or [adaptation benefits](#) (LDCF/SCCF); and 6) innovation, sustainability and potential for scaling up.

1) GLOBAL ENVIRONMENTAL AND/OR ADAPTATION PROBLEMS, ROOT CAUSES AND BARRIERS
Greater Colombo is the business and administrative heart of Sri Lanka, which has boomed since cessation of civil conflict in 2009. Continued socio-economic development is dependent on sustainable, climate-resilient management of the surrounding watersheds, river basins and coastal areas. Freshwater and coastal wetlands are deteriorating due to siltation from unsustainable land use in areas adjacent to wetlands, reclamation, clearing of vegetation, water pollution, dams that regulate water flow, inadequately planned irrigation structures, and illegal sand and gem mining which contribute to loss of valuable ecosystems services. Pollution affects aquatic life that is dependent on wetlands for survival. Wetlands and coastal areas are also threatened due to over exploitation and invasive alien species. Over 50% of the population is living in "under served settlements" which lack the basic services in sewage management, among others. Sewage-borne pathogens and organic loads enter estuaries, waterways and coastal

⁷ Provide those indicator values in this table to the extent applicable to your proposed project. Progress in programming against these targets for the projects per the *Corporate Results Framework* in the [GEF-6 Programming Directions](#), will be aggregated and reported during mid-term and at the conclusion of the replenishment period. There is no need to complete this table for climate adaptation projects financed solely through LDCF and/or SCCF.

⁸ For biodiversity projects, in addition to explaining the project's consistency with the biodiversity focal area strategy, objectives and programs, please also describe which [Aichi Target\(s\)](#) the project will directly contribute to achieving.

waters. This is compounded by dumping and accumulation of solid waste and marine litter, and increasing inputs of nutrients from industrial and agricultural activities. High nutrient discharges intensify eutrophication and large scale hypoxia. Water quality monitoring programs need to be strengthened and better coordinated across agencies and spatial areas, and synchronized with systematic investments in wastewater management systems and related service infrastructure. Greater Colombo and adjacent areas are also exposed to a number of climate-related hazards, particularly floods, which have impacts across a wide range of sectors, including health, energy, transportation, agriculture, manufacturing, communications and other services.

Root causes for many of these sustainable development challenges include: a) Rapid urbanization and population growth in Greater Colombo metropolitan area, projected to reach between 5.5 and 7 million by 2030, b) Economic development which increases pressures on natural resources, particularly unsustainable land and water use practices, c) Weak and unevenly applied governance mechanisms to manage natural resources sustainably, and d) Exposure to climate change hazards, particularly increases in extreme rainfall, sea level rise and increasing sea surface temperature. Barriers to be addressed include: a) limited capacity to implement multilateral environment agreements (MEAs) given current fragmentation across ministries and agencies, b) need to update and harmonize policies, regulatory and institutional frameworks in view of threats, c) gaps and weaknesses in skills and technical capacity, data/information management, secure equipment and financial resources needed for implementation, d) weak enforcement of law in relevant sectors, e) need for integrated land and water management framework to halt degradation of natural resources, reduce the 'ecological footprint', and to support ecosystem-based approaches to climate resilient urban planning and development, f) threats to human and ecosystems health from outdated infrastructure and escalating pollution from point and non-point sources, combined with sedimentation in river basins, waterways, wetlands and coastal areas in Greater Colombo and adjacent areas, g) limited awareness of policy makers, businesses, service providers and civil society of the long term consequences of unsustainable use of natural resources, and of how various tools and methods can be applied to assess trade-offs and options in the context of economic growth.

Against the backdrop of urban growth, Greater Colombo is identified as highly vulnerable to the impacts of climate change. Increases in the frequency and intensity of extreme climatic events including intense rainfall and flooding, sea level rise, and storm surges are the major concerns for Greater Colombo. These and other projected impacts will likely result in (i) greater pressure on freshwater resources, increasing water scarcity and reducing water quality (including saline intrusion of coastal aquifers); (ii) long-term damage to coastal settlements, infrastructure, and livelihoods; and (iii) increases in vector densities, resulting in the rapid spread of diseases such as dengue. The low-lying, coastal nature of the City has exposed its people and infrastructure to considerable flood risk in the past. The most recent flooding in 2010 highlighting its vulnerability to projected changes in extreme rainfall combined with sea-level rise and storm- surge; and to development within the catchment resulting in greater runoff volume and flood peaks. There is a need to develop strategies which identify and prioritize resilience-building measures on the ground in Greater Colombo to address both immediate, medium and long term requirements. Such strategies will integrate governance mechanisms with infrastructure-building measures and ecosystem-based approaches to resilience building which ensure multiple development, adaptation and biodiversity conservation benefits. This will enable rapid on-the-ground implementation of the pending Sri Lanka National Adaptation Plan (NAP), both within Greater Colombo and other urban systems in the country, through the development of consistent methods and tools supported by financial incentive mechanisms.

