

### **UNEP GEF PIR Fiscal Year 2023**

Reporting from 1 July 2022 to 30 June 2023

### 1. PROJECT IDENTIFICATION

# 1.1. Project details

		GEF ID.: 5681	Umoja WBS: SB-006743		
Identification Table		SMA IPMR ID: 30723	Grant ID: S1-32CCL-000012		
		Project Short Title: CityAdapt LAC  Building climate resilience of urban systems through Ecosystem-			
Project Title		based Adaptation (EbA) in Latin America and the Caribbean			
Duration months	Planned	48 months			
	Age	70 months			
Project Type		Full Size Project			
Parent Programme	if child project	N/A			
Project Scope		Regional			
Region		Latin America and Caribbean			
Countries		El Salvador, Jamaica and Mexic	0		
GEF Focal Area(s)		Climate Change Adaptation			
GEF financing amo	unt	USD 6,000,000			
Co-financing amour	nt	USD 29,893,223			
Date of CEO Endor	sement/Approval	October 21, 2016			
UNEP Project Appre	oval Date (on	Insert the date as per Decision Sheet (As per date on the project			
Decision Sheet)	ovar Bato (on	approval sheet signed by the Divisional Director approving the UNEP GEF Project)			
Start of Implementa	tion (PCA entering				
into force)		April 13, 2017			
Date of Inception W available	orkshop, if	October 2017			
Date of First Disbur	sement	N/A (internally executed project)			
Total disbursement	as of 30 June 2023	N/A (internally executed project)			
		LACO: USD 4,324,127			
Total expenditure as	s of 30 June 2023	CCAU: USD 49,808			
		Total: USD 4,373,935			
Midterm undertaker	1	Yes			
Actual Mid-Term Da	ate	July 2022			
Expected Mid-Term	Date, if not taken	N/A			
Completion Date	Planned – original PCA	April 30, 2022			
Completion Date	Revised – Current PCA	December 31, 2023			
Expected Terminal	Evaluation Date	January 2024			
Expected Financial	Closure Date	July 2024			



### 1.2. Project description

The overarching goal of this SCCF-financed project (referred to as the "CityAdapt" project) is to build the climate resilience of urban and peri-urban communities living in cities in the LAC region through the implementation of EbA approaches. The objective of the project is to increase the capacity of government and local communities living in three medium-sized LAC cities, namely San Salvador in El Salvador, Xalapa in Mexico and Kingston in Jamaica, to adapt to the effects of climate change through the integration of EbA into urban planning in the medium- to long-term.

The project, implemented by the United Nations Environment Programme (UNEP), builds on several baseline projects (both national and regional), and is executed by UNEP's Regional Office for Latin America and the Caribbean (ROLAC) in collaboration with the Ministry of Environment and Natural Resources (MARN) in El Salvador, the Ministry of Housing, Urban Renewal, Environment and Climate Change (MHURECC)<sup>1</sup> in Jamaica and the Ministry of Environment and Natural Resources (SEMARNAT) in Mexico.

**Component 1** aims at mainstreaming urban Ecosystem-based Adaptation (EbA) into medium- and long-term urban development planning. The activities under this component seek to propose revisions to relevant national and sub-national plans and strategies to incorporate urban EbA approaches, as well as to train local stakeholders to integrate climate change indicators in their planning processes. Through these lessons learnt, upscaling strategies are developed to extend the revised plans, strategies and successful experiences to other cities in the LAC region.

Component 2 aims at implementing urban EbA interventions to foster climate-resilient communities. These interventions: i) reduce runoff and enhance infiltration of rainfall at watershed scale by constructing vegetated infiltration ditches (in San Salvador and Xalapa) and restoring vegetation (in the three cities); ii) contribute to enhanced water storage capacity through wetland rehabilitation (in Kingston) and the creation of natural storage points for excess water (in San Salvador and Xalapa); iii) increase water quality and availability at household level for washing and irrigation of gardens by implementing a solid waste management system (in San Salvador and Jamaica) and; iv) implement rainwater harvesting schemes (in all three cities). This addresses urban communities' vulnerabilities identified during a vulnerability assessment conducted in each city, most of them related to flooding as a result of increased rainfall, and water shortages as a result of more frequent and prolonged droughts. Interventions are complemented by capacity building activities, including training on climate-resilient livelihoods, and the drafting of protocols to implement, monitor and maintain the EbA interventions.

Component 3 aims at acquiring knowledge and raising awareness of urban EbA throughout the LAC region. Through social media campaigns and tailored communication tools and materials (including educational toolkits, games, children and adults' guidebooks, webinars, videos and virtual tools etc.), the CityAdapt project increases the awareness of the urban communities on climate change and the benefits of EbA approaches to adapt to the effects of climate change. This knowledge component also includes the development of a long-term research programme with national research institutions to monitor the benefits of the implemented urban EbA interventions. The research institutions include the University of El Salvador and the Catholic University - UCA (San Salvador), the University of the West Indies (Kingston), and the Institute of Ecology, Universidad Veracruzana and the Superior Technology Institute of Xalapa (Xalapa).

### 1.3. Project Contacts

Division(s) Implementing the project Ecosystems Division

Name of co-implementing Agency

Executing Agency(ies)

N/A

UNEP-LACO, MARN (El Salvador), MHURECC (Jamaica) and SEMARNAT (Mexico)

Mexico: Fondo Golfo de México AC (FGM)

Jamaica: Jamaica 4H Clubs, The Nature Conservancy (TNC), the Forestry Department

<sup>&</sup>lt;sup>1</sup> Previously, Ministry of Water, Land, Environment and Climate Change (MWLECC)



	El Salvador: Fundación Salvadoreña de Desarrollo y –Vivienda Mínima (FUNDASAL); Asociación de Proyectos Comunales de El Salvador (PROCOMES)
UNEP Portfolio Manager(s)	Jessica Troni
UNEP Task Manager(s)	Anna Kontorov
UNEP Budget/Finance Officer	Bwiza Wameyo-Odemba
UNEP Support/Assistants	Linda Chemutai Choge, Ruth Mutinda
EA Manager/Representative	Juan Bello
EA Project Manager	Marta Moneo
EA Finance Manager	Carolina Chiappara
EA Communications Lead, if relevant	N/A

# 2. OVERVIEW OF PROJECT STATUS

# 2.1 UNEP PoW and UN

UNEP Current	
Subprogramme(s)	Climate action
PoW Indicator(s)	PoW 2022-2023 Indicators:  (i) Number of national, subnational and private-sector actors that adopt climate change mitigation and/or adaptation and disaster risk reduction strategies and policies with UNEP support  (ii) Amounts provided and mobilized in \$ per year in relation to the continued existing collective mobilization goal of the \$100 billion commitment through to 2025 with UNEP support  (iv) Positive shift in public opinion, attitudes and actions in support of climate action as a result of UNEP action  Strategic Objective 2: "Living in harmony with nature".  PoW 2022-2023 Indicators:  (i) Number of national or subnational entities that, with UNEP support, adopt integrated approaches to address environmental and social issues and/or tools for valuing, monitoring and sustainably managing biodiversity  (iii) Number of countries and national, regional and subnational authorities and entities that incorporate, with UNEP support, biodiversity and ecosystem-based approaches into development and sectoral plans, policies and processes for the sustainable management and/or restoration of terrestrial, freshwater and marine areas
UNEP previous Subprogramme(s)	Climate Change Subprogramme
UNSDCF / UNDAF linkages	Mexico:  UNDAF 2020-2025, Outcome 3: Green Economy and climate change  — Direct effect 6: The Mexican State implements policies, strategies, and programs that allow us to move towards a green economy and promote the fight against climate change by strengthening the institutional framework, which considers sustainable cities. Result 6.7: Preservation of natural resources, ecosystems, and biodiversity. Result 6.12: Sustainable urban environments through the articulation of multisectoral policies linked to the



	instruments of territorial planning and urban development, promoting sustainability in the use of resources, management, and land use.  - <u>Direct effect 7</u> : Adaptation and resilience to climate variability and change.  Result 7.1: Strengthening institutional capacities, promoting inclusive alliances, citizen participation, and knowledge management for developing and providing climate services that favor inclusive decision-making based on evidence in terms of adaptation to climate change.
	Jamaica: UN-MSDF for the Caribbean 2017-2021 – Priority area 4: A Sustainable and Resilient Caribbean  - Outcome 1: Policies and programmes for climate change adaptation, disaster risk reduction and universal access to clean and sustainable energy in place
	El Salvador: UNSDCF 2022-2026, Effect 4: By 2026, people, particularly those in vulnerable situations, have greater opportunities to access decent, productive work and sustainable livelihoods, in an environment of inclusive, innovative, and sustainable economic transformation Product E4P4: Public, national and local institutions, private institutions and community organizations have improved capacities to formulate and implement public policies, regulatory frameworks and financing strategies based on evidence and social dialogue for the restoration of ecosystems and landscapes, the implementation of nature based solutions and the sustainable management of natural resources, including water resources, and their control and defence mechanisms.
Link to relevant SDG Goal(s)	Goal 13: Take urgent action to combat climate change and its impacts Goal 11: Make cities inclusive, safe, resilient and sustainable
Link to relevant	Targets 13.1, 13.2 and 13.3
SDG Target(s)	Targets 11.A and 11.B

### 2.2. GEF Core Indicators:

Indicators	Targe	ets – Expected Value	Materializad to data	
	Mid-term	End-of-project	Total target	Materialized to date
N/A (GEF-5 proje	ect)			

# 2.3. Implementation Status and Risk

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
PIR#	1 <sup>st</sup> PIR	2 <sup>nd</sup> PIR	3 <sup>rd</sup> PIR	4 <sup>th</sup> PIR	5 <sup>th</sup> PIR	6 <sup>th</sup> PIR
Rating towards outcomes (DO) (section 3.1)	MS	MS	S	S	S	S
Rating towards outputs (IP) (section 3.2)	MS	MS	MS	S	S	S
Risk rating (section 4.2)	М	М	М	М	М	M



Rating towards outcomes: The rating towards outcomes remains satisfactory, as the project has managed to positively advance towards its development objectives in this last reporting period, with a completion of interventions in El Salvador and Mexico, and advancement of activities in Jamaica (with some remaining activities in Jamaica to be finalized by December 2023). Throughout this reporting period, emphasis has been given to finishing implementation of pilot interventions, but also completing knowledge products, measuring impact, drafting exit strategies and prioritizing upscaling proposals in El Salvador and Mexico. At the same time, project implementation progressed during this reporting period in Jamaica, with the finalization of activities under the Forestry Department's scope, a near-completion of TNC's activities and with the rest under the Jamaica 4H clubs and UNEP's direct execution well underway.

The Mid-Term Review (MTR) of the project was undertaken from March to June 2022. It also rated the progress towards the achievement of project outcomes as satisfactory. The Terminal Review (TR) consultant team was recruited under this reporting period, with a kick-off meeting planned for July 2023. The TR team will first focus on El Salvador and Mexico, and finalize the TR in early 2024 after the completion of project activities in Jamaica.

Under **Component 1**, the finalization of the vulnerability assessments in Xalapa and San Salvador in previous reporting periods provided an opportunity to build institutional capacities and coordination — new outreach materials were developed to disseminate these results and new opportunities were identified to update the vulnerability assessments, such as the added climate change scenarios for San Salvador. A vulnerability assessment was also elaborated for the Hope watershed in Kingston under this reporting period, with a final delivery and related knowledge materials planned for S2-2023. Trainings of key decision-makers have been expanded to other municipalities in all three countries to ensure capacity building and proper understanding of the content of these analyses; this includes contributions to a six-month training programme called the NbS accelerator, with 16 Mexican States. A regional technical guideline on NbS implementation was produced under previous reporting periods based on the trainings and lessons learnt from all three cities, as well as two regional policy briefs on the lessons learnt in terms of sustainable financing for NbS and mainstreaming of NbS into local planning that were translated and finalized under this reporting period. This complements the policy briefs elaborated and finalized in Xalapa, San Salvador and Kingston.

In this reporting period, a special emphasis was given to the development of upscaling strategies in all three countries for the potential replication of the project. In Mexico, the so-called CityAdapt 2.0 project proposal to the GCF aims to scale the CityAdapt experience to six cities in addition to Xalapa (total of 7), with co-financing from GGGI and FMCN. A series of regional consultations and workshops were held to generate a baseline for the project approach, in addition to determining the main climate risks, the challenges around the integrated management of water resources, and the financing need to address these problems. The workshops were organized with the six CityAdapt 2.0 cities - La Paz, Mazatlan, Oaxaca, Mexico City, San Miguel Allende and Colima, as well as two other cities part of the GGGI and FMCN network - Saltillo and Chiapas, with key experience and interest in the theme. In El Salvador, with the approval of the pre-concept note for the regional project proposal to the Adaptation Fund in March 2023, the project team continued the drafting of the full proposal and consultation process in Soyapango, La Libertad and San Miguel, where the project would take place. In Jamaica, the upscaling strategy is currently being developed by TNC, with several consultation processes under way during this reporting period. The project has engaged two municipalities (Trelawny and St James) to share the outputs from CityAdapt and to ascertain interest in the upscaling strategy.

Regarding EbA pilot interventions under **Component 2**, while they were temporarily halted or delayed due to COVID-19 related restrictions in previous reporting periods, their implementation was finalized in Xalapa and San Salvador under this reporting period, and progressed considerably in Kingston.

All three cities have finalized the reforestation and restoration activities. San Salvador restored close to 15,000 additional lineal meters of vegetated infiltration ditches on 565 hectares of coffee plantations (a cumulative total of 55,198 lineal meters of ditches and 1,161 hectares) and built 16 absorption wells (total of 30), which increase vegetation cover in key areas for water and soil retention and improve surface water infiltration. This is in addition to the 489 fruit trees distributed to communities and the 5.1km of riparian restoration previously reported.

