GEF-6 REQUEST FOR PROJECT ENDORSEMENT/APPROVAL

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: Building climate resilience of urban systems through Ecosystem-based Adaptation (EbA) in Latin America and the Caribbean.			
Country(ies):	El Salvador, Jamaica and Mexico	GEF Project ID:[1]	5681
GEF Agency(ies):	UNEP	GEF Agency Project ID:	01238
Other Executing Partner(s):	UNEP ROLAC, MARN, MWLECC and SEMARNAT	Submission Date: Third Resubmission Date:	April 7, 2016 August 30, 2016
GEF Focal Area (s):	Climate Change	Project Duration (Months)	48
Integrated Approach Pilot	IAP-Cities ☐ IAP-Commodities ☐ IAP-Food Security ☐	Corporate Program: SGP ☐	
Name of Parent Program	[if applicable]	Agency Fee ($)	570,000

A. FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES[2]

Focal Area Objectives/Programs	Focal Area Outcomes	Trust Fund	(in $) GEF Project Financing	(in $) Co-financing
CCA-1 (Component 2)	Outcome 1.1 Vulnerability of physical assets and natural systems reduced.	SCCF	4,570,256	26,886,000
CCA-2 (Component 3)	Outcome 2.1: Increased awareness of climate change impacts, vulnerability and adaptation	SCCF	756,856	826,000
CCA-2 (Component 1)	Outcome 2.3: Institutional and technical capacities and human skills strengthened to identify, prioritize, implement, monitor and evaluate adaptation strategies and measures	SCCF	672,888	2,022,000
	Total project costs		6,000,000	29,734,000

B. PROJECT DESCRIPTION SUMMARY

Project Objective: To reduce the vulnerability of communities living in three medium-sized Latin American and Caribbean cities to the effects of climate change through the integration of Ecosystem-based Adaptation (EbA) into urban planning in the medium- to long-term.

Project Components/ Programs	Financing Type[3]	Project Outcomes	Project Outputs	Trust Fund	(in $) GEF Project Financing	(in $) Confirmed Co-financing
Component 1. Enabling environment for mainstreaming EbA into medium- and long-term urban development planning.	TA	Outcome 1. Technical capacity of government stakeholders from urban development and natural resource management ministries to integrate EbA into planning, policies and regulations strengthened.	Output 1.1 Policy briefs developed to outline recommendations for revisions to policies, strategies and plans – including budget allocations – to integrate EbA into urban planning and management of natural resources.	SCCF	73,233	1,855,715
			Output 1.2 Technical guidelines on planning and implementing EbA in urban areas developed for relevant government stakeholders, private sector and	SCCF	60,500	

[1] Project ID number remains the same as the assigned PIF number.
[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.

			targeted communities.			
			Output 1.3 Training provided to local government authorities and relevant private sector stakeholders in San Salvador, Kingston and Xalapa on implementing urban EbA.	SCCF	235,950	
			Output 1.4 Strategies developed to upscale and sustain EbA interventions in El Salvador, Jamaica and Mexico.	SCCF	150,450	
Component 2. Demonstration of urban EbA interventions in selected cities to enhance climate-resilience.	TA	Outcome 2 Demonstration of EbA in San Salvador, Kingston and Xalapa to increase the capacity of urban and peri-urban communities to adapt to the effects of climate change.	Output 2.1 Assessments of climate change hazards, adaptation needs and scenario maps of resource availability produced for Kingston, Xalapa and San Salvador.	SCCF	280,100	25,533,334
			Output 2.2 Protocols for city-specific EbA interventions developed.	SCCF	146,749	
			Output 2.3 Relevant urban EbA interventions demonstrated in San Salvador, Kingston and Xalapa at the household, urban landscape and urban catchment scale using the developed EbA protocols[4].	SCCF	3,045,501	
			Output 2.4 Additional climate-resilient livelihoods from EbA promoted through training and demonstration in community spaces.	SCCF	945,150	
Component 3 Knowledge and awareness of urban EbA throughout the LAC region.	TA	Outcome 3 Knowledge and awareness of urban EbA interventions strengthened in El Salvador, Jamaica and Mexico, and throughout the LAC region.	Output 3.1 Communication strategies developed to collate and disseminate knowledge on urban EbA.	SCCF	83,000	714,285
			Output 3.2 Public awareness communication materials developed and shared with decision-makers, community members and identified stakeholders.	SCCF	220,000	
			Output 3.3 A long-term research programme established on the benefits and cost-effectiveness of urban EbA interventions in Kingston, Xalapa and San Salvador.	SCCF	146,000	
			Output 3.4 Educational toolkits detailing lessons learned and good EbA practices developed and shared with local, sub-national, national and regional authorities.	SCCF	85,700	

[4] Details on the proposed EbA interventions in El Salvador, Kingston and Xalapa can be found in Section A3 from p17 of this CEO endorsement.

			Output 3.5 Knowledge generated by the SCCF-financed project – including lessons learned – shared through web-based portals within the Global Adaptation Network, including REGATTA.	SCCF	69,400	
Component 4 M&E	TA	Monitoring and Evaluation		SCCF	178,000	0
			Subtotal		5,719,733	28,103,334
			Project Management Cost (PMC)[5]	SCCF	280,267	1,630,666
			Total project costs		6,000,000	29,734,000

C. CONFIRMED SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND BY TYPE

Please include evidence for co-financing for the project with this form.

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount ($)
Multilateral development bank	Ministry of Public Works (MOP), El Salvador	Grant	21,986,000
Multilateral Agency	Jamaica Social Investment Fund (JSIF)	Grant	4,000,000
Government of Mexico	CONAGUA	Grant	3,120,000
Multilateral agency	United Nations Environment Programme	Grant and In-Kind	628,000
Total Co-financing			29,734,000

D. TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES) AND THE PROGRAMMING OF FUNDS

GEF Agency	Trust Fund	Country Name/Global	Focal Area	Programming of Funds	(in $) GEF Project Financing (a)	Agency Fee a) (b)[2]	Total (c)=a+b
UNEP	SCCF	El Salvador	Climate Change	(select as applicable)	2,000,000	190,000	2,190,000
UNEP	SCCF	Jamaica	Climate Change	(select as applicable)	2,000,000	190,000	2,190,000
UNEP	SCCF	Mexico	Climate Change	(select as applicable)	2,000,000	190,000	2,190,000
(select)	(select)		(select)	(select as applicable)			0
Total Grant Resources					6,000,000	570,000	6,570,000

a) Refer to the Fee Policy for GEF Partner Agencies

[5] For GEF Project Financing up to $2 million, PMC could be up to10% 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.

E. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS[6]

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	*150 hectares*[7]
2. Sustainable land management in production systems (agriculture, rangelands, and forest landscapes)	120 million hectares under sustainable land management	*45,054 hectares*[8]
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;	*Number of freshwater basins*
	20% of globally over-exploited fisheries (by volume) moved to more sustainable levels	*Percent of fisheries, by volume*
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)	metric tons
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)	*metric tons*
	Reduction of 1000 tons of Mercury	*metric tons*
	Phase-out of 303.44 tons of ODP (HCFC)	*ODP tons*
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	*Number of Countries:*
	Functional environmental information systems are established to support decision-making in at least 10 countries	*Number of Countries:*

F. DOES THE PROJECT INCLUDE A "NON-GRANT" INSTRUMENT? No

(If non-grant instruments are used, provide an indicative calendar of expected reflows to your Agency and to the GEF/LDCF/SCCF Trust Fund) in Annex D.

PART II: PROJECT JUSTIFICATION

A. DESCRIBE ANY CHANGES IN ALIGNMENT WITH THE PROJECT DESIGN WITH THE ORIGINAL PIF[9]

Several changes have been made with regards to alignment of the project design in comparison to the original PIF. The list below summarises the most significant changes in terms of GEF Focal Areas, baseline projects, partner projects and the proposed project's outcomes/outputs.

- The PIF was aligned with three GEF-5 Focal Area objectives, namely CCA-1, CCA-2 and CCA-3. Since the PIF was developed, the GEF-6 Programming Strategy and associated results framework were adopted. The focal area

[6] Update the applicable indicators provided at PIF stage. 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.

[7] 150 ha of critical ecosystems restored in San Salvador.

[8] This includes: i) 44,000 ha of forest replanted in the Hope watershed, 2 hectares of wetland and 2.3 hectares of community area in Jamaica; and ii) 1,000 ha of sustainable agriculture in San Salvador.

[9] For questions A.1 –A.7 in Part II, if there are no changes since PIF, no need to respond, please enter "NA" after the respective question.

objectives of the project have therefore been revised in line with to the GEF-6 Results Framework of the LDCF and the SCCF[10]. The project is now aligned with objectives CCA-1: Outcome 1.1, CCA-2: Outcome 2.2 and Outcome 2.3.

- The Biodiversity Ecosystem Services Funds Programme (regional project) – as described in the PIF has been removed following consultations at the PPG phase.
- UNEP-ROLAC will contribute grant co-financing through the EUROCLIMA project, the GCF Readiness programme and REGATTA for a total amount of US$400,000 and in-kind co-financing of approximately 228,000 USD from senior members staff time, office space and communications.
- For all three countries and cities, the baseline projects have changed based on the selection of intervention implementation sites. In the PIF, the indicative amount of co-financing totalled US$21,910,000. The current amount of co-financing totals US$ 29,734,000.

(See Section A.1.2 for more information on the baseline projects).

Based on consultations undertaken during the PPG phase, minor changes have been made to the formulation of outcome 2 (outcome 1 and 3 remain the same) and all the outputs that were outlined in the PIF. These changes take into account the current priorities of the stakeholders as well as recent developments in each of the three countries. The table below outlines the changes made to the outcomes and outputs compared to the PIF.

Outcome as written in the PIF	Outcome at CEO endorsement	Justification
Outcome 2: Vulnerability of communities within pilot cities to climate change hazards reduced.	Outcome 2: Demonstration of EbA in San Salvador, Kingston and Xalapa to increase the capacity of urban and peri-urban communities to adapt to the effects of climate change.	The fundamental concept of this outcome remains the same (i.e. implementation of concrete EbA interventions in pilot countries). Recent reports and scientific literature[11] indicate that measuring a change in vulnerability over a period of a few years is not practical/feasible. The wording of the outcome was therefore changed to better reflect the nature of the work to be implemented under this outcome in terms of on-the-ground interventions. Consequently, the demonstration of EbA interventions has been made the focus of Outcome 2.

The following table details the revisions to outputs under Component 1.

Output as written in PIF	Output revised after PPG consultation	Justification
Output 1.1 Stocktaking and recommending revisions, with an emphasis on resource allocation, of relevant policies to integrate urban EbA at local and national scales.	Output 1.1 Policy briefs developed to outline recommendations for revisions to policies, strategies and plans – including budget allocations – to integrate EbA into urban planning and management of natural resources.	Although the underlying principle of this output remains the same, the wording was amended to more clearly describe the product/service to be delivered through this output. In particular, policy briefs will be disseminated to raise awareness on the revisions to policies, strategies and plans that will be proposed under this project.

[10] GEF/LDCF.SCCF.16/03/Rev.01.

[11] UNEP. 2013. PROVIA Guidance on Assessing Vulnerability, Impacts and Adaptation to Climate Change.

Output 1.2 A framework for sharing technical information on EbA to promote government, private sector and community action to implement EbA interventions in urban areas.	Output 1.2 Technical guidelines on planning and implementing EbA in urban areas developed for relevant government stakeholders, private sector and targeted communities.	Frameworks on climate change adaptation are already established in El Salvador, Jamaica and Mexico (e.g. through the national strategies on climate change for El Salvador and Jamaica). However, technical guidelines on how to move from policy to implementation have not yet been developed for these countries. This output has therefore been amended to build on these existing frameworks by developing technical guidelines on urban EbA for policy- and decision-makers. The existing frameworks will be used to share technical information on urban EbA with government, the private sector and local communities.
Output 1.3 Training provided to local and sub-national government in pilot cities on the effects of climate change and urban EbA.	Output 1.3 Training provided to local government authorities and relevant private sector stakeholders in San Salvador, Kingston and Xalapa on implementing urban EbA.	Government authorities in El Salvador, Jamaica and Mexico already have some awareness on the effects of climate change. However, there is limited knowledge on the implementation of an EbA approach to adapt to climate change. This output has been amended to better reflect the need for specific knowledge on EbA.
Output 1.4 Strategy to upscale and sustain EbA interventions through strengthening of local financial mechanisms to fund EbA actions.	Output 1.4: Strategies developed to upscale and sustain EbA interventions in El Salvador, Jamaica and Mexico.	This wording was slightly refined to reflect the fact that a strategy for sustaining the implementation of EbA will be developed for each country in which the project is operating.
Output 1.5 Roadmaps for medium- and long-term urban development in the three pilot countries that includes EbA considerations and interventions.	This output has been merged with Output 1.4.	Following advice from government stakeholders that were consulted during the PPG phase, this Output – development of roadmaps – was included under Output 1.4 as an activity.

The following table details the revisions made to outputs under Component 2. Output 2.3 remained the same.

Output as written in PIF	**Output revised after PPG consultation**	**Justification**
Output 2.1. Assessments of climate change hazards and adaptation needs in each pilot city, which will guide EbA interventions	Output 2.1. Assessments of climate change hazards, adaptation needs and scenario maps of resource availability produced for each pilot city.	Outputs 2.1 and 2.2 were combined as the production of scenario maps can be considered as an activity under this output. In addition, the wording was changed to emphasise the benefit of the product from the output.
Output 2.2. Scenario mapping of resource availability in relation to expected population growth, economic activities, climate change, development plans, disaster risk, urban catchment condition and land-use change.	This output has been merged with Output 2.1.	See above.
Output 2.4. Relevant urban EbA interventions implemented within pilot cities at household, urban landscape and urban catchment level (upstream and downstream from the pilot cities), which	Output 2.3. Relevant urban EbA interventions demonstrated in San Salvador, Kingston and Xalapa at the household, urban landscape and urban catchment scale using the developed EbA	The wording was revised slightly to make the output more focused.

increase climate resilience, the disaster preparedness and adaptive capacity of urban communities to climate change.	protocols.	
Output 2.5. Alternative livelihoods based on city-specific urban EbA interventions developed and promoted to reduce climate vulnerability.	Output 2.4. Additional climate-resilient livelihoods from EbA promoted through training and demonstration in community spaces.	The wording was changed because the livelihoods that will be developed through the project will not necessarily be alternatives to the current livelihoods of local communities i.e. livelihoods will be developed in addition to the current livelihoods. As a result of the new wording, there is also now a greater emphasis on the product/service from the output.

The following table details the revisions made to outputs under Component 3. Outputs 3.1, 3.2 and 3.3 remained the same.

Output as written in the PIF	**Output revised after PPG consultation**	**Justification**
Output 3.4. Reports, policy briefs and toolkits detailing lessons learned and good EbA practices disseminated to local, sub-national, national and regional authorities.	Output 3.4. Educational toolkits detailing lessons learned and good EbA practices developed and shared with local, sub-national, national and regional authorities.	The output was changed to educational toolkits based on recommendations from PPG consultations regarding the most effective information-sharing tools for the LAC region. The focus of the output remains the same, namely to share lessons learned and information on best practice EbA. The scope of the output has, however, increased to include schoolchildren from El Salvador, Jamaica and Mexico as target beneficiaries, as well as government representatives involved in education. The policy briefs and reports that target local, sub-national, national and regional authorities were integrated into Component 1.
Output 3.5. Knowledge generated by the SCCF project, including lessons learned, available through the REGATTA network.	Output 3.5. Knowledge generated by the SCCF-financed project – including lessons learned – shared through web-based portals within the Global Adaptation Network, including REGATTA.	This output was reworded to be more specific.

Monitoring and Evaluation of project outcomes and outputs was separated into a separate component (Component 4) for ease of reference

A.1. *Project Description*.

1) The global environmental and/or adaptation problems, root causes and barriers that need to be addressed.

The Latin America and Caribbean (LAC) region is the second most urbanised region in the world[12], with ~80% of the population living in cities. Within the next two decades, this proportion is projected to reach ~85%, thereby ranking the cities of the LAC region among the fastest-growing in the developing world[13]. The rate of urban expansion is faster in

[12] North America is the most urbanised region in the world with ~82% of the population living in cities.
[13] United Nations, Department of Economic and Social Affairs, Population Division. 2014. World Urbanization Prospects: The 2014 Revision, Highlights. Available online at: http://esa.un.org/unpd/wup/Highlights/WUP2014-Highlights.pdf. Accessed on 4 March 2015.

small- and medium-sized cities relative to mega cities[14]. In the medium-sized cities of San Salvador, Kingston and Xalapa – in El Salvador, Jamaica and Mexico respectively – rapid urbanisation occurs with limited urban planning. This has resulted in several socio-economic problems, including: i) rapid and unplanned expansion of housing into areas that are vulnerable to natural disasters or otherwise unsuitable for settlement; ii) inadequate access to public services such as waste management, sanitation and refuse collection; and iii) unsustainable management and use of natural resources, particularly water.

In addition to the problems described above, the rapid and unplanned expansion of urban areas in the LAC region has resulted in the degradation of ecosystems in wetlands, green spaces, agricultural land and forests located within and adjacent to urbanising areas. The effects of degradation of these ecosystems include: i) increased soil erosion as a result of reduced vegetation cover; ii) reduced infiltration of water in degraded watersheds and catchment areas resulting in reduced recharge of groundwater and an increased incidence of flooding; and iii) decreased water quality as a result of increased pollution and deposition of sediment in rivers and other water ways. The degradation of urban water bodies such as wetlands and rivers is further exacerbated by the inadequate management of urban waste, which results in the blockage of waterways and contributes to urban flooding as well as the incidence of vector- and water-borne diseases. The abovementioned effects of ecosystem degradation are a threat to the lives and well-being of urban communities in the LAC region through direct impacts of hazards such as flooding. Ecosystem degradation also decreases communities' food and water security.

The goods and services generated by functional urban ecosystems have the potential to mitigate these threats by providing multiple benefits to urban communities. Such benefits include the provision of natural resources such as food and water as well as regulatory functions such as flood mitigation, water filtration and waste decomposition. Furthermore, urban ecosystems provide protective, recreational and cultural benefits while improving the aesthetics of cities. The multiple economic and protective benefits of functioning urban ecosystems are not, however, being realised in the urban areas of the LAC region at present.

The negative effects of environmental degradation and the consequent threats to the well-being of urban communities in the LAC region are exacerbated by climate change and climate variability[15,16]. Effects of climate change in the LAC region that are already being widely observed include *inter alia*: i) increased variability in the timing and mean annual volume of rainfall received; ii) increased mean annual temperature and number of 'hot' days per year; iii) increased frequency and severity of climate-related hazards such as droughts, floods and storms; and iv) increased frequency of extreme events such as hurricanes. Climate change models for the region predict that the abovementioned effects of climate change are likely to increase in severity in the future, thereby further exacerbating the existing socio-economic and environmental challenges in urban areas in the LAC region. In particular, regional climate change models predict an increase in mean annual temperature and increased rainfall variability, which will result in an increased frequency and intensity of floods and droughts[17]. Under future climatic conditions, urban communities in the LAC are consequently predicted to experience *inter alia*: i) reduced quality and availability of water for irrigation and domestic use; ii) decreased food security as a result of reduced agricultural productivity; iii) increased economic losses, infrastructural damage and loss of life as a result of climate-related disasters such as floods and landslides; and iv) greater risks to health from heat stress as well as an increased prevalence of vector- and water-borne diseases.

[14] Between 1990 and 2014, the global population living in medium-sized cities increased by~50% compared with ~34% for mega cities over the same period. By 2030, the current population of medium-sized cities is expected to increase by ~36% to 1.1 billion.

[15] Magrin, G.O., J.A. Marengo, J.-P. Boulanger, et al. 2014. Central and South America. In: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA. 1499-1566.

[16] IPCC Fourth Assessment Report: Climate Change 2007. Available online at: http://www.ipcc.ch/publications_and_data/ar4/wg2/en/ch13s13-2-2.html.

[17] Magrin, G.O., J.A. Marengo, J.-P. Boulanger, et al. 2014. Central and South America. Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA. 1499–1566.

To address the vulnerability of urban communities to the effects of climate change, governments in the LAC region need to develop and implement cost-effective, low-risk solutions for integrating climate change adaptation into social and economic development plans for individual cities. Ecosystem-based Adaptation (EbA) is a cost-effective approach to reducing the vulnerability of urban and peri-urban communities to climate change by protecting, maintaining and rehabilitating priority ecosystems[18] in urban areas to act as physical buffers against climate change-related hazards while generating multiple social and environmental co-benefits. Importantly, EbA has been shown to require comparatively small investments relative to the long-term social, economic and environmental benefits generated[19]. However, there is currently limited awareness and technical capacity within national and municipal governments to identify and integrate EbA approaches into development planning in the LAC region. In particular, the government authorities and institutions responsible for urban planning, management and development in LAC cities are largely unaware of the benefits of implementing an ecosystem-based approach to adaptation. Additionally, communities living in urban and peri-urban areas of the LAC region have limited knowledge, awareness and technical capacity to implement this type of approach.

The **problem** that the SCCF-financed project will address is that urban communities in the LAC region are vulnerable to the present and future effects of climate change – particularly floods and droughts – that exacerbate environmental pressures. Compounding this problem is the fact that government authorities and urban communities currently have limited technical capacity and financial resources to adapt to the negative effects of climate change. There is consequently an urgent need to implement and mainstream adaptation interventions that: i) are cost-effective; ii) reduce exposure to climate-induced natural disasters; iii) support investments into urban infrastructure that will increase the climate change resilience of cities; iv) reduce the vulnerability of urban communities; and v) improve resilience of ecosystems and delivery of their services.

The **preferred solution** is to reduce the vulnerability of urban communities in Latin American to climate change by catalysing a region-wide integration of EbA into urban planning. However, there are several **barriers** to achieving this preferred solution. These barriers include limited: i) institutional capacity of government authorities to integrate EbA into urban development planning; ii) technical capacity of government authorities and urban communities to plan and implement urban EbA; iii) coordination between and within government departments and institutions to implement and upscale urban EbA interventions; iv) local proof of concept and scientific research to demonstrate the benefits of urban EbA to policy- and decision-makers in the LAC region; v) public awareness of the benefits of urban EbA approaches; and vi) financial resources to implement urban EbA activities as part of municipal planning and budgets.

The SCCF-financed project will contribute to overcoming the barriers described in the paragraph above by: i) strengthening the institutional capacity of government authorities in three pilot cities in the LAC region – San Salvador, Kingston and Xalapa – to integrate EbA into existing environmental and urban development plans; ii) strengthening the technical capacity of government authorities and targeted urban communities in the three pilot cities to identify, design and implement locally-appropriate EbA interventions; iii) demonstrating site-specific urban EbA interventions to reduce the vulnerability of households in the three pilot cities to climate change; iv) increasing public awareness within the three pilot cities on the effects of climate change and the benefits of EbA to adapt to these effects; and v) engaging with representatives of the private sector to catalyse funding for sustaining, replicating and upscaling of successful EbA interventions across the three pilot countries and the LAC region in general.

2) The baseline scenario and associated baseline projects

Under the baseline scenario, communities in San Salvador, Kingston and Xalapa will continue to experience economic, social and environmental problems that will be further exacerbated by the effects of climate change[20]. Inadequate planning for urban development will continue to result in poor, vulnerable communities having to live in marginal areas such as flood-risk zones. Furthermore, unsustainable land-use practices such as the clear-cutting of trees and pollution

[18]Jones, H.P., Hole, D.G. & Zavaleta, E.S. 2012. Harnessing nature to help people adapt to climate change. *Nature Climate Change* 2: 504–509.
[19]UNEP/STREP 2012. A comparative analysis of ecosystem-based adaptation and engineering options for Lami Town, Fiji: Synthesis Report.
[20] Such problems include: i) reduced household income; and ii) pollution from limited waste and water management.

of water resources will continue to degrade the urban and peri-urban ecosystems within these cities. This ecosystem degradation will in turn continue to compromise the provision of ecosystem goods and services that underpin the well-being of urban communities.

At present, several ongoing initiatives are being implemented to address socio-economic and environmental challenges in these cities. For example, the interventions of the Inter-American Development Bank (IDB) project "Reducing Vulnerability in Urban Settlements" in San Salvador include construction of water detention basins and repair of culverts to reduce the risk of flooding. Similarly, in Kingston, the ongoing "Integrated Community Development Project" (ICDP) includes a focus on improving storm water drainage and promoting recycling and waste collection to reduce flooding. In Xalapa, the interventions of the project "Reducing Vulnerability through Management of Rain Water in the Rio Carneros Watershed" include improving water quality by building water treatment plants and improving drainage systems to reduce rainwater run-off and consequent flooding. However, the current and predicted effects of climate change – including *inter alia* increased temperature, increased variability and intensity of rainfall, and increased frequency of resultant hazards such as flooding and droughts – are expected to reduce the efficacy of ongoing initiatives to address the socio-economic and environmental challenges in San Salvador, Kingston and Xalapa. Furthermore, within the institutions responsible for planning and implementing such initiatives, the technical capacity to plan and implement EbA as a cost-effective and low-risk approach of adapting to climate change is likely to remain limited. The baseline scenario as it relates to each component of the SCCF-financed project and the associated baseline projects is further described below.

Component 1. Enabling environment for mainstreaming EbA into medium- and long-term urban development planning.

In the LAC region, several past and ongoing initiatives[21] are providing training to increase the capacity of local and national governments to integrate climate change considerations into development planning. As a result, several ministries in El Salvador, Jamaica and Mexico will continue to develop sectoral strategies and plans that include considerations related to planning for climate change. Examples of such plans and strategies include *inter alia:* i) the National Climate Change Strategy (ENCC) in El Salvador; ii) Vision 2030 – National Development Plan in Jamaica; and iii) the Xalapa Municipal Development Plan in Mexico. However, the training currently provided does not include EbA as an adaptation option. Consequently, there will continue to be limited awareness amongst government staff[22] on the benefits of integrating EbA into policies, strategies and plans as a cost-effective and low-risk approach to achieving development objectives under conditions of climate change. In addition to integrating climate change into sectoral plans, national budgets and funding frameworks[23] have been established to support the achievement of national targets for climate change adaptation. However, in the absence of technical knowledge and an evidence base on the benefits of EbA at a national scale, the activities supported by the abovementioned funding frameworks will continue to exclude the adoption of EbA.

A number of cross-sectoral committees have been established in the three countries to serve as national platforms for the development of policies, strategies and activities to adapt to the effects of climate change. These committees include *inter alia* the Urban Risk Management Committee in El Salvador, the National Climate Change Advisory Committee in Jamaica and the Working Group on Adaptation in Mexico. However, the policies generated by these national-level committees on adaptation to climate change do not currently promote EbA as an effective approach to adaptation. In the absence of national-level discussions and awareness-raising on the benefits of the EbA approach, it is likely that the government officials responsible for reviewing and drafting the policies and laws related to urban planning and environmental management will continue to have limited awareness of the benefits of EbA. Under this baseline scenario,

[21] These programmes include *inter alia:* UN-HABITAT Cities and Climate Change Initiative (CCCI), UNISDR Making Cities Resilient Campaign and CARICOM's Regional Framework for Achieving Development Resilient to Climate Change.

[22] Particularly staff from the Ministry of Environment and Natural Resources (MARN) and Ministry of Planning (MOP; San Salvador), Ministry of Water, Land, Environment and Climate Change (MWLECC; Kingston), and Ministry of Environment and Natural Resources (SEMARNAT) and National Water Commission (CONAGUA; Xalapa).

[23] Such as the Climate Finance Committee in El Salvador, the Finance and Project Committee under the National Climate Change Advisory Committee in Jamaica, and the Climate Change Fund in Mexico.

the planning and implementation of initiatives that focus on socio-economic development and environmental management in the LAC region will therefore continue without consideration of EbA approaches.

Component 2: Demonstration of urban EbA interventions in selected cities to enhance climate-resilience.

Governments in the LAC region are currently focussed on addressing environmental and socio-economic problems to improve the well-being of urban communities. In particular, the governments of El Salvador, Jamaica and Mexico are implementing initiatives that focus on water conservation, environmental protection and pollution control[24]. However, these initiatives do not explicitly include consideration of the effects of climate change. Furthermore, none of these initiatives include explicit consideration of EbA as a cost-effective approach to achieving socio-economic development under future climate conditions. Several ongoing initiatives in San Salvador, Kingston and Xalapa will therefore continue to invest in infrastructure – such as basins and drains – for management of urban storm water without investments in EbA as a measure for increasing the climate-resilience of the infrastructure. For example, increasing vegetation cover adjacent to hard infrastructure will continue to be absent as a means of controlling soil erosion and reducing the deposition of silt into water management facilities under conditions of more intense rainfall. It is therefore likely that the efficacy and long-term sustainability of the abovementioned initiatives will continue to be undermined by the current and future effects of climate change (as summarised in Table 1).

Table 1. The predicted future effects of climate change in San Salvador, Kingston and Xalapa[25].

Climate change risk	San Salvador	Kingston	Xalapa
Increased frequency and intensity of flooding	X	X	X
Increased duration of droughts	X	X	X
Increased occurrence of natural disasters, particularly hurricanes	X	X	X
Increased frequency of tropical storms from the Pacific	X		
Sea-level Rise (SLR) and storm surges		X	

Current initiatives in San Salvador, Kingston and Xalapa focus on the rehabilitation of vegetation in and around urban areas to improve the goods and services provided by these ecosystems to communities, but without considering the predicted effects of climate change. Such initiatives include activities conducted by the Forestry Department (FD) and National Environment and Planning Agency (NEPA) in Kingston. As a result, these initiatives will continue to select plant species that are not tolerant to the temperature increase and rainfall variability that is predicted for Jamaica (see Section 2.3 of the Project Document). Similarly, ongoing restoration initiatives in El Salvador – including reforestation under the National Ecosystem and Landscapes Restoration Programme and the planting of green barriers by the NGO PROCOMES – will continue to be implemented without prioritising tree species that will tolerate the increase in rainfall variability expected for this country in the future. Consequently, the negative effects of climate change will continue to undermine the efficacy of these restoration initiatives. Similarly, a number of ongoing initiatives focussing on hard infrastructure are currently being implemented in San Salvador, Kingston and Xalapa to reduce the risk of natural disasters such as flooding and hurricanes but without consideration of EbA as an approach to providing natural buffers against such climate-related hazards. Under the baseline scenario, initiatives that focus on addressing environmental and socio-economic problems will therefore continue to gain no benefit from EbA as a cost-effective approach to achieving development objectives under conditions of climate change.

Component 3. Knowledge and awareness of urban EbA throughout the LAC region.

A number of aligned programmes and initiatives in the LAC region – such as the Climate Change Adaptation and Disaster Risk Reduction Project [26] – will continue to focus on the development and implementation of interventions to

[24] UN. 2012. Water and a Green Economy in Latin America and the Caribbean (LAC). UNECLAC Natural Resources and Infrastructure Division and the UN-Water Decade Programme on Advocacy and Communication (UNW-DPAC).

[25] Information from: i) IPCC 4th Assessment Report. 2007; ii) El Salvador, Second National Communication, 2013; iii) State of the Jamaican Climate. 2012; and iv) Climatological Atlas of tropical cyclones in Mexico. Cenapred. IMTA 2002.

[26] This project was implemented in the period 2011-2013 and executed by the EU and UNEP.

adapt to climate change. These programmes will also continue to focus on increasing the awareness of the general public on the effects of climate change and potential adaptation interventions. However, they will not actively promote EbA as a cost-effective and low-risk approach to adaptation. This is because of limited awareness and technical knowledge on EbA amongst government stakeholders and project planners, and few opportunities for sharing relevant information and lessons learned from past initiatives. As a result, municipal authorities and the general public in El Salvador, Jamaica and Mexico will continue to have little knowledge of the potential benefits of EbA in an urban environment. Under the business-as-usual scenario, these stakeholders will consequently remain with limited understanding of the potential applications of EbA across the LAC region.

Research programmes – including those offered at the University of El Salvador, the University of West Indies in Kingston and at the University of Veracruz, Mexico – currently offer programmes on climate change. Furthermore, a number of institutions – such as the Climate Studies Group, Mona in Kingston and the Institute of Ecology in Xalapa – promote research on EbA. However, current research on EbA is focussed on interventions suitable for rural rather than urban areas. Without research on urban EbA, integration of EbA into urban development planning in the LAC region will continue to remain limited and ineffective.

Baseline projects

The SCCF-financed project will build on several projects that are currently being implemented in San Salvador, Kingston and Xalapa to address problems related to social and economic development in cities. In particular, these problems include: i) limited availability and poor quality of water for domestic use and urban agriculture; ii) inadequate infrastructure for household sanitation; and iii) vulnerability of urban communities to floods. A brief description of these projects is provided below. Please refer to Section 2.6 in the Project Document for more information.

National Baseline Projects

El Salvador

San Salvador – Reducción de Vulnerabilidad en Asentamientos Urbanos Precarios (AUP) del AMSS (2013–2018). This US$50 million project – of which US$21,689,000 is co-financing for the SCCF-financed project – is a MOP project financed by the IDB. The objective of the project is to reduce the vulnerability of urban communities in AUP to floods and landslides while also improving their livelihoods. This objective will be achieved through three components focussed on: i) reducing the vulnerability of informal neighbourhoods to flooding through the construction and maintenance of infrastructure such as basins and culverts in the Metropolitan Area of San Salvador (AMSS); ii) improving basic sanitation infrastructure in informal neighbourhoods in the AMSS through risk mitigation works and resettlement; and iii) strengthening the operational management of the government.

The predicted effects of climate change – including increased intensity of rainfall events as well as increased duration and severity of dry periods – will lead to greater frequency and intensity of climate-related disasters such as flooding, landslides and droughts. These climate-related disasters will place additional pressure on the infrastructure that is being constructed by the AUP project to protect urban communities. This infrastructure will consequently be at increased risk of damage and will require costly maintenance at more frequent intervals under future climatic conditions.

Through the SCCF-financed project, urban EbA measures will be implemented to complement the infrastructure that is being constructed by the AUP project. In particular, the project will build on this initiative by: i) constructing infiltration ditches on the slope of the San Salvador volcano to increase water infiltration on these slopes and to reduce runoff (Output 2.3); ii) developing a watershed management plan for Arenal-Monserrat in alignment with the drainage master plan for this area; iii) implementing climate-resilient restoration interventions at watershed scale to reduce the risk of flooding and landslides (Output 2.3); iv) creating infiltration wells[27] to complement existing initiatives that increase the

[27] Infiltration wells are shallow wells which draw water into or from a natural aquifer outside of a riverbed, but which have a partial lining. These wells can be used to either drain a catchment area or recharge groundwater, especially where recharge rate of the aquifer is low.

water infiltration rate to reduce the risk of flooding during periods of intense rainfall and overcome water shortages during periods of drought (under Output 2.3); and v) providing training to representatives of the MOP on the benefits of EbA for managing climate change risks. The training provided under Outputs 1.3, 2.3 and 2.4 will increase technical and institutional capacity of government authorities and urban communities in San Salvador, Kingston and Xalapa to plan and implement urban EbA interventions and improve climate-resilient livelihoods. The government authorities involved include the MARN and MOPTVDU in El Salvador, the MWLECC in Jamaica and INECC as well as the municipality of Xalapa in Mexico.