The Sri Lanka National Climate Change Adaptation Strategy (NCCAS) strategic priority development process adheres to a number of guiding principles, is informed through stakeholder consultations and sector based vulnerability profiles, and articulates a preliminary investment framework with a project pipeline associated with five "strategic thrusts". While the Climate Change Secretariat (CCS) has been identified as the key lead agency for climate change adaptation efforts, it is recognized that the CCS has limited capacity to execute on this mandate. Furthermore, technical capacity to effectively deal with climate change is lacking across key sector agencies. There is no focal point or unit responsible for ensuring climate resilience criteria are considered in national level planning initiatives. There are no training institutions or programmes locally which are targeted at building the required technical skill base for effective long term management of climate change risks either. A pool of experts and future leaders in this space needs to be developed and nurtured. (NCCAS, 2010 p.9)

2) BASELINE SCENARIO

The proposed GEF project will build on an upcoming “Greater Colombo Waste and Wastewater Management Improvement Investment Program” (GCWMMIIP) executed by the national Ministry of Water Supply and Drainage (for water supply) and Ministry of Local Government and Provincial Councils (for waste water), and implemented by the National Water Supply and Drainage Board (for water supply) and Colombo Municipal Council (CMC) (for waste water), financed by Asian Development Bank (ADB). The cost of this tranche, of a multitranche financing facility (MFF) is USD 128,000,000. Much of the Colombo Sewerage System (CSS) was constructed between 1902 and 1925, and now covers nearly 80% of the Colombo Municipal Council (CMC) area. Sewage from two adjoining municipalities, Dehiwala-Mt Lavinia and Kolonnawa as well as from another 11 locations including the Parliament Complex in Sri-Jayawardenapura is pumped into the CSS, which is managed by the CMC Drainage Division. Rehabilitation and extension of the sewerage system has occurred progressively following Master Plans prepared in 1972 and in 1993 including through the on-going GCWMP (first two tranches of the MFF).

Nevertheless, the system still suffers from many technical deficiencies, including: a) poor condition, under-capacity with some collapses, serious blockages and overflows, b) need for upgrading to keep up with rapid urban commercial real estate and industrial development, c) up to 50% of Colombo not connected or with irregular connections, d) 40% of population, primarily poor segments, not connected to sewerage system, e) cross connections between sewerage and storm water drainage resulting in additional pollution to waterways and overloading of the sewerage system, f) ingress of solid waste into the sewerage system contributing to system blockages and damage to infrastructure, g) reliance on pumping stations which results in high operational costs (of which 20% is power), h) equipment failures at pumping stations results in discharge of untreated and unscreened sewage at long sea outfalls. These deficiencies give rise to relatively high incidence of waterborne disease and the poor environmental condition of the canals and lakes within the city. It is the low income communities that bear the greatest burden resulting from the inadequate sewerage services provided.

The CMC also suffers from a number of constraints institutionally in managing the wastewater services. These include: a) lack of independence in decision-making with some functions appropriated by the National and Provincial Governments, b) lack of resources to manage both the wastewater and storm water systems for which the Drainage Division is responsible, c) staff shortages at the professional, sub-professional and skilled / unskilled labour levels, d) ineffective enforcement against violators due to political interventions, and e) sub-optimal procurement arrangements.