Xalapa finalized the ecological restoration of the Estropajo hill (6,361 plants of 42 species, as previously reported), which was executed with an upscaling strategy called "one tree per household" that led to the



planting of more than 600 additional trees, adopted by families in the peri-urban area of Xalapa. Under this reporting period, this was complemented by the design and implementation of the training strategy in urban agroecology, which also served as a sustainability strategy for the riparian restoration along the Papas urban river (3,706 plants sown, as previously reported). Under this reporting period, the environmental restoration and the construction of infiltration trails to improve the hydrological dynamics of the natural wetland within the Molino de San Roque Natural Protected Area was also implemented and finalized, along with a series of workshops to help strengthen the capacities of 24 municipalities in the state of Veracruz and Tlaxcala.

Kingston had previously completed the planting of 8,100 trees and the planting of 1,363 seedlings for the rehabilitation of 2.3 hectares in the upper watershed of the city. Under this reporting period, 2ha of wetland restoration were finalized in the Palisadoes Port Royal Protected Area and Ramsar Site, and 466 fruit trees were distributed to schools and communities. Alternative livelihoods were introduced to local communities through the distribution of 219 bee colonies along with equipment and trainings for their use.

At the urban landscape level, Xalapa installed 2 additional rainwater harvesting systems, complementing the implementation of 10 rainwater harvesting systems finalized in public buildings and schools in previous reporting periods. Kingston installed 5 new rainwater harvesting systems, while San Salvador proceeded with additional monitoring of the 11 already installed. The implementation of a fifth infiltration garden was completed in Xalapa: the soil infiltration capacity was measured as 200 mm of rain /m² /every 6h, reducing flooding in front of a hospital and a school and improving the conditions of more than 5,000 people per month waiting outside the hospital with adequate space and 6 miyawaki forests that invite reconnection with nature.

All three cities collaborated with schools to develop urban gardens; San Salvador completed this activity during the past reporting period, while Xalapa implemented 10 and Kingston 2, with an additional container garden, and they proceeded with the distribution of the agricultural toolkits. To support the piloting of the EbA measures, several thematic implementation protocols characterizing the interventions were developed and are being finalized in all three cities, with the elaboration of an additional Compendium that compiles other NbS interventions that could be implemented for urban resilience.

Enhanced communication on the project results under Component 3 has been one of the cornerstones of the project strategy since early 2020, with a focus on disseminating key messages on urban EbA measures. not only to decision-makers or the three specific countries, but also to a wider regional audience. The monthly webinars initiative "Wednesdays of CityAdapt" continued under this reporting period, with 7 new webinars on urban NbS, and a special edition of three webinars on the second Adaptation Action Days held in October 2022. Under this reporting period, the project web platform was merged with the Nature4Cities LAC initiative, one of CityAdapt's regional upscaling projects that started its implementation in 2021. This was done in order to provide Nature4Cities' beneficiaries direct access to all the materials developed by CityAdapt, thus ensuring a wider impact of the knowledge component of both projects. Moreover, with CityAdapt coming to an end in December 2023, the merge ensures a stronger communication strategy with this common virtual identity, as well as a technical continuity to UNEP's urban NbS agenda in the LAC region, with the new content and features that is being added by Nature4Cities and other urban NbS projects to come. The web platform obtained close to 19 thousand new views under this reporting period, and the Youtube account has obtained 525 new subscribers. Additional content was developed and shared through social and digital networks, including several videos, guidelines and publications, and a communications team was hired for Jamaica's content. Research partnerships have been established in all three countries, with the finalization of several research projects in Xalapa and San Salvador under this reporting period, demonstrating how long-term research strategies can generate scientific knowledge and evidence on the potential benefits of EbA in urban areas.

Rating towards outputs: The rating towards outputs remains <u>satisfactory</u>: several challenges reported in the previous PIR are continuously being addressed, and while differences in execution rates between the cities are still significant, the satisfactory rating is warranted considering the impressive progress in all three cities

As previously reported, an adaptive management approach was adopted to make most of the limited resources and to maximize the relevance and efficient delivery of the project interventions. The delivery of some outputs has been combined under a single process, and the timelines and budgets have been adjusted. This has included some changes from the original workplan, especially concerning certain planned



interventions in Kingston that were no longer relevant or appropriate. As a result, some project targets and delivery dates have been revised in this PIR.

The progress monitoring and follow-up in each country has continued with the technical advisory committees set up in the initial stage of the project. These committees bring together relevant institutions and stakeholders to ensure appropriate guidance and integration with ongoing initiatives and strategies and have been able to enforce the created synergies between different sectors of the municipalities. They ensure the transfer of results from the project, local ownership and the use of these results for real transformation of city planning processes.

**Overall risk rating:** The risk rating for the project remains "medium".

In terms of the challenges posed by high staff turnover in implementing partner agencies, despite the change in municipal governments in 2021 in Xalapa and San Salvador, all the interventions were concluded. In Xalapa, although the new mayor is from the same political party as the previous one, the municipal team changed and the new administration limited certain activities, in particular the 2% water mechanism that was developed in 2021. Nonetheless, the Committee for Environmental Services is still in place and new key actors from the city and the state were approached to mainstream the EbA approach to help address problems of public interest such as climate change and the management of the territory and natural resources, as well as to value the ecosystem services, especially water. In Kingston, ownership of the project by the national counterpart and the municipality is still a challenge, due to high turnover of staff within the Climate Change Division of the Ministry of Economic Growth and Job Creation (MEGJC) and the lack of participation of municipal staff, that limited the capacity building and engagement in the project's scope. Other national and local authorities have been targeted instead, including the National Environmental Planning Agency.

The violent outbreaks and political tensions that emerged in El Salvador after the 2022 elections diminished under this reporting period, and the investigations targeting PROCOMES, one of the two implementing partners in the country, were completed, leaving delay in some activities for several months. Even though nocost extensions were required to the PCA agreements, all activities and targets were achieved under this reporting period.

On the other hand, while the overall project progress is good, there are significant differences in the capacity and engagement between the three countries / cities, which is resulting in different levels of target achievement and quality of deliverables. Due to challenges with previous project team performance in Kingston, the level of ownership and delivery of the project have affected implementation in Kingston. Progress still lags behind the other two cities, although much progress was achieved under this reporting period and many targets have already been achieved. Additional flexible and adaptive management was put in place in the face of challenges for the implementation of some activities due to the limited time for implementation and impact measurement, especially regarding the permeable pavements. The limited engagement with beneficiaries and the need to ensure maladaptation is avoided resulted in the shift towards more capacity building and knowledge management activities instead, as well as additional activities in the schools and foundations already engaged in the project (see section 5 for more detail). Continued support and capacity building, as well as opportunities to exchange between the three cities, have been provided by the regional project coordination team to support the achievement of the project targets and overall objectives in all three cities.

Additionally, a continuing risk is that the overarching project approaches are not fully understood or internalized by national or local stakeholders. This challenge was partially mitigated in San Salvador and Xalapa through substantial increase in the level of coordination among institutions, data sharing and understanding of the concept of EbA. The ongoing stakeholder engagement in the scaling-up strategies in both cities has resulted in increased ownership and understanding of the multi-faceted nature of the project, but constant changes in government officials (risk mentioned above) pose a challenge to continued long-term internalization. In Kingston, capacity building of stakeholders (decision-makers, direct beneficiaries and other key stakeholders) was organized through different trainings strategies. These covered a wide range of topics on the role of ecosystem-based approaches in adaptation in cities and learning-by-doing exercises. The regional coordination team is also supporting extensive knowledge- and experience-sharing between the cities to help overcome the challenges encountered. The risk is thus currently considered as low.



Finally, most restrictions related to the COVID-19 pandemic were lifted under the current reporting period, leaving only the known delays to project implementation. Nonetheless, the related global economic crisis (exacerbated by the war in Ukraine) has resulted in general inflation of prices and in necessary adjustments to procurement processes.

### 2.4. Co-financing

Planned Co-finance Total:

USD 29,734,000

Actual to date: USD 30,545,073 (103%), as of 30 June 2023 The co-financing presented by the government of **El Salvador** for this project is: i) the detention basin for USD 21,920,000; and ii) Master drainage plan for USD 651,537, for a total co-financing of USD 22,571,537. Both projects have finished, the first in 2020 and the second in 2019, and their impacts are being measured. CityAdapt's EbA interventions complement the detention basin by constructing infiltration ditches on the slope of the San Salvador volcano: the EbA measures increase water infiltration on the upper levels of the city and reduce the water runoff that arrives to the detention basin. A comparative analysis of these two infrastructures was done in 2020 and is available <a href="here">here</a>. Additional green infrastructure implemented by CityAdapt, such as absorption wells and climateresilient restoration interventions at the watershed scale contribute to the same objective as the detention pond and the drainage plan, which is to reduce the risk of flooding and landslides in the urban areas.

Moreover, additional leveraged funding was identified in San Salvador through the financing of a water harvesting system by a cooperative, installed to complement the community garden built by the project, for a total of USD 4,336 (including cofinancing). For the installation of the water harvesting system in San Isidro community, the support received from the community stands out through the mutual aid system, which collaborated with land clearing and unskilled labour for the construction of the storage tank. The established amount was USD 4,766. In the restoration of coffee plantations, coffee farmers received 118,500 coffee trees from the Ministry of Agriculture under a support program for the coffee sector in 2019. These trees, along with the trees provided by the project, were planted by the cooperatives at their own expense and with their own staff, adding to the commitment and ownership of these beneficiaries. According to the cost-benefit analysis for the planting of fruit trees, this corresponds to USD 2.83/plant (the amount includes land clearing, plant transfer, hollowing out, hauling and planting), making a total of USD 335,335 in co-financing.

In the case of the city of Xalapa, **Mexico**, co-financing from Fernando Gutierrez Barrios stormwater collector, for USD 2,105,263, was finalized in 2017. This grey infrastructure is complemented by two CityAdapt interventions, which are the riparian restoration of the Papas River and the ecological restoration of the Estropajo Hill. Because these two measures are implemented in the same area and will also contribute to the increased water infiltration and decreased sedimentation, they should directly contribute to the objective of the water collector. More information on the monitoring plan for these measures can be found in section 3.2. The communication material and awareness raised on this topic in the neighborhood should also contribute to expanding the benefits and lifespan of the water collector.

Three other sources of co-financing were identified in Xalapa during implementation: (1) Rainwater harvesting systems at public buildings from Xalapa city council for USD 92,760; (2) Rainwater harvesting systems at domestic level from the Gonzalo Río Arronte Foundation for a total of USD 100,000, and (3) the resources collected from the voluntary contribution of 2% in the water bills in the city, for a total USD 494,027 collected to date. Some of the resources from the voluntary contribution will serve to scale the interventions in the Papas River and in the Estropajo Hill, which contributes to reducing the amount of sediment that reaches the Gutierrez Barrios collector and represents savings in maintenance costs (for more information on



M&E, see section 3.2). CityAdapt is collaborating with the city's sanitation operator to monitor these interventions: they are providing the collector's maintenance program to evaluate the economic benefits and to estimate the economic impact of the decrease in sediments in the long term. Finally, within the framework of the upscaling strategy, which aims at working with seven cities in Mexico, the Gonzalo Río Arronte Foundation has provided USD 200,000 for undertaking climate change vulnerability assessments in three of the CityAdapt 2.0 Initiative cities; in addition USD 20,000 were mobilized from GGGI and FMCN for initiating consultations within the cities.

In **Jamaica**, co-financing of USD 4,000,000 was linked to the World Bank *Integrated Community Development* Project (ICDP), implemented by the Jamaica Social Investment Fund, which ended in May 2021. The ICDP aimed to promote public safety and transformation through the delivery of basic infrastructure and social services in 18 communities across Jamaica, two of which are a part of the CityAdapt Kingston Project site, namely Tivoli Gardens and Greenwich Town. Activities implemented by this project, such as greening of communities, alternative livelihood training for youth as well as improvement in solid waste management and infrastructure, will benefit the projected outcomes of CityAdapt, as the activities were implemented with the same potential target beneficiaries as CityAdapt interventions. The sensitization and public awareness component of the ICDP provides a foundation for the CityAdapt project to engage stakeholders in the project site. More information on both projects' complementarity will be gathered once interventions in the project sites are undertaken in the second half of 2023.

Project implementation partner, the Forestry Department, also provided in-kind support for the project, valued at USD 17,056. The co-financing comprised technical and administrative support, the facilitation and attendance of public meetings and trainings by staff, as well as the use of office/laboratory space for project activities, specifically the verification of the seedlings selected for use in the silviculture plan. The other implementing partner, TNC, also provided co-financing to two of the activities implemented under their agreement: (i) after the success of the EbA training, a second cohort was organized and financed by TNC for USD 3,750; and (ii) to ensure a stronger result of the upscaling strategy activity, TNC added USD 4,500 of its budget.

At the **regional** level, co-financing of USD 250,000 from the REGATTA programme (Regional getaway for technology transfer and climate change) was reached in 2020, focused on promoting knowledge sharing of climate change technologies and experiences for climate resilient development in Latin America and the Caribbean. Contribution from UNEP senior management staff time for a total of USD 228,000 was also achieved in early reporting periods. Additional financing was leverages from the EU Programme Euroclima+ and Norway bilateral funds (NFL) in 2020 through the Contribution to the online course Financing and Climate Action in Cities: Nature-based Solutions as a mechanism for adaptation in Latin America and the Caribbean in 2020 for a total of USD 48,000. In 2022, both initiatives also contributed to the elaboration of a publication on NbS in the LAC region for a total of USD 43,327. Both knowledge management initiatives directly contributed to the objective of this project and to the activities under outcome 1 and 3 of the CityAdapt; they include key messages and lessons learnt from the project implementation, ensuring a wider impact at the regional level.