Jamaica

Jamaica Integrated Community Development Project (ICDP) (2014–2020). This US$42 million project – of which US$4 million is co-financing for the SCCF-financed project – is funded by the World Bank and executed by the Jamaica Social Investment Fund (JSIF). The main objective of the ICDP is to improve access to basic urban infrastructure and services, and improve community safety in economically vulnerable and socially volatile urban communities of Jamaica. This objective will be achieved through four main components focussed on: i) enhancing public safety and alternative livelihoods; ii) strengthening public awareness sanitation through a skills and knowledge transfer programme; iii) strengthening the capacity of government to manage urban environments and communities; and iv) improving project administration.

The predicted increase in rainfall intensity as a result of climate change will increase the risk of flooding in Kingston. Such flooding is expected to damage infrastructure – including roads and storm water drains – that is being constructed or repaired by the ICDP project. These climate-related damages will undermine the objective of the ICDP project to improve the access of local communities to basic urban infrastructure and services. The activities of the SCCF-financed project will increase the climate-resilience of the ICDP project against flooding by restoring vegetation in watersheds, thereby increasing water infiltration and reducing rainwater runoff during periods of intense rainfall. As a result, the risk of flash floods in Kingston will decrease. To ensure the resilience of the interventions to the prolonged droughts predicted by climate change models, drought-resilient plant species will be used for the restoration. As a result of the deeper root system and soil-binding characteristics of these plant species, the restored areas will also be less prone to erosion and landslides during periods of intense rainfall. Additionally, the SCCF-financed project will provide direct benefits for one of the target communities of the ICDP by demonstrating climate-resilient livelihoods and the role of solid waste management to reduce blockages in waterways. In so doing, the incidence of floods and water-borne disease will be decreased. Within Component 1 of the SCCF-financed project, the capacity of government stakeholders within the ICDP – including MWLECC and the Ministry of Transport, Works and Housing – will be strengthened to plan and implement EbA as a cost-effective approach; this will contribute to the overall objective of the ICDP to reduce the vulnerability of local communities.

Mexico

Reducción de Vulnerabilidad por gestión de aguas pluviales en la Cuenca del Rio Carneros, AMX: Proyecto Fernando Gutiérrez Barrios (FGB). (Phase I: 2015–2017, Phase II: 2018 onwards). In collaboration with the government of the state of Veracruz and the Ministry of Environment and Natural Resources (SEMARNAT), this project is funded by the National Water Commission (CONAGUA) on potable water and the Xalapa Municipality. Phase I of the FGB project has a budget of US$1.3 million and will end in 2017. Phase II of the project will commence in 2018 with the financial support of the Municipality of Xalapa and additional resources from CONAGUA. The total amount of co-financing committed to the SCCF project by the FGB project is US$3,120,000 over the period of 2016–2020. The main objectives of this project are to: i) improve sanitation infrastructure in six neighbourhoods; ii) improve water treatment in PTAR II; and iii) reduce vulnerability of local communities to floods by improving drainage systems. The project aims to benefit 15,000 people in Perseverancia, Santa Lucia and Unidad y Trabajo, D.S. San Bruno, Montevideo, 24 de Abril, and San Andrés Tlalnehuayoc.

Over the past few decades, unplanned expansion of urban areas of Xalapa has resulted in clearing of forests and the inadequate management of its waterways including wetlands, rivers and storm-water drains. For example, the disposal

of solid waste into these waterways obstructs the flow of water and results in flooding. In addition, forests, riparian corridors and wetlands have been cleared for agriculture and urban infrastructure. As a result, these ecosystems no longer provide services such as the regulation of water flow. This has resulted in an increased frequency and intensity of flooding in the city, particularly under conditions of more intense rainfall events. The activities of the SCCF-financed project will increase the resilience of the FGB project to climate-related increases in frequency and intensity of flooding by restoring cloud forests and riparian corridors, establishing an artificial wetland and constructing permeable pavements. As a result, infiltration of rainwater into the ground will be improved and the risk of flash floods as well as consequent damage to drainage and other infrastructure being constructed by the FGB project will be reduced. In addition, increased infiltration of rainwater into the ground will recharge aquifers, improving the water security of urban communities during periods of drought.

Regional projects providing co-financing

The Regional Gateway for Technology Transfer and Climate Change Action for Latin America and the Caribbean (REGATTA). REGATTA is funded by the government of Spain and will be implemented until December 2016. A total of US$250,000 will be used as parallel co-financing for the SCCF-financed project. This co-financing pertains to REGATTA's development of the knowledge-sharing platforms and communities of practice, which are expected to continue operating beyond the duration of the SCCF-financed project. Aside from helping countries to meet their technology requirements for low carbon and climate-resilient development, REGATTA aims to contribute to the implementation of the Climate Technology Centre and Network (CTCN) in the region. This regional framework is supporting the mainstreaming of climate change adaptation into National Development Plans (NDPs). Furthermore, close collaboration between knowledge centres, governments and experts has been promoted to undertake vulnerability assessments and identify relevant adaptation strategies. This type of dialogue is crucial for the National Adaptation Plan (NAP) process in participating countries. The knowledge-sharing component of REGATTA involves three sub-regional ("Andes", "MesoAmerica" and "Southern Cone and Gran Chaco") and two thematic ("Health" and "EbA") web-based communities of practice for climate change adaptation. Under the SCCF-financed project, UNEP will support countries in the LAC region to strengthen capacity, share knowledge and pilot experiences on technologies for climate change adaptation and mitigation. The SCCF-financed project will collaborate closely with REGATTA to: i) strengthen the institutional capacity of government authorities under Component 1; ii) demonstrate technologies for climate change adaptation by implementing urban EbA interventions at three scales across three pilot cities under Component 2; and iii) share knowledge using the communication strategy and existing knowledge platforms, including the Global Adaptation Network, to disseminate the preliminary results of the EbA interventions under Component 3.

The Green Climate Fund (GCF) Readiness Programme is funded by the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB), UNEP, the United Nations Development Programme (UNDP) and the World Resources Institute (WRI). In El Salvador, the programme is jointly implemented by UNEP and UNDP. A budget of US$620,000 has been allocated for UNEP activities of which US$100,000 will be used as co-financing for the SCCF-financed project. As the new operating entity of the UNFCCC's financial mechanism, access to the GCF will require strong capacity to plan and implement adaptation interventions by governments and other actors as they prepare for scaled-up financing of adaptation and mitigation measures. The GCF Readiness Programme is currently supporting developing countries to effectively and efficiently access, manage, deploy and monitor climate financing. In six pilot countries[28] – including El Salvador and Colombia – partner institutions will: i) offer needs-oriented capacity building and support to enable these countries to directly or indirectly access the GCF; ii) help develop investment roadmaps based on national climate change strategies, plans and policies, including through the active involvement of the private sector; and iii) assist in setting up in-country monitoring and tracking systems for climate finance and its effectiveness. The lessons learned will be shared with the GCF Board and Secretariat as well as other initiatives dedicated to enhancing readiness for climate finance.

[28] These six countries include: Colombia, El Salvador, Benin, Ghana, Fiji and Nepal.

In El Salvador, the objectives of the GCF Readiness Programme are to: i) improve institutional capacities to manage climate finance at different government levels, including the capacity to design and implement the institutional arrangements for the National Implementation Entity (NIE); ii) improve capabilities of Small- and Medium-Sized Enterprises (SMEs), micro-enterprises, and executing entities to design projects; iii) enhance access and management of climate finance to increase the efficiency of project implementation and yield greater environmental and social benefits; and iv) build the capacity of government authorities to produce a project portfolio for climate finance with the support of the Inter-Institutional Committee for Climate Finance. The SCCF-financed project will take lessons learned from the GCF Readiness Programme in El Salvador regarding engagement with the private sector to finance initiatives to adapt to climate change. In addition, the project will build on the capacity of the government authorities to produce project portfolios for climate finance and the development of sustainable financing strategies as part of the upscaling strategy for EbA under Output 1.4.

The **EUROCLIMA** programme is a regional partnership between the European Union and Latin America focused on climate change. The programme will run until 2016 and has a total budget of €17.5 million. The objective of the programme is to improve the knowledge of decision-makers and scientists in Latin America on the effects of climate change to strengthen sustainable development strategies. Specifically, the programme aims to facilitate the integration of climate change mitigation and adaptation into national and (sub-) regional public development policies and plans in Latin America. The programme is active in *inter alia* El Salvador and Mexico. Under Component 1, the SCCF-financed project will build on the activities undertaken by the programme to integrate EbA into the national and local development policies and plans. UNEP-ROLAC is implementing a component of EUROCLIMA, promoting climate legislation in main LAC countries (financing of US$1,187,500). Strong synergies with this initiative exist at the legislation level to include urban EbA guidelines as part of the adaptation package. A technical study will be performed on urban sustainability with a focus on transport, but with a possibility to include EbA.

3) The proposed alternative scenario, GEF focal area[29] strategies, with a brief description of expected outcomes and components of the project

The vulnerability to the current and predicted effects of climate change of urban communities in San Salvador, Kingston and Xalapa will continue to increase in the future. To address this climate-related vulnerability, the SCCF-financed project will promote to government and local communities in these cities, the use of an EbA approach to adaptation. This will be achieved by implementing activities that will build on and climate-proof the baseline projects described in Section A2. National and local stakeholders will be trained on implementing EbA as a cost-effective and sustainable means to adapt to climate change. By demonstrating the EbA approach in the pilot cities of San Salvador, Kingston and Xalapa, the functioning of urban and peri-urban ecosystems that underpin the well-being of communities living in these cities will be enhanced under conditions of climate change. It is envisaged that successful demonstration of the EbA approach in the three pilot cities will promote the replication of EbA interventions in other cities in the LAC region. The upscaling of EbA across El Salvador, Jamaica and Mexico will be further promoted by proposing revisions to policies and plans for climate-vulnerable sectors such as ecosystem management, urban planning and water. Additionally, awareness of EbA and access to scientific research on EbA will be improved. The proposed alternative scenario – including the expected outcomes, outputs and activities of the SCCF-financed project – is described below.

Component 1: Enabling environment for mainstreaming EbA into medium- and long-term urban development planning.

Outcome 1: Technical capacity of government stakeholders from urban development and natural resource management ministries to integrate EbA into planning, policies and regulations strengthened.

SCCF: US$520,133

[29] 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.

Co-financing: US$ 1,855,715

Adaptation alternative
The activities under this outcome will be implemented in El Salvador, Jamaica and Mexico to create an enabling environment that facilitates the integration of EbA into relevant policies. This will be achieved by developing: i) policy briefs on proposed revisions to policies and plans related to urban development and land-use planning in San Salvador, Kingston and Xalapa; ii) technical guidelines for policy- and decision-makers in these pilot countries that detail how to move from policy to the implementation of urban EbA; and iii) a strategy to upscale and sustain EbA interventions in each of the pilot countries, particularly through strengthening local financial mechanisms to fund urban EbA interventions in the future. Existing cross-sectoral committees will be involved – through participation in meetings and workshops – to facilitate the mainstreaming of an EbA approach across the public and private sectors. These committees will include the Urban Risk Management Committee (CGRU) in El Salvador, the Climate Change Advisory Committee in Jamaica and the Inter-ministerial Working Group on Adaptation (GT-Adapt) –part of the Inter-Ministerial Commission on Climate Change (CICC) – in Mexico. In addition, technical guidelines will be developed in collaboration with these stakeholders to support the move from policy to implementation. These guidelines will consider and promote the use of innovative approaches for adaptation. Examples of these include *inter alia* closed loop systems for ecological sanitation, biomimicry[30] for infrastructure design, the broader pathways approach[31] and the systemic modelling approach[32]. To strengthen their technical capacity, national and local government authorities – including *inter alia* the MARN, MOP, MWLECC, JSIF, SEMARNAT, SEDATU and the municipality of Xalapa – will be trained on using the policy briefs and technical guidelines developed through the project.

This component will build on existing regional networks, including *inter alia:* i) REGATTA; ii) C40 Cities; and iii) the Caribbean Community Climate Change Centre (CCCCC). In each of the three pilot cities, the activities under Outcome 1 will build on the following national frameworks: i) the Climate Change Policy Framework and Action Plan in Jamaica; and ii) the National Strategy on Climate Change (ENCC) in both El Salvador and Mexico. In addition, lessons learned from other adaptation projects and manuals on best practices based on the implementation of EbA interventions under Outcome 2 will inform the development of an upscaling strategy.

Output 1.1 Policy briefs developed to outline recommendations for revisions to policies, strategies and plans – including budget allocations – to integrate EbA into urban planning and management of natural resources.

Activities to be implemented under Output 1.1 include:
1.1.1. Collate information on barriers to and opportunities for integrating EbA into policies, strategies and plans related to urban planning and environmental management for El Salvador, Jamaica and the state of Veracruz[33], Mexico.
1.1.2. Formulate revisions to relevant policies, strategies, plans and budgets to promote urban EbA in El Salvador, Jamaica and Mexico.
1.1.3 Develop policy briefs on the recommended revisions to policies, strategies, plans and budgets.
1.1.4 Present the recommended revisions to policy (developed in activity 1.1.3) - and decision-makers from ministries related to the management of natural resources and urban planning. The policy briefs developed in Activity 1.1.3 will be discussed at these workshops.

Output 1.2 Technical guidelines on planning and implementing EbA in urban areas developed for relevant government stakeholders, private sector and targeted communities.

[30]Zari, M. P. 2015. Can biomimicry be a useful tool for design for climate change adaptation and mitigation? In: Biotechnologies and Biomimetics for Civil Engineering.
[31] Wise, R.M. et al. 2013. Reconceptualising adaptation to climate change as part of pathways of change and response. *Global Environmental change*. 28: 325–336.
[32] Masson,V. et al, 2014. Adapting cities to climate change: A systemic modelling approach. *Urban Climate*. 10: 407–429.
[33] In Mexico, it is not feasible to undertake this at national level. Therefore it will be carried out at state and city level only.

Activities to be implemented under Output 1.2 include:

1.2.1 Develop technical guidelines on planning, implementing and monitoring urban EbA interventions for technical government staff from departments related to management of natural resources – including MARN, MOP, MWLECC, JSIF, SEMARNAT, INECC and the Municipality of Xalapa – and urban planning, NGOs, the private sector and target communities in San Salvador, Kingston and Xalapa.

1.2.2 Disseminate the guidelines to: i) technical government staff from departments related to management of natural resources and urban planning, NGOs and the private sector in El Salvador, Jamaica and Mexico; and ii) targeted urban and peri-urban communities in San Salvador, Kingston and Xalapa.

Output 1.3 Training provided to local government authorities and relevant private sector stakeholders in San Salvador, Kingston and Xalapa on implementing urban EbA.

Activities to be implemented under Output 1.3 include:

1.3.1 Develop training material on: i) the effects of climate change; ii) planning, implementing and monitoring urban EbA in each particular city; and iii) the benefits of using EbA to adapt to climate change in urban areas.

1.3.2 Provide training to relevant government stakeholders and relevant private sector representatives using the training material developed in Activity 1.3.1.

1.3.3 Refine training material developed in Activity 1.3.1 based on lessons learned during project implementation to inform the Training of Trainers (ToT).

1.3.4 Provide ToT for national and local government authorities in El Salvador, Jamaica and Mexico on: i) the effects of climate change; ii) planning, implementing and monitoring urban EbA in each pilot country; and iii) the benefits of using EbA to adapt to climate change in urban areas.

Output 1.4 Strategies developed to upscale and sustain EbA interventions in El Salvador, Jamaica and Mexico.

Activities to be implemented under Output 1.4 include:

1.4.1 Design strategies – with relevant planning departments and ministries – to upscale EbA across urban and peri-urban areas in El Salvador, Jamaica and Mexico. This will include the development of municipal roadmaps to integrate best practice EbA and prioritise areas for this approach and sustainable finance strategies to upscale the interventions after the project lifespan.

1.4.2 Hold workshops with national government stakeholders from environmental and urban planning departments and ministries in El Salvador, Jamaica and Mexico to present the upscaling strategies.

1.4.3 Develop a watershed management plan in San Salvador.

Component 2: Demonstration of urban EbA interventions in selected cities to enhance climate-resilience.

Outcome 2: Demonstration of EbA in San Salvador, Kingston and Xalapa to increase the capacity of urban and peri-urban communities to adapt to the effects of climate change.

SCCF: US$4,417,500
Co-financing: US$ 25,533,334

Adaptation alternative

Under Component 2, EbA interventions to build capacity to adapt to increased rainfall intensity as well as an increased frequency of drought will be implemented to demonstrate the benefits of these interventions to urban communities in San Salvador, Kingston and Xalapa. These interventions will include: i) reforestation of watersheds and riparian forests using locally adapted plant species in all three cities; ii) adoption of climate-resilient agricultural practices in San Salvador and Xalapa; iii) the construction of vegetated infiltration ditches in San Salvador and Kingston; iv) rehabilitation of degraded wetlands in Kingston; v) establishment of an artificial urban wetland in Xalapa; vi) creation of infiltration wells in San Salvador and permeable pavements in Kingston to increase the infiltration of rainwater

during intense rainfall; vii) implementation of ecological sanitation[34] in all three cities; viii) implementation of rainwater harvesting systems in all three cities; and ix) the creation of biodiverse urban gardens at selected schools in all three cities. The interventions for re-vegetation will prioritise the selection of a diverse range of locally adapted species that are resilient to the current and predicted future climate variability of the respective intervention sites. The EbA interventions related to the restoration of watersheds and urban wetlands will cumulatively increase the availability and quality of freshwater, thereby increasing the resilience of all pilot cities to the predicted variability of rainfall under future climate change conditions. These interventions will be complemented by the construction of vegetated infiltration ditches and detention ponds, which will further increase the recharge rate of groundwater aquifers. The project's interventions will also cumulatively reduce the incidence and severity of hazards related to intense rainfall events – particularly soil erosion, landslides and floods. The increased infiltration of rainwater by vegetated ditches and restored watershed will reduce the volume of rainfall runoff that contributes to severe flooding, while the restoration of degraded wetlands and riparian areas will increase the capacity of these areas to mitigate flooding by storing excess water. The total number of people that will benefit from these EbA interventions is ~193,500 of which ~115,500 are in San Salvador; ~42,000 in Kingston and ~36,000 in Xalapa.

EbA protocols will be developed to guide planning, implementation and monitoring of the long-term effects of urban EbA. The establishment of a long-term research programme under Component 3 will contribute to this monitoring. Furthermore, the generation of local data and information on the effects of the project interventions will contribute to the development of a scientific evidence base to support future investments in EbA and other innovative approaches to climate change adaptation in urban areas. The project's interventions will be implemented at household, urban landscape and urban catchment scales within a specific watershed in each of the pilot cities. There will be strong coordination of EbA activities at all three scales to promote synergies. Interventions at the household scale will be demonstrated in schools or community spaces – rather than individual homes – to ensure equity and communal ownership. The urban catchment scale is the overarching scale within which the urban landscape scale is located. Similarly, the household scale is located within the urban landscape scale. The complementarity of the three scales is depicted in Figure 1 below.

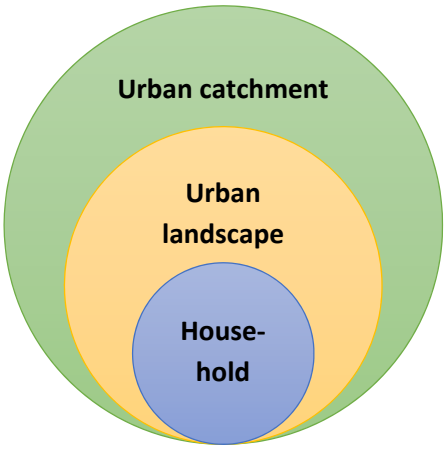


Figure 1. Illustration of the complementarity of the three scales at which interventions will be undertaken.

During the PPG phase of the project, potential intervention sites were identified within each of the selected cities based on their vulnerability to future climate changes as predicted by modelled scenarios. During project implementation, socio-economic and ecological assessments will be undertaken to inform the development of site-specific, tailored EbA protocols. The socio-economic assessments will be based on household questionnaires combined with data obtained from municipalities and will have a particular emphasis on the most climate-vulnerable groups – including women and children – within the selected watershed in each city. Moreover, a gender analysis will be undertaken to assess the different adaptation needs of women to climate change based on their different socio-economic roles in the community.

[34] Ecological sanitation refers to the creation of a "closed loop" system where human waste is used as resource for agricultural purposes and food security thereby conserving water.

The ecological assessments will include the identification of appropriate plant species that are most adapted to the predicted effects of climate change at each intervention site. Results of these assessments will include scenario maps on resource availability based on the predicted effects of climate change. These scenario maps will be used to validate the proposed EbA interventions as an appropriate response to the predicted effects of climate change. Furthermore, the scenario maps will inform the design of detailed implementation protocols for the validated EbA interventions in each targeted urban ecosystem. The EbA protocols will also include guidelines to develop climate-resilient livelihoods – such as urban gardening and bee-keeping – that are complementary to the EbA activities implemented in various urban contexts. The protocols will include recommendations for native or endemic tree and crop species that are climate-resilient in terms of their flood tolerance and/or drought tolerance, and which have the potential to provide climate change adaptation and socio-economic benefits. Reforestation in degraded urban watersheds will involve the planting of the selected native or endemic climate-resilient tree species. At the urban landscape and household scales, climate-resilient trees will be planted in riparian zones, along sidewalks, in green spaces and within gardens. By increasing the vegetative cover within the pilot cities, urban and peri-urban reforestation will: i) provide shade as protection against the predicted increase in temperature; ii) facilitate increased infiltration of rainwater into aquifers; and iii) reduce surface runoff and erosion. In addressing both social and environmental aspects, the project's EbA interventions will generate multiple benefits in terms of climate change adaptation for vulnerable urban communities.

Output 2.1 Assessments of climate change hazards, adaptation needs and scenario maps of resource availability produced for each pilot city.

Activities to be implemented under Output 2.1 include:

2.1.1 Undertake assessments in San Salvador, Kingston and Xalapa to identify climate vulnerabilities and collect socio-economic data – including a gender analysis – on urban communities.
2.1.2. Collate data on factors that will most likely affect the well-being of local communities, including population growth, planned economic activities, urban development plans, disaster risk, and land-use change.
2.1.3 Collate spatial data on climate trajectories at the city level for San Salvador, Kingston and Xalapa[35].
2.1.4. Combine all socio-economic and natural resource data to map the worst-case scenarios related to urban development, unplanned growth of the city, climate-related risks and resource availability under conditions of climate change.

Output 2.2 Protocols for city-specific EbA interventions developed.

Activities to be implemented under Output 2.2 include:

2.2.1 Undertake rapid Environmental and Social Impact assessments in each of the project intervention sites.
2.2.2 Develop site-specific protocols for urban EbA implementation – at the water catchment, urban landscape and household scales – based on the worst-case scenario in Output 2.1 and assessments undertaken in Activity 2.2.1.

Output 2.3 Relevant urban EbA interventions demonstrated in San Salvador, Kingston and Xalapa at the household, urban landscape and urban catchment scale using the developed EbA protocols.

Activities to be implemented under Output 2.3 include:

2.3.1 Implement appropriate EbA interventions in the Arenal Monserrat area in San Salvador based on the developed protocols under Output 2.2 by:

[35] The spatial data will depict the effects of climate change in the past X years for different parts of the city based on recorded historical data. For example, which areas have been affected by flooding in the last X years, which areas by storms, etc. In addition, spatial data will be collected on the change in vegetation within and around the city over X years.

- developing 1,000 hectares of sustainable agriculture in the Arenal Monserrat watershed, including the construction of vegetated infiltration ditches on the slope of the San Salvador volcano;
- restoring 16 km of riparian vegetation in 4 ravines (4 km per ravine) using native fruit trees in the area, including: River Almond (*Andira inermis*), Ceder (*Cedrela salvadorensis*), Conacaste (*Enterolobium cyclocarpum*), Ojushte (*Brosimun alicastrum*), Ingas (*Inga vera*), Zapote (*Pouteria mammosa*), Níspero, (*Manilkara zapota*) Barillo (*Calophyllum brasiliense),* Matazano (*Casimiroa edulis).*
- restoring 150 hectares of critical ecosystems
- constructing 30 infiltration wells (of 1 metre height) to improve water infiltration and increasing storage of storm water runoff;
- constructing rainwater harvesting systems in the community of El Trebol;
- constructing rainwater harvesting systems for ten schools; and
- establishing ecological sanitation (management of grey water and sewage) at two schools to close the water cycle.

2.3.2 Implement appropriate EbA interventions in the Greenwich town area in Kingston and the Hope watershed based on the protocols developed under Output 2.2 by:

- planting 4,200 trees in the Hope watershed using drought-resilient tree species;
- rehabilitating 2 hectares of the wetlands in Greenwich Town to increase water storage;
- constructing 3 detention basins made from natural material to improve water infiltration and increase storage of storm water runoff;
- constructing 500 metres of dykes;
- constructing 2,500 metres of permeable pavements and walkways using grass and other appropriate plant species;
- rehabilitating 2.3 hectares in May Pen Park, in Kingston, by planting 400 fruit trees and 1,000 forest trees.
- constructing one rainwater harvesting system each at Camperdown High School, St Andrews Technical School, Kingston Technical College and Tivoli Gardens School; and
- constructing a rainwater harvesting system at two community buildings.

2.3.3 Implement appropriate EbA interventions in the Carneros water catchment in Xalapa based on the protocols developed under Output 2.2 by:

- restoring the area of the El Palenquillo stream by: i) planting 3,640 trees (1,820 on each side of the river, 2 metres apart); and ii) constructing infiltration ditches (0.6 metres deep, 0.5 metres wide, covered with 2 centimetres of gravel);
- restoring the Cerro del Estropajo hill by: i) planting 20,000 trees using cloud forest species; and ii) constructing 2,803 metres of infiltration ditches; and iii) constructing 1,667 metres retention berms to retain soil and increase the infiltration;
- constructing 200 m connectivity corridor between EbA action gardens;
- constructing 1,000 metres of linear park;
- constructing two permeable, concentric sports circuits – each 1,000 metres long – to promote rainwater infiltration (one constructed with permeable concrete, the other with gravel);
- constructing an artificial wetland in the green area of the Telesecundaria school Rafael Hernández Ochoa, which will also be used to cultivate ornamental plants; and
- installing 10 rainwater-harvesting systems (at 8 schools and 2 public buildings).

<u>Output 2.4 Additional climate-resilient livelihoods developed and promoted through training and demonstration in community spaces.</u>

Activities to be implemented under Output 2.4 include:

2.4.1 Develop strategies and a benefit-sharing mechanism with targeted communities in San Salvador, Kingston and Xalapa for managing EbA interventions in community spaces that will demonstrate the potential for additional climate-resilient livelihoods including *inter alia*: i) urban food gardening (including fruit tree fences); and ii) bee keeping. The fruit trees and crops to be planted will be selected based on their tolerance to the predicted warmer climate and rainfall variability. In addition, bee keeping in urban areas will increase pollination of these crops and fruit trees thereby enabling the production of fruits thereby increasing food security for urban communities. Other additional livelihoods will also be explored once detailed scenario maps and assessments are undertaken.

2.4.2 Demonstrate the additional climate-resilient livelihoods promoted in Activity 2.3.1 by:

- establishing two urban gardens at two high schools in the Arenal Monserrat area;
- providing agricultural start-up kits for 10 schools in the Arenal-Monserrat area;
- planting fruit trees as part of the agroforestry in the watershed area in Arenal-Monserrat;
- planting 400 fruit trees and 1,000 forest trees in 2.3 hectares in May Pen Park, in Kingston;
- providing 250 hives and equipment to promote bee keeping at the community space in May Pen Park in Kingston;
- planting 400 fruit trees along the perimeter of the football field at Tivoli High School;
- planting 400 fruit trees along the perimeter of Camperdown High School;
- providing equipment for container gardening at Kingston Technical School;
- providing equipment for the greenhouse and nursery as part of the agricultural improvement programme at St Andrews Technical College;
- installing 10 urban gardens in public spaces or schools in Xalapa;
- providing agricultural start-up kits for 8 schools in Xalapa;
- establish 20 demonstration stands for cultivating edible mushrooms in the Carneros watershed in Xalapa; and
- establishing 25 modules for silvopastoral use in the Carneros water catchment in Xalapa.

2.4.3 Provide training for targeted communities to: i) establish and maintain the urban food gardens; ii) develop potential livelihoods from these gardens; iii) manage waste; and iv) maintain the EbA interventions.

Component 3: Knowledge and awareness of urban EbA throughout the LAC region.

Outcome 3: Knowledge and awareness of urban EbA interventions strengthened in El Salvador, Jamaica and Mexico, and throughout the LAC region.

SCCF: US$604,100
Co-financing: US$714,286

Adaptation alternative
Through Outcome 3 of the SCCF-financed project, public awareness on EbA will be increased and information will be disseminated on lessons learned from the interventions demonstrated under Component 2. In El Salvador, the project will develop a communication strategy to increase the awareness of government authorities and the general public on how to use EbA approaches to adapt to climate change. In Jamaica and Mexico, the project will strengthen existing public communication programmes [36] by promoting the inclusion of EbA in an urban context. To support the implementation of the communication strategies in each pilot country, a set of locally appropriate communication tools will be identified and developed to increase awareness on EbA. Stakeholders to be targeted by the communication tools will include *inter alia* school-children, university students, scientific researchers and government extension staff. To

[36] These include for Jamaica the Communication for Climate Resilience 2012 to 2017, A National Strategy & Action Plan;

increase awareness on climate change and EbA among the youth, educational toolkits will be developed for primary and secondary schools. Such toolkits will include a combination of lessons, small assignments and work in school gardens. The project will also contribute to the availability of data and information on EbA through the establishment of a long-term research programme to monitor the effects of the EbA interventions implemented by the project. Memoranda of Understanding will be established with the respective climate change departments of the universities and research institutions in each pilot country [37] to support the continuation of the long-term research programme on EbA interventions after the SCCF project's lifespan. Lessons learned and best practices on EbA generated by the project's interventions and elsewhere in the LAC region will be disseminated to national and sub-national authorities. Furthermore, knowledge generated on urban EbA will be shared through the REGATTA, CCCCC, Global Adaptation Network (GAN), Ecosystem-Based Adaptation flagship website, the "Ecosystem-based Adaptation through South-South Cooperation" portal[38] and other regional networks, thereby contributing to the regional knowledge base and awareness on EbA.

Output 3.1 Communication strategies developed to collate and disseminate knowledge on urban EbA.

Activities to be implemented under Output 3.1 include:

3.1.1 Develop and implement a communication strategy for urban EbA in San Salvador, Kingston and Xalapa.
3.1.2 Build on existing online portals in each city and country to share information on climate change and urban EbA.
3.1.3 Build on existing cross-sectoral committees in each pilot country to promote the coordination and exchange on climate change adaptation and EbA.

Output 3.2 Public awareness communication materials developed and shared with decision-makers, community members and identified stakeholders.

Activities to be implemented under Output 3.2 include:

3.2.1 Develop appropriate awareness-raising material on urban EbA to adapt to the effects of climate change for inter alia social media, radio, TV, festivals, information modules and posters.
3.2.2 Implement awareness-raising activities using the material developed in Activity 3.2.1 to increase the knowledge of the general public.

Output 3.3 A long-term research programme established on the benefits and cost-effectiveness of urban EbA interventions in the three pilot cities.

Activities to be implemented under Output 3.3 include:

3.3.1 Design and institutionalise LTRPs with selected research institutions in El Salvador, Jamaica and Mexico to monitor the effects of urban EbA interventions in a scientifically rigorous manner
3.3.2. Develop MoUs between the executing agency of the SCCF-financed project and research institutions in each country to sustain the LTRP after project completion.
3.3.3. Develop and implement research projects with MSc and PhD students from partner research institutions on the costs and benefits of urban EbA implemented under Output 2.4, and the benefits of these interventions for vulnerable communities.
3.3.4. Disseminate the findings of the EbA research undertaken by the students through: i) presentations to government departments and institutions involved with urban development; and ii) publications in international and national journals.

[37] These research institutions include for example the Institute of Ecology in Xalapa.
[38] http://www.ebasouth.org/

Output 3.4 Educational toolkits detailing lessons learned and good EbA practices developed and shared with local, sub-national, national and regional authorities.

Activities to be implemented under Output 3.4 include:

3.4.1 Develop educational toolkits on climate change and urban EbA for teachers at primary and secondary schools in El Salvador, Jamaica and Mexico.
3.4.2 Pilot educational toolkits with willing schools in San Salvador, Kingston and Xalapa. Refine the toolkits based on the outcomes of the piloting phase.
3.4.3 Hold workshops to present the educational toolkits to the heads of schools and local authorities responsible for education in each city.

Output 3.5 Knowledge generated by the SCCF-financed project – including lessons learned – shared through web-based portals within the Global Adaptation Network, including REGATTA.

Activities to be implemented under Output 3.5 include:

3.5.1 Collate all information generated through the SCCF-financed project – including the results of the long-term research – on urban EbA in the LAC region through reports and other documents.
3.5.2 Disseminate the information generated by the project through REGATTA, CCCCC, GAN and the UNEP EbA Flagship website[39] as well as webinars and regional events to promote south-south learning.
3.5.3 Hold a regional workshop with relevant government authorities, EbA experts and the inter-ministerial committees to share information generated by the project.

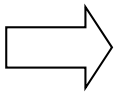
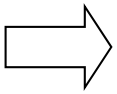
4) **Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing.**

The SCCF-financed project will reduce the vulnerability of urban communities to the effects of climate change by implementing EbA interventions – informed by scientific research and local knowledge – within urban areas of medium-sized cities in San Salvador, Kingston and Xalapa. These interventions will enhance the provision of ecosystem goods and services – including flood protection, water quality maintenance and erosion prevention – regardless of the effects of climate change. In addition, the urban EbA interventions of the project will increase the climate resilience of the baseline projects in the three selected cities. Table 2 below details the business-as-usual scenario compared with the alternative adaptation scenario for each outcome.

Table 2. Business as usual scenario in comparison with the alternative adaptation scenario.