The ADB-financed (USD 128 million) “Greater Colombo Waste and Wastewater Management Improvement Investment Program” (GCWMMIIP) aims to support the following interventions: a) Sewer rehabilitation, upgrading and realignment: anticipated to satisfy projected 2040 waste water flows to cover about 50 km of sewer lines, and 6 small pumping stations, b) Provision of services to unserved areas: anticipated to cover 11 principal areas and 40% of the Colombo City population (much of which is in low-lying, low income areas), c) Rehabilitation of pumping stations, d) Two potential waste water treatment facilities (with plans to upgrade primary treatment to advanced primary treatment), e) Management of biosolids: from septic tank de-sludging, sewer cleaning operations and tanker discharges from industries, f) Storm water cross connections: to complement work supported by World Bank and explore policy / regulatory options, g) Solid waste management: series of measures to reduce ingress into the sewer system, and h) Institutional strengthening.

3) PROPOSED ALTERNATIVE SCENARIO

The proposed lead Executing Agency for the GEF project will be the Ministry of Mahaweli Development and Environment, with primary implementation responsibility undertaken by the Climate Change Secretariat (CCS). Greater Colombo has been selected as a project locus because of its vulnerability to climate change impacts, specific sustainability challenges and strong local and national support for integrating climate resilience with urban development. The country has emerged from three decades of conflict and significantly increased investments in key sectors of the economy. Elements of the rationale include: a) strong national government and local commitment to

sustainable urban planning and management, b) the city is typical of the challenges facing most rapidly growing South Asian cities (accelerating economic development and higher industrial concentrations, rapid population growth, impacts on watersheds, river basins, wetlands and coastal areas as well as biodiversity; aging and inadequate urban infrastructure and services to address demands; significant urban, peri-urban and global environmental and health issues), c) the low-lying, coastal nature of the city has resulted in high exposure to flood risk; changes in the frequency and intensity of extreme climatic events, sea level rise, and storm surges are likely to result in increasing water scarcity, reducing water quality, long-term damage to coastal settlements, infrastructure, and livelihoods, and increased risk of rapid spread of diseases; d) an opportunity exists to demonstrate that promoting climate resilient and sustainable urban development is consistent with retaining significant cultural values; e) ADB, the World Bank and other financing agencies are already investing in several key projects that support sustainable and resilient cities, and in combination with Government investments, sufficient implementation capacity exists; f) Sri Lanka, by virtue of the number of urban development programs and projects has emerging institutional and coordination mechanisms for sustainable cities initiatives, and g) replication potential is high both at the national and regional (i.e South Asia) levels.

The proposed GEF project will support efforts to enhance climate resilience, integrated and sustainable urban development for Greater Colombo, with special attention to water resources management (as a link with the baseline project). This will be undertaken through a series of five (5) interlinked actions: a) Establishing an integrated urban resilience and sustainability planning framework - which will build on NCCAS Strategic Thrust 1 - establish sector coordinating mechanisms for climate resilient urban planning and management, and define city and sector level investment and performance targets and priorities, with emphasis on addressing flash flood occurrences in Greater Colombo; b) Strengthening the management of natural ecosystems and resilience in urban areas and associated watersheds - which will build on NCCAS Strategic Thrust 5 - and assess / prioritize ecosystem-based adaptation options for urban resilience, and establish an inter-agency coordinating mechanism to manage coastal zones, mangroves, wetlands and associated watersheds; c) Investment in demonstrations projects - which will build on NCCAS Strategic Thrust 2 - and leverage / mobilize investments in priority climate resilience measures and technologies for urban water and flood management, demonstrate ecosystem-based adaptation options, including ecosystem protection and restoration, and strengthen the environmental and climate impact monitoring and performance framework for Greater Colombo (e.g. priority pollutants, ecosystem health indicators, climate resilience indicators etc); d) Development of financial mechanisms for sustainable urban investments and climate change responses - which will address Financing Requirement and Implementation Targets outlined in the NCCAS (Chapter 4) - and establish financial mechanisms and assessment processes to support climate response investments including urban priorities as identified in the NAP process, improved capacity for financial management and administration to support urban resilience planning and implementation, and increase the flow of investments from governments, donors and private sector sources in identified priority urban and per-urban programs and projects (including adaptation/resilience-enhancing investments for energy, transport, water, health, industry, education etc); e) Improving knowledge management and partnership development for sustainable cities - which cuts across all of the NCCAS Strategic Thrusts - shares knowledge through communities of practice, learning networks etc at sub-national, national and regional levels, and replicates /scales up best practices and models for integrated urban resilience planning and management for other cities in Sri Lanka and within the South Asian region.