Additional co-financing was identified under this reporting period through the Climate Change Adaptation Unit for three activities. The first one was the launch of the new CityAdapt web platform and the adding of the new features and tools for urban NbS – this represented USD 15,000 from bilateral funding from Japan government. The second one consisted of the development of three case studies on lessons learnt on CityAdapt, that will be finalized in S2-2023. The case studies will focus on (i) Gender-responsive EbA: Women coffee farmers in El Salvador; (ii) Financing Ecosystem-



	based Adaptation: A case study from Xalapa, Mexico; and (iii) The watershed approach for EbA in urban areas (tentative title). The total co-financing for these case studies was of USD 7,200 from SIDA bilateral funding. Finally, a video and related communication material was also developed under this reporting period on Xalapa's Rainwater Harvesting Systems and Ecosystem restoration approach, that was produced for USD 15,000 and is expected to be launched during the LAC Climate Week in October 2023.
Progress	Original co-finance had already been accounted for under previous reporting periods. Under this reporting period, additional co-finance was identified and leveraged through partnerships with institutions and close engagement with project stakeholders.

2.5. Stakeholder engagement

Date of
project
steering
committee
meeting

Xalapa: July 14, 2022 Ordinary Technical Committee session (see report <a href="here">here</a>)

Xalapa: July 27, 2023 Ordinary Technical Committee conclusion session (see report <a href="here">here</a>)

San Salvador: November 21, 2022 (see report <u>here)</u> San Salvador: June 13, 2023 (see report <u>here)</u>

Kingston: December 2, 2022 (see report here)

Previous Steering Committee meetings:

- In Xalapa, five Technical Committee meetings were held in March 2018, January 2020, August 2020, March 2021, and December 2021.
- In San Salvador, the third and fourth Steering Committee meetings were held in August 2021 and June 2022.
- In Kingston, the initial Steering Committee meeting took place on February 22, 2018.

# Stakeholder engagement

The project is being implemented with the support of national organizations (CSOs) as a means to ensure sustainability of results and ownership of the process. The situation is different depending on the country and the existing capacities – one NGO is supporting the implementation in Mexico, two in El Salvador and three in Jamaica. Moreover, the project reaches a wide variety of actors – from decision-makers to civil society, as well as academia, private sector and more. Engagement is targeted to each group to ensure greater impact of activities.

Lessons learnt from the previous years of implementation have enabled the detailing of the actor mapping exercise and the adapting of the stakeholder engagement strategy to the different activities and goals. The complex and integrated approach of the project, as well as the large number of actors involved in urban development, still hinders stakeholders' involvement in the project, requiring a constant follow-up with existing partners and engagement of new ones based on the activities' needs and the political context. Cooperation agreements were signed with municipalities in San Salvador to consolidate their engagement, capacity building needs were identified and addressed under this reporting period and bilateral meetings and surveys were organized to mobilize government officials.

New stakeholders were engaged in this reporting period to enhance awareness and understanding of project activities and key concepts, especially in Jamaica where implementation has progressed considerably. This includes both national government, NGOs and CSOs, as also suggested under recommendations 8.3.3, 8.4 and 8.5 of the project's MTR. In Mexico and El Salvador, as implementation concluded, an emphasis was given to reinforcing engagement with communities and beneficiaries involved in the project. This was noticed during the Technical Committee meetings, where representatives from local communities, public bodies and counterparts participated to share lessons learned and discuss upscaling potential and sustainability of project interventions.



Capacity building exercises have continued with local organizations, focused mainly on the mainstreaming of ecosystem-based adaptation and accompanying local interventions in Jamaica, as well as the integration of climate change in urban planning and scaling up strategies for EbA measures in all countries. The collaboration with the University of Wageningen (WENR) ended under previous reporting periods (September 2021), but their support in strengthening the technical capacities of the stakeholders involved was key.

In Mexico, as part of the up-scaling and dissemination strategy for the Ecosystem-based Adaptation approach, 152 local government officials (65 women) were trained in this reporting period through courses and workshops on decision-making tools, climate-resilient communities, cost-benefit analysis, and public policies for recruitment. In addition, more than 900 people (434 women) were informed about the experience and lessons learned from CityAdapt (academics, local governments of other cities, decision-makers, and citizens) through forums such as one on urban forests organized by FAO and a regional meeting on vulnerability to climate change organized by SEMARNAT and INECC, among others.

In Jamaica, an Urban EbA training component was developed under this reporting period, with over 85 government and private sector stakeholders trained in Urban EbA. The feedback and results from this cohort was such that a second cohort was organized and financed by TNC.

In El Salvador, a new group of beneficiaries was added from La Reforma Community, where the community garden is located, and general engagement is strong with the different beneficiaries. Several "champions", representative of specific interventions, where invited to participate in global events and podcasts, demonstrating their comprehension of the concept and their new role as ambassadors of urban NbS.

In terms of partnerships with local CSOs, in **Mexico**, one NGO led the execution of project activities: Fondo Golfo de Mexico (FGM), an organization with years of experience on environmental and climate change projects in the region. It is linked to a larger national organization, Fondo Mexicano para la Conservación de la Naturaleza (FMCN), that has been engaged since 2021 to develop a CityAdapt 2.0 project for GCF funding, involving seven midsized cities in Mexico to improve resilience to climate change and reduce water stress and vulnerability to extreme hydrometeorological events through NbS, integrating green and grey infrastructure, and strengthening technical, institutional, participatory, and financial capacities.

Within this upscaling strategy to other cities in Mexico, CityAdapt participated in previous reporting period with World Resources Institute (WRI) in the project called "NbS Accelerator" funded by the UK Pact, training more than 80 officials from 16 sub-national governments to accelerate the adoption of Nature-based Solutions in urban planning. The training, built on City Adapt's experience, addressed aspects such as vulnerability to climate change, Nature-based Solutions for cities, Monitoring and Evaluation, and the design of a national and international financing roadmap.

Partnerships with the universities and research centers involved in the project, namely Universidad Veracruzana, Tecnológico de Xalapa and Instituto de Ecología, AC, have been strengthened with the MSc research projects. Regarding rainwater harvesting systems, many actors were involved in the scaling up of these measures: mainly the civil association Sendas, AC, and two actors that provided co-financing to replicate the measure and ensure long-term monitoring: the city council of Xalapa and the Gonzalo Río Arronte Foundation. During the implementation process, CityAdapt has convened different actors, among which local government officials, organized civil society, academia, private sector, and interested citizens. Consultations, awareness-raising workshops, interviews and surveys were undertaken to understand the population's perception of the actions, achieving good social acceptance and involvement of key actors, including the vulnerable communities.

As part of the strategy for involvement of key stakeholders and adoption of the EbA and NbS approaches to climate change, CityAdapt participates in two governance and decision-



making mechanisms at the local and subnational level, with the ability to express opinions and the right to vote. It is part of the Environmental Services Council whose purpose is to recommend, advise and promote the conservation of the Pixquiac watershed and the integrated management of water resources from a perspective of the conservation of ecosystems and the services they provide to the city. It also participates in the state council for mitigation and adaptation to the effects of climate change, which brings together the entire structure of the state government and aims at the coordination of all agencies to channel efforts and actions to face the negative effects of climate change in the state of Veracruz. Through these councils CityAdapt has disseminated actions, made public policy recommendations and shared tools for decision-making based on experience, It has also organized tours with counsellors to experience the project interventions carried out at the level of the urban landscape and local communities with the objective to raise awareness and demonstrate the multiple benefits that this type of solution can bring to a city like Xalapa.

In **El Salvador**, the project engaged two national organizations. FUNDASAL has expertise in rural and urban housing, neighborhood improvement, and risk mitigation in urban and rural neighborhoods. The institutional methodological basis of FUNDASAL is community-focused learning-by-doing and mutual aid. They also have presence in various departments of El Salvador. Thanks to lessons learnt from this project and with the support of the UNEP national team, FUNDASAL developed a new environmental and climate justice policy, to include climate change considerations in its long-term strategy and management. PROCOMES, on the other hand, has experience in urban communities in the metropolitan area of San Salvador. They have previously developed projects with the participation of civil society on topics such as risk reduction, food and nutrition security, basic sanitation and environment. One of their main lines of work is to improve the productive value chains, specifically coffee and urban agriculture. Thanks to learnings from this project, PROCOMES started a regional program with a Honduran academic institution to promote scholarships in agricultural sciences with special emphasis on preparation for climate change adaptation, taking into account the implemented NbS interventions and their impact measurement process.

During this reporting period, the collaboration with the metropolitan area of San Salvador's Planning Office (OPAMSS) has continued to be further strengthened. While the project focuses its interventions in the Arenal Monserrat micro-watershed, made up of 3 municipalities (Santa Tecla, Antiguo Cuscatlán and San Salvador), upscaling and replication opportunities have been identified with the OPAMSS. This technical entity supports the municipalities of the San Salvador Metropolitan Area (AMSS) in urban planning and is a key partner to mainstream EbA into territorial planning. In that regard, after a large landslide occurred in an AMSS municipality in 2020, the municipality of Nejapa was engaged and invited to participate in the training sessions. Entry points to the project were identified under previous reporting period, with several capacity building sessions organized with the technical staff of the municipality of Nejapa. As a result of these trainings, four plans were elaborated that integrate NbS into urban planning under this reporting period.

Progress was also achieved with the research projects with the National and the Central American (UCA) universities, to show the benefits of EbA. Under this line of work, CityAdapt developed a collaboration between the Faculty of Agronomic Sciences of the National University and a private company – Sigma Q, that financed a research programme through equipment and sponsorship. Using the i-Tree platform, the study proposes a method for the restoration of the Bicentenario Park, a 90-hectares protected natural area within the microwatershed of Arenal Monserrat where CityAdapt interventions are implemented. Based on this positive experience with the private sector, a new strategy was initiated to engage a wider variety of private actors, targeting mainly the construction sector, as well as food and plastic production, to integrate adaptation to climate change in their portfolio. In addition, other research was carried out with the National University on the impact of NbS on coffee forests in the micro-watershed and on the measurement of water quality of the water harvesting and biogardening systems, finalized under this reporting period.

On the other hand, EbA interventions require the participation of the beneficiary communities. Students, teachers and parents are directly responsible for the installation and maintenance



of school gardens. At the community level, the communities selected the variety of vegetables and fruit trees to be planted in the urban gardens and in the restored areas, and participated voluntarily in planting them. The involvement of coffee cooperatives in the training sessions and the implementation of sustainable agriculture practices and EbA measures has also been crucial in this project.

In Jamaica, three partners have been engaged, which has increased the rate of project implementation. The Forestry Department which is the agency responsible for the management of forest resources in Jamaica and has decades of experience in reforestation, agroforestry and wetland rehabilitation, has been conducting all related activities. They have been engaging local stakeholders to assist with the implementation of activities and have also been working closely with the University of the West Indies, Mona Campus to rehabilitate wetlands in the Port Royal community in Kingston. The Forestry Department will also be conducting maintenance of interventions once the project has ended, given the mandate of the entity. All activities with the Forestry Department were completed during this reporting period. The Nature Conservancy (TNC) is leading the policy-related activities, the training, as well as the development of the vulnerability assessment. TNC has valuable experience in these particular areas, having conducted projects with similar expected outcomes in Jamaica. The third collaboration is with Jamaica 4-H Clubs, which promotes agriculture training among young population as a means to maintain the link between citizens and the rural environment. It is crucially important to build the capacity of these organizations on climate change adaptation, so this approach can be incorporated into their activities and disseminated at the national level. Partnership with these organizations also provides an opportunity to disseminate results from the project at a much wider level.

Capacity building was enhanced through a training programme developed by TNC and provided to a range of actors, including the municipal corporation, and alternative livelihood trainings are being provided at the community level by 4-H Clubs. The selection of participants for the beekeeping initiative was carried out under this reporting period. Community members are being trained in beekeeping based on the bee colonies distributed to support livelihood start-up. Community members are also engaged in rainwater harvesting training for maintenance, and capacity building exercises will be developed with the school students to sensitize them to these trainings. Considering the level of engagement from the different schools and community centers where the rainwater harvesting systems are being implemented, a new centre was identified under this reporting period for the implementation of the rainwater harvesting and water management system – the Ability Foundation. This is a foundation for teenage students (age ranging from 14 to 17) of different types of physical and mental disabilities, which directly participate in the school's agricultural programme, and thus benefit from the activities related to the urban gardens that are irrigated with the water collected from this intervention.

Finally, at the **regional** level, stakeholders from the entire region are continuously being engaged in the project through the webinar initiative "*Wednesdays of CityAdapt*" and trimestral newsletters. The webinars are viewed by a large variety of actors and stakeholders, including public officials, technicians from NGOs and international organizations, researchers, students, etc. The web platform has joined efforts with the Nature4Cities LAC Readiness project, also implemented by UNEP, to increase visibility and support the dissemination of urban NbS material. Under this reporting period, new features were added to the platform (how NbS can support the decrease of a city's carbon footprint, for instance), and new tools will be added during the next reporting period (a Community of Practice and a MOOC under development). This ensures long-term sustainability of the knowledge material and outreach to a wide scale of audiences.

The project is collaborating with the EU-funded Euroclima+ program to disseminate its content and strengthen its network. This partnership was also key in the development of the course "Climate action and financing in cities: Nature-based solutions as a mechanism for adaptation in Latin America and the Caribbean" in 2020, and the elaboration of a publication on urban NbS in the region (currently under finalization). Both initiatives benefited from the support of the NGO Practical Action and provided key alliances with tutors and students.



Through these initiatives, the CityAdapt website is becoming a reference platform for the region on Nature-based Solutions for adaptation in urban areas.