	Business-as-usual		**Alternative adaptation scenario**
Problem Description	Under the business-as-usual scenario, the functioning of urban and peri-urban ecosystems and socio-economic development in San Salvador, Kingston and Xalapa will be undermined by the negative effects of climate change. These effects include *inter alia* more frequent and severe floods, droughts and landslides. Initiatives that are being implemented to improve the well-being of communities living in these cities will not integrate urban EbA as a cost-effective and low-risk	⇨	SCCF resources will be used to decrease the vulnerability of local communities in San Salvador, Kingston and Xalapa to climate change through the cost-effective, low-risk EbA approach. This will be achieved by increasing the capacity of government authorities and local communities to plan and implement interventions following this approach. Additionally, demonstration of urban EbA interventions to restore urban and peri-urban ecosystems in these pilot cities will contribute to *inter alia*: i) mitigating the impacts of floods; ii) improving water availability and quality; and iii)

[39] An agreement might be sought to blend this dissemination with the Massive Open Online Courses on Climate Change, fostered by the World Bank Group.

	approach to climate change adaptation that provides multiple benefits. Under such conditions, urban communities will continue to be vulnerable to the effects of climate change and urban economic sectors such as infrastructure, energy and urban planning will continue to be negatively affected.		increasing food security. Such ecosystem improvements will be particularly beneficial because the well-being of urban communities is underpinned by the services provided by these ecosystems. These EbA interventions will also provide multiple benefits for urban communities in pilot cities, such as additional climate-resilient livelihoods.
Project Outcomes	**Outcome 1:** There will continue to be limited: • Revision of national and sub-national strategies, plans and policies that include urban EbA. • Institutional frameworks that include EbA to share information and guide a coordinated response to climate change, particularly between and within relevant government departments, the private sector and research institutions. • Technical capacity of sub-national government to raise awareness on the effects of climate change within urban communities. • Priority to implement urban EbA on the national development agenda. • Financing to promote and upscale urban EbA across the LAC region.		SCCF resources will be used to increase the technical capacity of the relevant stakeholders to plan, implement and monitor urban EbA. The activities under this Outcome will develop an enabling environment for national and local government in the LAC region to promote the upscaling of urban EbA. This will be done by: • Recommending revisions to national and local strategies, plans and laws to integrate urban EbA and promote the implementation of the local strategies for adaptation • Using existing frameworks for cross sectoral sharing of technical information on urban EbA thereby promoting the effective implementation of urban EbA interventions. • Training local and national government on urban EbA protocols. • Developing a strategy to upscale the urban EbA interventions, including a sustainable financing mechanism with budget allocations. **Cost: SCCF US$520,133**
	Outcome 2: Under this scenario: • Adaptation practices using hard infrastructure will continue to be implemented without considering EbA as a cost-effective measure to ensuring resilience of these measures. • Current adaptation practices will continue without considering the <u>future</u> effects of climate change. • Adaptation interventions will continue to be implemented on a small scale, and in isolation of other projects. • Urban and peri-urban ecosystems will continue to degrade as a result of uncoordinated urban planning and unsustainable use of water resources. • The effects of climate change will exacerbate natural disasters – such as hurricanes and storm surges – thereby damaging urban infrastructure and livelihoods. • There will continue to be limited knowledge on best practices to implement urban EbA interventions. • Urban wetlands will continue to have reduced capacity to store and filter water because of pollution and unregulated solid waste management.		SCCF resources will be used to implement urban EbA interventions in San Salvador, Kingston and Xalapa. These interventions will: i) promote EbA as a cost-effective and low-risk option to adapt to climate change; and ii) increase the capacity of urban communities to use EbA to mitigate effects of natural disasters. The project will climate-proof baseline projects by: • Implementing locally appropriate urban EbA interventions that are designed with consideration of current and predicted effects of climate change. • Demonstrating an integrated spatial approach to adaptation – from household scale to urban landscape to watershed scale. • Providing cost-effective solutions to climate change-related hazards such as landslides and floods through restoration of watersheds and urban wetlands, thereby protecting urban infrastructure and livelihoods from the effects of climate change. • Implementing the EbA interventions using a learn-by-doing approach to increase the knowledge base on urban EbA. • Increasing the availability of ecosystem goods and services to urban households – including services such as regulation of water quality, provision of shade, mitigation of floods and protection of infrastructure – thereby increasing the resilience of urban LAC communities to climate change.

	• Urban communities will remain vulnerable to the effects of climate change.		**Cost: SCCF US$4,417,500**
	Outcome 3: There will continue to be limited: • Public awareness on urban EbA to adapt to climate change. • Long-term research programmes to monitor the benefits of adaptation interventions, particularly urban EbA. • Monitoring of results of ongoing adaptation-related interventions beyond the project lifespan. • Evidence on the socio-economic and environmental benefits of urban EbA within the LAC region. • Mechanisms to share technical knowledge on urban EbA within the LAC region.		SCCF resources will be used to promote the generation and sharing of evidence-based knowledge of urban EbA across the LAC region. This will be achieved by: • Implementing an awareness campaign on climate change adaptation, including the benefits of urban EbA. • The development of a research programme in collaboration with national research institutes to monitor the long-term effects of the urban EbA interventions. In addition, scientific research will be integrated with local knowledge to tailor the design and development of urban EbA interventions. • Collecting and updating information on past and on-going research on climate change adaptation in El Salvador, Jamaica and Mexico. • Using existing online information platforms – to disseminate information and lessons learned on the urban EbA interventions. **Cost: SCCF US$604,100**
Cost	**Business-As-Usual Development Cost US$29,734,000**		**Additional Adaptation Cost US$6,000,000**
Financed by:	Ministry of Planning and Public Works (MOP) (El Salvador), Jamaica Social Investment Fund (JSIF), and CONAGUA/Municipality of Xalapa (Mexico).		SCCF

5) Global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF))

Urban communities in San Salvador, Kingston and Xalapa will gain direct adaptation benefits from the implementation of EbA in urban and peri-urban ecosystems. These benefits will initially accrue locally, but research and awareness-raising on urban EbA under Component 3 will promote the replication and upscaling of the EbA interventions nationally and regionally. In addition, the upscaling strategy and knowledge frameworks established by the project will support the sustained promotion of urban EbA in the long term.

The direct adaptation benefits for urban communities in San Salvador, Kingston and Xalapa will include *inter alia* improved provision of ecosystem goods and services from watersheds and wetlands that will increase the climate resilience and underpin the well-being of these communities. For example, the restoration of watersheds with climate-resilient and deep-rooted trees will prevent soil erosion and reduce the risk of landslides during heavy rains. Moreover, regulation of water flow will reduce damage to infrastructure and losses to livelihoods. Rehabilitation of wetlands will also improve filtration of sediment and pollution from surface water, thereby improving the quality of water available for household and agricultural use. In addition, the implementation of locally appropriate urban EbA interventions will contribute to the: i) generation of additional livelihoods, such as urban agriculture; and ii) improvement of people's health in cities by improving air quality and reducing the "urban heat island" effect. These EbA interventions will increase the resilience of multiple sectors including infrastructure, tourism and natural resource management. Furthermore, the enhanced technical and institutional capacity of national and local institutions – including the MARN, MOP, MWLECC, JSIF, SEMARNAT and the municipality of Xalapa – will support the sustained implementation of EbA interventions, thereby increasing the climate-resilience of local communities in the pilot cities in the long term.

The total number of beneficiaries by the project will be ~193,500 (~115,500 in San Salvador, ~42,000 in Kingston and ~36,000 in Xalapa).

The technical training of government authorities, researchers and students in the three cities on EbA by the SCCF-financed project will promote the integration of EbA into development planning across the LAC region. Furthermore, building an evidence base on urban EbA and raising awareness of the general public to the benefits of EbA, will promote investment into EbA interventions by individuals, private sector companies and local governments. For example, if the negative effects of poor waste management and the positive effects of proper waste management on climate change-induced flooding are demonstrated, it is likely that communities will change their behaviours and dispose of wastes in demarcated waste sites/containers. Similarly, demonstration of the benefits of planting climate-resilient trees, is likely to lead to individuals, companies and municipalities establishing such trees in their local neighbourhoods, thereby increasing infiltration of rainwater and reducing the risks of climate change-induced flooding.

The SCCF-financed project will also generate benefits after the implementation period by: i) developing an upscaling strategy to collate and disseminate lessons learned on urban EbA to other cities within the LAC region; and ii) communicating the results of the Long-term Research Programme (LTRP) to national and regional networks. Through the upscaling strategy and the sharing of results of the LTRP with national and regional stakeholders, the expansion and replication of urban EbA in other cities across the LAC region will be promoted. In addition, the SCCF-financed project will contribute towards several global benefits. These include *inter alia*: i) biodiversity conservation; ii) enhanced provision of ecosystem goods and services through restoration of wetlands and degraded forests; and ii) increased sequestration of carbon dioxide in restored wetlands and forests.

6) Innovativeness, sustainability and potential for scaling up.

Innovativeness

There are several climate change adaptation projects in urban areas in El Salvador, Jamaica and Mexico (see A1 on baseline scenario), but these projects have to date not adopted an EbA approach. A growing body of research indicates that EbA provides favourable cost/benefit ratios compared with hard infrastructure[40]. EbA reduces climate change vulnerability and provides a range of co-benefits such as biodiversity conservation, additional climate-resilient livelihoods and carbon sequestration. The proposed SCCF-financed project is innovative in that it will introduce the EbA approach as a novel and cost-effective way to adapt to the effects of climate change in an urban context in the LAC region.

Wherever possible, the urban EbA interventions implemented through the SCCF-financed project will complement existing and planned hard infrastructure. The combination of EbA and hard engineering is an innovative and effective option because hard infrastructure provides direct benefits in the short to medium term to address immediate needs whereas EbA interventions are comparatively better at ensuring long-term adaptation gains. In addition, strengthening and protecting ecosystems through EbA is a long-term investment that – if well managed – will provide a wide range of environmental, social and financial benefits in the future.

To promote private sector investment in EbA in El Salvador, Jamaica and Mexico, business representatives will be actively involved in the development and implementation of the EbA interventions. In particular, the private sector will be engaged to develop the upscaling strategy and sustainable finance strategy under Output 1.4. The active involvement of the private sector is an innovative approach to promote the replication and upscaling of EbA interventions. Furthermore, the involvement of the private sector will reduce the dependency on donor and government budgets and consequently contribute to the long-term sustainability of the project.

[40] Blignaut, J., Aronson, J. and de Wit, M. 2014. The economics of restoration: looking back and leaping forward. Annals of the New York Academy of Science (1322): 35-47.

A long-term research programme will be developed in collaboration with the existing research institutes to monitor and evaluate the benefits of the EbA interventions. Such research is innovative as the monitoring of the potential benefits of EbA has not yet been undertaken in El Salvador, Jamaica and Mexico.

Sustainability

The sustainability of the SCCF-financed project's investments will be supported by the: i) active participation of all relevant stakeholders in the decision-making and implementation of the project activities; ii) strengthened technical capacity of national and local government to monitor the EbA interventions and maintain the benefits of the interventions; iii) increased public awareness of the benefits of urban EbA to support and maintain the activities beyond the project lifespan; and iv) collection, analysis and dissemination of the results generated through the long-term research programme on urban EbA interventions. Details of these approaches are described below.

The SCCF-financed project was developed in close consultation with regional, national and local stakeholders including representatives of international and national NGO's, representatives from government in each country, the private sector, city authorities and representatives from the selected communities in Arenal-Monserrat watershed in San Salvador, downtown Kingston-and the Hope watershed and the Carneros watershed in Xalapa. These stakeholders will continue to be consulted during the implementation of the project. For example, workshops and other forms of participatory consultations will be held to promote the adoption of climate-resilient urban livelihoods identified by the selected communities. This participatory approach will promote ownership of the project by the stakeholders, which will in turn contribute to the sustainability of the project.

The technical capacity of stakeholders in the three selected cities[41] will be strengthened through building on existing frameworks to share information on urban EbA across sectors. For example, the SCCF-financed project will promote the sharing of information through existing regional networks such as REGATTA, the CCCCC, the Global Adaptation Network (GAN) etc... Moreover, EbA will be included into national climate change strategies in El Salvador and Mexico. By sharing the lessons learned on urban EbA through existing frameworks, the promotion of urban EbA is expected to continue after the end of the project.

Sustainability will also be supported by the technical training of national and sub-national authorities, the private sector and local communities on urban EbA in San Salvador, Kingston and Xalapa. This training will include development of: i) technical guidelines to plan, implement and monitor urban EbA; ii) best practice manuals on upscaling urban EbA; and iii) a roadmap for integrating urban EbA into medium- to long-term urban development planning of the municipalities of the pilot cities.

Monitoring and research conducted by the project (e.g. Output 3.3) will also provide a knowledge base on the social, economic and environmental benefits of urban EbA in the three pilot cities. Research results will be disseminated through the publication of peer-reviewed papers. National research institutions that will play a role in this work include the University of El Salvador in San Salvador, the University of the West Indies in Kingston and the Institute of Ecology in Xalapa. The availability of quantitative information on the benefits of urban EbA will promote evidence-based decision-making by the local authorities in the future, thereby promoting EbA investments beyond the project's lifespan.

Awareness raising campaigns on climate change and the benefits of urban EbA will further promote sustainability within the project. For example, in Kingston, the urban EbA approach will be integrated into the existing national communication strategy on climate change. In so doing, information on urban EbA will be disseminated through a variety of media such as web pages, radio, television and local newspapers.

[41] Particularly those government departments involved with water, environment and urban planning.

Local authorities and community members will be engaged with to actively participate in the development and implementation of the EbA interventions based on their own priorities. Through this learning-by-doing approach, local authorities and community members will learn the necessary skills to implement and maintain the EbA interventions after the project's lifespan. As part of the approach, systems will be developed for the maintenance of the interventions. This will include: i) sustainable financing mechanisms that can support ongoing maintenance and implementation of EbA interventions; ii) local community members taking formal responsibility for maintaining the various aspects of the EbA interventions; and iii) guidelines on monitoring and reporting any maintenance requirements. In addition, the involvement of local government with the implementation of EbA interventions will provide them with the technical knowledge necessary to support and maintain the interventions. Moreover, the mainstreaming of urban EbA into policies, strategies and plans is expected to lead to integration of EbA into budget and planning processes. This will result in regular budget allocations by local government for the implementation, maintenance and upscaling of the EbA interventions beyond the project lifespan. The strategies developed under Output 1.4 will also contribute to ongoing maintenance and sustainability of the project interventions, particularly through the establishment of sustainable financing mechanisms involved private sector stakeholders.

Upscaling

Urban EbA protocols, technical guidelines and lessons learned (e.g. from Output 1.2 and Output 2.2) will be rigorously documented by the SCCF-financed project in order to facilitate replication in other cities within the corresponding country as well as across the LAC region as a whole. To this end, upscaling strategies will be developed under Output 1.4. These strategies will describe in detail: i) lessons learned through the SCCF-financed project and other related initiatives in the LAC region; ii) the benefits of urban EbA, particularly its cost-effectiveness relative to other approaches for adapting to climate change; iii) recommendations for mainstreaming urban EbA into national and local development planning such as the NAP in alignment with Output 1.1; iv) the potential roles and responsibilities of stakeholders in each country related to the upscaling of urban EbA approaches; and v) sustainable financing mechanisms to support the upscaling of urban EbA in each country. Upscaling will be further supported by the proposed revisions to existing climate change and environmental strategies, policies and plans. In addition, regional websites – such as REGATTA and the C40 cities – will facilitate the sharing of information between governments, research institutions, the private sector, NGOs and communities across the LAC region. It is anticipated that such knowledge sharing will catalyse considerable upscaling of urban EbA beyond the project's intervention areas.

During the implementation of this pilot project, local authorities in the three cities will acquire increased knowledge and skills while developing a degree of ownership of the project. As a result, relevant government departments will have increased capacity to upscale the urban EbA interventions to other neighbourhoods within each city. Upscaling the EbA interventions will support implementation of the revised local environmental plans and strategies as well as the sustainability of the project interventions. Due to their geographical scope of work, national research institutes and universities will be targeted as stakeholders to promote upscaling of the urban EbA interventions in other cities within each country.

A.2. Child Project? **If this is a child project under a program, describe how the components contribute to the overall program impact.**

N/A

A.3. Stakeholders**. Elaborate on how the key stakeholders engagement, particularly with regard to civil society and indigenous people, is factored in the preparation and implementation of the project.**

The development process for SCCF-financed project was country driven and included extensive consultations with local urban communities, civil society organisations, city management authorities and relevant government authorities in the sectors of urban planning, transport, energy, water and the environment. At the commencement of the PPG phase in February 2015, a regional workshop was held with the national consultants and national focal points of El Salvador, Jamaica and Mexico to outline the background and the development process for the SCCF-financed project. This

regional workshop was followed by stakeholder consultations including: i) national inception workshops during March–April 2015 (see Appendix 22 of the Project Document); ii) national validation workshops during July 2015 (see Appendix 22 of the Project Document); iii) multiple individual meetings with national stakeholders between February and July 2015; and iv) a series of face-to-face meetings with SEMARNAT and INECC on the project development in Mexico. Between February 2015 and July 2015, workshops were complemented by regular consultations with the three national consultants from El Salvador, Jamaica and Mexico respectively. The objectives of these consultations were to: i) identify the most vulnerable areas in the pilot cities; ii) identify appropriate baseline projects within these areas; iii) develop a detailed list of urban EbA interventions to implement in the selected sites; iv) calculate the costs of each intervention; and v) set up realistic indicators and targets for these interventions. To achieve this, the three national consultants engaged with national, provincial and local stakeholders, visited the pilot cities and selected the intervention sites using a set of selection criteria (see Appendix 15 of the project document). As a result, the EbA interventions of the proposed project are aligned with the cities' specific priorities and needs to adapt to climate change. This participatory approach will also be followed during the project implementation phase and will promote ownership of the project by the government and local communities. The stakeholders consulted during the PPG phase are outlined in the table below.

Table 3. The main stakeholders consulted in each country during the PPG phase.

Stakeholders	El Salvador	Jamaica	Mexico
National government	MARN	MWLECC	SEMARNAT
	• MOP • Ministry of Education (MINED); • Department of Climate Change Adaptation and Strategic Management of Risk (DACGER); • Legislative Assembly; • National Administration of Water and Sewage (ANDA); and • Ministry of Agriculture and Livestock (MAG).	• National Environment and Planning Agency (NEPA); • Ministry of Forestry and Fisheries; • Forestry Department; • Ministry of Finance and Planning; • Planning Institute of Jamaica' • Ministry of Education; • Ministry of Health; • Ministry of Local Government and Community Development; • Ministry of Science Technology Energy and Mining; • Ministry of Transport Works and Housing; • Ministry of Industry Investment and Commerce; • National Solid Waste Management Authority; • National Water Commission; • Water Resources Authority; • Office of Disaster Preparedness Emergency Management; and • Meteorological Services.	• National Water Commission CONAGUA; • National Institute of Ecology and Climate Change (INECC); • National Forest Commission (CONAFOR); • National Commission for Protected Areas (CONANP); • Veracruz state Secretariat for the Environment (SEDEMA); • Ministry of Agricultural, Land and Urban Development (SEDATU); and • National Centre for Disaster Prevention (CENAPRED).
Local	• Community representatives of Arenal-Monserrat; • Mayor of San Salvador; and • The Planning Office of the Metropolitan Area of San Salvador (OPAMSS).	• Mayor of Kingston; • Community of Rae Town; • Portmore Municipal Council; • Mayor of Saint Andrew; • Mayor of Mandeville; • Mayor of Montego Bay; and • Negril Planning Authority.	• Mayor of Xalapa; • Municipal Council of Xalapa; • Municipal Commission for Water and Sanitation (CMAS); and • Municipality of Tlalnelhuayocan
Private sector	• Salvadorian association of engineers and architects ASIA.	• Caribbean Institute of Media and Communications (CARIMARC); • Interamerican Development Bank (IDB); • Latin American Energy Organisation (OLADE); • CEAC Solutions Company; and • Urban Development Cooperation;	• Planning, Development and Environmental Restoration (PLADEYRA); and • Interamerican Development Bank (IDB).
NGOs	• Oxfam;	• UNEP (country office);	• Mexican Fund for Nature

	• CORDAID • AECID; • Oikos Portugal • Red Cross Switzerland; • Geologos del Mundo; • UNES; • ACUA; • PRISMA; • PROCOMES; • Engineers without borders; and • Foro del Agua.	• UNDP; • Caribbean Youth Network; • The Nature Conservancy, • USAID; • ACDI/VOCA; and • PANOS.	Conservation (FMCN); and • SENDAS AC.
Research institutes	• University El Salvador (UES); and • University Catolica (UCA)	• University of the West Indies (UWI); • Climate Study Group, Mona; • University of Technology; and • The Jamaica Bauxite Institute;	• Institute of Ecology (INECOL); • University of Veracruz; • Colegio de Veracruz; • Centre for Earth sciences, University Veracruz; and • Centre for Climate Studies.

The implementation phase of the SCCF-financed project will rely on the participation of a wide range of stakeholders. Consequently, the project will create active partnerships at the regional, national and local level with NGOs, private sector partners and relevant ongoing initiatives and projects in the pilot cities. In addition, national and international research institutions will be involved in the implementation and maintenance of scientific research projects to inform the design and implementation of the urban EbA interventions. In particular, these research institutions will contribute to assessing and monitoring the long-term social, economic and environmental benefits of these interventions. At the local level, representatives of urban communities will participate in the decision-making process to design, implement and monitor the on-the-ground interventions. Community participation will be further supported by communicating with the public in a consistent, supportive and effective manner. This process will promote an understanding and ownership of the project's interventions by local communities.

The process for stakeholder consultations during the implementation phase will include: i) initial meetings with national and sub-national government authorities – the MARN, MWLECC and SEMARNAT – and communal authorities during the inception workshop (see Appendix 22 of the Project Document); ii) consultations with the coordinators of the baseline and partner projects (see Section 2.6 of the Project Document); iii) consultations with the aligned projects (see Section 2.7 of the Project Document); iv) consultations with NGOs, local associations and cooperatives; and v) consultations with community-based organisations. The role of relevant stakeholders and their partners during the implementation phase of the project are presented in Table 4 below. MoUs will be signed between the implementing ministry and the relevant government institutions participating in the implementation of the project.

Table 4. The roles and responsibilities of relevant stakeholders during project implementation.

Output	Activity	Lead coordination	Important stakeholders	Main responsibility
Output 1.1. Policy briefs developed to outline recommendations for revisions to policies, strategies and plans – including budget allocations – to integrate EbA into urban planning and management of natural resources.	1.1.1	ROLAC	MARN (El Salvador), MWLECC (Jamaica), SEMARNAT/INECC (Mexico)	• Undertaking gap analyses and mapping exercises. • Collating and synthesising urban EBA information and planning tools.
	1.1.2	ROLAC	MARN (El Salvador), MWLECC (Jamaica), SEMARNAT/INECC (Mexico)	Overseeing the revisions to the existing plans and strategies to include (urban) EbA.
	1.1.3	ROLAC	MARN (El Salvador), MWLECC (Jamaica), SEMARNAT/INECC (Mexico), MoF	Coordinating workshops to communicate findings and strategies to policy- and decision-makers on the following topics: i) entry points for urban EbA; ii) an upscaling strategy; and iii) national budget allocations for

				urban sectors to integrate urban EbA at local and national scales.
Output 1.2. Technical guidelines on planning and implementing EbA in urban areas developed for relevant government stakeholders, private sector and targeted communities.	1.2.1	ROLAC	• MARN (El Salvador), MWLECC (Jamaica), SEMARNAT/INECC (Mexico)NCU • National Experts	Overseeing: • meetings between national experts and projects already conducting research on policies and strategies for producing technical guidelines that promote urban EbA; • review of relevant strategies and policies to identify where technical guidelines on EbA are needed; and • the development of technical guidelines that promote adaptation to climate change using EbA.
	1.2.2	ROLAC	MARN (El Salvador), MWLECC (Jamaica), SEMARNAT/INECC (Mexico)	
Output 1.3. Training provided to local government authorities and relevant private sector stakeholders in San Salvador, Kingston and Xalapa on implementing urban EbA.	1.3.1	ROLAC	MARN (El Salvador), MWLECC (Jamaica), Municipality of Xalapa (Mexico)	Coordinating training activities, including: • inviting participants from relevant government departments; and • providing input for the training of the trainer (TOT) material.
	1.3.2	ROLAC	MARN (El Salvador), MWLECC (Jamaica), Municipality of Xalapa (Mexico)	
Output 1.4. Strategies developed to upscale and sustain EbA interventions in El Salvador, Jamaica and Mexico.	1.4.1	ROLAC	MARN (El Salvador), MWLECC (Jamaica), SEMARNAT/INECC , Municipality of Xalapa (Mexico)	Overseeing: • workshops/meetings between experts and the Ministries of Finance of the three countries; • the development of a national upscaling strategy; • the development of a financing plan; • the design of the roadmaps at municipal level; • the development of manuals; and • the process to identify potential sites for replication.
	1.4.2	ROLAC	MARN (El Salvador), MWLECC (Jamaica), SEMARNAT, Municipality of Xalapa (Mexico)	
	1.4.3	ROLAC	MARN (El Salvador), MWLECC (Jamaica), SEMARNAT/INECC , Municipality of Xalapa (Mexico)	
	1.4.4	ROLAC	MARN (El Salvador), MWLECC (Jamaica), SEMARNAT/INECC , Municipality of Xalapa (Mexico) MOF (all three countries)	
	1.4.5	ROLAC	MARN (El Salvador)	
Output 2.1. Rapid Environmental and Social Impact Assessments of climate	2.1.1	MARN (El Salvador), MWLECC (Jamaica),	National experts	Overseeing: • the development of the climate hazard and socio-economic assessments;

change hazards, adaptation needs and scenario maps of resource availability produced for each Kingston, Xalapa and San Salvador.		SEMARNAT (Mexico)		• the development and dissemination of policy briefs; • the identification and analysis of social and climate-related factors; and • the development of the scenario maps.
	2.1.2	MARN (El Salvador), MWLECC (Jamaica), SEMARNAT (Mexico)	National Policy expert	
		MARN (El Salvador), MWLECC (Jamaica), SEMARNAT (Mexico)	NCU and experts	
		GIS unit	NCU	
	2.2.2	GIS unit	NCU	
Output 2.2. Protocols for city-specific EbA interventions developed.	2.2.1	ROLAC (for El Salvador), ROLAC (for Jamaica), SEMARNAT, Municipality of Xalapa (Mexico)	MARN, NCU, MOP (El Salvador); MWLECC (Jamaica)	Developing protocols for urban EbA interventions.
	2.2.2	ROLAC (for El Salvador), ROLAC (for Jamaica), SEMARNAT Municipality of Xalapa, (Mexico)	MARN, MWLECC NCU	Overseeing workshops/ meetings between experts and representatives from the relevant ministries.
Output 2.3. Relevant urban EbA interventions demonstrated in San Salvador, Kingston and Xalapa at the household, urban landscape and urban catchment scale using the developed EbA protocols.	2.3.1	ROLAC	MARN, MOP Community groups, Women groups, (El Salvador)	Coordinating the implementation of the urban EbA interventions in the Arenal-Monserrat area in San Salvador.
	2.3.2	ROLAC	MWLECC, Community groups, Women groups (Jamaica)	Coordinating the implementation of the urban EbA interventions in the Hope watershed in Kingston.
	2.3.3	Fondo Golfo de México (FGM)	Community groups, Women groups, SEMARNAT, Municipality of Xalapa (Mexico)	Coordinating the implementation of the urban EbA interventions in the Carneros watershed in Xalapa.
Output 2.4. Additional climate-resilient livelihoods from EbA promoted through training and demonstration in community spaces.	2.4.1	MARN (El Salvador), MWLECC (Jamaica), SEMARNAT, (Mexico)	ROLAC, Women groups, Municipality of Xalapa	Coordinating the development and implementation of a community strategy for climate-resilient livelihoods.
	2.4.2	MARN (El Salvador), MWLECC (Jamaica),	ROLAC, Women groups, MINED and MAG (El Salvador)	

		SEMARNAT (Mexico)	Municipality of Xalapa (Mexico)	
Output 3.1. Communication strategies developed to collate and disseminate knowledge on urban EbA.	3.1.1	MARN (El Salvador), MWLECC (Jamaica), SEMARNAT/INECC (Mexico)	Communication departments of relevant ministries	Overseeing: • the development and implementation of the communication strategy.
	3.1.2	MARN (El Salvador), MWLECC (Jamaica), SEMARNAT/INECC (Mexico)	Communication departments of relevant ministries.	Coordinating: • the design and implementation of a web-based platform for sharing information collated and generated by the SCCF-financed project; and • awareness raising activities for the website. Overseeing the development of the web-based platform.
	3.1.3	ROLAC	MARN (El Salvador), MWLECC (Jamaica), SEMARNAT/INECC (Mexico)	Overseeing the coordination of the cross-sectoral committees.
Output 3.2 Public awareness communication materials developed and shared with decision-makers, community members and identified stakeholders.	3.2.1	ROLAC	MARN (El Salvador), MWLECC (Jamaica), SEMARNAT, Municipality of Xalapa (Mexico), Ministry of Education	Coordinating the appropriate use of communication tools for the public awareness campaign.
Output 3.3. A long-term research programme established on the benefits and cost-effectiveness of urban EbA interventions in the Kingston, Xalapa and San Salvador.	3.3.1	ROLAC	MARN (El Salvador), MWLECC (Jamaica), SEMARNAT/INECC (Mexico). Universities and National Research institutions	Coordinating workshops with representatives of climate change and research institutions to identify gaps in existing data.
	3.3.2	ROLAC	MARN (El Salvador), MWLECC (Jamaica), SEMARNAT/INECC (Mexico), Universities and National Research institutions	• Overseeing the design and development of a LTRP to monitor the effects of the implemented interventions; and • Coordinating the monitoring of EbA interventions.
	3.3.3	ROLAC	MARN (El Salvador), MWLECC (Jamaica), SEMARNAT/INECC (Mexico), Universities and National Research institutions	Coordinating the dissemination of research results with the regional committee and other regional networks.
	3.3.4	ROLAC	MARN (El Salvador), MWLECC (Jamaica), SEMARNAT/INECC	Selecting: • urban EbA topics for MSc and PhD theses; and • funding for students.

			(Mexico), Universities and National Research institutions	
	3.3.5	ROLAC	MARN (El Salvador), MWLECC (Jamaica), SEMARNAT/INECC (Mexico), Universities and National Research institutions)	Assisting and encouraging students to publish the findings of their research in peer reviewed papers.
Output 3.4. Educational toolkits detailing lessons learned and good EbA practices developed and shared with local, sub-national, national and regional authorities.	3.4.1	ROLAC	MARN (El Salvador), MWLECC (Jamaica), SEMARNAT, Municipality of Xalapa (Mexico), NCU	Overseeing the development of educational toolkits on climate change and urban EbA.
	3.4.2	ROLAC	MARN (El Salvador), MWLECC (Jamaica), SEMARNAT, Municipality of Xalapa (Mexico), NCU Departments of education, schoolboards (All countries)	Providing input and validating the developed educational toolkits.
Output 3.5 Knowledge generated by the SCCF-financed project – including lessons learned – shared through web-based portals within the Global Adaptation Network, including REGATTA.	3.5.1	ROLAC	NCU, GAN, REGATTA	Overseeing the coordination of all information-sharing on urban EbA within the REGATTA network.
	3.5.2	ROLAC	NCU, GAN, REGATTA	
	3.5.3	ROLAC	NCU, GAN, REGATTA	

***A.4. Gender Considerations*. Elaborate on how gender considerations were mainstreamed into the project preparation, taking into account the differences, needs, roles and priorities of men and women.**

In the past two decades, women have become increasingly prominent in politics and economic activity within the LAC region[42]. For example, representation of women in parliament in several countries in the LAC region[43] is ~30%. This percentage exceeds that of the USA and Canada, with ~18% and ~25%, respectively[44]. Furthermore, the percentage of women in higher education (~53%) in the LAC region now exceeds that of men (~47%), and women have a higher life expectancy than men. Despite this improved access to education and life expectancy across the LAC region, social and cultural norms at the household, community, and national levels still result in disadvantages for women, including: i)

[42] Alves, J.E.D., et al. 2013. Population and changes in gender inequalities in Latin America. National School of Science – ENCE/IBGE.
[43] These countries include Cuba, Nicaragua, Costa Rica, Argentina, Mexico, Grenada, Ecuador and Guyana.
[44] Alves, J.E.D., et al. 2013. Population and changes in gender inequalities in Latin America. National School of Science – ENCE/IBGE.

wage discrimination; ii) occupational segregation; iii) exclusion from decision-making[45]; and iv) limited access to financial opportunities as a result of full-time obligations related to caring for families. Additional challenges to gender equality in the LAC region include high rates of adolescent pregnancy and gender-based violence. This is particularly notable among women with limited access to higher education and the labour market. As a result, women's access to financial resources within the LAC region remains limited resulting in considerably greater vulnerability to the effects of climate change compared with men.

The SCCF-financed project will work in poor urban communities of San Salvador, Kingston and Xalapa. A particular emphasis will be placed on assisting women adapt to the predicted effects of climate change. A gender analysis will therefore be undertaken as part of the socio-economic assessments to assess the different adaptation needs of women to climate change based on their different socio-economic roles in the community. As per GEF guidance and standards, the monitoring and evaluation process of the EbA interventions will include gender-disaggregated indicators and targets to monitor the participation of women throughout the project. Accordingly, the Project Management Unit (NCU) and Project Steering Committee (PSC) will include representatives of both genders. Project staff will also be required to have the skills and experience necessary to plan and facilitate gender-sensitive interventions. For example, training and awareness-raising activities will take place with appropriate proportions of women (which will be determined during consultations with local government and the selected urban communities in San Salvador, Kingston and Xalapa). The NCU will also be responsible for monitoring and reviewing gender sensitivity in the training activities and the application of gender-disaggregated indicators. During the project implementation, methods for increasing the benefits of the project to other disadvantaged and vulnerable groups – including children, the elderly and disabled people – will also be investigated and implemented, wherever possible. Specific approaches for ensuring gender sensitivity within the project's three countries are detailed below.

El Salvador

The proposed EbA interventions for the Arenal-Monserrat area in San Salvador will include equal participation of men and women. This is representative of the demographics within the watershed where ~53% of the inhabitants are women. Furthermore, the project's activities will provide training to at least 40 government representatives of which at least 40% will be women (see Appendix A).

The SCCF-financed project will give priority to women when implementing the EbA interventions, in particular at schools, Activities will include identifying tools to select climate-resilient crops and exploring opportunities to commercialise these crops when produced at a larger scale. By involving women in the commercialisation of crops, the project activities will generate additional income for women. This will enhance their livelihoods and enable them to improve their socio-economic conditions, for example by investing in education or healthcare for themselves and their families. In addition, including female students in the implementation of rainwater harvesting systems will increase women's capacity to maintain – and benefit from – these systems after the project implementation period. Regarding the training of government authorities, emphasis will be placed on increasing the technical capacity of women to identify, prioritise, plan and implement urban EbA interventions. This prioritisation of women is aligned with the recently developed regulations regarding the rights of women as described in paragraph 242.