4) INCREMENTAL REASONING:

While rapid development of Colombo and threats to the region's natural resources present a range of development challenges, climate change introduces a number of novel hazards and risks, and exacerbates existing challenges. In particular, sea level rise introduces specific risks to coastal aquifers through saline intrusion and to coastal infrastructure and assets through increases in storm surge and associated damage. Likewise, increases in riverine flooding due to amplified rainfall intensity creates new risk in floodplains and riparian zones; and changes in temperature and surface hydrology potentially introduce new public health risks. The GEF project will expand the scope of urban planning and management activities in Greater Colombo to address these emerging and anticipated risks, and enable adaptive strategies in the face of uncertain future climate. The successful demonstration of these strategies will inform and support upscaling of resilience-building activities to other cities in Sri Lanka. Furthermore, the policy formulation, physical and social infrastructure works in Greater Colombo, will foster resilience, and the

ability to reduce disruptions from disasters, which will in turn create new investment opportunities and financial returns. The GEF project will add value to the baseline project by: a) Increasing urban resilience through the introduction of ecosystems-based approaches to disaster risk management, b) Supporting sustainable water management and pollution reduction measures (both point and non-point source) by complementing conventional wastewater management systems with ecosystem-based approaches to water quantity and quality management, c) Expanding climate-resilient infrastructure investment opportunities, including complementary hard- and soft-infrastructure based approaches; d) Addressing key concerns related to sustainable financing by mobilizing new, targeted adaptation financing, and f) Supporting an inter-agency and intersectoral coordinating mechanism to enhance climate resilient urban planning and capacity for implementation of policies, plans and actions, and monitoring.

The National Climate Change Adaptation Strategy proposes to mobilize the equivalent of USD 367,000,000 from domestic (national government) sources for its implementation to 2016. The GEF project expects to catalyze significant additional investment flows.

5) GLOBAL ENVIRONMENTAL / ADAPTATION BENEFITS

Greater Colombo and surrounding areas are extremely vulnerable to the impacts of climate change. The project will provide opportunities for key decision-makers to understand and reduce climate change vulnerability through a staged process of first detailed vulnerability assessments, followed by evidenced based, targeted integrated urban planning initiatives, supported by focused adaptation investments. These measures are particularly timely, given the rapid post-conflict development of urban systems. This provides an opportunity to avoid the worst potential impacts of future climate change by avoiding at-risk locations, while targeting climate resilience-building measures through hard (infrastructure) and soft (ecosystem-based and planning/policy) measures. This will provide catalytic demonstration for other Sri Lankan cities of how best to integrate ecosystem-based and planning/policy adaptation measures with hard infrastructure through structured engagement and knowledge-sharing at national, provincial and municipal levels.

As a result, the project's adaptation benefits will occur via a suite of integrated measures: a) infrastructure damage costs avoided; b) reduced disruption from climate-related hazards; c) enhanced ecosystem resilience to climate-change impacts; and d) development-livelihood benefits accruing from reduced impacts on Greater Colombo's urban systems. An additional indirect adaptation benefit will be the impact of this GEF project in empowering local urban managers to take leadership in addressing adaptation issues in Sri Lanka.

2. *Stakeholders.* Will project design include the participation of relevant stakeholders from [civil society](#) and [indigenous people](#)? (yes /no) If yes, identify key stakeholders and briefly describe how they will be engaged in project design/preparation.

Major potential stakeholders will include: a) Mahaweli Development and Environment, b) Ministry of Urban Development, Water Supply and Drainage, c) Ministry of Irrigation and Water Management, c) Colombo Municipal Council and other local authorities, d) Wetlands Management Division, SLLRDC, e) National Physical Planning Department, f) International Water Management Institute (a CGIAR Center); g) Asian Disaster Preparedness Centre, h) University of Moratuwa, and i) selected non-governmental and civil society organizations. Stakeholders will be engaged through a series of focus group discussions, consultative workshops, focus interviews and visits to relevant project or field sites.