2.6. Gender	
Does the	No
project have a	
gender action	
plan? Gender	At the initial stage of the project, a partnership was established between UNEP and UN
mainstreaming	Women to incorporate gender mainstreaming throughout the project implementation cycle, including the development and implementation of a Gender Action Plan and gendered
	results frameworks in El Salvador and Mexico. The approach implied incorporating and validating gender-based elements to the existing project work plan and its correspondingly
	allocated funds, going beyond the gender-disaggregated indicators included in the validated Project Document. Following this partnership, the case studies from San Salvador and Xalapa were included in the 2020 UN Women-UNDP-UNEP publication "From words to action" (see full publication here and the project's case study here).
	Gender indicators were also incorporated in several of the project's activities. In San
	Salvador, methodological gaps were revealed during the production of the vulnerability assessment, which led to the elaboration of a new protocol for the collection of socioeconomic and environmental data with gender-sensitive indicators, tested in an urban community, Colonia IVU (see <a href="https://here">here</a> ). Gender-focused activities have also taken place during the implementation of the restoration of coffee plantations, the elaboration of infiltration ditches and agroecological practices in the El Espino coffee growers' cooperative. Indeed, the women's group Ahorradoras ("savers", responsible for the finances of the cooperative), took new initiatives based on the training sessions on climate change and EbA measures proposed by CityAdapt. The group requested the installation of a community garden that would serve not only to supply the community but also as a source of income from these additional livelihoods. Together with the project team, the garden was built with a drip irrigation system, to make more efficient use of water, and the cooperative installed a rainwater collecting system on the roof. Inaugurated in April 2021, the community garden is 500 square meters in size, with 16 varieties of vegetables and aromatic herbs and is maintained by 22 people, of which 78% are women and the rest are youth from the community (see video <a href="here">here</a> ). In this reporting period, this group of women and young people participated in training on how to sow, harvest and make cocoa products, since the project also supported them in a plot to plant cocoa plants and thus improve their agricultural diversity.
	In Xalapa, 70% of the residents involved in the comprehensive intervention in the Molino de San Roque natural protected area, implemented under this reporting period, were women. This intervention included the construction of 1,000m of infiltration trails and actions to support the recovery of the natural wetland, such as removing invasive species and recovering the water level and revegetation with species natives (See video <a href="here">here</a> ). Also, within the framework of the exit strategy and during the maintenance stage of the most significant interventions, women were involved in training processes to strengthen resilient livelihoods, such as in Cerro del Estropajo (see report <a href="here">here</a> ). Finally, through the Environmental Services Council, workshops have been held for 30 operating personnel (14 of them women) of the Xalapa drinking water and sanitation commission, on the design and installation of rainwater harvesting systems and on the importance of adopting coexistence schemes with nature and conservation of ecosystems that provide, in addition to water, their income source.
	The vulnerability assessment developed under previous reporting period also considered a set of gender-sensitive indicators, thus resulting in the identification of the most gender sensitive vulnerability zones in the city. In Xalapa, these areas are precisely where the project interventions are being implemented: one of them, the edible mushroom livelihood diversification activities was implemented with a new gender-sensitive approach in 2019



and 2020, training the beneficiaries in gender-equity, women's empowerment, and access to local markets (see manual here). Under the previous reporting period, the riparian restoration project of an urban stream also promoted the participation of female heads of households and neighbourhood community. They were trained to lead the reforestation teams and created the River quardians identity, an initiative that brings together people interested in collaborating in training and reforestation (70% are women), who were trained in the different stages of the activity and are responsible for the maintenance and monitoring of the actions. This initiative was supported by the head of the community management center, the Municipal Institute of Women of Xalapa, and the Deputy Director of Youth of the city council, achieving the engagement of 10 groups of women. In late 2021, the ecological restoration of the Estropajo hill and the agrosilvopastoral interventions also maintained a gender perspective in their training components. Out of the 27 women trained (48%), two got a fixed contract with one of the CSOs working in the project, thus providing an alternative and sustainable livelihood related to reforestation and community involvement.

In Jamaica, the beekeeping initiative has identified and targeted 60% involvement of women. The Nature Conservancy trained 85 persons in urban EbA, 62% of which are women. The vulnerability assessment also includes a socioeconomic assessment with gender focused data collection. The draft document can be found here. Gender considerations are being included throughout project implementation.

2.7. Environmei	ntal and social safeguards management
Moderate/High	Was the project classified as moderate/high risk CEO Endorsement/Approval Stage?
risk projects	No
(in terms of	
Environmental	If yes, what specific <b>safeguard risks</b> were identified in the SRIF/ESERN?
and social	N/A.
safeguards)	
New social	No
and/or	
environmental	
risks	
Complaints and grievances related to	Has the project received complaints related to social and/or environmental impacts (actual or potential) during the reporting period?  No
social and/or environmental	
impacts	
(to be filled in by TM and EA)	
Environmental	In the Environmental and Social Safeguards Screening undertaken during the project
and social safeguards management	preparation phase in 2016, no specific safeguard areas of concern were identified. UNEP's standards are applied in this project and almost all local partner supporting local implementation also have their own policy of E&S safeguards (FGM's can be found <a href="here">here</a> , PROCOMES' <a href="here">here</a> , FUNDASAL's <a href="here">here</a> and TNC's <a href="here">here</a> ). These standards match a majority of GEF's requirements, with the exception of Indigenous peoples, Conflict resolution and Displacement and resettlement, that are not relevant in this project's context.
	Concerning Environmental and Social Assessment, Management and Monitoring (MS1), the project's interventions are designed to ensure that no environmental or social negative impacts will result from its activities. The EbA measures are site-specific, with minimum risk associated and do not involve major impacts to surrounding environment or stakeholders. The finalization of vulnerability assessments in San Salvador and Xalapa, and the progress in its development in Kingston has ensured the EbA interventions were selected according to identified climate risks and with social approval. These evaluations



were conducted through a participative process, involving both decision makers and representatives from civil society and local communities. Terms of references for partners also include considerations of safeguards risks, and guidelines for EbA interventions, to prevent or reduce negative environmental or social impacts, and to ensure that reforestation activities in particular involve local stakeholders in the selection of indigenous species to avoid any invasive plantation or detrimental activity.

The project aims at ensuring the sustainable management of ecosystems to strengthen the cities' resilience to climate change, thus working towards **Biodiversity Conservation and the Sustainable Management of Living Natural Resources (MS3)**. The project includes activities to restore degraded ecosystems in all three cities and to reduce climate change vulnerability. The project contributes to reducing flooding within the cities through water storage, infiltration and harvesting techniques through nature-based solutions. Reforestation in Jamaica and El Salvador also contributes to the reduction of soil erosion and water run-off from peri-urban watersheds. In San Salvador, restoration activities have been implemented in a buffer zone around a protected area. This has been done with native species and with approaches to ensure there are no negative impacts on the protected area. An inventory of native species present in the area was carried out, as well as seed collection and the installation of a nursery with the collected seeds, from which plants were sown in the area.

In Xalapa, regarding the participation in the ecosystem services board, the local authorities advised by the members of the council, managed to register more than 1,564 hectares to a tripartite agreement made up of the national forestry commission, the state government and the Xalapa city council that will allocate resources for paying compensation for environmental services (see agreement <a href="here">here</a>). Additional areas are being identified for conservation purposes that would be financed by local authorities. Other actions in Xalapa have been implemented at different scales, in watersheds, urban landscapes, and local communities. Actions have included ecological restoration of riparian zones, soil conservation strategies, best practices in agroforestry, and silvopastoral management. These activities are focused on the conservation of ecosystems and environmental services of the watershed that provides water for the city (Pixquiac river), in addition to promoting connectivity between two natural protected areas (Cerro de la galaxia and the archipelago of forests and jungles of the capital region of Xalapa). In Jamaica a wetland is also being rehabilitated for which the required environmental permits have been obtained.

Reforestation activities are also contributing to the improvement in the cities' air quality, and thus contributing to pollution reduction, while the project presents no additional risk of pollution. Given the lack of air quality monitoring stations in EI Salvador, the project developed an air quality measurement methodology by visualizing lichens on trees. This measurement, also known as Lichen Biodiversity, is a key indicator of air quality and its monitoring provides regular information of pollution (see protocol <a href="here">here</a>). The activity was carried out in one of the areas that was reforested with fruit trees and riparian vegetation. More information on this monitoring scheme is provided in section 3.2. These activities at the watershed level strengthen water filtration and, coupled with the rainwater harvesting systems, contribute to improvement in water quality. Additionally, the urban school gardens and coffee planting restoration activities are developed with agroecological methods, using organic pesticides and fertilizers to avoid further use of chemical products. The coffee farms' training also includes organic plague management, thus tackling soil pollution prevention (MS7).

The trainings with coffee farmers in El Salvador have somewhat interfered with traditional production practices, as was described in the 2019 PIR. Indeed, by promoting agroecological measures and the use of infiltration ditches, the project provided alternatives to the "encajuelado" and "ahoyado" tradition<sup>2</sup>. Nevertheless, during this and

<sup>&</sup>lt;sup>2</sup> The "encajuelado" or "ahoyado" is a coffee plantation practice, that consists of making holes of 30x30x30 cm next to the coffee plant, whose only benefit is to maintain the humidity of the plant. By showing alternatives of infiltration ditches of 30x40x50 cm, other benefits were demonstrated to the farmers, such as soil moisture retention, nutrient retention, erosion regulation, and soil formation.



the previous reporting periods, the beneficial aspects of EbA measures have been demonstrated, understood and integrated. Contrary to what was expected in the project design, **Cultural Heritage (MS6)**, in the form of traditional activities, was thus somewhat affected by this project. In Xalapa, this was observed during the edible mushroom activities, that assisted women that depended on certain traditional corn production (*maiz criollo*) to gain an alternative income, which supports the maintenance of their ancestral practices, called *Nixtamalización*.

Capacity trainings on women's empowerment and accessibility of local markets for trained local producers also contributed to positive **Labor and Working Conditions (MS8)**. The project provides trainings and professional opportunities to support or improve social and economic activities, with the alternative climate-resilient livelihood activities promoting new ways to add value to farmers' products, thus gaining appreciable income and strengthening the communities' climate resilience.

Finally, **Community Health, Safety and Security (MS9)** is being addressed through the scope of water and food security. The installation of rainwater harvesting systems in schools and public buildings in all three countries improves water availability and storage capacity. The organic food produced by urban gardens in Kingston and San Salvador have also been served in school canteens and contributed to students' healthy and safe diet.

### 2.8. Knowledge management

# Knowledge activities and products

Within the exit strategy of the project, the project's communication and knowledge-sharing activities are being consolidated. Results from project activities are being compiled in a series of new materials, and the project's website continues to be used as a key tool disseminate the project's lessons learnt and key results. Please visit <a href="www.CityAdapt.com">www.CityAdapt.com</a> for more information.

A new version of the web platform was launched in December 2022, based on the joint efforts with the Nature4Cities project. The platform is composed of a series of tools for the implementation of NbS measures and includes new features added in this reporting period, such as the <u>urban carbon footprint</u>, the <u>calls</u> for opportunities and the trimestral <u>newsletters</u>. Other existing tools, such as the <u>publications</u> one or the <u>visualization</u> one geo-localizing the pilot NbS measures in the three cities and linking them to all relevant material (guidelines, protocols, videos, etc), were continuously updated. The vulnerability assessments, finalized for two of the pilot cities (Xalapa and San Salvador) in 2019 and 2020, are available, with a methodological tool detailing the elaboration process of these assessments. Communication materials have thus taken several formats: in addition to the <u>interactive guidelines</u>, <u>interactive maps</u> and <u>storymaps</u> are uploaded to illustrate NbS in each of the pilot cities.

Several knowledge products such as guidelines on waste management, policy brief on EbA mainstreaming and academic papers on Urban EbA have also been uploaded to the Learning Center, together with news on the project's results. Three case studies have also been drafted under this reporting period with the following tentative titles: (1) Financing ecosystem-based adaptation: A case study from Xalapa, Mexico; (2) Gender Justice and resilience of peri-urban female coffee farmers in El Salvador through ecosystem-based adaptation; and (3) EbA solutions for watershed resiliency in urban and peri-urban areas: A case of Latin America and the Caribbean. They should be finalized in Q4 2023.

In the current reporting period, there have been close to 19,000 **new** users accessing the website, from all 6 regions of the world. The Youtube account has also had an increasing number of subscribers, reaching more than 1,069 subscribers and more than 17,000 different viewers. The "Wednesdays of CityAdapt", virtual seminars to discuss key topics on NbS for urban adaptation, have also continued during the reporting period, coupled with city-level training. Furthermore, the Kids section was populated with new games and resources for teachers and parents.



The project has been invited to several global events in the current reporting period, including the Gobeshona Global Conference and the COP27. Other events from previous years include the World Forestry Congress organized by FAO and UNEP, and the Urban Wetlands events ("A solution for sustainable cities" organized by the University of Los Andes), a G20 session, The Nature of Cities Festival, the 15<sup>th</sup> International Conference on Community-based Adaptation (CBA) to climate change and the LAC Climate Week.

The local coordinating team in Jamaica participated in, and presented at, the Caribbean Sustainable Cities Conference, held in Montego Bay Jamaica, in November 2022. At this conference, the work being done under CityAdapt both locally and regionally was presented, and contact was made with organizations for possible replication or expansion of activities. See conference report here.

# Main learning during the period

Collaboration with UNEP's Climate Change Adaptation Unit and GEF Coordination Unit Communications team, as well as the EU-funded Euroclima programme, have been key in developing some communication materials (articles and videos) and in disseminating these to a wider audience.

#### 2.9. Stories to be shared

# Stories to be shared

In El Salvador, a Cost-Benefit Analysis (CBA) of the EbA measures implemented was carried out under this reporting period. This consisted of comparing the investment and operation costs of all the implemented measures with the benefits they generate, to establish whether their implementation and scaling is economically viable. By identifying the benefits and costs and valuing them, it was possible to estimate profitability indicators such as the Net Present Value (NPV), the internal rate of return (IRR) or the cost-benefit ratio (BCR). This analysis was carried out from a social perspective in order to analyse whether or not the interventions that the project implemented in El Salvador generated improvements in the well-being of society from the economic efficiency perspective. For each of the interventions, information compiled by the implementing partners was used, as well as the initial investments and maintenance costs, while gradually identifying tangible benefits for each of the measures. The study also included a sensitivity analysis with scenarios ranging from a reduction in the discount rate from 12 to 6%, reduction of some costs linked to inputs for the implementation of the measures and some considerations under climate change scenarios forecasted for the country.