Jamaica

In Kingston, the proposed EbA interventions to develop climate-resilient livelihoods will prioritise women. To achieve this, a community women's group will be established and given responsibility for the development of fruit orchards, vegetable gardens and bee keeping. To ensure an equal division of revenues of the fruits and vegetables among the group, a benefit-sharing mechanism will be developed. The yields of the additional livelihoods will primarily be for local consumption. Any excess will be sold to go into a fund – as part of the benefit-sharing mechanism under Activity

[45] http://www.worldbank.org/en/events/2014/11/24/gender-equality-lac. Accessed on 20 March 2015.

2.4.1 – to maintain these orchards and for other such projects. Payments from this fund to maintain the orchards will serve as additional income for women, particularly those who are heads of their respective households

Mexico

In the Carneros watershed area in Xalapa, the EbA interventions at urban and household scale will be tailored to the needs and requirements of women. For example, the selection of plants and fruit trees that are most adapted to the predicted increase in temperature and rainfall variability will be based on women's preferences. In addition, women will alongside men be actively involved in the restoration and management of the artificial wetland, with roles and responsibilities being defined and allocated in a participatory manner.

A.5 Risk. **Elaborate on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, the proposed measures that address these risks at the time of project implementation. (Table format acceptable).**

To support the delivery of the project's objective, there is a need to identify and assess the risks to implementation. Effective identification and assessment of risks will allow appropriate countermeasures to be taken. Monitoring and updating the identified project risks will be an important task of the RC and the national project coordinators throughout the project implementation phase. Table 5 summarises the identified risks and suggested countermeasures.

Table 5. Summary of the project risks and proposed countermeasures.

#	Description	Potential consequence	Countermeasures	Risk category	Probability & impact (1–5)
Regional-level risks					
1	National Coordinators and stakeholders at PSC have a limited overview of the overarching project objectives because of the project's multi-faceted, multi-country nature.	The effectiveness of project implementation is reduced.	• A detailed plan and clear description of roles and responsibilities will be developed to ensure that all stakeholders are well appraised of the project across all three countries.	Organisational	P=2 I=3
2	Poor coordination among project stakeholders because of language and geographical barriers.	Information on urban EbA is not shared effectively between the three countries.	• The National Coordinator within each NCU will be responsible for ensuring appropriate coordination among project partners – particularly with the regional coordinator at ROLAC – and that GEF standards are met. • Formal and informal communication and reporting functions between national and regional committees will be undertaken in both English and Spanish.	Organisational	P=2 I=3
3	Natural disasters undermine the implementation of the EbA interventions.	Economic loss and/or damage to the interventions.	• Meteorological predictions and conditions will be considered when planning the implementation phase of the project.	Ecological	P=4 I=3

			• Existing Early Warning systems (e.g. in San Salvador) will be used during project implementation.		
National level risks					
4	Limited inter-sectoral data sharing.	The timely delivery and effectiveness of the project is reduced.	• The existing cross-sectoral committees and mainstreaming mechanisms in each country will be used to promote communication and information sharing between sectors. • Information technologies and telecommunication systems selected will be those suited to the local context and which do not restrict the transfer and communication of information.	Political/ Organisational	P=2 I=3
5	High turnover of staff in implementing agencies.	Reduced institutional memory results in disruptions or delays in project implementation and coordination.	• Dialogue between stakeholders will be promoted during the implementation phase and deputy representatives appointed to ensure continuity. • The process of project decision-making and implementation will be well documented. • Technical guidelines will be developed in both English and Spanish to guide new staff who become involved in the project.	Political/ Organisational	P=3 I=3
6	Government will have insufficient funds to sustain the local structures, once the project ends.	Upscaling of the urban EbA interventions will be limited.	• A strategy will be developed to upscale, sustain and replicate the planning, implementation and monitoring of EbA interventions in other cities. • Mechanisms will be developed to help mobilise funds – particularly from the private sector – to maintain the EbA interventions after the project lifespan. • Decision-makers will be trained on how to identify funding opportunities and write project proposals during the project.	Organisational	P=2 I=3
Local-level risks					
7	The implementation of EbA interventions is undermined by social unrest within the target communities.	Project activities are delayed.	• The selection of the intervention sites will take into account past occurrences of social unrest within the target communities. • The National Coordinator and CTA will keep abreast of socio-economic developments in the pilot cities and develop contingency plans for the target communities if necessary.	Socio-economical	P=2 I=3
8	The communities at the selected	Limited support from the target communities	• Communication with urban communities will be undertaken	Socio-ecological	P=1 I=3

	intervention sites do not support the proposed urban EbA interventions.	may prevent the achievement of the immediate as well as long-term benefits of the project.	to create public awareness and support for the EbA interventions. • Local stakeholders will participate in project planning, implementation and monitoring. • The project will include raising awareness on the benefits of EbA.		
9	Unsustainable land and natural resource use.	Unsustainable use of natural resources continues, leading to further degradation of ecosystems.	• Awareness-raising campaigns will be held on the value of intact and functional ecosystems for surrounding communities. • Local communities will be actively engaged during implementation and monitoring of the EbA interventions.	Social	P=3 I=4
10	Local zoning and land use plans compete with EbA interventions.	The efficacy of the EbA interventions is undermined.	• The project will include representatives from the land use and urban planning departments to inform them from the inception phase on the location of the EbA interventions. In addition, formal agreements will be established to ensure that the EbA interventions will not be undermined by future urban development plans.	Institutional	P=3 I=4
11	Large-scale infrastructure development in the cities during implementation.	Project activities are disrupted or delayed.	• The National Coordinator will collaborate with relevant government agencies to ensure appropriate coordination between all ongoing projects in the intervention sites as well as to take into account urban development plans before embarking on any activities.	Economic/ Institutional	P=2 I=3

A.6. Institutional Arrangement and Coordination. Describe the institutional arrangement for project implementation. Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.

1. The SCCF-financed project will be implemented over a four-year period from 2016 to 2020 (see work plan Annex G). The project will be executed by UNEP-ROLAC in coordination with the MARN (El Salvador), MWLECC (Jamaica) and SEMARNAT (Mexico) and in collaboration with other relevant ministries. National inter-ministerial committees in each country will be consulted wherever possible. In addition, there will be consultation with local level stakeholders throughout project implementation to ensure that local-level priorities are included in the implementation of project activities. It should be noted that in Jamaica and El Salvador, national and local governments are closely linked as the pilot cities chosen are capital cities. Consequently, interactions between the national and local levels will be easily facilitated through meetings and workshops as needed. In El Salvador, the project will consult with representatives of the Municipality of District Five, as well as the Council of Mayors of the Metropolitan Area of San Salvador, as necessary. In Jamaica, consultations will include representatives from the Kingston and St. Andrew Corporation. Whereas in Mexico, there is one level in between local and national government, namely the state. The state government is seated in Xalapa and as a result the stakeholders of the project will work closely with the representatives of the state government. Implementation of the project will be informed by lessons learned from

ongoing activities on adaptation to climate change and EbA projects in the LAC region (see Section 2.7 of the Project Document).

UNEP will be the Implementing Agency (IA) for the SCCF-financed project. It will oversee the project and provide the technical assistance required to meet the project goal. Details of UNEP's comparative advantage are provided in Appendix 20 of the Project Document. A Task Manager (TM) – based in UNEP's Department of Environmental Policy Implementation (DEPI/GEF) Climate Change Adaptation Unit (CCAU) – will be responsible for project supervision to ensure consistency with GEF and UNEP policies and procedures. The TM will formally participate in the following: i) Annual Project Steering Committee (PSC) meetings; ii) the mid-term and final evaluations; iii) the clearance of Bi-annual Progress Reports and Project Implementation Reviews; and iv) the technical review of project outputs.

Management structure

As a result of the regional character of the SCCF-financed project and the large distances between project sites, the management structure will include a Project Steering Committee at a regional level and three National Project Management Units. The management structure of the project is presented in Figure 2 and its constituents are described below:

- The **Project Steering Committee** (PSC) will provide project oversight and advisory support, particularly regarding the Monitoring and Evaluation (M&E) plan. This committee will be comprised of: i) the focal points of the MARN, MWLECC and SEMARNAT; ii) focal points of the baseline projects MOP, JSIF and the municipality of Xalapa; iii) the UNEP task manager; and iv) the regional coordinator (RC).
- National Coordination **Units** (NCU) will execute the project at a national and local level. This structure will include a national coordinator (NC) and the project finance consultant.
- The **Technical Committee** will provide technical input for the implementation of the project activities. This committee will be comprised of: Community Based Organisations (CBOs), academics, national experts and representatives of national and international NGOs.
- The **Regional Support Unit** (ROLAC) will facilitate the project coordination and execution by providing guidance during the execution of activities. The Regional Support Unit will comprise the regional coordinator (RC), a part-time M&E expert and Administration and Finance Officer.

The roles of each of these positions and units are detailed further in Appendix 13 of the Project Document.

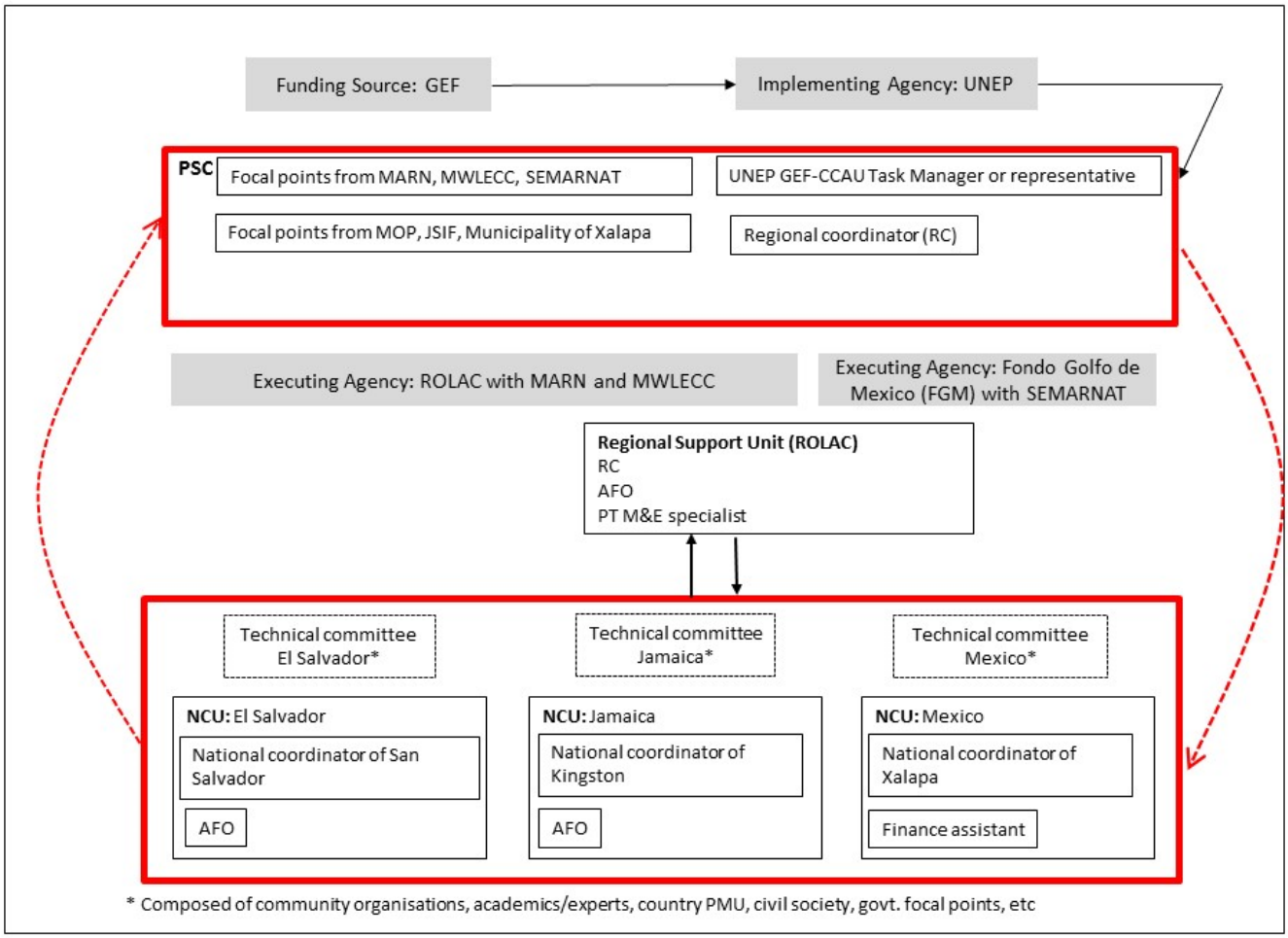


Figure 2. Organogram of the project management structure.

The PSC will be responsible for taking management-related and technical decisions for the project. The mandate of the PSC will include: i) providing guidance and direction for project implementation; and ii) reviewing and approving reports and Annual Work Plans (AWPs), including any changes to the Results-Based Framework (RBF) or timeline of project activities. All decisions to be taken by the PSC will be communicated to the concerned parties by the Member Secretary. The PSC will meet twice a year to discuss performance indicators and provide strategic guidance. In addition, the PSC will ensure that the necessary resources are committed, and will arbitrate on any conflicts within the project or negotiate a solution to any problems between the project and external bodies. Furthermore, the PSC will approve the responsibilities of the Regional Coordinator (RC).

ROLAC (for El Salvador and Jamaica) and FGM (for Mexico) – with technical support from MARN, MWLECC, SEMARNAT – will be the Executing Agencies (EA) for this project. A NCU will be established under each of these government departments. These units will support day-to-day project execution and will ensure:

- the quality of outcomes delivered by the project;
- the effective use of resources;
- appropriate procurement of equipment and consultation services;
- availability of financing to support project implementation; and
- efficient coordination between project stakeholders, particularly national and sub-national stakeholders.

The Executing Agencies will retain overall responsibility for project outcomes and strategic guidance.

A full time National Coordinator (NC) will be recruited for the NCU in each of the three countries to lead the implementation of local project activities and deliverables. The NC will: i) report to the RC; ii) manage the country level activities in line with the budget, work plans, and in accordance with GEF and UNEP guidelines; iii) be responsible for in-country financial management and disbursements, with accountability to the government and UNEP; and iv) work closely with national and local authorities, as well as NGOs, to manage the project effectively at a local level. To achieve this, the NC will *inter alia*: i) provide on-the-ground information for UNEP progress reports; ii) engage with project stakeholders; iii) provide technical support to the project, including measures to address challenges to project execution; and iv) participate in training activities, report writing and facilitation of expert activities that are relevant to the NC's area of expertise. Moreover, the NC will serve as a liaison among the other NCUs, the technical experts and the government staff involved in project activities.

One RC will be recruited for the Regional Support Unit to supervise the NCUs and technical committees in each country. In addition, the RC will: i) report to the PSC; ii) manage project implementation, monitor work progress, and ensure timely delivery of outputs in accordance with the project document and agreed work plans; iii) be responsible for financial management and disbursements, with accountability to the government and UNEP; iv) recruit national experts, including writing their ToRs; v) establish linkages and networks with the ongoing activities of other government and non-government agencies; v) contribute to regional project activities, including developing policy briefs, technical guidelines and training material on urban EbA; vi) develop reports and other documents as described in the M&E plan for the overall project, including reasons for delays, if any, and recommendations on necessary improvements; and vii) arrange the PSC, NCU and other meetings.

The Administration and Finance Officer (AFO) within the Regional Support Unit will ensure that all financial and administrative issues are carried out according to UNEP standard procedures. He/she will make all the necessary administrative steps and financial transactions for project outputs and activities to be delivered according to the established work plan. The AFO will assist the RC and the UNEP TM in all project reporting requirements and will report to the RC.

A part-time regional M&E specialist will be recruited whose duties will include: i) establishing a performance monitoring framework for the three countries to define bi-annual targets for the project to meet the targets defined in the project document by the end of the implementation phase; ii) measuring the indicators to evaluate the progress of the project in meeting the targets; iii) reporting to the RC and NCUs of each country and PSC on the performance of the project according to project and AMAT indicators; iv) collecting and reporting on the progress towards the outcomes and report to the RC; and v) supporting the RC and NC's in meeting the project objective. As part of his/her responsibilities, the M&E specialist will ensure gender is adequately addressed throughout the project and will oversee and monitor the application of gender disaggregated indicators.

As part of the NCU's, a technical committee will be established comprised of academics, representatives from NGOs, CBOs and other experts. In addition, to providing technical support, a team of national and international experts will be employed for the implementation of the project activities. They will provide technical support for specialised tasks that cannot be undertaken by staff from MARN, MWLECC or SEMARNAT or the staff of the implementing partner organisations. Descriptions of the Experts' responsibilities are included in the project's budget notes (see Appendix 4 of the Project Document)

Specific arrangements

<u>El Salvador</u>

The MARN and the MOP are establishing a collaborative framework with well-defined roles and responsibilities for project execution. Because of difficulties in integrating externally-funded projects into nationally-administrated budgets within the structure of the Ministry of Finance, the MARN and MOP proposed to have a supervisory role and entrust UNEP-ROLAC with the execution of Component 2 in San Salvador (see Appendix 22 of the Project Document). A

Memorandum of Understanding (MoU) between UNEP-ROLAC and the MARN – and possibly also the MOP – will be signed to establish the collaborative framework. UNEP-ROLAC will establish one or several project cooperation agreements to ensure that the proposed on-the ground activities are carried out according to the terms agreed with the MARN in the MoU. All additional executing partners will undergo standard UNEP due diligence procedures. Representatives of MARN will have a decisive role in all procedures relating to executing partners, procurement, human resources or other related services to execute Component 2. Executing partners will ensure ongoing communication and coordination with both government counterparts and UNEP-ROLAC. The NC will be provided with office space in MARN, MOP or the external executing partner (as established in the MoU). The position of Finance Assistant will be filled by the AFO in Panama.

Although project execution is under the auspices of the MARN and MOP as national government authorities, local government representatives from these authorities in San Salvador will be mainly responsible for implementing activities under Outcome 1 and 3, as well as the maintenance of EbA interventions beyond the project lifetime. As San Salvador is the capital city, there will be close collaboration between local and national government representatives of MARN and MOP through regular meetings and joint attendance to training workshops.

Kingston

In Jamaica, the MWLECC has entrusted UNEP-ROLAC with the execution of Component 2 in Kingston as a result of limited human resource capacity and challenges with integration of externally-funded projects into nationally-administrated budgets (see Appendix 22). An MoU between UNEP-ROLAC and the MWLECC will be signed to establish the collaborative framework. UNEP-ROLAC will establish one or several project cooperation agreements to ensure that the proposed on-the ground activities are carried out according to the terms agreed with the MWLECC in the MoU. MWLECC will act in a technical supervisory role to oversee processes on behalf of the Government of Jamaica. The Jamaican Focal Point and Climate Change Division – acting on behalf of MWLECC – will be involved in all the decision-making processes related to the implementation of the project generally and the Jamaican component in particular. All additional executing partners will undergo standard UNEP due diligence procedures. Representatives of the MWLECC will have a decisive role in all procedures relating to executing partners, procurement, human resources or other related services to execute Component 2. Executing partners will ensure ongoing communication and coordination with government counterparts and UNEP-ROLAC. The NC will have an office space in either the MWLECC or the external executing partner (as established in the MoU). The position of Finance Assistant will be filled by the AFO based in Panama. UNEP-ROLAC and the chosen executing partners will furnish the MWLECC with the required reports to the Ministry of Finance on the collaboration.

Although project execution is under the supervision of the MWLECC as national government authority, local government representatives from these authorities in Kingston will be mainly responsible for implementing activities under Outcome 1 and 3, as well as the maintenance of EbA interventions beyond the project lifetime. As Kingston is the capital city, there will be close collaboration between local and national government representatives of MWLECC through regular meetings and joint attendance to training workshops.

Xalapa

SEMARNAT and the municipality of Xalapa have identified Fondo Golfo de México (FGM) – a subsidiary of the Fondo Mexicano para la Conservación de la Naturaleza (FMCN) – as the preferred executing partner (see Appendix 22 of the Project Document). The FMCN has solid experience in executing GEF and World Bank projects, with in-house technical and financial capacity. FGM/FMCN is therefore an adequate partner for execution of Component 2 in Xalapa. UNEP-ROLAC will establish a Project Cooperation Agreement with FGM/FMCN to: i) set up clear responsibilities for delivery of the proposed activities; ii) determine the funds required; and iii) establish supervisory roles. SEMARNAT and the Municipality of Xalapa will have a decisive role in the agreement and a supervisory role in the deliverables of the executing partner. The NC and financial assistant will be contracted by the executing partner under supervision by UNEP-ROLAC, SEMARNAT and the Municipality of Xalapa and they will seek constant communication and coordination with the above-mentioned partners.

In Xalapa, project implementation will be undertaken in close collaboration with SEMARNAT at state level and the municipality of Xalapa at local level. The municipality of Xalapa will be responsible for maintaining Eba interventions beyond the project lifetime. SEMARNAT as intermediate between local and national level will be responsible for communicating progress on EbA interventions in Xalapa to representatives of SEMARNAT at national level and will be facilitating the upscaling of the interventions at state and national scale.

Planned coordination with other relevant GEF and non-GEF financed projects

The project has been designed in full alignment with the portfolio of GEF projects that are currently in implementation phase. The project will align with the following GEF-financed and non- GEF financed. The Technical Committee of each country will comprise the main local stakeholders, including the project coordinators of the ongoing initiatives presented below (for further information on coordination with GEF and non-GEF initiatives consult Section 2.7 of the UNEP Project Document).

Global level

The LDCF-funded **Urban EbA Asia project.** The SCCF-financed project will align with this project to set an example, provide lessons learned and best-practices on how to develop and implement urban EbA across several countries.

The **SCCF-funded China (2014–2018)** to build climate resilience in vulnerable Africa and Asian-Pacific developing countries by providing EbA support**.** The SCCF-financed project is aligned with this project and is taking lessons learned on the management structure and current implementation of this project. In addition, lessons learned and best practices will be shared through the "Ecosystem-based Adaptation for South-South Coordination" portal.

The Non-LDC NAP Global Support Programme (GSP). The SCCF-financed project is aligned with this GSP programme by contributing to laying the foundation for effective, private sector involvement in climate change adaptation. For example, through the development of a sustainable financing strategy under Output 1.4. In addition, the private sector will be consulted during the implementation of the EbA interventions to gain their support for replicating and funding such interventions elsewhere in the country and/or LAC region.

UNEPLive. Under component 3, the SCCF-financed project is aligned with this initiative to facilitate the exchange and sharing of data, assessments and knowledge on climate change and ecosystem restoration between *inter alia* member countries, research networks and local communities.

The **Global Universities Partnership on Environment for Sustainability (GUPES)** is UNEP's Environmental Education and Training Unit (EETU) flagship initiative. The goal of GUPES is to mainstream Environmental Education in higher education institutions, both through curricula and greening practices on campuses. It operates through EETU key 3 pillars: education, training, and networking. At present there are over 750 partner universities affiliated to GUPES worldwide. Alianza de Redes Iberoamericanas de, Universidades por la Sustentabilidad y el Ambiente (Alliance of Iberoamerican University Network for Sustainability and the Environment (ARIUSA) is a partner network of GUPES. Both ROLAC and EETU work with this network. The SCCF-financed project will align with GUPES and ARIUSA under Component 3 and particularly Output 3.3 where the mentioned universities and research institutes in each country will collaborate closely with these initiatives to incorporate EbA practices into higher education. In addition, lessons learned from GUPES can be taken to incorporate environmental education on EbA into the educational toolkits under Output 3.4.

Regional level

Biodiversity Ecosystem Services (BES) Funds Programme (2013–2016). This programme is part of the BIO Funds and operates in a number of LAC countries. Currently, the programme does not operate in El Salvador and Mexico, but it has the objective to expand its activities to all LAC countries. The main goal of BES is to include biodiversity and ecosystem services into planning and decision-making in sectors such as agriculture, sanitation, transport, tourism and water. The SCCF-financed project will coordinate with activities under Objectives 2 (promoting investment into protection of priority regional ecosystems) and 4 (promoting private sector investment opportunities for innovation and environmental protection) of the BES programme. Government stakeholders involved in BES will be trained on planning and implementing EbA under Outputs 1.2 and 1.3 of the SCCF-financed project. Furthermore, demonstration of EbA interventions at the watershed, urban landscape and household scale within the SCCF-financed project will complement the interventions of the BES programme to restore mangroves in coastal areas as a buffer against natural disasters. Policy revisions will be developed to build upon the assessments undertaken by BES on the effect of biodiversity policies in the LAC region. Information on urban EbA will also be disseminated to the general public through the Caribbean Coastal Capital Centre of Excellence and the Integrated Economic-Environmental Framework, developed under BES.

The campaign "**Making Cities Resilient: My City is Getting Ready**" of the United Nations Office for Disaster Risk Reduction (UNISDR). The first phase of this campaign (2010–2011) focused primarily on raising awareness of governments around the necessity of building resilient cities to climate-related hazards and any other risks. The second phase (2012–2015) is ongoing and shifts the focus from awareness raising to implementation. The SCCF project will benefit from this campaign, particularly from the toolkits that UNISDR has already designed to promote resilient cities. In addition, there is interest from UNISDR regional office to create synergies with the SCCF-project and there is already good collaboration with the current regional director[46].

The second phase of **the Emergent and Sustainable Cities Initiative (ESCI)** runs from 2014 to 2017 and is funded by the Inter-American Development Bank (IADB). The initiative is helping medium-sized cities in Latin America and the Caribbean to prioritise infrastructure investment and find specific solutions to problems identified using a participatory methodology. The initiative focuses on three pillars: i) environmental sustainability and climate change; ii) integrated urban development; and iii) fiscal sustainability and governance. Since 2013, Xalapa is one of the cities under this initiative. Therefore, the SCCF-financed project will make use of the following parts developed by the ESCI: i) the risk assessments and maps to assess the cities' vulnerability to natural hazards in the context of climate change; ii) the growth scenarios that are analysed to anticipate Xalapas infrastructure costs; and iii) the information that is collected from different sectors on climate change. The plan for Xalapa also has described potential urban EbA measures. So far the plan has not acquired any funding yet and therefore is a good reference to request additional funds for pilot initiatives developed in the SCCF-financed project[47].

ICLEI - Local Governments for Sustainability is a global network of cities and local governments dedicated to sustainable development, including Latin America and the Caribbean. ICLEI provides technical assistance, training and information services to build capacity and share knowledge as well as support the implementation of sustainable development at the local level. ICLEI works in San Salvador, El Salvador and Veracruz, Mexico. Recently, ICLEI developed the municipal climate action plan for Xalapa, which has not been carried out yet. The SCCF-financed project will take lessons learned from ICLEI to improve linkages with the technical staff of local governments. This will include building capacity of technical government staff and promote the inclusion of EbA interventions into sustainable development plans and policies of the local government in San Salvador and Xalapa.

The UN-HABITAT Cities and Climate Change Initiative (CCCI) is a global project that targets medium-sized cities in developing countries. It focuses on good governance and practical initiatives for municipalities and their citizens to address climate change. The initiative began in 2008 and has a budget of US$ 8 million.

[46] Personal communication Mr. Jacinto Buenfil. 29 April 2015.

[47] The project is quite relevant for Xalapa. The person UNEP-ROLAC has contacted is Ricardo De Vecchi who leads the possible implementation of ESCI projects, particularly in Mexico. ricardod@IADB.ORG.

The GEF-funded project **Climate Technology Transfer Mechanisms and Networks in Latin America and the Caribbean (2015–2018)**[48] will be implemented by the Inter-American Development Bank. The project will pilot institutional frameworks and mechanisms for the development and transfer of environmentally sound technologies (EST) in the energy (renewable energy and energy efficiency), transport and forestry sectors, to leverage investments from the public and private sectors. The development and transfer of ESTs in the LAC region will contribute to the reduction of greenhouse gas (GHG) emissions and reducing the vulnerability to climate change in specific sectors. The SCCF-financed project will align specifically with the Outcome 1.1 "Development of national capacities to identify, prioritize and promote climate technologies" and Outcome 2.2 "Thematic network on the development and transfer of adaptation technologies for agriculture created/strengthened" of the IADB project to integrate urban EbA in both Outcomes.

The GEF Earth Fund: Public-Private Funding Mechanisms for Watershed Protection project is currently implemented by The Nature Conservancy. The objective of this project is to set up public-private funding mechanisms to promote private sector participation in the conservation of freshwater ecosystems and biodiversity of global importance. The project is particularly interesting as it focuses on the watersheds around large cities in the LAC region. Therefore, the SCCF-financed project will take lessons learned of the financial and institutional mechanisms implemented under the GEF Earth Fund project to implement urban EbA interventions at the watershed level.

The **Waterclima LAC project** (2014–2018) is funded with €7 million by the European Commission. The project aims to improve the dialogue and cooperation on watershed and coastal management in the context of climate change by supporting technical and financial mechanisms. The emphasis will be on capacity building for policy-makers and public institutions and will include financial management, transparency and accountability of public expenditure and decision-making. In addition, the enhanced development of capacities in the water sector in the LAC region and the implementation of pilot projects is expected to contribute to a better governance and sustainable management of water resources and increased cooperation. The SCCF-financed project will therefore collaborate closely with this project to: i) complement the (urban) EbA aspect in adapting to climate change in the water sector; and ii) take lessons learned and build on the capacity developed through the Waterclima project. The main beneficiaries of this project are government bodies and institutions responsible for water and coastal management and research institutions and private sector that participate in research and training.

National level

El Salvador

The **LGGE: Energy Efficiency in Public Buildings (EEPB)** project is funded by the GEF Trust Fund and implemented by the Ministry of Environment and Natural Resources (MARN) in close cooperation with the Ministry of Education (MINED) and the Ministry of Economy (MINEC). The objective is to introduce energy efficiency (EE) measures in existing and new public buildings by creating a conducive policy environment, increasing user awareness, developing performance criteria and standards, and implementing a broad EE pilot within selected public entities. The SCCF-financed project will build forward on the technical and institutional capacity that has been developed under component 1 – policy – of the project. In addition, it will collate the lessons learned under component 4 – monitoring and evaluation – to consider these when implementing the adaptation interventions and revising relevant policies and plans.

The REDD+ Readiness El Salvador project is implemented by the MARN, in close cooperation with the MAG. The World Bank is funding the project with US$3.6 million. The project takes an adaptation approach through large-scale landscape restoration to recover the ecosystem services. In addition, the project contributes to climate change mitigation

[48] The project document for this project, including management arrangements is available on: http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38697709

by increasing the sequestration and storage of carbon. The REDD+ project has the strategy to: i) harmonize policies and associated sectoral laws or laws that have an influence on the use of soil; ii) enable and apply legal instruments related to the zoning and land use, the regulation of agricultural practices, control of land use change, illegal logging, firewood extraction and control of forest fires; iii) design and implement a program of incentives and compensation mechanisms; iv) have adequate legal instruments to recognize the rights to natural resources and forest management; and v) promote conservation strategies for forest ecosystems and restoration of their ecological connectivity. The SCCF-financed project will contribute to the REDD+ project through Component one regarding the technical and institutional capacity. In addition, the SCCF-financed project will collect the lessons learned and will consider these in Component 1 and Component 2.

The Third National Communication and Climate Change Biennial Report is a US$852,000 funded GEF/UNDP project and will be executed in the period 2015–2017. Under Component 1, the SCCF-financed project will collaborate closely with this project build on the climate change adaptation activities mention in this TNC and complement these activities using EbA as a tool to adapt to the effects of climate change.

The International Development Bank (IDB) is funding a project worth US$480,000 on "**Support to the Climate Change Strategy**" and will be executed in the period 2014–2015. The SCCF-financed will complement the adaptation activities under this Climate Change Strategy by implementing EbA interventions particular urban EbA.

The Program for the Restoration of the Ecosystems and Landscape of El Salvador (PREP) is funded by the Global Environment Fund with a budget of ~US$1,5 million. The program is designed by the MARN with the aim to promote and facilitate the restoration of the ecosystems and landscape. This will be achieved through including environmental services and conservation of biodiversity as part of a strategy to adapt to the effects and variability of climate change. The PREP programme is the main tool for adaptation to climate change and forms part of the new National Policy of Environment and Natural Resources, launched in May 2012. This programme has an EbA component, but focuses on rural areas. The SCCF-financed project will therefore collect the lessons learned and take these into account under the Outputs and activities under Outcomes 1 and 2 to implement urban EbA.

The Landscape Restoration project South of Ahuachapan is implemented by the MARN and funded with €2 million by the German Cooperation. The SCCF-financed project will collect lessons learned on landscape and ecosystem restoration and include these in the training workshops of Component 1 and Component 2. The project will end in 2016.

The "Strategies for Sustainable Urban Development: Associate Planning and Participative Management of the Territory by SIG- P" project is funded by the European Commission. This project finished in February 2015 and was implemented by the Italian NGO Medina together with the Mayor of San Salvador and the Planning Office of Metropolitan Area of San Salvador. The project developed a participatory model of standard procedures to territorial information management and made a pilot project of Participatory Geographic Information System. The outputs of the projects were i) built and empowered exchange network between local actors through a model of participatory urban planning and management; ii) strengthened technical and management capacities of partner institutions and empowered communities; iii) improved comprehensive land management and public services through the implementation and deployment of a multilevel participatory geographic information system. Under Component 1 and 3, the SCCF-financed project will build on the developed capacity of the institution and urban communities to integrate EbA into the urban development plans. In addition, for the scenario maps developed under Output 2.1, the SCCF-financed project will build on the GIS systems/maps to assist in local level zoning and planning.

The **DIPECHO VIII project: "Capacity building and sustainable strategies for risk reduction, preparedness and adaptation in the metropolitan area of San Salvador in institutional and community levels**" (2014–2015). The project was implemented by OXFAM and PROCOMES. The objectives of this project are i) improving the capacity of local institutions to deal with disasters; ii) building on previous DIPECHO actions and other projects; iii) expanding the coverage of the disaster risk reduction and preparedness of actions in the AMSS; and iv) ensuring timely and sustainable management for local authorities of different components of the disaster risk reduction. The SCCF-financed

project will collect lessons learned and build on the developed capacity of local institutions under Component 1. In addition, it will adopt the systems developed to respond to natural disasters to increase adaptation to climate change.