The GEF project will create capacity to integrate resilience building into urban planning and management in Greater Colombo. Support for national policy, planning and regulatory frameworks and well as the development of financial mechanisms and knowledge sharing with then support upscaling to other cities in Sri Lanka. Furthermore, the policy formulation, physical and social infrastructure works in Greater Colombo, will foster resilience, and the ability to reduce disruptions from disasters, which will in turn create new investment opportunities and financial returns. The project will contribute to regional sustainable cities, climate change and environmental management initiatives (i.e. ICLEI, C40, NARBO, PEMSEA, Asia Pacific Adaptation Network – APAN and others - see below) and share knowledge and best practices through communities of practice, cross-learning and partnership / network participation.

A stakeholder engagement plan will be developed during project preparation phase.

3. *Gender Considerations.* Are [gender considerations](#) taken into account? (yes /no). If yes, briefly describe how gender considerations will be mainstreamed into project preparation, taken into account the differences, needs, roles and priorities of men and women.

Gender considerations will be taken into account during project preparation consistent with ADB's Policy on Gender and Development and ADB's Guidelines on Gender Mainstreaming and Categorization. The process will involve the use of "Urban Sector gender checklist", which has been prepared to help ADB staff, project partners and consultants address gender issues in the design of projects across different sectors. The project will also use tools which ensure gender-inclusive climate resilience and disaster risk management. Project preparation will detail elements of essential gender mainstreaming approaches.

4 *Risks.* Indicate risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the project design (table format acceptable).

During the project preparation phase, a detailed climate risk and vulnerability assessment will be carried out to understand risks resulting from climate variability and change to the city, the interventions envisaged under the baseline project, and biodiversity and ecosystems relevant to greater Colombo. The assessment will include a technical and economic evaluation of potential adaptation measures, including: a) restoration and presentation of wetlands to reduce the risk of flooding; b) climate proofing measures of the urban infrastructure; c) adaptive management; and d) capacity building within the various government ministries and agencies to integrate adaptation objectives in planning and project design and implementation. Environmental and social safeguards will also be assessed, consistent with ADB's Safeguard Policy Statement (SPS) and associated requirements.

5. *Coordination.* Outline the coordination with other relevant GEF-financed and other initiatives.

The GEF project will also draw emerging lessons from the Special Climate Change Fund (SCCF) project "Strengthening the Resilience of Post Conflict Recovery and Development to Climate Change Risks in Sri Lanka", cooperate with the World Bank supported Metro Colombo Urban Development Program, and proposed activities of the United Nations Industrial Development Organization (UNIDO) related to "Smart Cities".

These opportunities will be further explored and defined during the project preparation phase. Other coordination measures are referenced under Section 7 on knowledge management (below).

6. *Consistency with National Priorities.* Is the project consistent with the National strategies and plans or reports and assessments under relevant conventions? (yes /no). If yes, which ones and how: NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, etc.

The proposed project is aligned with the National Climate Change Adaptation Strategy (NCCAS) 2011-2016. It specifically addresses 1. Strategic Thrust #1: "Mainstream Climate Change Adaptation into National Planning and Development", which covers cross cutting policy measures, capacity building, safeguards, monitoring programs, coordination mechanisms, etc; Strategic Thrust #2: "Enable Climate Resilience and Healthy Settlements", which identifies priority areas for action which include housing, urban development and planning, public health, drainage, drinking water, urban wetlands, waste management, pollution control etc., and 3. Strategic Thrust 5: "Safeguard Natural Resources and Biodiversity from Climate Change Impacts", which includes water resources management, biodiversity conservation. The proposed GEF project will help support identified priority adaptation measures. These include: a) Establish coordination body/mechanism for climate change adaptation of human settlements; b) Promote improved climate resilient construction methods; c) Support climate change adaptation interventions with incentives; d) Stimulate greening of settlements and preservation of natural ecosystems; e) Promote land use planning and monitoring for both urban and rural areas; f) Research climate change impacts on human settlements and link to planning; g) Promote water saving technologies including rainwater harvesting; h) Improve monitoring / surveillance and sharing of data across sectors; i) Promote integrated water resources and watershed management; j) Enhance awareness and demand for climate resilient construction; k) Promote efficient water resource use and development using IWRM; l) Promote research partnerships on good practices for varied water uses; m) Strengthen/establish an institution to coordinate management of water resource; n) Link/restore/conserves, forests and other habitat refugia to increase resilience of ecosystems and species; o) Restore and rehabilitate degraded ecosystems; q) Protect marshes/flood retention areas in urban areas and limit land conversion; r) Prevent the discharge of industrial effluents and solid waste into inland wetlands; s) Strengthen coordination and streamline

management of wetlands across relevant agencies; and t) Promote training and awareness on use of the ecosystem approach for conservation (NCCAS, 2010).