Among the key results, the CBA of the rainwater harvesting systems (RWHS) installed in schools highlights that, while a clear benefit of the intervention is to cover a small portion of the weekly water demand, the greatest benefit corresponds to the reduction of school absenteeism. This is because schools report to use water for cleaning and sanitary services (63.5% and 58% respectively) much more frequently than they do for drinking (44.3%) and when there is no water provision, schools suspend classes (see qualitative analysis of water harvesting systems <a href="here">here</a>). The CBA of this measure shows that RWHS implementation is viable under all the scenarios considered: it remains feasible in the case of reduced precipitation, heavy rains and a 50% reduction in the price of water (when it has to be supplied). Regarding the community RWHS that was built in an area lacking drinking water service, the cost of the measure was compared with the savings from the cost of bringing the water to said community, resulting in that it was feasible as well. Likewise, carrying out the sensitivity analysis similar to RWHS in schools, the measure continues to be viable. For more information see the study <a href="here">here</a>.



### 3. PROJECT PERFORMANCE AND RISK

Based on inputs by the Project Manager, the UNEP Task Manager<sup>3</sup> will make an overall assessment and provide ratings of:

- (i) Progress towards achieving the project Results(s)- see section 3.1
- (ii) Implementation progress see section 3.2

Section 3.3 on Risk should be first completed by the Project Manager. The UNEP Task Manager will subsequently enter his/her own ratings in the appropriate column.

### 3.1 Rating of progress towards achieving the project outcomes (Development Objectives)

Project objective and Outcomes	Indicator	Baseli ne level	Mid-Term Target or Mileston es <sup>4</sup>	End of Project Target	Progress as of current period (numeric, percentage, or binary entry)			Observations/ justification on rating	Progre ss rating <sup>5</sup>
Objective <sup>6</sup> To reduce the vulnerability of communities living in three mediumsized 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	N/A	At least 98,590 people benefitting from the project (of which at least 50% are women).  México: 36,590 people in the Carneros watershed, of which 53% women.  Jamaica: - 8,000 residents (2,500 households, of which ~60% are	target stands break down a  Country  Overall: Achievement Additional si  Additional sii  Jamaica Achievement Additional si  El Salvador Achievement Achievement Additional si	as ta 133%. The as follows:  Target  98,590  ht Percentage ince last PIR  36,590  Percentage	Achieve ment 131,133 133% 5,586 41,009 112% 5,162 70,025 167% 128 20,099	Mexico has reached 112% (55% women) of the direct beneficiaries' target after the intervention in the Natural Protected area Molino de San Roque.  Jamaica has reached 167% of its original target population through the restoration and reforestation activities as well as other interventions being conducted in communities and schools. This number covers both direct and indirect beneficiaries and will be reviewed by the M&E specialist to adjust it to the new implementation framework and ensure that the indicators are being accurately tracked. During this reporting period, the majority of activities undertaken involved the implementation of activities in schools as well as alternative livelihood intervention (beekeeping) and the training of stakeholders.	HS
				headed by women) in				In El Salvador, the additional beneficiaries (51% women) included under this reporting report	

<sup>&</sup>lt;sup>3</sup> For joint projects and where applicable ratings should also be discussed with the Task Manager of co-implementing agency.

<sup>&</sup>lt;sup>4</sup> Some projects are adopting/planning to adopt milestones for tracking the achievement of outcomes. Add the corresponding milestones in this column when applicable to inform the rating. Milestones are optional and may substitute for Mid-Term Target.

<sup>&</sup>lt;sup>5</sup> Use GEF Secretariat required six-point scale system (GEF/C.52/Inf.06/Rev.01): Highly Satisfactory (**HS**), Satisfactory (**S**), Marginally Satisfactory (**MU**), Unsatisfactory (**U**), and Highly Unsatisfactory (**HU**)

<sup>&</sup>lt;sup>6</sup> Add rows if your objective has more than 3 outcome indicators. Same applies for the number of outcomes.



Project objective and Outcomes	Indicator	Baseli ne level	Mid-Term Target or Mileston es <sup>4</sup>	End of Project Target	Progress as of current period (numeric, percentage, or binary entry)	Observations/ justification on rating	Progre ss rating <sup>5</sup>
				Greenwich Town 6,000 students at 4 schools, of which ~55% are women 28,000 people in Petersfield district, of which ~60% women.  EI Salvador: 20,000 people of direct beneficiaries in the Arenal- Monserrat watershed, of which~53% are women.		correspond to the La Reforma Community, where the community garden is located. These beneficiaries had not been accounted for until now.  A monitoring plan is in place for all EbA pilot interventions, to assess the impact of the measures. Vulnerability reduction is achieved both through:  1. Increased adaptive capacity with additional knowledge and skills acquired through training and awareness-raising activities on climate change and NbS multiple-benefits;  2. Decreased sensitivity through pilot interventions implemented to provide alternative livelihoods such as urban gardens and edible mushrooms plots, to attenuate the impacts of extreme climate events such as absorption wells and infiltration ditches, and to improve water availability through rainwater harvesting systems, among others.	
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	Zero	N/A	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, prioritize, plan and implement urban EbA.	Overall progress towards Outcome indicator 1.1 target stands at 426%.  Country Target Achieve ment  Overall: 190 810  Percentage of women 53.1%  Additional since last PIR 207  Mexico: 50 439  Percentage of women 49.5%  Additional since last PIR 152  Jamaica 100 53  Percentage of women 64%  Additional since last PIR 36  EI 40 318  Salvador  Percentage of women 54%  Additional since last PIR 19	With a total of 810 technicians trained, of which 53% are women, the target has been exceeded.  The capacity of government staff has increased in understanding of EbA concepts and interventions, as well as in the undertaking of vulnerability assessments, and the planning and implementation of NbS for cities.  Beneficiaries included public servants also from other municipalities, where the project upscaling strategies are being developed.  In México, the number of additional trained authorities (152) was achieved through the upscaling strategy in collaboration with FMCN and GGGI: a set of capacity building workshops and baseline assessments in several cities of	S



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	(disaggregat ed by gender).			México: At least 50 people are trained, of which 50% are women.  Jamaica: At least 100 people are trained, of which ~50% are women.  El Salvador: At least 40 people are trained, of which ~40% are women.		Mexico were conducted. This complements the capacity building from previous reporting period, including the one carried out within the "NbS accelerator" initiative with the Mexican Climate Community, WRI and WWF with 16 subnational teams made up of between 4 and 5 decision-makers each.  In Jamaica, 17 persons were trained by the Jamaica 4H Clubs previously, with an additional 36 trained in urban EbA by TNC in this reporting period. Because of the difficulty of engaging national and local authorities in Jamaica, and despite numerous efforts to reach out through different authorities, partners and UN subregional office, the project team engaged a smaller number of targeted government officials that more were responsive, receptive and could have more use of these trainings. The achievement remains low, and there is a risk that the 100-person target will not be met in the remaining 6 months of implementation. Additional efforts were placed in communication efforts for long-term availability of the capacity building materials. Other non-government staff were also engaged and trained as detailed in table 3.2.  In El Salvador, workshops were held with municipalities and decision-makers for the mainstreaming of NbS in urban planning (San Salvador, Nejapa and OPAMSS), with a total of 19 participants in this reporting period.  These capacities were built mainly among government officials, decision-makers and municipalities through activities under Output 1.3: Training provided to local government authorities and relevant private sector stakeholders () on implementing urban EbA,	



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						and Output 1.4: Strategies developed to upscale and sustain EbA interventions.	
	2. Number of technical guidelines developed on urban EbA.	Zero	N/A	At least three sets technical guidelines developed for each city to plan, implement and monitor urban EbA (nine in total).	Overall progress towards Outcome indicator 1.2 target stands at 178%. Technical guidelines are still under development for Kingston, Jamaica.  Country Target Achieve ment  Overall: 9 16  Additional since last PIR 5  Mexico: 3 7  Additional since last PIR 0  Jamaica 3 0  Additional since last PIR 0  El 3 9  Salvador  Additional since last PIR 5	Governments and key stakeholders have better access to tools and methodologies to improve their urban planning processes and mainstream EbA in their urban development plans and policies.  These guides focus on the best practices for urban and peri-urban ecosystems restoration and alternative livelihoods. They are also being used to build capacities in citizens and project beneficiaries through the community centres in the cities.  The guidelines produced under this reporting period are the following (all in El Salvador):  • Crop guide for home gardens (see here)  • Guide to the establishment and management of sustainable agriculture. Adapting coffee cultivation to climate change (final version, see here)  • Guide for the municipal planner. Integrating nature-based solutions in the city (final version, see here)  • Compendium of NbS measures for urban areas (final version, see here)  (this document is being translated into English and is under graphic design by Regional Office).  • A second version of the EbA measures implementation guide (see here)  In Jamaica, two guidelines are going to be developed in S2-2023.  Previously developed guidelines are:	S



Project objective and Outcomes	Indicator	Baseli ne level	Mid-Term Target or Mileston es <sup>4</sup>	End of Project Target	Progress as of current period (numeric, percentage, or binary entry)	Observations/ justification on rating	Progre ss rating <sup>5</sup>
						<ul> <li>For Mexico:         <ul> <li>Technical guidelines on edible mushroom production (see here).</li> <li>Guideline for the restoration, conservation and sustainable development (see here).</li> <li>Guideline on riparian restoration (see here).</li> <li>Guideline of ecologic restoration as a complementary strategy to agroforestry (see here)</li> <li>Practical guide on mountain silvopastoral livestock (see here)</li> <li>Guideline of agriculture with fruit trees – in agroecological systems to adapt to climate chance (see here)</li> <li>Guidelines on climate change adaptation in coffee plantation, better agricultural practices (see here)</li> </ul> </li> <li>For El Salvador:         <ul> <li>A guideline for Resilient Farm development (see here)</li> <li>Species guide for riparian vegetation restoration (see here). This version already has the ISBN registration code.</li> <li>Guide to native tree species identified in the buffer zone of the El Boquerón protected area (see here)</li> <li>Species guide for biogardeners (see here). This version already has the ISBN registration code.</li> </ul> </li> <li>In addition to the country-specific ones, a regional guideline on the identification, implementation, financing and replication of NbS was developed in 2021 (see here).</li> </ul>	



Project objective and Outcomes	ndicator	Baseli ne level	Mid-Term Target or Mileston es <sup>4</sup>	End of Project Target	Progress as of current period (numeric, percentage, or binary entry	Observations/ justification on rating	Progre ss rating <sup>5</sup>
po de wit go sta ou rec tio rev po eg	Number of olicy briefs eveloped ith relevant overnment takeholders utlining ecommenda ons for evisions to olicies/strat gies/plans o integrate bA	Zero	N/A	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 (in total).	Overall progress towards Outcome indicator 1.3 stands at 366%.  Country Target Achiev ement  Overall: 3 11  Additional since last PIR 4  Mexico: 1 4  Additional since last PIR 1  Jamaica 1 2  Additional since last PIR 2  EI Salvador 1 5  Additional since last PIR 1	Policy and regulations development at the local level have been strengthened through the provision of concrete recommendations derived from the project in the form of the policy briefs.  The policy briefs were elaborated with the support and participation of local authorities through consultation processes, ensuring ownership of its content. They are being used to generate interest to scale the project's interventions and increase awareness. They are also being shared with a global community: the building resilience project in Asia for instance has used one of Xalapa's policy briefs as a case study.  The policy briefs developed under this reporting period are the following:  Institutional Capacity for Adaptation to Climate Change in Three cities in Latin America and The Caribbean (see here)  Lessons learnt and results from CityAdapt project El Salvador (see here)  Delivering on the Promise of Sustainable Jamaican Cities: The Case for Urban EbA as a Policy Priority for Achieving National Adaptation & Sustainability Goals (see here, currently under graphic design)  Kingston: A City of Wood and Water. Practical Approaches to Using Urban EbA to Enhance Urban Adaptivity and Resilience (see here, currently under graphic design)  An additional policy brief was initiated under this reporting period, to be finalized in Q3 2023:	HS



Project objective and Outcomes	Indicator	Baseli ne level	Mid-Term Target or Mileston es <sup>4</sup>	End of Project Target	Progress as of current period (numeric, percentage, or binary entry)	Observations/ justification on rating	Progre ss rating <sup>5</sup>
		ne	Mileston			"Integrated water resource management for water supply in basins around Xalapa, Veracruz" (here)  Previously-developed policy briefs were:     "Adapting to climate change in mountain cities: Lessons from Xalapa", in collaboration with the Leeds University, published in: WRI initiative Coalition for Urban Transitions, February 2021 (from Mexico, see here).     "Rain harvesting systems: The case of Xalapa City", finalized in early 2021 (from Mexico, see here).     "Climate Resilient Cities in Latin America" policy brief for Xalapa city (here).	ss
						A story map on the impacts of the Amanda and Cristobal tropical storms that hit San Salvador in May 2020, providing a comparative analysis of the grey infrastructure (detention pond) and green NbS measures implemented by the project (see <a href="here">here</a> ). Neighbouring municipalities have shown interest in enhancing their land planning processes, as a result of information derived from this policy brief.	
						<ul> <li>Barriers and opportunities for integrating EbA into policy and regulatory instruments (from El Salvador, see <a href="here">here</a>).</li> <li>Input from CityAdapt to the Nationally Determined Contributions (NDC) of El Salvador (here).</li> <li>"Soluciones basadas en la Naturaleza: un ejemplo en la ciudad de San Salvador" was published in Revista Labverde of Sao Paulo University of Brazil in December 2021 (here).</li> </ul>	