The project **Food Program and School Health**, is executed and funded by the Ministry of Education (MINED). In 2008, MINED and the FAO signed an agreement to develop the project: "Support for curriculum development in basic education to improve nutrition education and food security", through developing school gardens with technical and financial assistance of the FAO. Currently, this curriculum is institutionalised by the MINED for $600,000 per year. The school garden has three objectives: i) be productive and environmentally friendly; ii) be educational; and iii) provide food and nutrition security. The SCCF-financed project will collect lessons learned to develop the urban gardens in Output 2.3.
The Ministry of Agriculture (MAG) is implementing the programme **"Urban and peri-urban Agriculture"**, which started September 2014. The program has the objective to: i) contributing to the food security of the poorest families in urban and peri-urban municipalities of different areas of the country; ii) the consumption and commercialization of surpluses; iii) improving diet; and iv) providing technical training. The SCCF-financed project will collect lessons learned in component 2 and will work with in coordination with this project for the promotion of sustainable agriculture to the peri-urban communities in the watershed and the development of the urban gardens at the schools.

The **"SLV-056-B Integrated Project of water, sanitation and environment"** project is funded by the Fund of Cooperation for Water and Sanitation (FCAS) for a total of $13.9 million dollars by FCAS and $3.41 million dollars by the GOES as well as a multilateral national program administered by the BID for US$3.41 million. The program has a duration of five years and finishes in 2017. Its overall objective is to contribute increasing the coverage, quality and sustainability of water and sanitation services, as well as strengthening the comprehensive management of water resources in the water and sanitation subsector. The products of the programme are:

- The national plan of comprehensive management of water resources and the plans of action in priority basins;
- The general water law;
- The policy and national strategy of water resources; and
- An information system to improve the knowledge to regulate the use and management of the water resources.

The programme has an intervention to recover the basin of Acelhuate, – which includes the sub basin Arenal-Monserrat – hence the SCCF-financed project will align strongly with the FCAS program. The SCCF-financed project will collect lessons learned build on the interventions by the FCAS project, particularly for the development of the watershed strategy under Outcome 1 of the SCCF-financed project.

The **Montreal Urban Park project** is created with the support of Cordaid, the Project Montreal Urban Park focuses on violence prevention in an environmentally and socially vulnerable area in the north-east sector of the Municipality of Mejicanos in the North of the San Salvador Metropolitan Area. The Project is implemented in partnership with the Municipality of Mejicanos. The land is located in the geographical centre of the "head" or the beginning of the watershed of the seven springs, which integrates a hydrographic basin system. The Montreal Urban Park initiative, initiated at the request of local communities, has resulted in the need to tackle the problems of the area, and the formulation of an urban program entitled "Building Inclusive Neighbourhoods", which is comprised of five components:

1. Citizen Security and Coexistence.
2. Integral Neighbourhood Improvement.
3. Job Placement of Youths and Women at Risk: Employability and Entrepreneurship.
4. Environmental Management and Urban Agriculture.
5. Governance.

Under component 4, environmental management focuses on the development of the so-called "Urban Farm", to be implemented in the western sector of the land. The area will serve as a training and demonstration centre for organic farming. Urban agriculture includes aspects of education in agriculture such as training of urban farmers to increase

their yield and add value to their produce. The SCCF-financed project will collect the lessons learned on the training and urban farming under Outcome 2 of the SCCF-financed project.

Jamaica

The GEF-UNEP funded project **LGGE Promoting Energy Efficiency and Renewable Energy in Buildings in Jamaica** is a forty eight (48) months US $7,000,000.00 project executed by the University of the West Indies in cooperation with national public and private sector organisations and with technical and advisory support from the centre of excellence for renewable energy. The project has five components, including *inter alia* monitoring and evaluation and dissemination.

GEF Trust Fund **Integrated Management of the Yallahs River and Hope River Watersheds (2014–2018)** is being executed by the NEPA and a number of related entities. Such as the Office of the Prime Minister (Lead), PIOJ, Forestry Department (FD), water Resources Authority (WRA), National Irrigation Commission (NIC), Ministry of Agriculture and Fisheries (MOAF) & Rural Agriculture Development Authority (RADA). The objective of the project is to improve the conservation and management of biodiversity and the provision of ecosystem services in the Yallahs River and Hope River watersheds. The budget of the project is US$12,933,198. The SCCF-financed project will take lessons learned from the management of the Hope River watershed that supplies water to the KMA and promote the integration of EbA to improve the management of the two watersheds.

The **National Biodiversity Planning to Support the Implementation of the CBD Strategic Plan in Jamaica** (2014–2015) is funded by the GEF-UNDP with US$220,000 and being implemented by the NEPA. The objective is to integrate Jamaica's obligation under the CBD into its national development and sectoral planning framework through a renewed and participative "biodiversity planning" and strategizing process. The SCCF-financed project will take into account the biodiversity objectives when implementing the adaptation activities.
The US$18,295,970 funded **Pilot Program for Climate Resilience (PPCR- Phase II)** (2014–2018) is being implemented by the MWLECC with coordination by the Planning Institute of Jamaica (PIOJ) to generate information on approaches to address climate challenges, help mainstream climate change into development planning and processes and disseminate results across sectors. Under Component 1, the SCCF-financed project will build on the efforts to mainstream climate change into development planning processes across sectors. The project will therefore collaborate with the PPCR project to take lessons learned and avoid duplication of efforts.

The Artificial Groundwater Recharge System project (2014–2016) is funded with US$8,928,571 and forms part of the NWA attempts at managing the island's water resources to achieve the NWC's Vision 2030 Jamaica - National Development plan goals. The implementing institutions are SM and M Jamaica Limited and the Rural Water Supply Limited. The project has three objectives: i) increase the revenue from additional water availability; ii) the sustainable abstraction of ~3.5 million gallons per day from nearby wells; and iii) the alleviation of water shortages and restrictions during the dry season. The SCCF-financed project will align with this project under Component 2 when designing appropriate urban EbA interventions to address the flooding and occurrence of drought.

The **Jamaica Rural Economy and Ecosystems Adapting to Climate Change (JA REEACH)** will be implemented by the MWLECC and the Ministry of Science Technology, Energy and Mining (MSTEM) from 2012 to 2015 and is funded with US$9,234,717 by the U.S. Government. The objective is to i) promote rural livelihoods and natural systems that are resilient to the impacts of climate change; and ii) strengthen the capacity of local and national institutions to support the processes of adaptation and sustainability. Under Component 2, the SCCF-financed project will build on the developed capacity to promote climate-resilient livelihoods and under Component 1, the project will build on the developed capacity of local and national institutions to support the process to adapt to climate change.

The **Food Facility project** (2014–2018) is funded by the European Commission and FAO with US$5,800,000 to support poverty reduction and food security of vulnerable groups, and improved availability of safe, affordable and nutritious food for the rural and urban poor. The project supports the food security strategy of the government of Jamaica by promoting sustainable increases in productivity of Jamaican agriculture and import substitution policies.

Fourteen strategic areas have been identified of which the following include climate change: i) Establish four greenhouses to provide quality seedlings to vegetable producers; and ii) increase the use of small scale irrigation by providing seven selected producer groups with irrigation systems operated through water users groups. Under Component 2, the SCCF-financed project will take lessons learned and adopt best practices for developing urban agricultural activities to address the food insecurity of local communities.

The COMET 11 (2013–2018) is a US$12,707,527 project funded by USAID. The objective is to strengthen community and civil society organizations (CSOs), increase citizen cooperation and accountability, strengthen juvenile justice and youth at-risk programs and further support community-based policing practices. The project has four components: i) community driven safety and security empowerment; ii) establishing supportive of a culture of lawfulness; iii) alternative programs for youth at risk; and iv) community policing. Climate change is a cross cutting theme with the objective to enhance the adaptive capacity of selected communities to respond to the negative impacts of climate change. The SCCF-financed project will build on the community work undertaken by this project – in particular under Component 2 and 3 – to take lessons learned how best to approach the communities and develop the awareness campaign on climate change. In addition, the COMET project can provide a useful link in getting communities to take part in the EbA interventions, for example to monitor the implemented EbA interventions.

The "Management of coastal resources and conservation of marine biodiversity in the Caribbean" (2012–2015) is funded by BMZ-GIZ. The SCCF-financed project will use lessons learned to form partnerships with the private sector in the development of the EbA interventions to secure their continuity and sustainability after the project's lifespan. In Jamaica the SCCF-financed project will build on the interventions of the BMZ-GIZ project that contributed to the development of environmentally-friendly sewage disposal to enhance ecosystem functioning.

Mexico

The Watersheds and Cities Program (2014–2017) includes a project in the Pixquiac river basin whose ecosystem services, including the provision of water, are very important for Xalapa. It is a US$1.1 million project, funded by the Gonzalo Río Arronte Foundation and the Mexican Fund for the Conservation of Nature (FMCN) (together accounting for 21% of the budget), the National Commission for Natural Protected Areas CONANP), the National Forestry Commission (CONAFOR), the Natural Protected Areas Commission (CONANP), the State of Veracruz, the Water and Sanitation Committee-Xalapa (CMAS), the Cofre de Perote Park, Conaculta and Fomento Social Banamex. The implementing agency is *Senderos y Encuentros para un Desarrollo Autónomo Sustentable, A.C. (Sendas)*, a local NGO. The main objective of this project is to sustain and recover natural processes through planning, protection and environmental restoration of natural resources in the Pixquiac river basin to improve living conditions for local population, and benefit rural and urban water users. The SCCF-financed project will acquire progress reports of this program and consult the project managers to take lessons learned from this project as the projects are at similar scale and scope. Furthermore, Sendas has played a relevant role in the design of the EbA interventions for the SCCF-financed project.

The project **"Strengthening Management Effectiveness and Resilience of Protected Areas to Safeguard Biodiversity Threatened by Climate Change" (2013–2018)** is funded by the GEF-UNDP with US$ 10,972,727 and executed by CONANP. The main objective of the project is to transform management and coverage of terrestrial and coastal protected areas in Mexico to alleviate the direct and indirect impacts of climate change. This will be achieved through three components: i) developing management systems – for monitoring and early warning systems, management decision making tools and sustainable financing – to optimise national readiness to address future climate change effects on NPAs; ii) expanding NPAs in landscapes sensitive to climate change to protect refugia and corridors; and iii) building readiness to address specific climate change impacts in vulnerable PAs through ecoregion-specific interventions in 17 priority NPAs.

The GEF project **Conservation of coastal watersheds to achieve multiple global environmental benefits in context of changing environments** is supported by the World Bank and executed by the CONANP, the CONAFOR, FMCN and the National Institute of Ecology and Climate Change (INECC). The total budget for the project is US$267,7

million, of which US$39,5 million is granted by the GEF. The main objectives of this project are to promote integrated environmental management of selected coastal watersheds as a means to conserve biodiversity, contribute to climate change mitigation, and enhance sustainable land use. The project focuses on the coastal watersheds near the Gulf of Mexico, which will include the implementation area of the SCCF-project.

The GEF-World Bank project **Adaptation to Climate Change Impacts on the Coastal Wetlands in the Gulf of Mexico through Improved Water Resource Management (2009–2014)** was a US$ 5,280,000 funded project executed by SEMARNAT and local agencies. The main objective was to reduce vulnerability to the anticipated impacts from climate change on the country's water resources, with a primary focus on coastal wetlands and associated inland basins. This would be achieved through three components: i) national policies to address the impacts of climate change on water resources management; ii) detailed design of key selected adaptation measures; and iii) implementation of pilot adaptation measures in selected wetlands highly vulnerable to the effects of climate change. This project is particularly relevant to the SCCF project as it addressed the management of water resources, including wetlands and urban water infrastructure. The SCCF-financed project will build on the activities implemented under this project to take lessons learned and prevent duplication of efforts. These activities include *inter alia* the: i) collected data on adaptation measures; ii) developed monitoring system; iii) installed Early Warning System; and iv) implemented rainwater harvesting measures.

The GEF-funded project **Enhancing Mexico's Environmental Sustainability in Regional Hubs (2016 – 2021)** is a US$13,761,468 funded project and will be implemented by the Inter-American Development Bank, as part of the GEF's Sustainable Cities Integrated Approach Pilot program. The proposed project entails enhancing Mexico's environmental sustainability through the development of projects and policies in cities that: i) serve as regional hubs; and ii) are located in environmentally important areas for the country. The objective is to promote the development of sustainable policies and projects in medium-sized cities, by supporting environmental and urban sustainability in cities that can serve as examples for the rest of the country. As one of the three selected cities is Xalapa, the SCCF-financed Urban EbA LAC project will complement the climate change mitigation aspects of this project with climate change adaptation elements. Particular components of the IADB project on which the SCCF-financed project will build on include: i) Component 1 regarding integrated sustainable urban planning and management; ii) Component 3 on catalysing investments for sustainable cities – the SCCF project will take lessons learned for developing the sustainable finance strategy under Output 1.4; and iii) Component 4 to enhance partnerships for sustainable cities at local, national, and global levels (through knowledge management, capacity building, global coordination) – which will also be done through Output 3.5 of the SCCF-financed project.

Additional Information not well elaborated at PIF Stage:

A.7 *Benefits.* Describe the socioeconomic benefits to be delivered by the project at the national and local levels. How do these benefits translate in supporting the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCF/SCCF)?

The restoration of urban and peri-urban ecosystems in San Salvador, Kingston and Xalapa will result in multiple socio-economic benefits for the urban communities in these cities. Urban reforestation and urban agriculture will increase vegetative cover, thereby reducing heat stress, air pollution and associated public health risks. Restored wetlands and streams in urban areas will contribute to increasing water quality and availability, thereby improving water security in adjacent communities. Furthermore, the risks posed by climate-related hazards – such as flooding – will be reduced because of the increased water storage capacity of restored wetlands. Compared with degraded wetlands, healthy wetlands and rivers also support a greater abundance of fish, thereby improving food security for vulnerable urban communities. Similarly, the establishment of urban gardens will contribute to food security of those communities. At the household level, improved rainwater harvesting and water recycling systems at schools as a result of project interventions will increase water availability. The project's EbA interventions will therefore result in an increase of the adaptive capacity of urban communities to respond to the predicted climate-related effects in each pilot city, including

increased variability of rainfall, intensity of rainfall, frequency of drought, and frequency of climate-related hazards such as floods and landslides.

At a national level, the SCCF-financed project will increase the technical and institutional capacity of national and sub-national government institutions to address the negative effects of climate change through training on how to plan, implement and monitor urban EbA. This will result in: i) enhanced capacity to integrate an urban EbA approach for adaptation to climate change into urban development policies, plans and legislation; and ii) increased capacity to plan, finance and implement urban EbA interventions to adapt to the effects of climate change, particularly at watershed and urban landscape scale.

The project's activities will also include interventions to maintain and increase the socio-economic and environmental benefits beyond the project implementation period. For example, the project will develop a strategy to upscale urban EbA to other cities within the LAC region. Additionally, the lessons learned during the project will be collated and shared with national and regional policy- and decision-makers.

A.8 *Knowledge Management.* Elaborate on the knowledge management approach for the project, including, if any, plans for the project to learn from other relevant projects and initiatives (e.g. participate in trainings, conferences, stakeholder exchanges, virtual networks, project twinning) and plans for the project to assess and document in a user-friendly form (e.g. lessons learned briefs, engaging websites, guidebooks based on experience) and share these experiences and expertise (e.g. participate in community of practices, organize seminars, trainings and conferences) with relevant stakeholders.

Effective management of knowledge will be promoted under each of the project components as described in Table 6 below.

Table 6. Contribution to effective knowledge management per component.

Project aspect/component	Contribution to effective knowledge management
Component 1: Enabling environment for mainstreaming EbA into medium- and long-term urban development planning.	*Generating information/knowledge:* • **Policy briefs** and **technical guidelines** will be developed to support integration of climate change and urban EbA into relevant policies and plans, and their related budgets. *Sustaining and improving knowledge:* • By **training** the national and sub-national government staff of MARN, MOP, MWLECC, JSIF, SEMARNAT, and Municipality of Xalapa on planning and implementing urban EbA interventions, these national stakeholders will have enhanced knowledge to implement this approach in the future. In addition, the development of Training of Trainers material will sustain this knowledge thereby promoting replication and upscaling of the interventions beyond the project lifespan. • Through **technical training** on urban EbA, government staff and urban communities in all three cities will have enhanced knowledge on urban EbA as a cost-effective means of adapting to climate change. • A **sustainable financing strategy** will be developed and integrated as part of the upscaling strategy to promote private sector investment into urban EbA. This strategy will guide project stakeholders and will promote the replication and funding of urban EbA interventions beyond the project lifespan.
Component 2: Demonstration of urban EbA interventions in selected cities to enhance climate resilience.	*Generating information/knowledge*: • **Socio-economic assessments and scenario mapping** will be undertaken with local authorities and communities at the intervention sites in each pilot city to identify the risks and vulnerabilities posed to these urban communities by the predicted effects of climate change. • **Technical protocols** for the reforestation of watersheds, and for the implementation and maintenance of detention ponds, permeable pavements and rainwater-harvesting systems will be developed and distributed via local government authorities. These protocols will be based on: i) socio-economic, biodiversity and climate change assessments that are site-specific to the urban communities' targeted; and ii) local knowledge on ecosystem restoration suitable for each city. *Sustaining knowledge:*

	• Through **training** and **active participation** of urban communities in the pilot cities during implementation of the EbA interventions, these stakeholders will have sufficient knowledge and skills to support the ongoing maintenance of project activities beyond the lifespan of the project as well as to replicate these interventions in other vulnerable urban communities in the future.
Component 3: Knowledge and awareness of urban EbA throughout the LAC region.	*Sustaining knowledge*: • By **implementing a communication strategy** that includes **awareness-raising campaigns** using a variety of media to disseminate information on urban EbA best practices and lessons learned, knowledge on urban EbA will be enhanced among the general public. • In **strengthening existing web portals** to capture and share information on climate change impacts and EbA, stakeholders at the national and international scales will be provided with an evidence base for EbA, thereby promoting the wide-scale implementation of this approach across the LAC region. • A regional workshop will be held towards the end of the project to share lessons learned on EbA. *Generating information/knowledge:* • A **long-term research programme on urban EbA** will be integrated into environmental or climate change departments of research institutions. This research programme will be used to monitor the adaptation benefits of the urban EbA measures, including: i) sustainable crop production in urban gardens; ii) watershed restoration using multi-use tree species, iii) construction/rehabilitation of urban wetlands; and iv) construction of permeable urban infrastructure such as pavements. In addition, citizen science will be used to allow local communities to provide feedback on the effect of the implemented urban EbA interventions. • By **developing educational toolkits on EbA** for teachers at primary and secondary schools, students will have increased knowledge and skills to implement urban EbA at small-scale. Demonstrating the benefits of EbA to the youth will promote the sustainability of EbA usage in the targeted countries.

B. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

B.1 *Consistency with National Priorities.* Describe the consistency of the project with national strategies and plans or reports and assessments under relevant conventions such as NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, etc.:

The governments of El Salvador, Jamaica and Mexico have ratified several multi-lateral agreements, including: i) the Sustainable Development Goals (SDGs); ii) the Campeche declaration on the Mesoamerican Strategy for Environmental Sustainability; iii) the Convention on Biological Diversity (CBD); and iv) the Ramsar Convention on Wetlands. These international conventions provide frameworks that influence the policies, plans and strategies of signatory nations. Examples of national plans and strategies developed as a result of the ratification of these conventions in LACs include i) the National Communications under the UNFCCC; ii) the National Biodiversity Strategies and Action Plans (NBSAP) under the CBD; and iii) the National Capacity Self-Assessment for Global Environmental Management (NCSA) under the United Nation Convention to Combat Desertification (UNCCD). These national plans and strategies provide guidance for countries to reduce the effects of climate change, with a strong focus on mitigation, rather than adaptation. Therefore, there is a need to increase the countries' emphasis on adaptation to climate change, particularly using EbA.

The Sustainable Development Goals (SDGs) are a set of targets that have been proposed to replace the Millennium Development Goals, which expire in 2015. However, the SDGs take a broader approach on environmental sustainability. There are 17 SDGs that are to be achieved by 2030. The goals relevant to the SCCF-financed project are:

- SDG 5 – *Achieve gender equality and empower all women and girls*, by ensuring equal participation of men and women in project activities;
- SDG 6 – *Ensure availability and sustainable management of water and sanitation for all*, by installing rainwater harvesting systems, implementing waste management measures and improving management of watersheds and associated watercourses;

- SDG 11 – *Make cities and human settlements inclusive, safe, resilient and sustainable*, through building capacity for long-term planning and implementation of adaptation measures coupled with demonstration of EbA interventions at the household, urban landscape and urban catchment scales;
- SDG 13 – *Take urgent action to combat climate change and its impacts* by taking current and future climate change scenarios into account during urban planning; and
- SDG 15 – *Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss* through the restoration and rehabilitation of watersheds and wetlands.

The SCCF-financed project will align with the Technology Needs Assessments (TNAs) that have been undertaken in El Salvador and Jamaica. These TNAs are a set of country-driven activities that identify and determine the priority needs of these countries in terms of mitigation and adaptation technologies of developing country parties. Since Mexico is not classified as a developing country, the GoM has not developed a TNA. The project activities will: i) build on the technology needs analyses and training material developed for the global TNA project; ii) include further development of the TNA' and iii) update the Technology Action Plan (TAP). Furthermore, the project will build on the TNA programme to share lessons learned on transferring adaptation technologies to other countries in the LAC region.

Additionally to the Global TNA, there are two other regional programmes with which the SCCF-financed project will align. The first programme is the Latin America and the Caribbean Regional Programme of Action – known as "Integrated Management of Water and Coastal Resources" (IMWCR). The SCCF-financed project will support this programme by restoring urban catchments and building the technical capacity of local government to plan urban EbA for watershed restoration. The second programme is the Caribbean Community (CARICOM) Implementation Plan for the Regional Framework for Achieving Development Resilient to Climate Change (2009–2015). This outlines the region's strategic approach to increase resilience to climate change and is guided by five strategic objectives to strengthen the resilience of the social, economic and environmental systems of the CARICOM member states. The project is aligned with three of these five objectives, namely: i) promoting the implementation of specific adaptation interventions; ii) encouraging the reduction of vulnerability of natural and human systems to climate change; and iii) promoting social, economic and environmental benefits through forest management in CARICOM countries.

In El Salvador, Jamaica and Mexico several steps have already been undertaken to address the problem of environmental degradation that is a barrier to the sustainable development of socio-economic sectors, including agriculture, infrastructure and social development. These steps include the development of policies, strategies and plans that focus on *inter alia* i) sustainable development; ii) poverty reduction; iii) disaster risk reduction; iv) water and sanitation; and v) climate change adaptation and mitigation. The SCCF-financed project will support the objectives of these frameworks and policies by strengthening the capacity of local, national and regional authorities to mainstream EbA into national policies. In particular, the project will align with the national and local policies and strategies on climate change in each country as described below.

El Salvador

- **The Second National Communication (SNC) (2013)** is the main guidance for the interventions of the SCCF-financed project to address the effects of climate change. In preparation for the SNC, the Government of El Salvador has already undertaken several steps to address these effects, including: i) adoption of the National Policy of the Environment that prioritises the risks of climate change; ii) formulation and launch of the restoration programme that promotes adaptation to climate change, such as the National Programme on the Restoration of Ecosystems and Landscapes (PREP); iii) development of the National Strategy on Climate Change that focuses on adaptation; iv) identification of priority technologies for adaptation to climate change; and v) activities to raise public awareness on climate change.
- **The National Climate Change Strategy (2013)** provides guidance on the development of sectoral strategies and plans that will be part of the first National Climate Change Plan and will include participation of national and sub-national governments, CSOs and local communities. The strategy is structured around three main areas, namely: i) financial mechanisms to address recurring losses and damages, ii) climate change adaptation; and iii) climate change

mitigation. As part of the SCCF-financed project interventions, this plan will likely be revised to identify entry points for EbA.

- **The first National Plan on Climate Change (PNCC)** was published in June 2015. The SCCF-financed project will align strongly with this plan under all components. In particular under Component 1 of the project, the PNCC will be supported to promote the inclusion of urban EbA as a cost-effective tool to adapt to the effects of climate change. The PNCC is the framework to coordinate: i) public administration and intersectoral policy assessments; and ii) the impacts and vulnerability of different sectors and systems to adapt to climate change. The main objective of the PNCC is to integrate climate change adaptation into the planning and management of national socio-economic sectors and ecological systems. The project will align with the PNCC by developing and implementing EbA activities to assist urban communities in San Salvador to adapt to the effects of climate change and contribute to component 3 to 7 of the PNCC. Under Component 3 of the SCCF-financed project, the raised public awareness on climate change will be built upon by including the EbA approach as a tool to adapt to the effects of climate change. Under Component 1 of the SCCF-financed project, the PNCC will be supported by developing policy briefs and proposing revisions to policies, strategies and plans – including budget allocations – to: i) integrate EbA into urban planning and management of natural resources; and ii) to develop strategies to upscale and sustain EbA interventions in El Salvador after the lifespan of the project. In particular, these interventions will support components 1 and 2 of the PNCC.
- Within **El Salvador's National Five-year Development Plan (2014–2019**), objective 7 describes the action plans for the development of El Salvador towards an economy and society that is sustainable and resilient to the effects of climate change. These action plans include the restoration and conservation of degraded ecosystems, and reduction of the vulnerability of communities to the effects of climate change. The development plan emphasises that an adequate response to climate change requires the integration of climate change into the energy, water and economy sectors. Furthermore, the development plan mentions that the disorganised expansion of urban areas contributes to the vulnerability of urban communities to the effects of climate change. The SCCF-financed project will complement the action points under objective 7 by promoting urban EbA as a cost-effective approach to adapt to climate change.
- **The National Biodiversity Strategic Action Plan (2014)** focuses on large-scale restoration and conservation, of the country's ecosystems, with the aim to establish favourable environment conditions to sustain current and future development. The strategy is structured along three main goals as well as priority areas, namely: i) biodiversity mainstreaming in the economy particularly in agriculture, fisheries and aquaculture, and tourism sectors; ii) restoration and conservation of critical ecosystems such as rivers and wetlands, and forest ecosystems; and iii) inclusion of biodiversity as local economic options. The action plan is currently in the process of being developed. Once the entry points for EbA have been identified, the action plan will likely be revised during the implementation phase of the SCCF-financed project to integrate urban EbA.
- **United Nations Development Assistance Framework (UNDAF) Action Plan** (2012 – 2015). The UNDAF articulates five priority areas for this period. These include: i) equity, including poverty reduction; ii) inclusive economic development; iii) democratic and reformed governance; iv) Security of the city and prevention of violence; and v) environmental sustainability and reduction of disaster risks.

Jamaica

- **Vision 2030- National Development Plan Jamaica** provides a comprehensive planning framework in which the economic, social, environmental and governance aspects of national development are integrated. This plan will likely be revised as part of the SCCF-financed project interventions to integrate urban EbA.
- **The Climate Change Policy Framework and Action Plan** is implemented and funded by the GoJ, the European Union and UNEP. The main objective of the programme is to support the Vision 2030 by reducing the risks posed by climate change to Jamaica's sectors and development goals.
- **The Water Sector Adaptation Strategy to Address Climate Change (2008)** provides an assessment of the water sector's vulnerability to climate change and outlines the duties of the GoJ and other stakeholder groups in helping to build the resilience of the sector against climate change and other potential hazardous impacts.
- **The National Biodiversity Strategy and Action Plan (NBSAP) (2003)** does not have a particular focus on the effects of climate change on biodiversity. However, the GoJ is currently updating its NBSAP with GEF funding to include climate change and is expected early 2016.

- **The National Building Code** has been developed to establish new guidelines for the construction of hurricane resistant buildings across the island.
- **United Nations Development Assistance Framework (UNDAF) Jamaica** (2012 – 2016). The framework will focus on the following three areas: i) Environment; ii) Social Empowerment and Equity; and iii) Safety, Security and Justice.

Mexico

- **The Fifth National Communication (FNC) (2012)** states the need for: i) undertaking risk assessments that include climate change to better prepare cities for natural disasters; ii) strengthening institutional capacity to adapt the urban growth model; iii) providing training on climate change at schools; iv) developing roadmaps for the implementation of large-scale pilot projects; and v) providing funding to implement the climate change action plans in states and municipalities. The activities under the SCCF-financed project are aligned with the FNC as these will contribute to the identified capacity gaps on adaptation to climate change. In addition, the project will build on ongoing activities to further contribute to the goals set in the FNC to reduce the vulnerability of urban communities to the effects of climate change.
- **Mexico's General Law on Climate Change (LGCC) (2012)** is the legal framework to regulate the enforcement of national policies and actions with a crosscutting, participative and long-term perspective. Under this law, municipalities are required to "formulate and apply policies to address climate change in agreement with the National Development Plan, the National Climate Change Strategy and Special Climate Change Programmes at national and state levels". The LGCC places particular emphasis on *inter alia* i) water and sanitation services; ii) land use planning; and iii) conservation of natural resources. Many municipalities are currently elaborating their respective Municipal Climate Action Plans. The SCCF-financed project will contribute to the objectives of the LGCC by mainstreaming urban EbA into these plans.
- The SCCF-financed project is consistent with **Mexico's National Climate Change Strategy (ENCC) (2013).** In particular, the project is aligned with strategic objectives A1 and A3 which aim to "reduce vulnerability and increase resilience of the social sector towards climate change effects" and "conserve and manage ecosystems sustainably to maintain the environmental services they provide" respectively.
- The objective of Veracruz's **State Law for Climate Change Adaptation and Mitigation (2010)** is to formulate and implement public policies for: i) climate change adaptation; ii) climate change mitigation; iii) protection of the state's inhabitants; and iv) sustainable development within the Veracruz State. The proposed revision of the policies and plans under Output 1.1 of the SCCF-financed project will be aligned with this law.
- **Climate Change Programme for the State of Veracruz (PVCC)** (2009). The SCCF-financed project aligns with this programme through the reforestation of riparian areas along the Sedeno River and assists urban communities adapt to the effects of climate change in the short term through the installation of rainwater harvesting systems.
- **The National Water Law** (1992). The SCCF-financed project will comply with this law when developing the urban EbA interventions that specifically address flooding in Xalapa, such as establishment of the water harvesting systems, reforestation at watershed scale and the creation of permeable pavements at urban landscape scale.
- The purpose of the **Climate Change Fund** is to mobilise public, private, national and international financial resources to support the implementation of adaptation actions that are needed to face climate change.
- **United Nations Development Assistance Framework (UNDAF)** (2014 –2019). The UNDAF focuses on six areas: i) equality and social inclusion; ii) economic development; iii) the environment and green growth; iv) security and justice; v) democratic governance; and vi) the above-mentioned Global Partnership for Development.

For more information on these strategies and plans, please refer to Section 3.6 of the UNEP Project Document - Consistency with national priorities and plans.

C. DESCRIBE THE BUDGETED M &E PLAN:

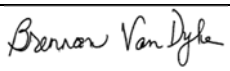
Type of M&E activity	Responsible Parties	Budget US$ (Excluding project team staff time)	Time frame
Inception workshop and report	• NC (in country) • Regional Coordinator (RC) • M&E Specialist • CTA • UNEP TM	Indicative cost: US$6,000	Within the first two months of project start up. A regional inception workshop and launch will be held followed by a national workshop.
Baseline Study	• UNEP TM • CTA • M&E Specialist • NC (in country) • RC	Indicative cost: US$15,000	Within the first six – ten months of project start up.
Measurement of means of verification of project results	• UNEP TM • CTA • M&E Specialist • NC (in country) • RC	To be finalised at Inception Workshop. This includes hiring of specific studies and institutions, and delegate responsibilities to relevant team members.	Start, mid and end of project (during evaluation cycle) and annually when required.
Measurement of means of verification for project progress on output and implementation	• UNEP TM • RC • NC (in country) • M&E Specialist • CTA	To be determined as part of the AWP's preparation.	Annually prior to PIR and to the definition of annual work plans.
PIR	• NC (in country) • RC • CTA • M&E Specialist • UNEP TM • UNEP FMO (Fund Management Officer)	None. Financial audit records to be provided for PSC review. Indicative cost: US$5,000 per audit.	Annually
Periodic status/ progress reports	• NC (in country) • RC • M&E Specialist • UNEP TM	None	Quarterly
Independent mid-term evaluation/review (MTE/MTR)	• UNEP TM/UNEP Evaluation Office • NC (in country) • RC • CTA	Indicative cost: US$ 30,000	At the mid-point of project implementation.

Type of M&E activity	Responsible Parties	Budget US$ (Excluding project team staff time)	Time frame
Terminal Evaluation (TE)	• UNEP Evaluation Office	Indicative cost: US$ 60,000	At least three months before the end of project implementation.
Project terminal report	• NC (in country) • RC • M&E Specialist • UNEP FMO • UNEP TM	Indicative cost: US$ 6,000	On completion of the terminal evaluation.
Visits to pilot intervention sites	• UNEP TM • M&E Specialist • NC (in country) • RC • PSC representatives	For GEF supported projects, paid from IA fees and operational budget	Annually
Consultants	• M&E Expert	Indicative cost: US$ 24,000	Over the lifetime of the project
TOTAL indicative cost Excluding project team staff time and UNEP staff and travel expenses			Estimated to cost US$161,000

PART III: CERTIFICATION BY GEF PARTNER AGENCY(IES)

A. GEF Agency(ies) certification

This request has been prepared in accordance with GEF policies[49] and procedures and meets the GEF criteria for CEO endorsement under GEF-6.