Most of these actions are also inextricably linked to a number of other national laws, policies and action plans, including: the National Environment Act, Coast Conservation Act, Marine Pollution Prevention Act, Urban Development Authority Law, Water Resources Board Act, National Water Supply and Drainage Act, National Watershed Management Policy, National Policy on Wetlands, National Land Use Policy, National Biodiversity Strategic Action Plan (NBSAP), Wetlands Policy and Strategy, National Policy on Wildlife Conservation, National Forest Policy of 1995, Municipal Council Ordinance, Urban Council Ordinance and Pradeshiya Sabha Act. This is important, particularly because many of the responsible Ministries and Agencies are identified as key partners in relevant sections of the NCCAS.

Capacity development will assist Sri Lanka to directly address targets associated with the UNFCCC and Hyogo Plan of Action, and less directly help meet obligations to multilateral environmental agreements such as the Convention on Biological Diversity, Convention on Wetlands (Ramsar Convention), and the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA).

7. Knowledge Management. Outline the knowledge management approach for the project, including, if any, plans for the project to learn from other relevant projects and initiatives, to assess and document in a user-friendly form, and share these experiences and expertise with relevant stakeholders.

A knowledge management strategy will be developed during the preparation phase of the proposed GEF project. The strategy will combine multi-media approaches and support 'audience segmented' communications and advocacy initiatives. Part of the strategy will focus on replication and scaling up of good practices through participation in communities of practice, learning networks, demonstrations and proof of concept. This will also involve coordination with a number of existing global and regional initiatives:

- a) ICLEI: possible participation in the EcoCities Network and World Mayors Council on Climate Change; the Resilient Cities Congress, Green Climate Cities Program;
- b) C40 Cities Climate Leadership Group: possible learning / participation in the Adaptation and Water Network, which facilitates forums on climate risk assessment and connecting "delta cities";
- c) Network of Asian River Basin Organizations (NARBO): possible participation in RBO benchmarking program, training courses in IWRM, participation in thematic workshops;
- d) PEMSEA: possible sharing of information through the PEMSEA Network for Local Governments Blue Economy Forum, participation in the EAS Congress 2015 /2018, training in integrated river basin and coastal area management (IRBCAM), orientation to Port Safety, Health and Environmental Management System (PSHEMs);
- e) Asia-Pacific Adaptation Network (APAN): leverage learning opportunities through ongoing and future projects (there are several ongoing in Sri Lanka) and communities of practice, web-enabled sharing information on good practices and technology development.

Project level monitoring and evaluation will be developed and consistent with GEF and ADB policies and standards, including tracking tools.

PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. RECORD OF ENDORSEMENT⁹ OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S):
 (Please attach the [Operational Focal Point endorsement letter](#)(s) with this template. For SGP, use this [SGP OFP endorsement letter](#)).

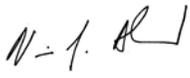
NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)
Eng Nihal Rupasinghe	Secretary and GEF Operational Focal Point	MINISTRY OF MAHAWELI	03/27/2015

⁹ For regional and/or global projects in which participating countries are identified, OFP endorsement letters from these countries are required even though there may not be a STAR allocation associated with the project.

	(OFF)	DEVELOPMENT AND ENVIRONMENT	

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF policies¹⁰ and procedures and meets the GEF criteria for project identification and preparation under GEF-6.

Agency Coordinator, Agency name	Signature	Date (MM/dd/yyyy)	Project Contact Person	Telephone	Email
Nessim J Ahmad Deputy Director General Regional Sustainable Development Department Asian Development Bank		03/31/2015	Mingyuan Fan	+632 632 1763	mfan@adb.org

C. ADDITIONAL GEF PROJECT AGENCY CERTIFICATION (APPLICABLE ONLY TO NEWLY ACCREDITED GEF PROJECT AGENCIES)

For newly accredited GEF Project Agencies, please download and fill up the required [GEF Project Agency Certification of Ceiling Information Template](#) to be attached as an annex to the PIF.

¹⁰ GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, and SCCF