Project objective and Outcomes	Indicator	Baseli ne level	Mid-Term Target or Mileston es <sup>4</sup>	End of Project Target	Progress as of current period (numeric, percentage, or binary entry)	Observations/ justification on rating	Progre ss rating <sup>5</sup>
	4. Number of draft upscaling strategies developed for urban EbA	Zero	N/A	One urban EbA upscaling strategy developed in each country (three in total).	Overall progress towards Outcome indicator 1.4 target stands at 66%.  Target Achievem ent  Overall: 3 2  Additional since last PIR  Mexico: 1 1  Additional since last PIR  Jamaica 1 0  Additional since last PIR  El 1 1  Salvador Additional since last PIR  O PIR  Heart PIR  Additional since last PIR  D PIR	The project's replication and sustainability are being ensured through the elaboration of upscaling strategies at different scales. The elaboration of new project proposals seeks to involve new municipalities in these processes, integrating the lessons learnt from the project to mainstream climate change adaptation, and EbA in particular, beyond the three CityAdapt cities.  At the regional level, a proposal based on the CityAdapt project's lessons learnt (Nature4Cities) was approved by the Green Climate Fund (GCF) in January 2021, to be implemented in Cuba, Ecuador, Honduras and the Dominican Republic. An amendment was submitted to add three new countries, Guatemala, Panama and Uruguay, and was approved in May 2022, reaching a total of 13 cities included in the project. The Nature4Cities project follows methodologies elaborated by this project, such as the vulnerability assessments, and aims at identifying NbS opportunities and key actors to strengthen selected Latin American cities' climate resilience. The project includes activities that will also benefit cities in El Salvador, Jamaica and Mexico in 2024, such as a MOOC on NbS in urban areas that will be disseminated to CityAdapt's key stakeholders.  In Mexico, the concept note "CityAdapt 2.0" is being developed for submission to the GCF. The proposal involves 10 cities in Mexico that suffer hydrological stress. The concept note was submitted to UNEP's internal Concept Review Committee and is foreseen to be submitted to the GCF with a project preparation funding request, as soon as the UNEP internal approved committee releases the authorization. Cofinancing from the Rio Arronte Foundation has already been secured for nearly USD 200,000 to partially develop the required vulnerability	$\omega$



Project objective and Outcomes	Indicator	Baseli ne level	Mid-Term Target or Mileston es <sup>4</sup>	End of Project Target	Progress as of current period (numeric, percentage, or binary entry)	Observations/ justification on rating	Progre ss rating <sup>5</sup>
						assessments. Xalapa being part of the new proposal, an updated vulnerability assessment will provide a follow-up to the one developed in 2019, in alignment with MTR Recommendation 4.1. These analyses should start end of 2023, following the concept note's submission. Under this reporting period, a set of 4 regional consultations with the involved cities were carried out with GGGI and FMCN financing (USD 20,000).	
						In Jamaica, The Nature Conservancy has submitted a draft upscaling strategy which can be seen here.	
						In El Salvador, several upscaling strategies were carried out.  The first one consisted in supporting four municipalities in developing their adaptation planning and identifying NbS measures for adaptation. This strategy is summarized <a href="here">here</a> , and capacity building and technical support workshops were held in July 2022 with San Salvador and Nejapa. These workshops resulted in plans that integrate NbS into urban planning (here).  It is important to note that Nejapa was not included in the project design (no EbA intervention was piloted there), but its inclusion in the process is aligned with recommendation 5.2 of the MTR, on identifying areas of "greatest possible impact", which Nejapa is considering the growing interest from local authorities to join the initiative after the 2020 landslide previously reported.  The team prepared a series of 6 methodological sheets for the implementation of the upscaling activities, which were used in these 4 workshops on the integration of NbS measures in urban planning (here).	



Project objective and Outcomes	Indicator	Baseli ne level	Mid-Term Target or Mileston es <sup>4</sup>	End of Project Target	Progress as of current period (numeric, percentage, or binary entry)	Observations/ justification on rating	Progre ss rating <sup>5</sup>
						In addition to the above, the project team also supported the formulation of a proposal "San Salvador in development of heat?" submitted with the San Salvador metropolitan area planning office (OPAMSS) for the IADB Cities Laboratory Challenge "Cities for All". The proposal was selected under this reporting period and would support funding research on the use of mosses and other species to reduce temperature and improve air quality in San Salvador, thus giving continuity to some of the NbS interventions implemented in the city (see working plan here).	
						Finally, under this reporting period, a regional upscaling project was developed for Adaptation Fund financing, together with Guatemala and Honduras – "Building Resilience of Urban Communities in Central America by Leveraging Nature-based Solutions (NbS) for Adaptation". The proposal builds on the lessons learnt from CityAdapt, planning to upscale its work in San Miguel, La Libertad, and two new municipalities of the San Salvador Metropolitan Area – Soyapango and Ilopango. The preconcept note was approved in March 2023 during AF B-40 and the project concept note is currently under review by UNEP's Concept Review Committee prior to submission to the Adaptation Fund.	
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	Zero	N/A	Mexico: - 3.46 km of riparian corridor restored with 3,640 trees 10 hectares of soil restoration and conservation measures	Overall progress towards Outcome indicator 2.1 targets stands at 111%.  Target Additional since last PIR Achieve ment  Mexico  3.46 km riparian corridor restored 3.46 km at 110	Demonstrations of EbA interventions in all three cities are increasing the capacity of urban and peri-urban communities to adapt to the effects of climate change. All measures are implemented with the participation of local communities and key stakeholders: their early involvement guarantees ownership of the interventions and ensures long-term maintenance and monitoring.  Monitoring plans are in place for all interventions, as detailed in section 3.2, to	HS



Project objective and Outcomes	Indicator	Baseli ne	Mid-Term Target or Mileston	End of Project Target	Progress (numeric, per	as of current centage, or bi		Observations/ justification on rating	Progre ss
		level	es <sup>4</sup>						rating <sup>5</sup>
	Indicator	ne	Target or Mileston					measure the impact of the interventions in the face of floods, landslides and other climate hazards.  Moreover, some interventions have already proven effective in the face of extreme climate events, such as the infiltration ditches and dead barriers in El Salvador, that withstood the heavy rains of a tropical storm during the previous reporting period. Humidity and erosion and sedimentation rate measurements were developed, proving the effectiveness of the soil conservation practices used. In Xalapa, the restoration of riparian areas proved effective to prevent damages due to the impact of hurricane Grace in August 2021. Together with the implementation of bamboo barriers and the design of crops following contour lines, these interventions avoided erosion and reduced losses in the orchards implemented on Estropajo hill.  In México, in this reporting period, one additional infiltration garden was completed as a demonstrative intervention at the Architecture faculty of Universidad Veracruzana (See the report here). 1,000m of infiltration pathways	_
				infiltration gardens established.	permeable infiltration trails	Jamaica		were completed in the Molino de San Roque Natural Protected Area, which included the revegetation with native species, slope stabilization through miyawaki methodology and	
				- 1 km of	7,500 trees	2,775	10,875	actions to improve hydraulic dynamics on the	
				permeable infiltration trails	,	,	trees	natural wetland (see video <u>here</u> ).	
				established.  Jamaica: - 7,500 trees planted across 12 hectares to contribute to	400 mixed seedlings (ornamenta I, fruit and timber) within agreed sites in	204	712	In Jamaica, the 2 ha of wetland restoration was completed under this reporting period by the Forestry Department and UWI at the Palisadoes Port Royal Protected Area and Ramsar Site (PPRPA) at Gallows Point in Kingston, with 2,582 seedlings planted. See final report here.	



Project objective and Outcomes	Indicator	Baseli ne level	Mid-Term Target or Mileston es <sup>4</sup>	End of Project Target	(numeric, per	as of curren centage, or b		Observations/ justification on rating	Progre ss rating <sup>5</sup>
		level		restoration in the Hope watershed 2 hectares of the wetland in Port Royal rehabilitated 400 mixed seedlings (ornamental, fruit and timber) planted within agreed sites in Kingston & St. Andrew 2.3 hectares rehabilitated in lower-income communities within project site (1,400 mixed tree seedlings)  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 5 kilometres of		2 ha  0  El Salvador  565 ha  14,900 m  0  3 round-abouts  3 rain gardens  153 ha	2 ha  1,563 seedlings on 2.3 ha  1,161 ha  55,198 m  5.1 km  3 round-abouts  3 rain gardens 153 ha	The permeable pavement activity was deleted after an initial pre-assessment carried out by 4H Clubs, that revealed both time and capacity constraints to carry out this intervention.  In El Salvador, the restoration of 150 ha of critical ecosystem was the last intervention that needed to be completed. Executing this required a study of the flora present in said ecosystem, seed collection and establishment of a nursery. The late start of the rainy season this year delayed the reforestation period and affected the growth of the plants, so the areas to be restored were prioritized.  Another intervention approved by the national technical committee to replace the original 16km goal established for the riparian restoration, which was not possible to achieve in the field, is the revegetation of 3 roundabouts, the construction of 3 rain gardens and tree planting in an urban neighbourhood. These works required permission from the municipal mayor's office because they are public spaces and coordination with the neighbours. The infiltration area of these interventions is 101.5 m².	rating <sup>5</sup>
				riparian forest restored.					



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			AVA	- 3 roundabouts renaturalized - 3 rain gardens - 150 hectares of critical ecosystems restored.	0 "					
	2. Number of protocols developed to	Zero	N/A	At least one set of EbA protocols developed for	Overall prog indicator 2.2				The technical information gathered during the on-the-ground pilot EbA interventions are compiled in a set of protocols. They are used by	S
	guide implementati on of EbA in San Salvador, Kingston and Xalapa			each pilot city (three in total)	Overall: Mexico:  Jamaica El Salvador	Tar get 3 1 1 1	Addition al since last PIR  0  3  protoc ols  0  3  protoc ols	Achieve ment  2 1 set (8 protocol s) 0 1 set (13 protocol s, 4 translat ed to English)	the beneficiaries (farmers and community members mainly) during implementation, as they were developed based on identified needs of providing appropriate materials for the EbA implementation. They increase adaptive capacity of project stakeholders, providing technical information on how to implement each EbA intervention, how to measure its impact and how to assess its links with ecosystem services and climate change adaptation.  The protocols produced based on the CityAdapt interventions are being harmonized (see latest versions here) and uploaded on the webportal (here). This standardization will ensure urban and peri-urban communities in other municipalities have access to technical information on EbA options.	
									In parallel, NbS measures for adaptation in urban settings were compiled to produce a regional manual detailing main characteristics of these interventions, that will be used beyond the direct beneficiaries identified by this project (see latest version <a href="https://example.com/here">here</a> ). It is currently being graphically designed.  In México, a set of 5 protocols were redesigned and 3 additional ones were developed. See the complete set <a href="https://example.com/here">here</a> .	



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						In Jamaica, the two previous protocols were revised under this reporting period (not yet included in the progress table above), to be finalized in S2-2023, on:  Reforestation (revised version here)  Wetland rehabilitation (revised version here)  In El Salvador, 3 new protocols were finalized under this reporting periods, resulting in a total of:  6 fully completed and designed in Spanish, four of which are also available in English, and the other 2 are being translated.  7 are currently under graphic design and translation.	
	3. Number of water storage and management systems established through the project	Zero	N/A	Mexico: - 1 artificial wetland at the Instituto Tecnológico de Xalapa 10 rainwater harvesting systems on the roof tops of 8 schools and 2 public buildings.  Jamaica: - 6 rainwater harvesting systems installed at schools and community buildings.  El Salvador:	wetland  art we s  exico 10 RWH systems  maic 6 RWH systems 30 water storage facilities  alvad  3 art we s  4 6 3 1 3 3 4 3 3 4 3 4 5 5 1 5 1 6 3 3 6 3 6 6 7 6 7 7 7 8 7 8 7 8 7 8 8 8 8 8 8 8	and management systems increase the beneficiaries' resilience by improving sanitation and providing water security in the face of water shortages. Their installation in public buildings such as schools or community spaces also provides local ownership of the measures and increases awareness of these interventions' multiple benefits, as all of them are implemented with accompanying awareness-raising materials and appropriate training for their maintenance.	HS



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				- 30 infiltration wells. - 10 rainwater harvesting systems for		4 were installed in Camperdown High School, Kingston Technical High, Greenwich Town Community Center and the Abilities foundation (see report here).	
				selected schools. - 1 rainwater harvesting system for 1 selected community.		As for the absorption wells (water storage facilities) built in <u>El Salvador</u> , 16 more were built under this reporting period, reaching a total of 30 (see report <u>here</u> ). Their monitoring has shown their efficiency and capacity to withstand a period of heavy rain.	
				,		In previous reporting periods, all rainwater harvesting systems were installed in Mexico and in El Salvador (see report here) and 2 were already installed in Jamaica, equipping schools, educational institutions and communities with additional water sources. In Jamaica and El Salvador, these have also been used for irrigation of school and community gardens. This provides a potential income source, and increases food in addition to water security. In Mexico a set of three artificial wetlands was also	
						completed (see construction report <u>here</u> and operating and maintenance manual <u>here</u> )	
	4. Number of waste management systems implemented in El Salvador.	Zero	N/A	El Salvador: 2 ecological sanitation systems at 2 schools to improve management of grey water and sewage.	100%  Completed in previous reporting periods.	The construction of the two ecological sanitation systems ( <i>biojardinera</i> ) were finalized in two schools in San Salvador under previous reporting period (see report <a href="here">here</a> ). The aim is to improve the water quality and sewage system of the identified schools, thus enhancing their resilience to external hazards.	S
	5. Number of climate resilient alternative livelihoods demonstrate	Zero	N/A	Mexico: - At least 10 food gardens to demonstrate potential	Overall progress towards Outcome indicator 2.5 target stands at 106%. Targets have been exceeded, and only the beekeeping, hydroponic infrastructure and container garden	Climate-resilient livelihoods provide beneficiaries with tools to adapt their activities in the face of climate change. Sustainable agriculture practices, such as edible mushrooms plots, beekeeping or coffee restoration, provide alternative productive activities, increase income	HS