Agency Coordinator, Agency Name	Signature	Date (mm/dd/yyyy)	Project Contact Person	Telephone	Email Address
Brennan Van Dyke Director, GEF Coordination Office, UNEP		August 30, 2016	Atifa Kassam Task Manager GEF Climate Change Adaptation Unit	(+254) 20-762-3507	Atifa.Kassam @unep.org

[49] GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, and SCCF

ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

Outcomes/ Outputs	Indicators	Baseline	End-of-project targets	Means of Verification
Project objective: To reduce the vulnerability of communities living in three medium-sized Latin American and Caribbean cities to the effects of climate change through the integration of Ecosystem-based Adaptation (EbA) into urban planning in the medium- to long-term.	1. Total number of direct beneficiaries from the project (and % of which are women).	Zero	At least 194,090 people benefitting from the project (of which at least 50% are women). El Salvador: 115,500 people in the Arenal-Monserrat watershed, of which ~53% are women. Jamaica: 8,000 residents (2,500 households, of which ~60% are headed by women) in Greenwich Town. 6,000 students at 4 schools, of which ~55% women. 28,000 people in Petersfield district, of which ~60% women. Mexico: 36,590 people in the Carneros watershed, of which ~53% women.	Household surveys. Attendance registers from training sessions and training reports.
Outcome 1: Technical capacity of government stakeholders from urban development and natural resource management ministries to integrate EbA into planning, policies and regulations strengthened.	1. Number of relevant government staff within each targeted national and local institution with improved technical capacity to identify, prioritise, plan and implement urban EbA (disaggregated by gender).	El Salvador: Zero Jamaica: Zero Mexico: Zero	By project end-point, at least 190 relevant government staff (of which at least 50% are women) within targeted institutions have increased technical capacity to identify, prioritise, plan and implement urban EbA. El Salvador: At least 40 people are trained, of which ~40% are women. Jamaica At least 100 people are trained, of which ~50% are women. Mexico:	Attendance registers from training sessions and training reports. A capacity scoring methodology as suggested by the GEF AMAT will be adopted. The scoring is based on five criteria expressed as questions (these criteria will be further validated at inception phase): 1. Are the relevant government staff able to understand and interpret climate information to support them in identifying climate change risks 2. Do the relevant government staff have the ability to identify locations vulnerable to the predicted effects of climate change in

			At least 50 people are trained, of which ~50% are women.	the city? 2. Are the relevant government staff able to identify, prioritise and plan appropriate urban EbA interventions as well as specify budget allocations and targets for these interventions? 4. Are the relevant government staff able to plan and coordinate with other stakeholders on urban EbA interventions across climate-sensitive sectors? 5. Are the institutions able to monitor and evaluate the socio-economic and environmental benefits associated with the implementation of urban EbA interventions? Each question is answered with an assessment and score for the extent to which the associated criterion has been met: not at all (= 0), partially (= 1) or to a large extent/ completely (= 2). An overall score is calculated, with a maximum score of 10 given five criteria. Government staff that have their score increased by at least 3 points will be considered to have increased technical capacity to identify, plan, implement and evaluate urban EbA. Baseline values to be verified prior to participation in training activities.
	2. Number of technical guidelines developed on urban EbA.	<u>El Salvador:</u> Zero <u>Jamaica:</u> Zero <u>Mexico:</u> Zero	At least three sets technical guidelines developed for each city to plan, implement and monitor urban EbA (nine in total).	Technical guidelines.
	3. Number of policy briefs developed with relevant government stakeholders outlining recommendations for revisions to	<u>El Salvador:</u> Zero <u>Jamaica:</u> Zero <u>Mexico:</u>	At least one set of policy briefs, developed with relevant government stakeholders, produced for each country to guide revision of national and city policies, strategies and plans	Policy briefs, policy/strategy documents.

	policies/strategies/plans to integrate EbA (AMAT indicator 12).	Zero	(three in total).	
	4. Number of draft upscaling strategies developed for urban EbA.	El Salvador: Zero Jamaica: Zero Mexico: Zero	One urban EbA upscaling strategy developed in each country (three in total).	EbA upscaling strategy document.
Outcome 2: Demonstration of EbA in San Salvador, Kingston and Xalapa to increase the capacity of urban and peri-urban communities to adapt to the effects of climate change.	1. Number of hectares and kilometres restored by the project using EbA interventions.	El Salvador: Zero Jamaica: Zero Mexico: Zero	El Salvador: 1,000 hectares of sustainable agriculture in the Arenal-Monserrat watershed, which includes the vegetated infiltration ditches on the slope of the San Salvador volcano. 16 kilometres of riparian forest restored along 4 ravines (4 kilometres each). 150 hectares of critical ecosystems restored. Jamaica: 4,200 trees planted across 44,000 ha to contribute to restoration in the Hope watershed. 500 metres of dykes. 2 hectares of the wetland in Greenwich town rehabilitated. 2,500 metres of permeable pavements and walkways. 2.3 hectares in May Pen Park, in Kingston, including 400 fruit trees and 1,000 forest trees planted. Mexico: 3,600 metres of riparian corridor restored. 2,800 metres infiltration ditches and 1,670 metres of berms. 200 m connectivity corridor between EbA action gardens. 2,000 metres of linear park.	Field visits to verify the extent of restored areas. GPS waypoints and GIS mapping of interventions. Repeat photography of the selected intervention sites in the three cities. Interviews with local community members.

			2,000 m of concentric circuits, one for cycling and one for walking;	
	2. Number of protocols developed to guide implementation of EbA in San Salvador, Kingston and Xalapa.	El Salvador: Zero Jamaica: Zero Mexico: Zero	At least one set of EbA protocols developed for each pilot city (three in total).	Protocols documents
	3. Number of water storage and management systems established through the project.	El Salvador: Zero Jamaica: Zero Mexico: Zero	El Salvador: 30 water storage points h=1 metre. 10 rainwater harvesting systems for selected schools. 1 rainwater harvesting system for 1 selected community. Jamaica: 3 detention ponds. 4 rainwater harvesting systems installed at schools. Mexico: 1 artificial wetland at the Telesecundaria school Rafael Hernández Ochoa. 10 rainwater harvesting systems on the rooftops of 8 schools and 2 public buildings.	Field visits to verify the extent of the established water points. Interviews with local community members, including school representatives. Interviews with relevant implementing organisation at each project intervention site.
	4. Number of waste management systems implemented in El Salvador through the project.	El Salvador: Zero	El Salvador: 2 ecological sanitation systems at 2 schools to improve management of grey water and sewage.	Field visits to verify the extent of the implemented systems. Interviews with local community members, including school representatives. Interviews with relevant implementing organisation at each project intervention site.
	5. Number of climate-resilient alternative livelihoods demonstrated at intervention sites through providing equipment, training and technical support.	El Salvador: Zero Jamaica: Zero Mexico: Zero	El Salvador 10 urban gardens in 10 schools. 10 agricultural start-up kits at 10 schools in the Arenal-Monserrat area. Jamaica: 1 urban garden per school for 2 schools and 1 community garden.	Field visits to verify the extent of restored areas. Interviews with local community members, including school representatives. Interviews with relevant implementing organisation at each project intervention site.

			400 fruit trees per school at 2 schools. 1 beekeeping unit in the community garden. <u>Mexico:</u> At least 10 food gardens to demonstrate potential climate-resilient livelihoods. 20 demonstration plots for commercial mushroom production 8 agricultural start-up kits at 8 schools.	
	6. Number of people trained on implementing and maintaining the EbA interventions and climate resilient livelihoods.	<u>El Salvador:</u> Zero <u>Jamaica:</u> Zero <u>Mexico:</u> Zero	<u>El Salvador:</u> At least 50 students (of which 50% women) per school for 10 schools will be trained on using agricultural start-up kits as well as development and maintenance of the urban gardens. <u>Jamaica:</u> At least 50 students (of which at least 50% women) per school from 4 schools will be trained on the development and maintenance of the urban gardens. At least 40 people are trained on bee-keeping. <u>Mexico:</u> At least 50 students (of which at least 50% women) per school from 10 schools will be trained on using agricultural start-up kits as well as development and maintenance of the urban gardens.	Attendance registers from training workshops. Interviews with local community members and students. Interviews with the project managers.
Outcome 3: Knowledge and awareness of urban EbA interventions strengthened in El Salvador, Jamaica and Mexico, and throughout the LAC region**.**	1. Number of communication strategies for urban EbA developed.	<u>El Salvador:</u> Zero <u>Jamaica:</u> One (national) <u>Mexico:</u> Zero	One communication strategy developed for each city (three in total) with specific guidelines for targeting different groups.	Communication strategy
	2. Number of communication	<u>El Salvador:</u>	At least 15 tools developed in total.	Radio shows, webinars, posters, awareness

	tools[50] developed and implemented – with specific focus on different groups (e.g. men, women, the youth, the elderly, persons with disabilities) – to increase awareness of government staff and urban communities on the benefits of EbA.	Zero Jamaica: Zero Mexico: Zero	El Salvador: At least 3 tools developed), at least 1 of which is focused specifically on women. Jamaica At least 4 tools developed), at least 1 of which is focused specifically on women. Mexico: At least 12 tools developed (including flyers, better practices manuals, short film signage, etc.), at least 1 of which is focused specifically on women.	campaign report.
	3. Number of MSc research reports developed on the benefits of urban EbA with a particular focus on gender.	El Salvador: Zero Jamaica: Zero Mexico: Zero	At least 6 reports, 3 of which include specific reference to gender-specific aspects of urban EbA. El Salvador: 2 reports Jamaica: 2 reports Mexico: 2 reports	Research reports.
	4. Number of educational toolkits[51] – for primary and secondary schools – developed on best EbA practices	El Salvador: Zero Jamaica: Zero Mexico: Zero	At least 7 educational toolkits developed in total. El Salvador: 1 toolkit developed Jamaica: 2 toolkits developed Mexico:	Existence of educational toolkits, attendance list of workshops, workshop reports, feedback from the ministry of education in each country.

[50] These communication tools include *inter alia* leaflets, posters, a radio programme, a tv advertisement and social media posts.
[51] These toolkits will include a combination of lesson plans, small assignments and on-the-ground work.

			4 toolkits developed	
	5. Number of knowledge-sharing products/events supported by the project to share lessons learned using existing regional and global networks.	Zero	At least three knowledge-sharing reports/events to share lessons learned through implementing EbA disseminated through regional networks (including REGATTA).	Knowledge-sharing reports and online webinars

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).

Response to GEF secretariat review

#	Comment	Response
7	By CEO Endorsement: Please provide details on the specific climate change related risks in each pilot city, and on the specific measures that will be undertaken to build resilience to these risks.	The climate change risks for all three cities include: i) increased frequency and intensity of flooding; ii) increased duration of droughts; and iii) increased occurrence of natural disasters, particularly hurricanes. More specifically, climate models for San Salvador predict an increased frequency of tropical storms from the Pacific, which will lead to loss and damages for urban infrastructure as well as lives and livelihoods. In Climate models for Kingston predict an increase in mean sea level, which will lead to greater impacts from storm surges and associated flooding in the city. Xalapa is expected to experience more frequent flooding and accelerated soil erosion, with associated risk of landslides. For more information, see Section A.1.1 (pages 9-10) and Section A.1.2 (pages 12-13) of this CEO Endorsement Request. A more comprehensive description of current and predicted climate risks is provided in Section 2.1 (pages 13-20) of the Project Document. Concrete interventions to adapt to these risks will be implemented at the water catchment, urban landscape and household scales. These interventions will combine both "hard" and "soft" approaches to improve the provision of ecosystem goods and services that buffer urban communities against the predicted effects of climate change. Interventions to be implemented include *inter alia:* • reforestation of watersheds using climate-resilient endemic species (all three pilot cities) to reduce the risk of landslides caused by excessive run-off and associated soil erosion resulting from extreme weather events; • construction of infiltration wells (San Salvador) and ditches (Kingston and Xalapa) to increase the infiltration rate of water into aquifers and consequently reduce run-off during heavy rainfall events; • rehabilitation of wetlands (Kingston and Xalapa) to improve the retention of water and reduce the risk of flooding during heavy rainfall events; • creation of detention ponds (Kingston) to slow the rate of water flow and reduce the risk of flooding during heavy rainfall events; • construction of rainwater harvesting systems (all three cities) to slow the rate of runoff into water ways and thus decreasing flood risk; and

		• creation of urban gardens/green spaces using climate-resilient species (all three cities) to reduce the extent of catchment hardening, thereby increasing rates of infiltration decreasing flood risk. For more detailed information on the specific adaptation measures to be implemented, please see Section A.1.3 (pages 19-22) of this CEO Endorsement Request and Section 3.3 (pages 81-85) of the Project Document.
10	By CEO endorsement: Please provide more information on how communities (including vulnerable urban populations) have been engaged in consultations and will continue to be engaged in project activity selection and implementation.	During PPG phase, national consultants undertook community consultations during visits to the project sites. During these consultations, community members identified specific risks posed by current and future climate changes as well as those caused by environmental and other factors. Community members also participated in the identification of potential adaptation measures (See validation workshop reports in Appendix 22 of the PD) to be implemented through the project for reducing their vulnerability to these climate risks. The input obtained from the urban communities during these consultations was used to define the EbA interventions, particularly at the household scale. During project implementation, further refinement of project activities will take place to address site-specific climate risks. Participatory assessments will be undertaken in all three pilot cities to identify site-specific climate vulnerabilities experienced by urban communities (see Output 2.1). Based on these assessments, the selection of urban EbA interventions will be refined and site-specific protocols for their implementation developed (see Output 2.2). This will ensure that interventions: i) are tailored to the local environmental and socio-economic context; and ii) address the climate vulnerabilities identified by the communities. Activities have been designed to promote engagement and involvement of local communities. Many of the activities will be implemented in commonly-used, public spaces such as schools and community gardens. This will promote general awareness amongst the public frequenting the areas of the importance of climate change and the role of urban EbA as a means to address climate vulnerabilities.
13	By CEO endorsement: While awareness-raising and capacity building/ research activities will contribute to interest from local authorities and communities, please discuss the measures will be in place to ensure that the adaptation investments continue to yield benefits over time?	The EbA interventions have been designed to be low-cost, low- maintenance initiative that are easy and cheap to both implement and sustain. Moreover, many of the measures to be implemented will take place on public spaces that are regularly maintained. For example, schools will take ownership of and maintain

		the water harvesting systems to ensure ongoing provision of benefits. The project will also facilitate participatory development of management strategies for the urban EbA interventions (see Activity 2.4.1) to support the ongoing maintenance of adaptation measures beyond project completion. The use of bottom-up approaches with active participation of the targeted urban communities and relevant local authorities will enhance the sense of ownership of the EbA interventions, particularly at household scale, which will contribute to the sustainability and yielding of benefits of the interventions over time.

Response to STAP review

	Comment	**Response**
1	STAP recommends defining explicitly indicators for each adaptation benefit, and the methodology that will be used to measure and monitor the project's performance and impact.	For all activities, appropriate indicators linked to the type of interventions have been selected. These indicators include: • surface area for implementation of sustainable agriculture (ha) and permeable pavements (m^2); • length for measuring implementation of riparian reforestation (km) as well as construction of dykes, infiltration ditches and walkways (m); • number of trees planted to restore degraded watersheds and improve ecosystem functioning; • number of detention ponds, water storage points and rainwater harvesting systems; • number of ha of wetlands restored or created; and • number of ha supporting climate-resilient alternative livelihoods. The number of project beneficiaries will also be quantified and disaggregated by gender to identify specific benefits delivered to women and other vulnerable groups. Further details on the indicators for each adaptation benefit are outlined in the Results Framework in Annex A.
2	It may be worth considering new approaches such as improving the permeability of paved surfaces (for storm water management) and catchment conservation/restoration (for water supply). There is now a growing literature on the use of natural infrastructure with regard to climate resilience, and it would be good if this knowledge-base could be accessed during project development. While urban agriculture is an interesting concept, its overall role as far as food security is concerned is uncertain, and it may be helpful to focus on current climate risks that are likely to worsen under climate change projections, such as storm-water management, thermal stress and water supply reduction disruption.	In El Salvador, the following measures to be implemented by the project are innovative approaches to building climate resilience within the local context: • vegetated infiltration ditches to regulate water flow (watershed level); • detention ponds and permeable pavements to regulate water flow and promote infiltration (urban landscape level); and • water harvesting and ecological sanitation to regulate water flow and reduce the risk of water-borne diseases (household level). In Jamaica, the following measures to be implemented by the project are innovative approaches to building

		climate resilience within the local context: • restored watersheds by replanting with drought-resilient tree species to regulate water flow (watershed level); • restored urban wetland and permeable pavements to regulate water flow and promote infiltration (urban landscape level); and • water harvesting and solid waste management to regulate water flow and prevent blockage of water ways (household level). In Mexico, the following measures to be implemented by the project are innovative approaches to building climate resilience within the local context: • restored riparian vegetation to reduce erosion and sedimentation of waterways (watershed level); • infiltration ditches, an artificial wetland and permeable pavements to regulate water flow and promote infiltration (urban landscape level); and • water harvesting to regulate water flow (household level). All the interventions were decided upon through extensive stakeholder consultations and reflect the needs of each city/country. In addition, these interventions will be further validated following detailed scenario mapping and assessments are undertaken for each country. For more information on the adaptation interventions and their innovativeness, please see Section A.1.6 (page 27-28) of the CEO Endorsement Request and Section 3.3 (pages 79-88) and Section 3.4 (pages 88-89) of the Project Document.
3	The project developers may wish to consider relying on a framework to define the multiple factors influencing climate risks in the target sites. For example, identifying processes that influence adaptive capacity as well as risks resulting from environmental processes. It is important to capture the underlying drivers of vulnerability that might influence the effectiveness of EbA interventions. The following references may be helpful in this regard: 1) Romero-Lankao, P. et al "Scale, urban risk and adaptation capacity in neighborhoods of Latin Americancities". (2014). Habitat International (42): 224-235; 2) Satterthwaite, D. (2007). Adapting to climate change in urban areas: the possibilities and constraints in low-and middle-income nations (Vol. 1). IIED; 3) Leichenko, R. (2011). Climate change and urban resilience. Current Opinion in Environmental	We appreciate and thank the STAP for the provision of these references that have helped to guide the formulation of the project design. During the project preparation phase, particular emphasis was placed on identification of climate risks posed to the vulnerable/poor urban populations of the target cities. In addition, other underlying socio-economic and environmental factors contributing to community vulnerability will be taken into consideration. Participatory assessments will be undertaken in all three pilot cities to identify site-specific climate vulnerabilities experienced by urban communities (see Output 2.1). Data/information on will also be collected on *inter alia* demography, land use, future climate projections, resource use and biodiversity (Outputs 2.1 and 2.2). These data will be used to produce a comprehensive analysis of the range of risk factors and drivers determining the climate vulnerabilities of

	Sustainability,3(3), 164-168; 4) Zandersen, M., Jensen, A., Termansen, M., Buchholtz, G., Munter, B., Kastrup Blemmer,M.,& Andersen, A. H. (2014). Ecosystem based approaches to climate adaptation: Urban Prospects and Barriers. Aarhus University, DCE-Danish Centre for Environment and Energy. 5) Breuste, J., Haase, D., & Elmqvist, T. (2013). Urban landscapes and ecosystem services. Ecosystem services in agricultural and urban landscapes. John Wiley & Sons, Ltd, Chichester, 83-104.	urban communities in the pilot cities. Following this, the selection of urban EbA interventions to address the vulnerabilities of the target beneficiaries will be refined. Site-specific protocols for implementation of these measures will then be developed to ensure that the interventions effectively address the vulnerabilities identified by the communities in questions. For more information, please refer to Section A.1.3 (pages 19-22) of the CEO Endorsement Request and Section 3.3 (pages 79-81) of the Project Document.
4	STAP recommends defining at what scale will the project target its interventions (households, peri-urban communities, cities). This will assist in specifying further the interventions based on the drivers of adaptation capacity and responses (including EbA) that are appropriate to each scale, and across scale.	The SCCF-financed project will implement EbA interventions at three scales, namely watershed, urban landscape and household levels. This has been done to ensure that linkages across entire urban catchments – i.e. from upper catchment/watershed areas down to lower catchment/coastal areas – are taken into when addressing climate vulnerabilities. For example, flooding in communities in lower catchment areas often results from poor hydrological functioning in upper catchment areas. By acknowledging the linkages across scales, the root causes – rather than the symptoms – of climate risks can be addressed cost-effectively. For more information on the multiple-scale approach, please consider Section A.1.3 (page 19-22) of the CEO Endorsement Request and Section 3.3 (pages 81-83) of the Project Document.

Response to Germany Council review

	Comment	**Response**
1	The proposed project sets as its objective to increase the climate change resilience of “vulnerable urban communities”. In relation to this target group, the PIF notes that the SCCF project will "…increase the climate resilience of vulnerable, marginalised population in urban areas. Slum dwellers, people renting accommodation in low income neighbourhoods, women and female-headed households, people who depend on urban agriculture, recent migrants and daily wage labourers are among the target beneficiaries for this project …". We very much appreciate this, yet in our view this focus should be more strongly reflected in the conceptualization of the approach. We therefore recommend clarifying in the final project document how the proposed project will ensure that the interventions will actually benefit the vulnerable/poor urban population in the pilot cities.	During the project preparation phase, particular emphasis was placed on identification of climate risks posed to the vulnerable/poor urban populations of the target cities. The specific intervention areas for implementation of urban landscape- and household-level EbA interventions were selected based on the following criteria: i) low-income households; ii) poor infrastructure; and iii) limited access to financial resources to improve their livelihoods. The specific climate vulnerabilities of these communities were then identified and interventions were selected to address these vulnerabilities. • In El Salvador, a community on the slope of the San Salvador volcano will benefit from implementation of development of rainwater harvesting systems and improved agricultural practices. These interventions will increase the food and water security of this vulnerable community while also reducing the risk of landslides and flooding further down in the catchment.

		• In Kingston, poor communities – in particular female-headed households – will be targeted for the development of additional climate-resilient livelihoods to increase food security and provide opportunities to generate additional income. • In Xalapa, flooding poses a risk for low-cost housing areas. The construction of permeable pavements and an artificial wetland will increase infiltration of rainwater and consequently reduce the risk of flooding in these area. In addition, the reforestation of upper catchment areas with climate-resilient native species will reduce the risk of flooding and landslides that adversely affects the housing of the poor communities downstream. In Section 2.3 (pages 19-30) of the Project Document, the main climate and non-climate change threats for the urban population in each city are described, with a focus on the most vulnerable and poor groups. In Section 3.3 (pages 81-85) of the Project Document, the proposed urban EbA and livelihood support interventions are described with specific reference to the benefits they will provide for vulnerable urban populations in each pilot city.
2	With regard to ownership, it remains somewhat unclear to what extent actual demand for the EbA approach exists on the part of the pilot cities' local governments. The PIF recognizes the risk ("Resistance of local governments to adopt urban EbA instead of hard engineering interventions") and rates it as "high", yet the proposed mitigation measures do not seem sufficient for addressing the risk. In order to further mitigate the risk from the very beginning, we would recommend closely involving and consulting the pilot cities' local governments (as soon as the cities are chosen) in the process of designing the final project document.	During the course of the project preparation phase, the project interventions were developed in close collaboration with the local authorities in each pilot city. This included participatory consultations to identify priority needs and potential solutions to address climate risks. During these consultations, the local authorities acknowledged urban EbA as an appropriate approach to address the vulnerabilities or urban communities. Close involvement of and consultation with local authorities was a hallmark of the entire project preparation phase, culminating in their validation of a project design with a strong emphasis on urban EbA to address climate vulnerabilities. This consultation process will continue throughout the implementation of the project to ensure continued involvement of local authorities in the design and implementation of project activities. For more information, see Section 5 (pages 106-111) of the Project Document.
3	In addition to the relevant projects mentioned in the PIF, it might be useful to identify possible synergies with the following initiatives: (1) "Planning of Coastal Areas and Sustainable Development in Central America", (the implementation is assisted by GIZ on behalf of the Federal Ministry for Economic Cooperation and Development (BMZ)), and (2) "NAMA Program Mexico" (the implementation is assisted by GIZ on behalf of the Federal Ministry for the Environment, Nature Conservation, Building and	The SCCF-financed project will draw from lessons learned under the BMZ-GIZ project "Management of coastal resources and conservation of marine biodiversity in the Caribbean" (2012–2015), particularly on the formation of partnerships with the private sector to support planning and implementation of EbA interventions as well as to promote continuity and sustainability after the project's lifespan. In particular, the SCCF-financed project will build on the interventions of the BMZ-GIZ project in Jamaica that

	Nuclear Safety (BMUB)).	contributed to the development of environmentally-friendly sewage disposal to enhance ecosystem functioning. For more information, please refer to Section A.7 of this CEO endorsement and Section 2.7 of the Project Document.

ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS[52]

A. Provide detailed funding amount of the PPG activities financing status in the table below:

PPG Grant Approved at PIF: **150,000**			
Project Preparation Activities Implemented	***GEF/LDCF/SCCF Amount ($)***		
	Budgeted Amount	***Amount Spent To date***	***Amount Committed***
International consultants	50,000	50,000	0
National and Regional consultants	57,000	38,300	21,000
Travel	15,000	11,212	7,294
Meetings and Conferences	28,000	22,194	
Total	150,000	121,706	28,294

[52] If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent fund, Agencies can continue to undertake the activities up to one year of project start. No later than one year from start of project implementation, Agencies should report this table to the GEF Secretariat on the completion of PPG activities and the amount spent for the activities. Agencies should also report closing of PPG to Trustee in its Quarterly Report.

ANNEX D: CALENDAR OF EXPECTED REFLOWS (if non-grant instrument is used**)**

Provide a calendar of expected reflows to the GEF/LDCF/SCCF Trust Funds or to your Agency (and/or revolving fund that will be set up)

Not Applicable

EMENT PLAN

curement Plan

Building the resilience of urban communities in the LAC region through ecosystem based adaptation (EbA)

er: 5681

	Budget note reference		**Year {Note 1}**	**Brief description of anticipated procurement process {Note 2}**
nators	4	4 years @US$4,160 /month	Year 1 -4	Three national coordinators will be hired full time to supervise and coordinate the project activities under Outcome 2, particularly Output 2.3 and 2.4.
tion	2	11 months @ US$3,000/month	Year 1- 4	The National Adaptation Expert (NAE) with proven expertise in policy development and adaptation to climate change will undertake the following activities: i) develop training plans to improve local and national policy- and decision-makers' understanding of EbA. The training plans will be developed using international best practices and lessons learned from adaptation projects in the LAC region. The consultant will then implement the training plans and run training sessions and workshops with local and national policy- and decision-makers. ii) assist the Regional Coordinator with providing training on: i) the effects of climate change; ii) planning, implementing and monitoring urban EbA in each pilot city; and iii) the benefits of using EbA to adapt to the effects of climate change in urban areas. iii) refine the training material and assist the Regional Coordinator with providing a "training of trainers" programme for sub-national government.
in ncing	12	5 months @ US$6,000/month	Year 3- 4	The regional expert with proven experience in environmental economics will identify and detail financing mechanisms for inclusion in the technical guidelines developed by the RC and adaptation expert. In addition, this expert will identify barriers to national dialogue on adaptation and mobilisation of funds for EbA implementation, and develop a strategy to overcome these barriers (Activity 1.4.1 and 1.4.2).
t	16	13 months @US$5,000/month	Year 1 and year 2	This Socio-economic expert will: i) undertake assessments to identify the risks and adaptation needs of urban communities to the effects of climate change. (Activity 2.4.1 and 2.4.2); and ii) develop a community strategy and assist developing and implementing the additional climate-resilient livelihoods (Activity 2.4.1).
pert	17	8 months	Year 1	The regional expert will oversee the national GIS experts to collate data

			@US$3,000/month		and produce digital maps (Activity 2.1.3 and 2.1.4).
1206–1208	National GIS expert	18	8 months @US$2,500/month	Year 1	The NC will work closely with AGLCs, DREDDs, local communities and local community representatives to: i) collate spatial data on climate trajectories at the city level for San Salvador, Kingston and Xalapa. (Activity 2.1.3). ii) produce maps to show the worst-case scenarios related to urban development, climate-related risks and resource availability (Activity 2.1.4).
1209	Regional Ecology Expert	20	4 months @US$5,000/ month	Year 1	The regional expert will collect and update data and information on biodiversity and ecology for the urban EbA intervention areas in San Salvador, Kingston and Xalapa. (Activity 2.2.1).
1210–1212	National Agricultural Expert	33	22 months @US$3,000/month	Year 2- 4	The national expert will implement peri-urban EbA interventions related to sustainable agriculture in San Salvador, Kingston and Xalapa (Activity 2.4). This will include: i) designing and implementing sustainable agricultural practices to restore degraded ecosystems and ii) assisting with the development of urban agriculture gardens in each pilot city.
1213–1215	National Urban Planning Expert (NUPE)	24	1 month @US$5,000/month	Year 1	The National expert will assist the other technical consultants in the implementation of the EbA interventions at urban landscape scale in each pilot city (Activity 2.3.1; 2.3.2 and 2.3.3).
1216	Regional Communication expert	35	15 months @US$5,000/ month	Year 1- 4	The regional expert will draft a communication strategy and undertake local awareness raising activities on EbA using tailored communication material (Activity 3.1.1).
1217	Regional Education Expert	42	9 months @US$5,000/ month	Year 1- 4	The regional expert will develop and pilot the educational toolkits in Activity 3.4.1 and 3.4.2 for primary and secondary schools in San Salvador, Kingston and Xalapa.
	International consultants				
1104	Regional Coordinator	1	4 years @ US$12,000/month	Year 1- 4	The Regional Coordinator (RC) will work closely with the NCs, national stakeholders and NGOs to: i) develop policy briefs, technical guidelines and strategies to upscale EbA (Activities 1.1.1 and 1.2.1 and 1.4.1); ii) provide training on technical guidelines to local government authorities in San Salvador, Kingston and Xalapa in cooperation with an adaptation expert (Activity 1.3.1) iii) assist with the development of the site-specific protocols for urban EbA implementation (Activity 2.1.1 and 2.2.1); iv) Collaborate with the communication expert on the communication strategy and awareness raising material (Activity 3.3.1 and 3.3.2); and v) Coordinate with national academics on the design and institutionalisation of a Long-term Research Programme on EbA (Activity

					3.3.3).
1201	International M&E expert	2	4 months @US$6,000/month	Year 1- 4	The consultant will undertake the following M&E tasks: i) assist the socio-economic expert 1 month in year 1 with undertaking assessments in San Salvador, Kingston and Xalapa to identify climate vulnerabilities and collect socio-economic data on urban communities; ii) assist the ecological expert 1 month in year 1 in developing site-specific protocols; and iii) assist the universities 2 weeks /year with the monitoring of the EbA interventions.
2200	Sub-contracts (MOUs/LOAs for supporting organizations)				
2201	National academics	39	24 months @US$2,000/month US$5,000 per country in year 1 and 4, and US$3,000 per country in year 2 and 3.	Year 1- 4	The national academics will: i) facilitate the design of the long-term research programme to assess the performance of EbA interventions by monitoring the bio-physical and socio-economic benefits of the implemented interventions. ii) facilitate and arrange an MoU between the University and the financial executive of the SCCF-financed project. iii) oversee the implementation of the long-term monitoring programme developed in Activity 3.3.1.
2301	National Web-designer	37	3 months @US$2,000/month	Year 3- 4	The web-designer will develop an online portal to share information on urban EbA as well as maintenance and updating in year 4.
2302	MSc candidates	40	US$5,000 for year 1 and US$2,500 for year 3 and US$2,500 for year 4.	Year 1- 4	A stipend for academic supervision of MSc candidates.

Note 1 - Year when goods/services will be procured

Note 2 - Based on your organisation's procurement procedures, and in compliance with UNEP rules and procedures, briefly explain how the service provider/consultant/vendor will be selected

ANNEX F: DETAILED GEF BUDGET

Detailed UMOJA budget

Project title:		**Building the resilience of urban communities in the LAC region through ecosystem based adaptation (EbA)**											
Project number:													
Project executing partner:		**UNEP-ROLAC, MARN, MWLECC and SEMARNAT**											
Project implementation period:		**Expenditure by project component/activity**						**Expenditure by calendar year**					
From:	**2016**												
To:	**2020**	**Outcome 1**	**Outcome 2**	**Outcome 3**	**PM**	**M&E**	**Total**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Total**	**Notes**
UNEP Budget Class													
		PERSONNEL COMPONENT											
010		**Project personnel**											
	1	National coordinator (El Salvador)		200,000			200,000	50,000	50,000	50,000	50,000	200,000	4
	2	National coordinator (Jamaica)		200,000			200,000	50,000	50,000	50,000	50,000	200,000	4
	3	National coordinator (Mexico)		200,000			200,000	50,000	50,000	50,000	50,000	200,000	4
	4	Regional coordinator (48 months @$12,000/month)	172,000	36,000	168,000	200,000	576,000	144,000	144,000	144,000	144 000	576,000	1
		Sub-total	**172,000**	**636 000**	**168,000**	**200,000**	**-**	**1,176,000**	**294,000**	**294,000**	**294,000**	**294,000**	**1,176,000**	
010		**Consultants**											
	5	International M&E expert		12,000	12,000			24,000	15,000	3,000	3,000	3,000	24,000	2
	6	Adaptation expert	51,000					51,000		12,000	12,000	27,000	51,000	3
	7	Regional Environmental Economics and Finance expert	60,000					60,000			30,000	30,000	60,000	12
	8	Regional Socio-economic expert		65,000				65,000	45,000	20,000			65,000	16
	9	Regional GIS expert		24,000				24,000	24,000				24,000	17
	10	GIS expert (El Salvador)		20,000				20,000	20,000				20,000	18
	11	GIS expert (Jamaica)		20,000				20,000	20,000				20,000	18
	12	GIS expert (Mexico)		20,000				20,000	20,000				20,000	18
	13	Regional Ecological expert		25,000				25,000	25,000				25,000	20
	14	National Agricultural expert (El Salvador)		24,000				24,000		12,000	9,000	3,000	24,000	33
	15	National Agricultural expert (Jamaica)		21,000				21,000		12,000	6,000	3,000	21,000	33

	16	National Agricultural expert (Mexico)		21,000				21,000		12,000	6,000	3,000	21,000	33
	17	National Urban Planning expert (El Salvador)		5,000				5,000		5,000			5,000	24
	18	National Urban Planning expert (Jamaica)		5,000				5,000		5,000	-		5,000	24
	19	National Urban Planning expert (Mexico)		5,000				5,000		5,000	-		5,000	24
	20	Regional Communication expert			75,000			75,000	15,000	15,000	25,000	20,000	75,000	35
	21	Regional Education expert			45,000			45,000	20,000		15,000	10,000	45,000	42
		Sub-total	**111,000**	**267,000**	**132,000**	**-**	**-**	**510,000**	**204,000**	**98,000**	**106,000**	**102,000**	**510,000**	
010		**Administrative Support**												
		Administration and Finance Officer (50%)		**55,000**		**45,000**		**100,000**	**25,000**	**25,000**	**25,000**	**25,000**	**100,000**	47
		Sub-total	**-**	**55,000**	**-**	**45,000**	**-**	**100,000**	**25,000**	**25,000**	**25,000**	**25,000**	**100,000**	
160		**Travel on official business**												
	1	Travel RC to 2 countries and compensation government authorities	8,700					8,700		8,700			8,700	
	2	Travel costs to hold workshops and disseminate technical guidelines in San Salvador, Kingston and Xalapa	11,000					11,000		11,000			11,000	
	3	Travel to countries to provide training on urban EbA	36,000					36,000		12,500	12,500	11,000	36,000	48
	4	Travel for training of trainers workshop	10,950					10,950				10,950	10,950	49
	5	Travel costs for workshop on upscaling strategies	10,950					10,950				10,950	10,950	50
	6	Travel to the countries for socio-economic assessments		20,100				20,100	20,100				20,100	51
	7	Travel to and within the countries for biodiversity assessments		11,700				11,700	11,700				11,700	52
	8	Travel costs for workshop on protocols		10,050				10,050	10,050				10,050	53
	9	Travel costs for workshop on climate-resilient livelihoods		10,950				10,950		10,950			10,950	54
	10	Travel costs to provide training to urban communities and M&E visit		12,300				12,300		5,100	3,600	3,600	12,300	55
	11	Travel costs for a workshop in each pilot city on the communication strategy			12,000			12,000			12,000		12,000	56
	12	Travel costs to pilot the educational toolkits in the three pilot cities			11,450			11,450			11,450		11,450	57
	13	Travel costs to hold a regional workshop			16,400			16,400				16,400	16,400	58

	14	Travel International M&E expert			12,000			12,000		4,000	4,000	4,000	12,000	67
		Sub-total	**77,600**	**64,800**	**50,850**	**-**	**-**	**193,250**	**41,850**	**51,150**	**43,950**	**56,300**	**193,550**	
	COMPONENT TOTAL		**360,600**	**1,022,800**	**350,850**	**245,000**	**-**	**1,979,250**	**564,850**	**468,150**	**468,950**	**477,300**	**1,979,250**	
		SUB-CONTRACT COMPONENT												
140		**Sub-contracts (MOUs/LOAs for cooperating agencies)**												
	1	With Universities	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**		**-**	
		Sub-total	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
140		**Sub-contracts (MOUs/LOAs for supporting organizations)**												
	1	National academics			48,000			48,000	15,000	9,000	9,000	15,000	48,000	39
		Sub-total	**-**	**-**	**48,000**	**-**	**-**	**48,000**	**15,000**	**9,000**	**9,000**	**15,000**	**48,000**	
140		**Sub-contracts (for commercial purposes)**												
	1	National Website designer/consultant	-		12,000			12,000				12,000	12,000	37
	2	El Salvador-Equipment and EbA interventions	-	966,000				966,000		359,000	361,000	246,000	966,000	25
	3	Jamaica-Equipment and EbA interventions	-	881,500				881,500		358,500	274,000	249,000	881,500	27
	4	Mexico-Equipment and EbA interventions	-	893,000				893,000		385,000	348,000	160,000	893,000	28
	5	El Salvador-Additional livelihoods	-	60,000				60,000		50,000	10,000	-	60,000	30
	6	Jamaica-additional livelihoods	-	180,200				180,200		135,500	29,500	15,000	180,200	31
	7	Mexico-additional livelihoods		155,000				155,000		80,000	55,000	20,000	155,000	32
	8	MSc candidates	-	-	30,000	-	-	30,000		15,000	7,500	7,500	30,000	40
		Sub-total	**-**	**3,135,700**	**42,000**	**-**	**-**	**3,177,700**	**-**	**1,383,200**	**1,085,000**	**709,500**	**3,177,700**	
	COMPONENT TOTAL		**-**	**3,135,700**	**90,000**	**-**	**-**	**3,225,700**	**15,000**	**1,392,000**	**1,094,000**	**724,500**	**3,225,700**	
		TRAINING COMPONENT												
		Group training												
	1	Training on urban EbA (El Salvador)	16,000	-	-	-	-	16,000		6,500	6,500	3,000	16,000	10
	2	Training on urban EbA (Jamaica)	16,000					16,000		6,500	6,500	3,000	16,000	10
	3	Training on urban EbA (Mexico)	18,000					18,000		7,000	7,000	4,000	18,000	10
	4	Training of Trainers workshop	12,000	-	-	-	-	12,000	-			12,000	12,000	11
	5	Strengthening drainage master plan El Salvador	48,000					48,000		8,000	32,000	8,000	48,000	15

	7	Training for school garden committee and environmental guards (El Salvador)		30,000				30,000		10,000	10,000	10,000	30,000	34
	8	Training for urban gardens (Jamaica)		11,000				11,000		4,000	4,000	3,000	11,000	34
	9	Training in levee, drain and pond maintenance (Jamaica)		15,000				15,000		5,000	5,000	5,000	15,000	59
	10	Training local community and schools (Mexico)		25,000				25,000		10,000	10,000	5,000	25,000	34
	11	Workshop costs to present recommended revisions (El Salvador)	1,511					1,511		1,511			1,511	5
	12	Workshop costs to present recommended revisions (Jamaica)	1,511					1,511		1,511			1,511	5
	13	Workshop costs to present recommended revisions (Mexico)	1,511					1,511		1,511			1,511	5
	14	Workshop to disseminate the technical guidelines	10,500					10,500		10,500			10,500	65
	15	Workshop on upscaling strategies (El Salvador)	2,500					2,500				2,500	2,500	14
	16	Workshop on upscaling strategies (Jamaica)	2,500					2,500				2,500	2,500	14
	17	Workshop on upscaling strategies (Mexico)	2,500					2,500				2,500	2,500	14
	18	Hold a workshop to discuss the protocols		9,000				9,000	9,000				9,000	23
	19	Training on solid waste management (El Salvador)		15,000				15,000		9,000	6,000		15,000	26
	20	2 day Workshop on developing climate-resilient livelihoods		12,000				12,000		12,000			12,000	29
	21	Catering for training at schools		35,000				35,000		11,700	11,700	11,6000	35,000	66
	22	Workshop on communication strategy (El Salvador)			3,000			3,000			3,000		3,000	36
	23	Workshop on communication strategy (Jamaica)			3,000			3,000			3,000		3,000	36
	24	Workshop on communication strategy (Mexico)			3,000			3,000			3,000		3,000	36
	25	Workshop to present toolkits			5,250			5,250				5,250	5,250	44
	26	Regional workshop to share information on SCCF-financed project	-		1,500			1,500				1,500	1,500	46
	27	Awareness raising activities El Salvador			41,000			41,000		41,000			41,000	38
	28	Awareness raising activities Jamaica			41,000			41,000		41,000			41,000	38
	29	Awareness raising activities Mexico			41,000			41,000		41,000			41,000	38

		Sub-total	**132,533**	**160,000**	**138,750**	**-**	**-**	**431,283**	**9,000**	**232,733**	**110,700**	**78,850**	**431,283**	
		Meetings/Conferences												
	30	Consultations		-	-	-	-	-					-	
	31	Presentations research findings			3,000			3,000				3,000	3,000	41
	32	Project Steering Committee Meetings	-	-	-	-	41,000	41,000	12000	12,000	11,000	6,000	41,000	63
	33	Inception and closure workshop	-	-	-	-	12,000	12,000	6,000			6,000	12,000	64
		Sub-total	**-**	**-**	**3,000**	**-**	**53,000**	**56,000**	**18,000**	**12,000**	**11,000**	**15,000**	**56,000**	
	Component total		**132,533**	**160,000**	**141,750**	**-**	**53,000**	**487,283**	**27,000**	**244,733**	**121,700**	**93,850**	**487,283**	
		EQUIPMENT AND PREMISES COMPONENT												
135		**Expendable equipment**												
	1	Printing of policy briefs, training material and strategies	24,000					24,000		18,000		6,000	24,000	6,9 ,13
	2	Designing and printing technical guidelines	3,000					3,000		3,000			3,000	7
	3	Produce digital maps		90,000				90,000	90,000				90,000	19
	4	Printing of assessment reports and protocols		9,000				9,000	9,000				9,000	21, 22
	5	Designing and printing of toolkits			18,000			18,000		18,000			18,000	43
		Sub-total	**27,000**	**99,000**	**18,000**	**-**	**-**	**144,000**	**99,000**	**39,000**	**-**	**6,000**	**144,000**	
135		**Non-expendable equipment**												
	6	Office equipment	-	-	-	4,500	-	4,500	2,500	2,000	-		4,500	60
		Sub-total	**-**	**-**	**-**	**4,500**	**-**	**4,500**	**2,500**	**2,000**	**-**	**-**	**4,500**	
	COMPONENT TOTAL		**27,000**	**99,000**	**18,000**	**4,500**	**-**	**148,500**	**101,500**	**41,000**	**-**	**6,000**	**148,500**	
		MISCELLANEOUS COMPONENT												
125		**Reporting costs**												
	1	Reporting			3,500			3,500				3,500	3,500	45
		Sub-total	**-**	**-**	**3,500**	**-**	**-**	**3,500**	**-**	**-**	**-**	**3,500**	**3,500**	
125		**Sundry**												
	2	Miscellaneous	-	-	-	1,967	-	1,967	500	500	500	467	1,967	62
	3	Telecommunications cost	-	-	-	28,800	-	28,800	8,000	8,000	6,800	6,000	28,800	61
		Sub-total	**-**	**-**	**-**	**30,767**	**-**	**30,767**	**8,500**	**8,500**	**7,300**	**6,467**	**30,767**	
125		**Evaluation**												
	4	Baseline evaluation including all 3 countries	-	-	-	-	15,000	15,000	15,000	-	-		15,000	

	5	Mid-term evaluation including all 3 countries	-	-	-	-	30,000	30,000	-	30,000	-		30,000	
	6	Final evaluation including all 3 countries	-	-	-	-	60,000	60,000	-	-		60,000	60,000	
	7	Audit					20,000	20,000	5,000	5,000	5,000	5,000	20,000	
		Sub-total	**-**	**-**	**-**	**-**	**125,000**	**125,000**	**20,000**	**35,000**	**5,000**	**65,000**	**125,000**	
	COMPONENT TOTAL		**-**	**-**	**3,500**	**30,767**	**125,000**	**159,267**	**28,500**	**43,500**	**12,300**	**74,967**	**159,267**	
	GRAND TOTAL		**520,133**	**4,417,500**	**604,100**	**280,267**	**178,000**	**6,000,000**	**736,850**	**2,189,583**	**1,696,950**	**1,376,617**	**6,000,000**	

Co-Financing Budget

RECONCILIATION BETWEEN GEF ACTIVITY BASED BUDGET AND UNEP BUDGET LINE (GEF FUNDS ONLY US$)								
Project title:			Building the resilience of urban communities in the LAC region through ecosystem based adaptation (EbA)					
Project number:								
Project executing partner:			UNEP-ROLAC, MARN, MWLECC and SEMARNAT					
Project implementation period:								
From:	**2016**		**GEF**	**IDB (El Salvador)**	**JSIF (Jamaica)**	**CONAGUA (Mexico)**	**UNEP-ROLAC**	
To:	**2020**							
UNEP Budget Line			Cash	Grant	Grant	Grant	In-kind + Grant	**Total**
	PERSONNEL COMPONENT							
	1100	**Project personnel**						
	1101	National Coordinator (El Salvador)	200 000					**200 000**
	1102	National Coordinator (Jamaica)	200 000					**200 000**
	1103	National Coordinator (Mexico)	200 000					**200 000**
	1104	Regional coordinator (48 months @$12,500/month)	576 000					**576 000**
	1199	**Sub-total**	1 176 000					**1 176 000**
	1200	**Consultants**	-					**-**
	1201	International M&E expert	24 000					**24 000**
	1202	Adaptation expert	51 000					**51 000**
	1203	Regional Environmental Economics and Finance	60 000					**60 000**

		expert						
	1204	Regional Socio-economic expert	65 000					**65 000**
	1205	Regional GIS expert	24 000					**24 000**
	1206	GIS expert (El Salvador)	20 000					**20 000**
	1207	GIS expert (Jamaica)	20 000					**20 000**
	1208	GIS expert (Mexico)	20 000					**20 000**
	1209	Regional Ecological expert	25 000					**25 000**
	1210	National Agricultural expert (El Salvador)	24 000					**24 000**
	1211	National Agricultural expert (Jamaica)	21 000					**21 000**
	1212	National Agricultural expert (Mexico)	21 000					**21 000**
	1213	National Urban Planning expert (El Salvador)	5 000					**5 000**
	1214	National Urban Planning expert (Jamaica)	5 000					**5 000**
	1215	National Urban Planning expert (Mexico)	5 000					**5 000**
	1216	Regional Communication expert	75 000					**75 000**
	1217	Regional Education expert	45 000					**45 000**
			-					**-**
	1299	**Sub-total**	**510 000**					**510 000**
	1300	**Administrative Support**	**-**					**-**

		Administration and Finance Officer (50%)	100 000					**100 000**
		Senior management						
	1399	**Sub-total**	-					-
	1600	**Travel on official business**	193 250					**193,250**
	1601		-					-
	1602	NC and RC travel						-
	1699	**Sub-total**	193 250					**193 250**
	Component total		1 979 250					**1 979 250**
			-					-
	SUB-CONTRACT COMPONENT		-					-
	2100	**Sub-contracts (MOUs/LOAs for cooperating agencies)**	-					-
	2101	With Universities	-					-
	2199	**Sub-total**	-					-
	2200	**Sub-contracts (MOUs/LOAs for supporting organizations)**	-					-
	2201	National academics	48 000					**48 000**
	2299	**Sub-total**	**48 000**					**48 000**
	2300	**Sub-contracts (for commercial purposes)**	-					-

	2301	National Website designer/consultant	12 000					**12 000**
	2302	MSc candidates	30 000					**30 000**
	2399	**Sub-total**	42 000					**42 000**
	Component total		90 000					**90 000**
			-					**-**
	TRAINING COMPONENT		-					**-**
	3200	Group training	-					**-**
	3201	Training on urban EbA (El Salvador)	16 000	200 000			**50 000**	**266 000**
	3202	Training on urban EbA (Jamaica)	16 000		250 000		**50 000**	**316 000**
	3203	Training on urban EbA (Mexico)	18 000				**50 000**	**68 000**
	3204	Training of Trainers workshop	12 000					**12 000**
	3205	Strengthening drainage master plan El Salvador	48 000	900 000			25 000	**973 500**
	3206	Training on solid waste management	8 000	200 000				**208 000**
	3207	Training for school garden committee and environmental guards (El Salvador)	30 000					**30 000**
	3208	Training for urban gardens (Jamaica)	11 000					**12 000**
	3209	Training in levee, drain and pond maintenance	15 000					**15 000**
	3210	Training local community and schools (Mexico)	25 000					**25 500**

	3211	Workshop costs to present recommended revisions (El Salvador)	1 511				25 000	**26 511**
	3212	Workshop costs to present recommended revisions (Jamaica)	1 511				***25 000***	**26 511**
	3213	Workshop costs to present recommended revisions (Mexico)	1 511				***25 000***	**26 511**
	3214	Workshop on upscaling strategies (El Salvador)	2 500	196 000			25 000	**223 500**
	3215	Workshop on upscaling strategies (Jamaica)	2 500					**2 500**
	3216	Workshop on upscaling strategies (Mexico)	2 500					**2 500**
	3217	Workshop to discuss the protocols	9 000					**9 000**
	3218	Workshop on developing climate-resilient livelihoods	12 000					**12 000**
	3219	Workshop on communication strategy (El Salvador)	3 000				25 000	**28 000**
	3220	Workshop on communication strategy (Jamaica)	3 000				**25 000**	**28 000**
	3221	Workshop on communication strategy (Mexico)	3 000				**25 000**	**28 000**
	3222	Workshop to present toolkits	5 250					**7 000**
	3223	Regional workshop to share information on SCCF-financed project	1 500				**50 000**	**51 500**

	3299	**Sub-total**	247 783					**310 033**
	3300	**Meetings/Conferences**	**-**					**-**
	3301	Consultations	-					**-**
	3302	Presentations research findings	3 000					**3 000**
	3303	Project Steering Committee Meetings	41 000					**41 000**
	3304	Inception and closure workshop	12 000					**12 000**
	3399	**Sub-total**	56 000					**56 000**
	Component total		112 000					**366 033**
			-					**-**
	EQUIPMENT AND PREMISES COMPONENT		**-**					**-**
	4100	Expendable equipment	-					**-**
	4101	Printing of policy briefs, training material and strategies	24 000		250 000			**274 000**
	4102	Designing and printing technical guidelines	3 000					**3 000**
	4103	Produce GIS maps	90 000					**90 000**
	4104	Printing of assessment reports and protocols	9 000					**9 000**
	4105	Designing and printing of educational toolkits	18 000		250 000			**271 000**
	4106	Reporting	3 500					

	4106	Office equipment	4 500				20 000	**24 500**
	4107	Telecommunications cost	28 800				60 000	**88 800**
	4108	Miscellaneous	1 967					**1 967**
	4199	**Sub-total**	144 000					**182 267**
	4200	Non-expendable equipment	-					**-**
	4201	El Salvador-Equipment and EbA interventions	966 000	18 800 000				**19 766 000**
	4202	Jamaica-Equipment and EbA interventions	881 500		2 500 000			**3 381 500**
	4203	Mexico-Equipment and EbA interventions	893 000			2 000 000		**2 893 000**
	4204	El Salvador-Additional livelihoods	60 000	1 690 000				**1 755 000**
	4205	Jamaica-additional livelihoods	180 200		500 000			**680 000**
	4206	Mexico-additional livelihoods	155 000			1 120 000		**1 275 000**
	4207	Awareness raising activities El Salvador	41 000					**41 000**
	4208	Awareness raising activities Jamaica	41 000		250 000			**291 000**
	4209	Awareness raising activities Mexico	41 000					**41 000**
			-					**-**
	4299	**Sub-total**	**3 263 500**					**3 263 500**
	Component total		**3 445 767**					**3 445 767**
			-					**-**

	MISCELLANEOUS COMPONENT		-					-
	5200	Reporting costs	-					-
	5299	**Sub-total**	-					-
	5300	Sundry	-					-
	5499	**Sub-total**	-					-
	5500	Evaluation	-					-
	5501	Baseline evaluation including all 3 countries	15 000					**35 000**
	5502	Mid-term evaluation including all 3 countries	30 000					**35 000**
	5503	Final evaluation including all 3 countries	60 000					**35 000**
	5504	Audit	20 000					**20 000**
	5599	**Sub-total**	125 000					**128 500**
	Component total		125 000					**128 500**
			-					-
	GRAND TOTAL		**6 000 000**	**21 986 000**	**4 000 000**	**3 120 000**	**628 000**	**35 734 000**

Budget Notes

The budget notes with an asterisk (*) are gender-relevant.

1	Consultancy contract for full time Regional Coordinator (48 months @$12,000/month)	This budget will be used mainly to oversee the deliverables under Component 1 and 3. **1.1.** Coordinate with the policy experts in each country that policy briefs are developed on the recommended revisions to policies, strategies and plans, including budget allocations to integrate EbA into urban planning and management of natural resources. More specifically, in Activity 1.1.1, 1.1.2 and 1.1.3 collate information in year 1 to identify barriers and opportunities to implement urban EbA, review existing policies and plans related to natural resource management, urban planning and infrastructure development to identify entry points for EbA, recommend revisions to national and local policies and strategies and develop policy briefs based on these recommended revisions. **1.2** Lead the development of technical guidelines on planning, implementing the EbA interventions with possible assistance from an adaptation expert. **1.3** Provide training on technical guidelines to local government authorities in San Salvador, Kingston and Xalapa in cooperation with an adaptation expert. **1.4** Design strategies to upscale EbA across urban and peri-urban areas in El Salvador, Jamaica and Mexico. **1.4.2** Hold workshops with national (ES and Jamaica), sub-national (Mexico) and local government authorities from urban planning and NRM departments to present the policy briefs with recommended revisions and upscaling strategies. **2.2.** Assist with the development of the site-specific protocols for urban EbA implementation – at watershed, urban landscape and household scales. Ensure good cooperation and communication between the stakeholders in each pilot country to create consistency of protocols. **3.1.** Lead the development of a communication strategy for urban EbA for San Salvador, Kingston and Xalapa **3.2.** Assist with the development of awareness raising material on urban EbA **3.3** Coordinate with national academics on the design and institutionalisation of a long-term research programme. In addition, the RC will assist the M&E expert with the monitoring and evaluation of the project interventions. **3.4** Assist the national education expert with the development of educational toolkits on climate change and urban EbA. **3.5** Collate and disseminate the information generated through the SCCF- project, including the leading of a regional workshop.
2	Consultancy contract for International M&E expert (IME) (4 months @US$6,000/month)	This budget will be used to contract an expert in Monitoring and Evaluation in an environmental or urban context. This expert will assist the Socio-economic and ecological expert to: **2.1.1**. assist 1 month in year 1 with undertaking assessments in San Salvador, Kingston and Xalapa to identify climate vulnerabilities and collect socio-economic data on urban communities.

		2.2.2 assist 1 month in year 1 with develop site-specific protocols for urban EbA implementation – at watershed, urban landscape and household scales – based on the worst-case scenario in Output 2.2, the socio-economic assessments and biodiversity undertaken in Output 2.1. and 2.2 respectively. **3.3.3** In total 2 weeks per year over 4 years to assist monitoring the development and implementation of the urban EbA interventions in San Salvador, Kingston and Xalapa in cooperation with the universities.
3	Consultancy contract for National Adaptation Expert (NAE) 17 months @ US$3,000/month).	This budget will be used to contract a consultancy with expertise in Ecosystem-based Adaptation (EbA) (if available in El Salvador, Jamaica or Mexico) in the urban context. This consultancy will use the funds to develop training plans aimed at improving local and national policy- and decision-makers understanding of EbA. The training plans will be developed using international best practices and lessons learned from adaptation projects in the LAC region. The consultant will then implement the training plans and run training sessions and workshops with local and national policy- and decision-makers. **1.3.2**. 4 months per year in year 1 and 2 to assist the Regional Coordinator with providing training on: i) the effects of climate change; ii) planning, implementing and monitoring urban EbA in each pilot city; and iii) the benefits of using EbA to adapt to the effects of climate change in urban areas. **1.3.3-1.3.4.** 9 months in year 4 to refine the training material and assist the Regional Coordinator with providing a "training of trainers" programme for sub-national government.
4	National Coordinators (@4,160/month full time)	This budget will be used to hire 3 national coordinators full time to supervise and coordinate the project activities under Outcome 2, particularly Output 2.3 and 2.4.
5*	Workshops to present the recommended revisions to relevant ministries.(including travel, all stationary, lunch and venue hire)	**1.1.3** 3 workshops in year 1 - one in each country - on EbA for in total 60 national and local policy- and decision-makers. Total costs will be @ US$1511per workshop, including rent of venue @US$1,000 and catering for 25 people @US$500. This workshop will be specific to urban EbA and will use the information collected in activity 1.1.1 and the revisions developed in activity 1.1.2. The workshop will be conducted by the Regional Coordinator. Workshop attendees will include 50% women.
6	Developing and printing policy briefs	**1.1.3.** This budget will be used for the development and printing of the policy briefs. A total of US$6,000 to be divided over the three countries.
7	Designing and printing technical guidelines	**1.2.1.** This budget will be used for the designing and printing of the technical guidelines. $1,000 for each country.
8	Travel costs to disseminate technical guidelines on urban EbA	This budget of US$8,700 and US$11,000 will be used to for travel to hold workshops in each country to present the recommended policy briefs in Activity 1.1.4 and for the dissemination of the technical guidelines developed in Activity 1.2.2. for national and local government. For Activity 1.1.4, travel reimbursement 25 X @US$50 for 3 countries =US$3,750 and travel RC to 2 countries @US$3,000; and DSA RC for 3 countries @300/day for 2 days totalling US$1,800. For Activity 1.2.2, total budget for travelling is: @ US$11,000 including travel for RC to 1 country ~US$1,500; DSA @300/day for 2 days for 3 countries =US$1,800; travel compensation in total 150 participants (50 per country including community and government representatives)@US$50=US$7,500
9	Printing of training material	This budget is used for printing training material under Activity 1.3.1. US$4,000 for each country.
10	Training on urban EbA	**1.3.2**. 3 days training on urban EbA in year 2 with a follow up training in year 3 and 4 using the technical

		guidelines developed in activity 1.2.1. A total of 4 days of training (3 days in year 2 and 3 days in year 3 and 1 day in year 4 for national government in El Salvador and Jamaica and 3 days training in year 2, 3 days in year 3 and 1 day in year 4 of local government in Mexico. 25 people per country with in total 75 representatives of government. Cost of venue and catering are ~US$1,500 per day, totalling US$4,500 per country for year 2 and 3 and US$1,500 for year 4. Remaining budget is for training material that can include excursions with transport to a site to apply lessons learned from workshop.
11*	Training of trainers workshop on urban EbA	**1.3.4**. 2 day Training of Trainers workshop for representatives of the national and sub-national government of all three countries on urban EbA in year 4 based on the refined training material developed in activity 1.3.3. The allocated budget includes all training material @US$50 per participant for a maximum of 40 per country (50% women), totalling US$6,000. Cost of venue and catering are US$1,500 per day per country, with a total of US$3,000 per country.
12	Regional Expert in Environmental Economics/Financing expert (5 months @ US$6,000/month for each of year 3 and year 4)	This budget will be used to contract a Regional Expert in Environmental Economics/Financing. This expert will identify and detail financing mechanisms for inclusion in the technical guidelines developed by the RC and adaptation expert. This expert will identify barriers to national dialogue on adaptation and mobilisation of funds for EbA implementation, and develop a strategy to overcome these barriers. **1.4.1** and **1.4.2.** Develop the different strategies for upscaling urban EbA in close collaboration with the Regional Coordinator.
13	Printing the strategies	This budget is used for printing the strategies under Activity 1.4.1. US$2,000 for each country.
14*	Hold a workshop with national (ES and Jamaica), sub-national (Mexico) and local government authorities to present the upscaling strategies.	This budget (including venue hire and catering) will be used to hold a 1 day workshop in each country to present the upscaling strategies developed under Activity 1.4.1. Total costs will be @ US$2,500 per workshop, including rent of venue @US$1,000 and catering for 25 people @US$20 = US$500. There is an extra US$1,000 budget available for an extra 1/2 day venue hire if necessary. Participants will have 50-50 gender representation.
15	Develop a Watershed management plan (@$48,500)	This budget under 1.4.3 will be used to develop a watershed management plan for the Arenal-Monserrat area in San Salvador. The development includes water sampling and mapping @US$15,000; training workshops @US$23,500 and printing of the plan @US$10,000.
16	Consultancy contract for Regional Socio-economic Expert (13 months@ US$5,000/month)	This budget will be used to contract a Regional Expert in Socio-economics. This expert will undertake assessments to identify the risks and adaptation needs of urban communities to the effects of climate change. **2.1.1.** 4 months in year 1 to undertake assessment in San Salvador, Kingston or Xalapa to identify climate vulnerabilities and collect socio-economic data on urban communities. **2.1.2.** 4 months in year 1 to collate data on population growth, planned economic activities, development plans, disaster risk, and land-use change – that will most likely affect well-being of local communities. The finding will be presented in a report. **2.4.1** This budget will be used to hire a National Socio-economic expert to develop a community strategy and assist developing and implementing the additional climate-resilient livelihoods under Activity 2.4.1 in a participatory way that meets the needs of the targeted local communities. @5 months of which 1 month in year

		1 and 4 months in year 2.
17	Consultancy contract for Regional GIS expert (8 months@ US$3,000/month)	This budget will be used to contract a Regional GIS expert. **2.1.3.** 4 months to collate spatial data on climate trajectories at the city level for San Salvador, Kingston and Xalapa. **2.1.4.** 4 months to produce maps to show the worst-case scenarios related to urban development, climate-related risks and resource availability under conditions of climate change.
18	Consultancy contract for National GIS expert (8 months@ US$2,500/month)	This budget will be used to contract a National GIS expert. **2.1.3.** 4 months to collate spatial data on climate trajectories at the city level for San Salvador, Kingston and Xalapa. **2.1.4.** 4 months to produce maps to show the worst-case scenarios related to urban development, climate-related risks and resource availability under conditions of climate change.
19	Produce maps based on the information in GIS	This budget will be used to produce maps based on the information collected under Activity 2.1.1, 2.1.2 and 2.1.3. US30,000 for each country.
20	Regional Ecology Expert (5 months @ US$5,000/month)	This budget will be used to contract a Regional expert in biodiversity and ecology who will collect and update data and information on biodiversity and ecology for the urban EbA intervention areas in San Salvador, Kingston and Xalapa. **2.2.1.** 3 months to undertake biodiversity and ecosystem assessments in each of the project intervention sites and write a report with recommendations for each intervention site. **2.2.2** 2 months to assist the national coordinators and regional coordinator with the development of site-specific protocols.
21	Print the assessment reports	This budget will be used to print the reports of the biodiversity assessments done on each intervention site. A total of US$3,000 to be divided over the three countries.
22	Print the site-specific protocols	This budget will be used to print the site specific protocols developed under Activity 2.2.2. A total of US$6,000 to be divided over the three countries.
23*	Hold a workshop to discuss and validate the protocols with identified stakeholders for each city.	This budget will be used to hold a workshop to discuss and validate the specific protocols developed under Activity 2.2.2. The workshop will be conducted by the Regional coordinator in collaboration with the national coordinators. Costs for the workshop are US$3,000 per country and include venue hire and catering. Participants will include 50-50 gender representation.
24	Consultancy contract for National Urban Planning Expert (NUPE) (@$5,000/month)	This budget will be used to contract an urban planning expert to assist the other technical consultants in the implementation of the EbA interventions at urban landscape scale. **2.3.1** 30 days in year 2 to provide guidance to the hydrologist and ecologist on the location of the interventions in San Salvador and ensure the interventions fit into existing local plans. **2.3.2** 30 days in year 2 to provide guidance to the hydrologist and ecologist on the location of the interventions in Kingston and ensure the interventions fit into existing local plans. **2.3.2** 30 days in year 2 to provide guidance to the hydrologist and ecologist on the location of the interventions in Xalapa and ensure the interventions fit into existing local plans.
25*	Implement appropriate EbA interventions	This budget @US$966,000 will be used to implement urban and peri-urban EbA interventions at watershed,

	at watershed, urban landscape (city) and household scales in San Salvador based on the protocols developed under Output 2.2.	urban landscape and household scale. Beneficiaries will include 50% women. **2.3.1.** Promoting sustainable agriculture: • developing 1,000 hectares of sustainable agriculture in the Arenal-Monserrat watershed, including the construction of vegetated infiltration ditches on the slope of the San Salvador volcano; • restoring 16 km of riparian vegetation in 4 ravines (4 km per ravine) using native fruit trees in the area; • constructing 30 infiltration wells (of 1 metre height) to improve water infiltration and increasing storage of storm water runoff; • constructing rainwater harvesting systems in the community of El Trebol; • constructing rainwater harvesting systems for ten schools; and • establishing ecological sanitation (management of grey water and sewage) at two schools to close the water cycle.
26*	Training on solid waste management (El Salvador)	This budget @US$16,800 will be used to provide training to the target community and the schools in the Arenal-Monserrat area on the management of solid waste. Participants will include 50-50 gender representation. **2.3.1** 2 x 2 days of training in year 2 and 1 x 2 days follow up training in year 3. Venue hire @US$2,000 per 2 day training, totalling US$4,000 in year 2 and US$2,000 in year 3. Catering @US10 per person per day for 60 people per school = $10 x 60 x 2 days = US1,200 per 2 days. There will be 3 schools at each training @ US$1,200 x 3 = US$3,600 per training session. 2 training sessions in year 2 @ US$2,000 + US$3,600 each = US$11,200. 1 training session in year 3 @ US$2,000 + US$3,600 each = US$5,600.
27*	Implement appropriate EbA interventions at watershed, urban landscape (city) and household scales in Kingston based on the protocols developed under Output 2.2.	This budget @US$881,500 will be used to implement urban and peri-urban EbA interventions at watershed, urban landscape and household scale. The costs of construction include the sub-contracts for the service providers. Beneficiaries will include 50% women. **2.3.2.** • planting 4,200 trees in the Hope watershed using drought-resilient tree species; • rehabilitate 2 hectares of the wetlands in Greenwich Town to increase water storage; • constructing 3 detention basins made from natural material to improve water infiltration and increase storage of storm water runoff; • constructing 500 metres of dykes; • constructing 2,500 metres of permeable pavements and walkways using grass and other appropriate plant species; • constructing one rainwater harvesting system each at Camperdown High School, St Andrews Technical School, Kingston Technical College and Tivoli Gardens School; and • constructing a rainwater harvesting system at two community buildings.
28*	Implement appropriate EbA interventions at watershed, urban landscape (city) and household scales in Xalapa based on the protocols developed under Output	This budget @US$893,000 will be used to implement urban and peri-urban EbA interventions at watershed, urban landscape and household scale. The costs of construction include the sub-contracts for service providers. Beneficiaries will include 50% women. **2.3.3.**

	2.2.	• restoring the area of the El Palenquillo stream by: i) planting 3,640 trees (1,820 on each side of the river, 2 metres apart); and ii) constructing infiltration ditches (0.6 metres deep, 0.5 metres wide, covered with 2 centimetres of gravel); • restoring the Cerro del Estropajo hill by: i) planting 20,000 trees using montane forest species; and ii) constructing 2,803 metres of infiltration ditches; and iii) constructing 1,667 metres retention berms to retain soil and increase the infiltration; • constructing two permeable, concentric sports circuits – each 1,000 metres long – to promote rainwater infiltration (one constructed with permeable concrete, the other with gravel); • constructing an artificial wetland in the green area of the Telesecundaria school Rafael Hernández Ochoa, which will also be used to cultivate ornamental plants; and • installing 10 rainwater-harvesting systems (at 8 schools and 2 public buildings).
29	Workshops (@$4,000)*	This budget will be used to hold workshops to present the strategies developed under Activity 2.4.1 for managing the urban EbA interventions. Cost of venue and catering are ~US$2,000 per day per country, with a total of US$4,000 per country. Participants will include 50-50 gender representation.
30	Equipment for additional livelihood activities San Salvador	This budget of US$60,000 will be used to provide i) agricultural start up kits at 10 schools @$2,000 in year 2, totalling US$20,000. The start-up kit will include seeds and fertilizer, tools @US$1000 per school, totalling US$20,000; and transport and food for work @US$1,000 per school, totalling US$10,000. In addition fruit trees will be provided to be planted @US$12,000 and training material for waste management @US$8,000.
31	Equipment for additional livelihood activities Kingston	This budget @US$180,200 will be used to provide equipment for urban gardens, fruit trees and beehives at the 4 selected schools. • planting 400 fruit trees and 1,000 forest trees in 2.3 hectares in May Pen Park, in Kingston; • providing 250 hives and equipment to promote bee-keeping at the community space in May Pen Park in Kingston; • planting 400 fruit trees along the perimeter of the football field at Tivoli High School; • planting 400 fruit trees along the perimeter of Camperdown High School; • providing equipment for container gardening at Kingston Technical School; and • providing equipment for the greenhouse and nursery as part of the agricultural improvement programme at St Andrews Technical College.
32	Equipment for additional livelihood activities Xalapa	This budget @US$155,000 will be used to provide agricultural start up kits at @US$2,000 x 8 schools and 2 public spaces, totalling $20,000 in year 2.
33	National Agricultural Expert (22 months @ US$3,000/month)	This budget will be used to contract a national expert in agriculture to implement peri-urban EbA interventions related to sustainable agriculture in San Salvador, Kingston and Xalapa. In year 2, the expert will spend 4 months in each country to assist with the development of urban agriculture. In addition, the agricultural expert will spend a total of 13 months in the field as follows: in year 3, there will be 3 months assistance in El Salvador, 2 months in Jamaica and Mexico; in year 4, the assistance by the agricultural expert will be 1 month in each country. This includes: **2.4.3** 2x5 days to provide on-the-job training to the local urban communities in San Salvador, Kingston and