Project objective and Outcomes	Indicator	Baseli ne level	Mid-Term Target or Mileston es <sup>4</sup>	End of Project Target	Progress as of current period (numeric, percentage, or binary entry)		inary entry)	Observations/ justification on rating	Progre ss rating <sup>5</sup>
	d at intervention sites through			climate-resilient livelihoods. - 20	activities in Jamaica are pending completion.		ding	and promote the diversification of crops so as to increase the crops' resilience.	
	providing equipment, training and technical support.		plo cor mu pro - 10 sta	demonstration plots for commercial mushroom production - 10 agricultural start-up kits at 10 schools	Target	Additional since last PIR Mexico	Achie- vement	Urban gardens installed in all three cities provide food security and also additional resources and incomes. In Jamaica, two food gardens were installed under this reporting period in schools	
					10 food gardens 20 mushroom plots 10 agricultural	0 10	10	(see report). Also, after the pandemic, some urban gardens installed prior to 2020 needed additional support to recover in El Salvador particularly, where a rehabilitation strategy was	
				- 15 hectares under agrosilvopastora I management.	start-up kits 15 ha under agrosilvopasto ral	0 ha	16.8 ha	developed for 4 of the first 5 school gardens. Impacts from the pandemic were lower in Mexico and Jamaica, although the consequent economic crisis had an impact on materials'	
				Jamaica: - 1 urban garden	management  3 food gardens	Jamaica 2	3	purchase and availability of local staff in all three countries.	
				per school for 3 schools 1 container	1 container garden 1 hydroponic infrastructure	0	0	Agricultural start-up kits are being delivered with capacity building exercises in most schools, with 10 agricultural startup kits delivered under this	
				garden - 1 hydroponic infrastructure	400 trees in schools	483 219	949	reporting period in 10 school orchards in selected schools of Xalapa (see video here). The kits had already been delivered in El	
				<ul><li>400 trees in schools</li><li>250</li></ul>		Salvador		Salvador. In addition, an urban agricultural capacity-building strategy was developed in Xalapa together with the Estate Public Education	
				beekeeping colonies.	10 food gardens 10 agricultural start-up kits	0	11	Secretary (See report <u>here</u> ). The promoted ownership has led to increased local initiatives, such as in El Salvador, where a community	
				El Salvador: - 10 urban gardens in 10 schools.	450 fruit trees in communities	0	489	garden run by women from a coffee cooperative was established based on CityAdapt's support. This gender positive initiative is promoted by CityAdapt's actions at the local scale.	
				schools 10 agricultural start-up kits at 10 schools in the Arenal Monserrat area 450 fruits trees planted in urban				These interventions are also being monitored to assess agricultural adaptation. The cocoa plants for instance, which grow under specific conditions (under 900 meters above sea level), are used to monitor changes in climate	



communities and coffee plantations.	conditions (some of the selected plantations are 1,100 meters above sea level).  In Jamaica, of an intended total of 250 bee colonies, 219 have been distributed. The	
	remaining 31 will be distributed in the next reporting period.	
people trained on implementin g and maintaining the EbA interventions and climate resilient livelihoods.  At least 50 students (of which at least 50% women) per school from 10 schools will be trained on using agricultural startup kits as well as development and indicated indicated which are students (of which at least 50% women) per school from 10 schools will be trained on using agricultural startup kits as well as development and schools with a school from 10 schoo	In Mexico	S



Project objective and Outcomes	Indicator	Baseli ne level	Mid-Term Target or Mileston es <sup>4</sup>	End of Project Target	Progress as of current period (numeric, percentage, or binary entry)	Observations/ justification on rating	Progre ss rating <sup>5</sup>
				trained on bee-keeping.  El Salvador: Al 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.		persons trained in the maintenance of irrigation systems (76% women). The purchases required for the container gardens have started but installation and training will be conducted after the summer holidays, with new school year. In Jamaica 25 persons have also been trained in beekeeping (56% women).  In El Salvador, students and local government members from the agroecology department acquired knowledge on best practices, benefits and co-benefits of urban food gardens and water harvesting systems. Capacities have also been enhanced on the implementation of urban gardens, infiltration ditches and absorption wells with local cooperative members and farmers from coffee plantations. In times of pandemic due to the closure of schools, the 5 orchards installed in 2019 were abandoned. The project developed a rehabilitation strategy, consulting again with the educational community. Only 4 of these schools agreed to participate with new students in the recovery of the school garden through training. This recovery was made in Q3 and Q4 2022.	
Outcome 3  Knowledge and awareness of urban EbA interventions strengthened in El Salvador, Jamaica and Mexico, and throughout the LAC region	Number of communicati on strategies for urban EbA developed.	Zero	N/A	One communication strategy developed for each city (three in total) with specific guidelines for targeting different groups.	Overall progress towards Outcome indicator 3.1 target stands at 100%.    Country	Knowledge and awareness on urban EbA have increased throughout this reporting period through the continued consolidation of CityAdapt's identity and its growing presence in social media.  The project has continued to increase its regional impact through the further development of its website, with quality products being consulted and downloaded from across the LAC region, such as the NbS guidelines, thematic webinars and technical publications, as highlighted by recommendation 6 of the MTR.	S



Project objective and Outcomes	Indicator	Baseli ne level	Mid-Term Target or Mileston es <sup>4</sup>	End of Project Target	Progress as of current period (numeric, percentage, or binary entry)  Observations/ justification on rating	Progre ss rating <sup>5</sup>
					Mexico:     1     0     1     In previous reporting periods, the region communication strategy was completed national strategies of Mexico (here) and salvador (here), while under this reporting periods, the region communication strategy was completed national strategies of Mexico (here) and salvador (here), while under this reporting periods, the region communication strategy was completed national strategies of Mexico (here) and salvador (here), while under this reporting periods, the region communication strategy was completed national strategies of Mexico (here) and salvador (here).	I, with the I EI ing
					Facebook +5% 70% period, the Jamaican strategy was prod finalized (here). Specific communication strategies were or are being put in place	n e for
					Jamaica     1     1       People reached through social media     0     0       Throw Jamaica     0     0       Throw Jamaica     0     0       Through social media     0     0       Throw Jamaica     0     0       Throw Jamaica     0     0       Through social media     0     0       Throw Jamaica     0     0 <td>ion are EbA –</td>	ion are EbA –
					El 1 0 1 approach in El Salvador (200 additional last reporting period). This approach is initiated in Jamaica in Q3-2023 and also reached through social	since being o
					media     reporting periods in Mexico.       Facebook     -18.4%     75.6%       Twitter     N/A     These knowledge campaigns are elabo with the support of local actors and governmental bodies, such as INECC in	
					ensuring a wider reach and a long-term the produced material. In Jamaica, the communication strategy being drafted is aligned with the national climate change communication strategy, that aims at im public awareness and education, and w reviewed with CityAdapt's team to incluas a main focus. A communications specifically	s being e nproving rill be de EbA
					and a graphic designer were engaged in Jamaica 4-H Clubs and have been developed in Series of products and communications campaigns to be further developed in Series of products.	n eloping a
	2. Number of communicati on tools developed and	Zero	N/A	At least 15 tools developed in total.  Mexico:	Overall progress towards Outcome indicator 3.2 target stands at 720%.  Country Tar Additio Achiev get nal Additio ement The development of communication too ensures comprehension of EbA concep interventions and diffuses the results to audience.	ts and a wider
	implemented – with			At least 12 tools developed	since The collaboration of local authorities ha consolidated through the process, as we	



Project objective and Outcomes	Indicator	Baseli ne level	Mid-Term Target or Mileston es <sup>4</sup>	End of Project Target	Progress a (numeric, perc			Observations/ justification on rating	Progre ss rating <sup>5</sup>
	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.			(including flyers, better practices manuals, short films, etc.), at least 1 of which focused specially on women.  Jamaica: At least 4 tools developed, at least 1 of which is focused specifically on women.  EI Salvador: At least 3 tools developed, at least 1 of which is focused specifically on women.	Overall 15 Mexico 12 Jamaica 4 El 3 Salvador	<b>43</b>   23   0   20	108	involvement of other actors that have been key in disseminating the ecosystem-based approach in academia and civil society. For instance, in Xalapa, the set of educational games developed were widely accepted and implemented in online class programs during the COVID-19 lockdown.  These tools are elaborated for different target groups specifically for training sessions with children, youth and adults.  In Mexico 23 additional communication tools were developed:  • A set of four videos regarding the conservation of natural urban wetlands (here), social appropriation of the intervention (here), natural urban wetland recovery (here), and a brief video of the whole intervention (here).  • A brief of the urban school orchards implementation process (here).  • A video of the Xalapa water paradox together with the communications unit of Nairobi (see draft here)  • Infographics of urban school orchards management:  - Compost guide (here)  - A set of (5) food preparation (here).  Integrated resources management (here)  - Waste reduction (here)  - Waste separation (here)  - School orchard management (here)  • A set of 11 infographics of family orchards management: biofertilizers, compost, soil conservation, etc. See the complete set (here)	



Project objective and Outcomes	Indicator	Baseli ne level	Mid-Term Target or Mileston es <sup>4</sup>	End of Project Target	Progress as of current period (numeric, percentage, or binary entry)	Observations/ justification on rating	Progre ss rating <sup>5</sup>
						This brings the new total of tools to	_
						communicate climate change, EbA and the	
						interventions to 52, exceeding Mexico's target.	
						Among the materials developed in previous	
						reporting periods are:	
						<ul> <li>An EbA Factsheet (<u>here</u>)</li> </ul>	
						<ul> <li>Two infographic sheets on rain</li> </ul>	
						harvesting systems and edible	
						mushroom production EbA measures	
						(here)	
						CityAdapt Xalapa timeline infographics	
						(here)	
						CityAdapt project executive brief ( <u>here</u> )	
						<ul> <li>A set of 10 templates developed to</li> </ul>	
						show the results of the project on social networks (here)	
						<ul> <li>A set of 14 short videos developed, that</li> </ul>	
						can be found on Youtube	
						<ul> <li>Story Map on rain harvesting systems:</li> </ul>	
						the case of Xalapa City (see here)	
						<ul> <li>Video of urban restoration (see here)</li> </ul>	
						Press note on the Xalapa water	
						paradox (see <u>here</u> )	
						<ul> <li>Riparian restoration implementation</li> </ul>	
						process video (see here)	
						<ul> <li>Set of 16 didactic games for basic</li> </ul>	
						school climate change training (here)	
						<ul> <li>A technical video for designing</li> </ul>	
						agroforestry and ecological restoration	
						measures (see here)	
						A technical video on techniques for     agrefacetry (bess)	
						agroforestry ( <u>here</u> )	
						Climate change communication     collegitive with students (see bers)	
						colloquium with students (see here)	
						<ul> <li>Infiltration gardens brief animation (video, here)</li> </ul>	
						<ul> <li>Infiltration gardens implementation</li> </ul>	
						(video, here)	
						<ul><li>Artificial wetlands animation (see <u>here</u>)</li></ul>	



- Animation on the importance of collaboration for climate mobilization (see here) - Two interviews with key beneficiaries produced for COP26 (see here)  In Jamaica, a communications specialist and a graphic designer were engaged by the Jamaica 4-H Clubs, with various communications tools expected in S2-2023.  In El Salvador, 20 additional communication tools were developed during this reporting period:  - A set of 7 methodological videos about restoration of critical area, biogardening, cocoa farming, coffee restoration, resilient gardens, water harvesting systems and absorption wells (see here) A set of 7 final videos about lessons learned and results of CityAdapt project in San Salvador: a long video and segmented into 6 short videos (see here) 2 interviews with the main beneficiaries (see here) An interview of Luis Roberto Hermández and Leyla Zelaya in Brújula Sonora (podcast) A poster about CityAdapt project in San Sanora (podcast) A poster about CityAdapt project in San Sanora (podcast).	Project objective and Outcomes	ı	Baseli ne level	Mid-Term Target or Mileston es <sup>4</sup>	End of Project Target	Progress as of current period (numeric, percentage, or binary entry)	Observations/ justification on rating	Progre ss rating <sup>5</sup>
Salvador (see here)  - Master lecture at the award ceremony for the best graduation projects and best professors in the engineering and architecture career 2022, delivered by the Salvadoran Association of Engineers and Architects (October							collaboration for climate mobilization (see here)  Two interviews with key beneficiaries produced for COP26 (see here)  In Jamaica, a communications specialist and a graphic designer were engaged by the Jamaica 4-H Clubs, with various communications tools expected in S2-2023.  In El Salvador, 20 additional communication tools were developed during this reporting period:  A set of 7 methodological videos about restoration of critical area, biogardening, cocoa farming, coffee restoration, resilient gardens, water harvesting systems and absorption wells (see here).  A set of 7 final videos about lessons learned and results of CityAdapt project in San Salvador: a long video and segmented into 6 short videos (see here)  2 interviews with the main beneficiaries (see here)  An interview of Luis Roberto Hernández and Leyla Zelaya in Brújula Sonora (podcast).  A poster about CityAdapt project in San Salvador (see here)  Master lecture at the award ceremony for the best graduation projects and best professors in the engineering and architecture career 2022, delivered by the Salvadoran Association of	



Project objective and Outcomes	Indicator	Baseli ne level	Mid-Term Target or Mileston es <sup>4</sup>	End of Project Target	Progress as of current period (numeric, percentage, or binary entry)		Progre ss rating <sup>5</sup>
						<ul> <li>Participation in the International symposium Metropolis for governance San Salvador, El Salvador, organized by Planning Office of Metropolitan Area of San Salvador (May 19th, 2023)</li> </ul>	
						This complements previous tools, such as:  - A video about vulnerability assessment (see <a href="here">here</a> )  - 4 tutorial videos for the construction of orchards and to make bioferments, repellents and seeds (see <a href="here">here</a> )  - 2 interviews with the main beneficiaries produced for COP26 (see <a href="here">here</a> )	
						<ul> <li>6 Brochures on the impacts of EbA measures (see here)</li> <li>A set of 6 postcards about school and community gardens (here)</li> <li>A set of 6 infographics about EbA interventions (here)</li> </ul>	
						<ul> <li>An interview about migration and climate change for Caminos - an audiovisual magazine run by IOM (to be disseminated under next reporting period).</li> <li>An interview of one of the beneficiaries</li> </ul>	
						of the project, the coffee producer Hector Velasquez, from the BBC (here)  - An interview about women and climate change in the TV Program De mujer a mujer, Channel 33.  - Inclusion of CityAdapt in the Global	
						Repository of Good practices, elaborated by Internal Displacement Monitoring Center (IDMC) (here).  An article in 1st Edition of Revista de Sostenibilidad empresarial by Fundación Empresarial para la Acción	
						Social (FUNDEMAS) (here)  - Participation in the International symposium Metropolis for governance	