		Xalapa on establishing and maintaining urban food gardens.
34	Training on using equipment	This training, including material, will be provided by the national agricultural expert and will focus on: i) establishing and maintaining the urban food gardens; and ii) potential livelihoods from these gardens. One training session in year 2 with follow up training in year 3 and 4 and using the equipment for local communities (@ US$ 2,000 per school, totalling US$40,000 for El Salvador; 4 schools x US$2,000=US$8,000 for Jamaica and 10schools x US$2,500 =US$25,000 for Mexico). Beekeeping training material is estimated @US$3,000.
35	Regional Communication expert (16 months @$4,625 per month)	**3.1.1** The communication expert will draft a communication strategy and action plan and conduct a local and school specific awareness raising activities according to the strategy and workplan. The campaign will include, the production of promotion materials: leaflets, brochures, freecards, educational packages and their distribution at different events such as the DMRD week, climate change action day. The communication expert will also meet with NGOs, journalists to gain further information and will use Social media, TV and Radio spots, posters and other means of raising awareness. This will be 3 months in year 3 and 2 months in year 4. **3.2.1** Developing communication material 3 months in year 1 and 3 months in year 3 **3.2.2** Implementing national, local and school specific awareness raising campaigns. The school specific awareness raising campaign will include budget that will be used for travel to and organisation of site visits where EbA is being implemented for local schools. This includes participation of local schools in tree planting and urban gardening. This will be 3 months in year 2 and 2 months in year 4.
36*	Workshop to present communication strategy	This budget will be used to hold a 2-day workshop @$3,000 in each country totalling @$9,000 in year 3 to present and discuss the proposed communication strategies developed under Activity 3.1.1. The workshop costs include venue hire @US$1,000 and catering for 40 people per country @US$15 per day US$600 for 2 days in year 3. Participants will include 50-50 gender representation.
37	Consultant contract for a Web-designer (US$12,000 to design website in year 4)	This budget will be used to hire a web-designer to develop an online portal to share information on urban EbA. **3.1.2** 3 months @3,000/month and maintenance and updating in year 4
38*	Implementing costs	This budget will be used to Implement the communication and awareness raising strategy using the material developed in Activity 3.2.1. The budget is US$41,000 in total per country. The communication and awareness strategy will take into account the different ways men and women prefer to receive information. The activity will include *inter alia* developing brochures and holding campaigns.
39	National Academics (@ US2,000/month)	**3.3.1.** 1 month @ $2,000 for 3 countries = $6,000 to design a long term research programme to assess the performance of EbA interventions by monitoring the bio-physical and socio-economic benefits of the implemented interventions. **3.3.2**. 1 month @ $2,000 for 3 countries = $6,000 to facilitate and arrange an MoU between the University and the financial executive of the SCCF-financed project. **3.3.3.** 2 months per year @ $2,000 per month for years 2-4 for 3 countries = $36,000 to oversee the implementation of the long-term monitoring programme developed in Activity 3.3.1 .
40*	Research stipend for MScs (@ US$	**3.3.3**. Stipend for academic supervision of PhD and MSc candidates (50% women). US$5,000 for year 1 and

	10,000).	US$2,500 for year 3 and US$2,500 for year 4 per country for 3 countries = $30,000.
41	Presentations (@US$1,000)	**3.3.4** This budget of US$1,000 per country will be used for catering and if needed a small fee for venue hire to present the preliminary research findings on the EbA interventions. Costs are estimated at rent of room at university @US$500 and catering for 50 people @US$10 =US$500.
42	Regional Education Expert (9 months@US$5,000/month)	This budget will be used to hire a regional education expert to develop and pilot the educational toolkits in Activity 3.4.1 and 3.4.2 for primary and secondary schools in San Salvador, Kingston and Xalapa. 4 months in year 1 (US$20,000), 3 months in year 3(US15,000) and 2 months in year 4(US$10,000).
43	Designing and printing (@18,000)	This budget will be used to design and print the educational toolkits developed under Activity 3.4.1. The amount is to be divided over the three countries.
44*	Workshop to present toolkits	This budget @US$1,750 per country will be used for the educational expert to hold a workshop to present the educational toolkits. Participants will include 50-50 gender representation. **3.4.3** 1 day workshop in each country to present the educational toolkits. Venue hire @US$1,000; catering 50 (including school representatives) x US$15 =US$750.
45	Reporting	This budget @US$3,500 will be used under Activity 3.5.1 for the regional coordinator for costs to report to the PRC and other regional networks on the results of the EbA interventions of the SCCF-financed project.
46	Workshop costs to disseminate information on SCCF-financed project	This budget @1,500 will be used to hold a regional workshop to disseminate the collected information during the SCCF-financed project. Venue hire @US$1,000; catering: 25 x US$15 = US$375.
47	Administration and Finance Officer	This budget will be used to hire a part-time Regional Administration and Finance Officer (AFO). the AFO will take responsibility to handle the procurement and all admin under Component and 3. In particular, the AFO will also be involved with all admin regarding the release of funding for Component 2.
48	Travel to provide training on urban EbA	This budget totalling US$ 36,000 will be used for the adaptation expert to provide training on urban EBA to each of the countries under Activity 1.3.2. Specific costs include: US$2,050 travel for adaptation expert per country per year to three countries for years 2, 3 and 4 = $18,450; US$50 reimbursements to 25 participants, for travel and terminal expenses in each of the 3 countries for three years = US$11,250. DSA for Adaptation expert @300/day x 3 days for 3 countries per year for years 2 and 3 = US$5,400. For year 4 the follow-up workshop is1 day in each country so DSA @300/day x3 = @ US$900.
49	Travel for Training of trainers	This budget @US$10,950 will be used for the adaptation expert to provide training to local and national authorities in each of the countries on urban EBA under Activity 1.3.4. Specific costs include: US$1,500 travel for adaptation expert to 3 countries totalling US$4,500, US$50 reimbursements to 25 participants, for travel and terminal expenses in each of the 3 countries=US$3,750 and DSA for Adaptation expert @US$300/day x 3 days for 3 countries =US$2,700.
50	Travel for workshop on upscaling strategies	This budget @US10,950 will be used for the Regional Coordinator to hold a workshop for urban planning, NRM departments and relevant private sector representatives in each of the countries under Activity 1.4.2. Travel to each country @US1,500 per country totalling US$4,500, DSA@300/day for 3 days per country totalling US$2,700 and US$50 reimbursements to 25 participants, for travel and terminal expenses in each of the 3 countries=USD$3,750.

51	Travel to three countries for socio-economic assessments	This budget for a total of US$20,100 will be used for the Regional socio-economic expert and International M&E expert to travel to and within each of the three countries. Tickets for 1 visit per person @US1,500 per country, totalling 3xUS$1,500 = US$4,500. For 2 people: 2xUS$4,500= @US$9,000; DSA for regional socio-economic expert @US300/day for 9 days per country in year 1 totalling US$8,100. DSA for International M&E expert @US300/day for 10 days for all three countries totalling US$3,000.
52	Travel to three countries for ecological assessments	This budget for a total of US$11,700 will be used for the Regional Ecological expert to travel to and within each of the three countries. Tickets @US$1,500 per country totalling @US$4,500; and DSA @300/day for 8 days per country in year 1 totalling US$6,300.
53	Travel to three countries for workshop on protocols	This budget of US$10,050 will be used for the Regional Coordinator to hold a workshop for local and national stakeholders, including private sector and communities, in each of the countries under Activity 2.2.2.Tickets @US1,500 per country totalling @US$4,500; DSA@300/day for 2 days per country totalling US$1,800; US$50 reimbursements to 25 participants, for travel and terminal expenses in each of the 3 countries=USD$3,750.
54	Travel for traditional livelihood workshop	This budget @US$10,950 will be used for the Regional socio-economic expert to travel to each of the three countries in year 2 to hold the workshop @US$4,500. DSA@300/day for 3 days per country = US$2,700. US$50 reimbursements to 25 participants, for travel and terminal expenses in each of the 3 countries=USD$3,750.
55	Travel for training on urban agriculture	This budget @US$11,700 will be used for the National Agricultural expert to travel to each of the three countries to provide on-site training. Travel costs El Salvador and Jamaica total @US$200 each; Mexico (from Capital) @US$500; DSA @US$300/day for 3 days for 3 countries=US$2,700 per year. Total per year US$3,600 for three years = US$10,800. An additional US$1,500 is for a ticket for the International M&E expert in year 2.
56	Travel for workshop communication strategy	This budget totalling US$ 12,000 will be used for the Regional Communication expert to hold a workshop in each country in year 3. In year 3: travel to each of the three countries to hold the workshop @US$4,500; DSA @US$300/day for 3 days for 3 countries=US$2,700. Transport compensation @US$40 for 40 participants per country (including local and national representatives), totalling US$4,800.
57	Travel for presenting toolkits and workshop	This budget @US$11,450 will be used for the Regional Educational expert to hold a workshop in each country in year 3 to present and discuss the educational toolkits. Travel to each of the three countries to hold the workshop @US$4,500; DSA @US$300/day for 3 days for 3 countries=US$2,700. US$50 reimbursements to 25 participants, for travel and terminal expenses in each of the 3 countries=USD$3,750. National representatives (Mexico) 5 x US$100 = US$500
58	Travel for regional workshop	This budget @US$16,400 will be used for the Regional Coordinator and other stakeholders from the three countries to attend the regional workshop. It is advised to hold the workshop in one of the three countries to minimise travel costs. In addition, it is advised to combine this meeting back to back with a PSC meeting to further minimise travel costs. Travel costs for 1 GEF representative and 1 UNEP representative will be covered under PSC meeting as per budget line 64. For regional workshop: 1 RC, 2 NCs, 2 academia, 2 representatives of executing agencies, 2 baseline project representatives = 9 participants. Travel costs 9

		x@US1,500 totalling US$13,500. DSA: 9 x US$300 =US$2,700. US$50 reimbursements to 1 NC and 3 local representatives, for travel and terminal expenses: 4 x US$50 = $200.
59*	Training in levee, drain and pond maintenance	This training will prepare both technical government staff and local communities on how to manage solid waste in San Salvador (@US$8,000) and Kingston and how to maintain the constructed interventions such as the dyke, drains and the detention pond in Kingston (@US$15,000). Beneficiaries will include 50% women.
60	Office equipment	Office equipment. Including, computers and office supplies. US$4500 over the duration of the project
61	Telecommunications cost	Telecommunications cost including telephone and internet. US$28,800 for the three countries for 4 years.
62	Miscellaneous	Miscellaneous costs. US$1,967 for 4 years.
63	Project Steering Committee Meetings	This budget of US$41,000 is reserved for annual meetings for the PSC @US$12,000 per year for year 1and 2, US$11,000 for year 3 and US$6,000 for year 4 including travel and DSA. It is advised to each year have the meeting in one of the three countries to minimise travel costs and at a time that the RC will be in one of the countries as well, which means only 9-3 is 6 people travel. Travel costs year 1-3: 6x US$1,500 = US$9,000. For year 4: Travel costs for 1 GEF representative and 1 UNEP representative @US$1,500 = US$3,000. DSA@300/day x 9 people = US$2,700 per year for 4 years.
64	Inception and closure workshop	This budget is for a regional inception and closure workshop for the project representatives.
65*	Workshop to present and disseminate the technical guidelines	This budget of US$3,500 per country (totalling US$10,500) will be used to rent venue @US$1,000/day for 2 days x 3 workshops = US$6,000; lunch for 50 people @ US$15 for 2 days x 3 workshops = US$4,500. Participants will include 50-50 gender representation.
66	Catering for providing the training on urban gardens at the schools, 1 day at each school.	**2.4.3** Training will be provided every year to a new class. Catering: US$9.5 x 50 learners x 10 schools = US$4,750 per year for El Salvador for 3 years; US$9.5 x 50 learners x 10 schools = US$4,750 per year for Mexico for 3 years; US$9.5 x 50 learners x 4 schools = US$1,900 per year for Jamaica for 3 years + US$9.5 x 10 specialists x 4 schools for maintenance and bee-keeping = US$1,140 for 3 years. Totalling US$35,000.
67	Travel for International M&E expert	This budget will be used for travel of the international M&E expert in year 2, 3 and 4 to the 3 countries. For years 2, 3 and 4: 2x US$1,500 per year for travel to Jamaica and Mexico totalling US$9,000; For years 2, 3 and 4: 1x US$1,000 for travel from Mexico to El Salvador, totalling US$3,000.

ANNEX G: WORKPLAN

Workplan key: Lead consultants for activities

Workplan key: lead consultant for each activity	
	Regional Coordinator
	Regional Environmental Economics and Finance expert
	Representatives of the MARN in San Salvador
	Regional Socio-economic expert
	Regional and National GIS experts
	Regional Ecological expert
	National Coordinators El Salvador, Jamaica and Mexico
	National Agricultural Expert El Salvador, Jamaica and México
	Regional Communication expert
	National Website designer
	National Academics
	Regional Educational expert
	Other (NCU/project staff)

	Annual breakdown				Quarterly breakdown															
					Year 1				Year 2				Year 3				Year 4			
Activity	Y1	Y2	Y3	Y4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1.1.1																				
1.1.2																				
1.1.3																				
1.1.4																				
1.2.1																				
1.2.2																				
1.3.1																				
1.3.2																				
1.3.3																				
1.3.4																				
1.4.1																				
1.4.2																				
1.4.3																				
2.1.1																				
2.1.2																				
2.1.3																				
2.1.4																				
2.2.1																				
2.2.2																				
2.3.1																				
2.3.2																				
2.3.3																				

	Annual breakdown				Quarterly breakdown															
					Year 1				Year 2				Year 3				Year 4			
Activity	Y 1	Y2	Y 3	Y 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4
2.4.1																				
2.4.2																				
2.4.3																				
3.1.1																				
3.1.2																				
3.2.1																				
3.2.2																				
3.3.1																				
3.3.2																				
3.3.3																				
3.3.4																				
3.4.1																				
3.4.2																				
3.4.3																				
3.5.1																				
3.5.2																				
3.5.3																				

ANNEX H: TRACKING TOOL

Attached separately in excel format

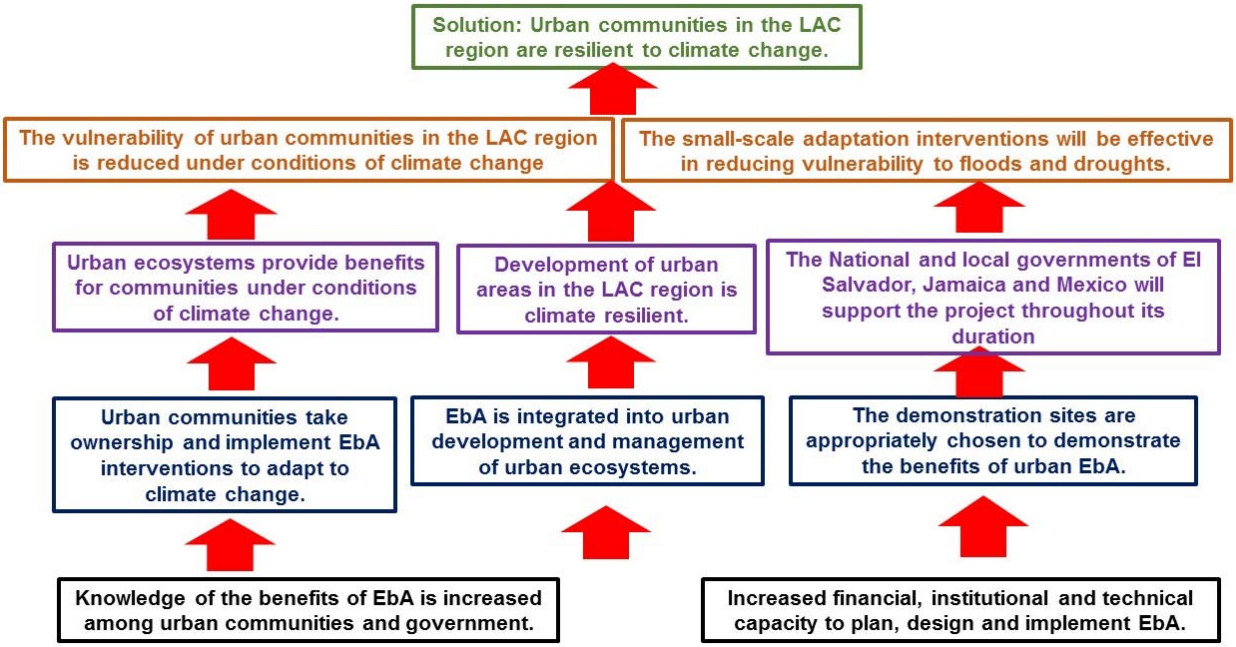
ANNEX I: COFINANCING LETTERS

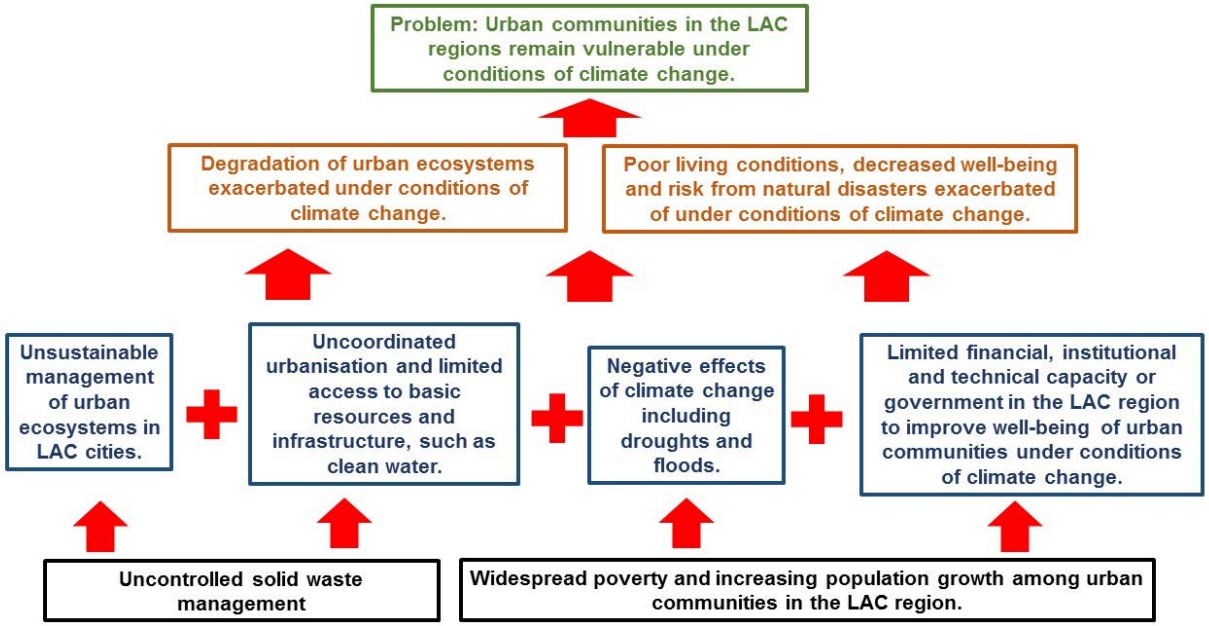
See separate attachments.

ANNEX J: LETTERS OF ENDORSEMENT

See separate attachments.

ANNEX K: THEORY OF CHANGE





ANNEX L: CHECKLIST FOR ENVIRONMENTAL AND SOCIAL ISSUES

Please note that as part of the GEFs evolving Fiduciary Standards that Implementing Agencies have to meet is the need to address 'Environmental and Social Safeguards'.

To address this requirement UNEP-DGEF have developed this checklist with the following guidance:

1. Initially filled in during concept development to help guide in the identification of possible risks and activities that will need to be included in the project design.
2. A completed checklist should accompany the PIF
3. Check list reviewed during PPG phase and updated as required
4. Final check list submitted with Project Package clearly showing what activities are being undertaken to address issues identified

Project Title:	Building climate resilience of urban systems through Ecosystem-based Adaptation (EbA) in Latin America and the Caribbean.		
GEF project ID and UNEP ID/IMIS Number	GEF Agency Project ID: 5681 UNEP ID: 01238	***Version of checklist***	Two
Project status (preparation, implementation, MTE/MTR, TE)	***Preparation***	***Date of this version:***	*June 2015*
Checklist prepared by (Name, Title, and Institution)	*Atifa Kassam, Task Manager, GEF Climate Change Unit, DEPI, UNEP*		

In completing the checklist both short- and long-term impact shall be considered.

Section A: Project location:

If negative impact is identified or anticipated the Comment/Explanation field needs to include: Project stage for addressing the issue; Responsibility for addressing the issue; Budget implications, and other comments.

	Yes/No/N.A.	*Comment/explanation*
- Is the project area in or close to -		
- densely populated area	Yes	San Salvador, Kingston and Xalapa are all in densely populated urban areas. The project aims to reduce vulnerability within these areas and hence there is no negative effect anticipated through the project.
- cultural heritage site	No	
- protected area	Yes	The intervention site in Xalapa is nearby the "Molinos de San Roque" Natural Protected Area.
- wetland	Yes	Within the project area in Kingston, there is one wetland, the project aims to restore areas within the wetland and hence there is no negative effects anticipated by the project.
- mangrove	No	
- estuarine	No	
- buffer zone of protected area	Yes	The Intervention site in Arenal-Monserrat in San Salvador is nearby "El Boqueron" Natural Protected Area. One of the EbA interventions implemented through the SCCF-Financed project will restore 150 hectares in the buffer zone of this protected are to reduce the risk of soil erosion

		and consequent landslides for the community living in Arenal-Monserrat.
- special area for protection of biodiversity	No	
- Will project require temporary or permanent support facilities?	Not anticipated	
If the project is anticipated to impact any of the above areas an Environmental Survey will be needed to determine if the project is in conflict with the protection of the area or if it will cause significant disturbance to the area.		

Section B: Environmental impacts, i.e.
If negative impact is identified or anticipated the Comment/Explanation field needs to include: Project stage for addressing the issue; Responsibility for addressing the issue; Budget implications, and other comments.

	Yes/No/N.A.	*Comment/explanation*
-Are ecosystems related to project fragile or degraded?	Yes	The ecosystems within the three cities are degraded as a result of waste pollution and unsustainable use of the natural resources. The objective of SCCF project is to restore these ecosystems and reduce their vulnerability to climate change.
- Will project cause any loss of precious ecology, ecological, and economic functions due to construction of infrastructure?	Not anticipated	
- Will project cause impairment of ecological opportunities?	Not anticipated	
- Will project cause increase in peak and flood flows? (including from temporary or permanent waste waters)	Not anticipated	The project will contribute to reduced risk of flooding through restoring wetlands and creating detention basins as water storage points.
- Will project cause air, soil or water pollution?	Not anticipated	The planting of trees within the urban area will reduce air pollution as trees filter the polluting particles. Similarly, improved solid waste systems will reduce pollution of urban waterways.
- Will project cause soil erosion and siltation?	Not anticipated	In El Salvador through the construction of ditches on the hills, water flow will be reduced and consequently the rate of soil erosion will be reduces. In addition, In Kingston, reforestation of the Hope watershed with drought-resilient species with deep root systems will hold the soil and consequently reduce erosion.
- Will project cause increased waste production?	Not anticipated	The project activities at household scale will address the increasing waste production through implementing ecological sanitation.
- Will project cause Hazardous Waste production?	Not anticipated	
- Will project cause threat to local ecosystems due to invasive species?	Not anticipated	For all planting activities, priority will be given to indigenous species that are resilient

		to the predicted climate change impacts. If it is not possible to plant indigenous species, an in depth study of invasion risk will be undertaken for each species that is considered for planting.
- Will project cause Greenhouse Gas Emissions?	Not anticipated	
- Other environmental issues, e.g. noise and traffic	Not anticipated	
Only if it can be carefully justified that any negative impact from the project can be avoided or mitigated satisfactorily both in the short and long-term, can the project go ahead.		

Section C: Social impacts

If negative impact is identified or anticipated the Comment/Explanation field needs to include: Project stage for addressing the issue; Responsibility for addressing the issue; Budget implications, and other comments.

	Yes/No/N.A.	*Comment/explanation*
- Does the project respect internationally proclaimed human rights including dignity, cultural property and uniqueness and rights of indigenous people?	Yes	Consultations with different stakeholders have been undertaken over the course of the PPG phase and will continue during project implementation.
- Are property rights on resources such as land tenure recognized by the existing laws in affected countries?	Yes	The project is in line with the following laws that recognize rights on resources and land tenure: i) Environmental law and environmental policy in El Salvador; ii) the water sector Adaptation strategy and the Jamaican national Environmental Action plan in Jamaica; and iii) the general law on human settlement, the National Water law and the general law on Sustainable Forest Development in Mexico.
- Will the project cause social problems and conflicts related to land tenure and access to resources?	Not anticipated	During the PPG phase, consultations were conducted with the targeted urban communities and local authorities to ensure that all access rights and other issues are taken into account. This participatory consultation will continue during project implementation to avoid conflicts related to land tenure and access to resources.
- Does the project incorporate measures to allow affected stakeholders' information and consultation?	Yes	Stakeholders' vulnerability is a major criterion for the selection of project beneficiaries. During the PPG phase, the target urban communities were consulted through various workshops and one to one meetings. These consultations will continue during implementation. Please see Section 5 of the Prodoc for more details on stakeholder consultation. In addition, a Social Impact Assessment will be undertaken to establish a baseline.
- Will the project affect the state of the targeted country's institutional context?	Yes	The focus of Component 1 is strengthening the institutional and technical capacity of national and local government to assist urban communities in the implementation of EbA. This increased capacity, in combination with the development of

		technical guidelines and manuals, the revision of policies, strategies and plans and the development of an upscaling strategy, will promote the replication and maintenance of adaptation interventions to build climate-resilient livelihoods, based on an EbA approach. During implementation phase, the project will continue the process to review relevant policies and strategies and to use up-to-date climate information for the development and implementation of these policies and strategies.
- Will the project cause change to beneficial uses of land or resources? (incl. loss of downstream beneficial uses (water supply or fisheries)?	Not anticipated	The project is designed to enhance ecosystem services and access to resources. This includes increasing water infiltration and reducing erosion.
- Will the project cause technology or land use modification that may change present social and economic activities?	Not anticipated	The project will restore degraded watersheds and urban ecosystems such as wetlands and riparian forest. The proposed EbA interventions will take place where potential for modification and economic activities is minimal.
- Will the project cause dislocation or involuntary resettlement of people?	Not anticipated	No translocation of people is required for the project activities.
- Will the project cause uncontrolled in-migration (short- and long-term) with opening of roads to areas and possible overloading of social infrastructure?	Not anticipated	
- Will the project cause increased local or regional unemployment?	Not anticipated	The project will support the development of additional climate-resilient livelihoods and therefore contribute to increasing employment.
- Does the project include measures to avoid forced or child labour?	Yes	The project follows the international labour laws. All required labour (short-term employment only) will be provided through community engagement and remunerated in accordance with national laws.
- Does the project include measures to ensure a safe and healthy working environment for workers employed as part of the project?	Yes	The project will conform to all national and international guidelines and laws regarding health and safety for workers employed as part of the project.
- Will the project cause impairment of recreational opportunities?	Not anticipated	The proposed EbA interventions will take place at schools and cemeteries where potential for modification and interference with current social and economic activities is minimal.
- Will the project cause impairment of indigenous people's livelihoods or belief systems?	Not anticipated	The project implementations will be undertaken after stakeholder consultation and in accordance with local belief systems. During the PPG phase, consultations were conducted in detail with the targeted urban communities and local authorities to assess their adaptation needs and tailor the EbA intervention accordingly. During the national workshops, input from local communities and authorities was asked to

		promote direct involvement in the project design and development. This participatory consultation will continue into project implementation phase to promote ownership of the EbA interventions and avoid future problems and conflicts.
- Will the project cause disproportionate impact to women or other disadvantaged or vulnerable groups?	Not anticipated	The project will aim to include equal representation of women and men in all project activities. Separate meetings were held with women groups in Jamaica to request their input and tailor the EbA interventions to their needs. As a result, more emphasis is placed on food production using fruit trees and the creation of a community garden.
- Will the project involve and or be complicit in the alteration, damage or removal of any critical cultural heritage?	Not anticipated	
- Does the project include measures to avoid corruption?	Yes	As per UNEP norms and standards the project will include regular financial monitoring and procurement will be done using UN rules and regulations.
Only if it can be carefully justified that any negative impact from the project can be avoided or mitigated satisfactorily both in the short and long-term, can the project go ahead.		

Section D: Other considerations

If negative impact is identified or anticipated the Comment/Explanation field needs to include: Project stage for addressing the issue; Responsibility for addressing the issue; Budget implications, and other comments.

	Yes/No/N.A.	*Comment/explanation*
- Does national regulation in affected country require EIA and/or ESIA for this type of activity?	Yes	Currently, according to consultations on the EbA interventions in all countries, no EIA's are required. [53]. However, at project inception rapid environmental assessments will be undertaken under Output 2.2. If any concerns arise, a full EIA will be undertaken.
- Is there national capacity to ensure a sound implementation of EIA and/or SIA requirements present in affected country?	Yes	There is capacity in country to undertake an EIA. However – as stated above – an EIA is not necessary to implement the planned EbA interventions in the three pilot cities.
- Is the project addressing issues, which are already addressed by other alternative approaches and projects?	To some extent	Consultations made during the PPG process show that some projects are already addressing the effects of climate change. However, they do not include using EbA in an urban context to address this problem and therefore the project will be the first to address this. The project will build on existing projects including government-funded

[53]Overview of the EIA process and requirements in the LAC region are accessible online at: http://www.ifc.org/wps/wcm/connect/1069ce004c08ad23ae9cbe79803d5464/3_EIA+in+LAC+poster.pdf?MOD=AJPERES. Accessed 15 September 2015.

		and other NGO-funded activities and will provide opportunities for synergies.
- Will the project components generate or contribute to cumulative or long-term environmental or social impacts?	Yes	Through on-the-ground EbA activities and promoting climate-resilient livelihoods, the project will contribute to the long-term environmental and social impact. Training will be provided to target communities to implement and maintain the interventions after the project lifespan thereby contributing to the long-term environmental and social benefits of these interventions. In addition, through long-term research programmes, the effect of the EbA interventions will be monitored. This research will contribute to the long-term environmental impact of the project.
- Is it possible to isolate the impact from this project to monitor E&S impact?	Yes	Indicators were developed during the PPG phase to monitor the E&S effects of the project. Additional indicators will be developed if required during the baseline study to ensure comprehensive monitoring of the project's progress. Additionally, indicators to measure the long-term benefits of the interventions will be defined in the LTRP.

ANNEX M: ACRONYM LIST

AFO	Administration and Financial Officer
AMSS	Metropolitan Area of San Salvador
ANDA	National Administration of Water and Sewage
AWP	Annual Work Plans
BMUB	Ministry for the Environment, Nature Conservation, Building and Nuclear Safety
CARICOM	Caribbean Community
CBD	Convention on Biological Diversity
CCAU	Climate Change Adaptation Unit
CCCCC	Caribbean Community Climate Change Centre
CCCI	Cities and Climate Change Initiative
CGRU	Urban Risk Management Committee
CMAS	Municipal Council for Water and Sanitation
CICC	Inter-ministerial Commission on Climate Change
CONAFOR	National Forestry Commission
CONAGUA	National Water Commission
CONANP	National Commission of Natural Protected Areas
CTCN	Climate Technology Centre and Network
DACGER	Department of Climate Change Adaption and Strategic Management of Risk
EbA	Ecosystem-based Adaptation
ENCC	National Climate Change Strategy
ESCI	Emergent and Sustainable Cities Initiative
FAO	Food and Agricultural Organisation
FCAS	Fund of Cooperation for Water and Sanitation
FD	Forestry Department
FGB	Fernando Gutiérrez Barrios
FMCN	Mexican Fund for the Conservation of Nature
FNC	Fifth National Communication
GAN	Global Adaptation Network
GCF	Green Climate Fund
GEF	Global Environmental Facility
GHG	Green House Gas
GOES	Government of El Salvador
GoJ	Government of Jamaica
GoM	Government of Mexico
GSP	Global Support Programme
GT-Adapt	Inter-ministerial Working Group on Adaptation
IA	Implementing Agency
ICDP	Integrated Community Development Project
IDB	Inter-American Development Bank
IMWCR	Integrated Management of Water and Coastal Resources
INECC	National Institute for Ecology and Climate Change
KMA	Kingston Metropolitan Area
LAC	Latin America and the Caribbean
LDCF	Least Developed Country Fund
LGCC	The General Law on Climate Change
LTRP	Long-term Research Programme

MAG	Ministry of Agriculture and Livestock
MARN	Ministry of Environment and Natural Resources
MINEC	Ministry of Economy
MINED	Ministry of Education
MOAF	Ministry of Agriculture and Fisheries
MOPTVDU	Ministry of Public Works, Transport, Housing and Urban Development
MoU	Memorandum of Understanding
MSTEM	Ministry of Science Technology, Energy and Mining
MTE	Mid-Term Evaluation
MTR	Mid-Term Review
MWLECC	Ministry of Water, Land, Environment and Climate Change
NAP	National Adaptation Plan
NBSAP	National Biodiversity Strategic Action Programme
NCSA	National Capacity Self-Assessment
NEPA	National Environment and planning Agency
NGO	Non-Governmental Organisation
OPAMSS	Planning Office of the Metropolitan Area of San Salvador
PIOJ	Planning Institute of Jamaica
NCU	Project Management Units
PNCC	First National Plan on Climate Change
PPCR	Pilot Programme for Climate Resilience
PSC	Project Steering Committee
PVCC	Veracruz Programme on Climate Change
RADA	Rural Agriculture Development Authority
RC	Regional Coordinator
SCCF	Special Climate Change Fund
SDGs	Sustainable Development Goals
SEDEMA	State Secretary for the Environment
SEMARNAT	Ministry of Environment and Natural Resources
SLR	Sea Level Rise
SNC	Second National Communications
TAP	Technology Action Plan
TM	Task Manager
TNA	Technology Needs Assessments
TNC	Third National Communication
ToT	Training of Trainers
UES	University of El Salvador
UNCCD	United Nations Convention to Combat Desertification
UNDP	United Nations Development Programme
UNES	The NGO Salvadoran Unit
UNFCCC	United Nations Framework Convention on Climate Change
UNISDR	United Nations Office for Disaster Risk Reduction
UWI	University of the West Indies
WRA	Water Resources Authority
WRI	World Resources Institute