Project objective and Outcomes	Indicator	Baseli ne level	Mid-Term Target or Mileston es <sup>4</sup>	End of Project Target	Progress as of current period (numeric, percentage, or binary entry)	Observations/ justification on rating	Progre ss rating <sup>5</sup>
						San Salvador, El Salvador, organized by Planning Office of Metropolitan Area of San Salvador (June 16th, 2022)  Participation in the Arboriculture symposium, organized by AES - energy distribution company of El Salvador (June 23rd, 2022).  Evening meeting for celebrating world environment day, organized by Salvadoran association of engineers and architects, June 23rd, 2022.  Plot signs and labels added along the path of a demonstration plot located in a park within one of the participating farms to raise awareness on the EbA interventions  A video on San Salvador as "a sponge city" was launched (in English and in Spanish)  An article on the same topic was also published (in English and in Spanish)  An article on the field visit of officials from the municipalities and Ministry of the Environment of the community garden was inaugurated on Environment Day (see article)  A video on the community garden (see here)  A short video on the project explaining EbA interventions in San Salvador (see here)  A video on the impact of extreme climate events, mainly storms Amanda and Cristóbal (here).  Communication materials like a brochure, banners and workshop notebooks (see here).	
	3. Number of MSc research	Zero	N/A	At least 6 reports, 3 of which include	Overall progress towards Outcome indicator 3.2 target stands at 67%,	The MSc research projects are developed with local universities, to provide additional scientific evidence and long-term monitoring schemes to	S



Project objective and Outcomes	Indicator	Baseli ne level	Mid-Term Target or Mileston es <sup>4</sup>	End of Project Target	(numeric, <sub> </sub>	percen	 nary entry)	Observations/ justification on rating	Progre ss rating <sup>5</sup>
	reports developed on the benefits of urban EbA with a particular focus on gender.			specific reference to gender-specific aspects of urban EbA  Mexico: 2 reports  Jamaica: 2 reports  El Salvador: 2 reports	Country  Overall  Mexico  Jamaica  El  Salvador		Achiev ement  13 5 0 8	implemented EbA interventions. They help to demonstrate scientifically the benefits and cobenefits of the project's interventions, creating knowledge on nature's potential and its role in reducing the vulnerability of cities. For instance, one of the research programmes in San Salvador measures the infiltration capacity of the absorption wells, and its results will allow to adjust the current and future wells.  The research programmes use innovative tools, such as the i-Tree initiative: in this specific case, the results are developed in collaboration with the local authorities in San Salvador and Xalapa, who will use the results on forest cover as a baseline for their urban planning.  The reports finalized during this reporting period are:  In Mexico:  - Human settlements and natural protected areas: challenges around the sustainable development goals (See Document here)  - Situational diagnosis of green infrastructure in the primary roads of Xalapa, (See document here)  - Nature-based Solutions as a strategy to reduce climate vulnerability in urban areas in Mexico  - Case study: Building climate resilience in Xalapa, Veracruz (CityAdapt project). (See document here)  In El Salvador:  - Analysis of rain information collected in the period 2018-2022 in a group of stations located in San Salvador (see report here).	



Project objective and Outcomes	Indicator Baseli ne level	Mid-Term Target or Mileston es <sup>4</sup>	End of Project Target	Progress as of current period (numeric, percentage, or binary entry)	Observations/ justification on rating	Progre ss rating <sup>5</sup>
					<ul> <li>Composition, structure and ecosystem services of the trees in the recovery zone, Bicentenario-Los Pericos park, using the I-Tree programme (see report here)</li> <li>Survey of qualitative analysis of water harvesting systems (WHS) (see report here)</li> <li>Simulation of Parque Bicentenario and development of an environmental educational tool using Minecraft (see summary here)</li> <li>Demonstration project for rainwater harvesting. Elaboration of proposal and evaluation of sites to carry it out (see report here).</li> <li>The reports still to be finalized (in development) are:         <ul> <li>A comparative analysis of urban woodland using i-Tree canopy: the cities of Kingston, San Salvador and Xalapa (Mexico, in drafting)</li> <li>Feasibility proposal for a water fund through an economic analysis for the conservation of the cloud forest of Xalapa, Veracruz, Mexico (here)</li> <li>Environmental Education in Cerro del Estropajo, Tlalnelhuayocan, Veracruz: contributing to its conservation (Document here)</li> <li>Contribution of coffee farms in the control of surface runoff: analysis of the effect of interception and NbS with the University of El Salvador</li> <li>Effect of NbS on moisture front behaviour and soil erosion in coffee farms with the University of El Salvador</li> </ul> </li> </ul>	



Project objective and Outcomes	Indicator	Baseli ne level	Mid-Term Target or Mileston es <sup>4</sup>	End of Project Target	Progress as of current period (numeric, percentage, or binary entry)	Observations/ justification on rating	Progre ss rating <sup>5</sup>
						<ul> <li>Water quality monitoring of rainwater harvesting systems and bio-gardeners with the University of El Salvador</li> </ul>	
						With the remaining time, the Jamaica project is strategizing to support MSc thesis reports. Three research topics will be supported by the project:  - Assessment of Ecosystem Services in a Jamaican Special Fishery Conservation Area  - Assessment of tourism earnings from Jamaican coral reefs and the potential for a sustainable Jamaican blue economy  - Growth of mangrove seedlings in Sargassum compost (SC) generated from floating, recently beached (gold) and beach dried (dark brown) sargassum.  An MoU has been drafted by the project partner (4-H Clubs) and is with the University of West Indies (UWI) for signing.	
						Reports finalized during previous reporting periods are:  - "Economic and social analysis of the production of edible mushrooms as an EbA strategy: Case of "Manos Mágicas", a women's group" (Mexico, see here).  - "Characterization, ecosystem services of trees and general guidelines for tree planting on sidewalks in the city of San Salvador" (El Salvador, final report here).  - "Determination of the composition, structure and ecosystem services of trees in Maquilishuat Park, San Salvador" (El Salvador) (see report here).	



Project objective and Outcomes	Indicator	Baseli ne level	Mid-Term Target or Mileston es <sup>4</sup>	End of Project Target	Progres (numeric, pe		f current pe age, or bina		Observations/ justification on rating	Progre ss rating <sup>5</sup>
									<ul> <li>Proposal for the management of sediments affecting the absorption wells located in the El Espino cooperative in San Salvador (see report here).</li> </ul>	
	4. Number of educational toolkits – for primary and secondary	Zero	N/A	At least 7 educational toolkits developed in total.	Weighted pro indicator 3.4 although no finalized in J	target educat amaica	stands at 10 ion toolkit h	00% as been	The educational tools are developed both for schools and community centers. They are made in simple language for an easy understanding of the EbA concept by a young and diverse audience.	S
	schools – developed on best EbA practices.			Mexico: 4 toolkits developed  Jamaica: 2 toolkits developed  El Salvador: 1 toolkit developed	Overall Mexico Jamaica El Salvador	7 4 2 1	Additional since last PIR 1 0 0 1	8 4 0 4	In El Salvador, the documents are used in schools and communities to raise awareness about solid waste management and the implementation of food gardens, while in Mexico, they are focused on water services and climate change adaptation. They are used to raise awareness of local authorities, such as (in a previous reporting period) water services and climate change groups from the Ministry of Education in Mexico (25 people and 6 people respectively). With this knowledge and material, these actors were able to start the replication of the rainwater harvesting systems EbA intervention in another municipality's school.  In this reporting period, in El Salvador, Minecraft (a popular game among young people and children) has been adapted with information from the Bicentenario park, an urban protected natural area, for the application of NbS measures that will be launched in September 2023.  Previous educational toolkits developed are:  1. A play-based climate change learning toolkit designed for elementary school students in Mexico (see here).  2. A popular version of the waste management guide for children in El Salvador (here).	



Project objective and Outcomes	Indicator	Baseli ne level	Mid-Term Target or Mileston es <sup>4</sup>	End of Project Target	Progress as of current period (numeric, percentage, or binary entry)	Observations/ justification on rating	Progre ss rating <sup>5</sup>
						<ol> <li>An urban garden manual in El Salvador (here).</li> <li>Educational toolkit focused on rainwater harvesting (in Mexico, see here).</li> <li>Vulnerability assessment storymap (in Mexico, see here).</li> <li>A comic book of EbA and climate change (in Mexico, see here).</li> <li>A technical waste management guide (in El Salvador, see here).</li> <li>In Jamaica, a consultant has been engaged to</li> </ol>	
						develop the toolkits. An inception report has been received and accepted and the focus group consultations commenced in June 2023. The inception report can be seen <a href="here.">here.</a>	
	5. Number of knowledge-sharing products/eve nts supported by the project to share	Zero	N/A	At least three knowledge-sharing reports/events to share lessons learned through implementing EbA	666%	With the CityAdapt webpage (launched in 2019, see <a href="here">here</a> ) and because the pandemic required a shift to more virtual events, a large number of online knowledge-sharing events have been organised since 2019. More than 20 regional online webinars have thus been organized, exceeding the target.	HS
	lessons learned using existing regional and global			disseminated through regional networks (including REGATTA).		The webinars gather a growing audience from across Latin America and the Caribbean, providing tools and knowledge on different elements of urban adaptation in the region.  The series of webinars Wednesdays of	
	networks.					CityAdapt continued with 7 additional webinars between July 2022 and June 2023, that gathered more than 4,700 viewers on the Youtube platform. All webinars are available in this playlist.  • Launch of CityAdapt platform for resilient cities	
						<ul> <li>N4C: Cities Carbon Footprint (WENR)</li> <li>Financing Opportunity for Adaptation in Cities</li> </ul>	



Project objective and Outcomes	Indicator	Baseli ne level	Mid-Term Target or Mileston es <sup>4</sup>	End of Project Target	Progress as of current period (numeric, percentage, or binary entry)	Observations/ justification on rating	Progre ss rating <sup>5</sup>
		level				Gender and Climate Change Week: Women in Climate Change Adaptation #8M  Eco-DRR and NbS for Adaptation Overcoming Barriers: Technological and Financial Tools for BDS in Cities Slums and Climate Change: Resilient Populations in Latin America and the Caribbean  The CityAdapt team also participated in UNEP's second three-day online workshop Adaptation Action Days II held in October 2022 (see Report). The three open events held online have more than 1,160 views under this reporting period. A face-to-face workshop was also held in Panama in May 2023. The final report of the Adaptation Action Week is available here.  CityAdapt Jamaica participated and presented at the Caribbean Sustainable Cities Conference, held in Montego Bay Jamaica, in November 2022. See conference report here.  CityAdapt El Salvador participated in the following webinars:  NbS initiatives with a watershed approach in Water Integrated Management course, organized by FUNCAGUA (September, 2022).  Multifunctional design of NbS in	rating <sup>5</sup>
						Mainstreaming NbS in urban planning course, organized by HTM Group - Colombia (November, 2022).  Gobeshona Global Conference, organized by International Center for	



Project objective and Outcomes	Indicator	Baseli ne level	Mid-Term Target or Mileston es <sup>4</sup>	End of Project Target	Progress as of current period (numeric, percentage, or binary entry)	Observations/ justification on rating	Progre ss rating <sup>5</sup>
						<ul> <li>was represented by Héctor Velásquez, a Salvadoran coffee farmer.</li> <li>NbS, gender and adaptation to climate change, organized by IFAD (April, 2023).</li> </ul>	
						<ul> <li>This is in addition to previous: <ul> <li>Local webinar on climate change scenarios in El Salvador, attended by 110 participants (here)</li> <li>Local webinar on scaling up EbA in San Salvador (here)</li> <li>13 webinars from Wednesdays of CityAdapt (here)</li> <li>Local webinar in Mexico: "Cities with a watershed focus" (see here), attended by 70 participants,</li> <li>Local webinar in El Salvador celebrating Cities Day in 2020, attended by 30 participants (see webinar video)</li> <li>The participation to a COP26 side event (see recording here), showcasing the lessons learnt from the project.</li> <li>UNEP's three-day online workshop Adaptation Action Days held in February 2022 (see Report) and presented the project's key results during the final open session "Adaptation in Latin America and the Caribbean: Lessons Learned and Opportunities" (over 528 views under</li> </ul> </li> </ul>	
						this reporting period).  The 3 webinars held for the launch of the 6 <sup>th</sup> IPCC report Climate Change 2022: Impacts, Adaptation and Vulnerability from Working Group 2, a special series of events were organized with three sessions, attended by ~6,000 people:	



Project objective and Outcomes	Indicator	Baseli ne level	Mid-Term Target or Mileston es <sup>4</sup>	End of Project Target	Progress as of current period (numeric, percentage, or binary entry)	Observations/ justification on rating	Progre ss rating <sup>5</sup>
						<ul> <li>Implications for Central and South America of the IPCC Report: Impacts, Adaptation and Vulnerability (here)</li> <li>IPCC: Climate Change Impacts, Adaptation and Vulnerability for Small Islands in the Caribbean (here)</li> <li>IPCC: Resilient Climate Development and the Role of NbS in Central and South America (here)</li> </ul>	



### 3.2 Rating of progress implementation towards delivery of outputs (Implementation Progress)

Outputs 7	Expected completion date 8	Implementation status as of 30 June 2022 (%)	Implementatio n status as of 30 June 2023 (%)	Progress rating justification <sup>9</sup> , description of challenges faced and explanations for any delay	Pro- gress rating
	ons strengthe	ned		from urban development and natural resource management ministries to integrate EbA into planning, p	
Output	Q3 2023	Mexico: 97	Mexico: 100	Regional:	S
1.1: Policy briefs		Jamaica: 30	Jamaica: 85	<ul> <li>The policy brief on "Sustainable Financing of Nature-based Solutions (NbS) in Latin American and Caribbean cities - Lessons learnt from CityAdapt" was finalized (here).</li> </ul>	
developed to outline		El Salvador:	El Salvador:	From previous reporting periods:	
recommen dations for				The policy brief on " <u>Nature-Based Solutions (NBS) in Latin American cities</u> - From pilot measures to the integration into planning" was finalized in May 2022.	
revisions to policies,				Mexico:	
strategies				One additional policy brief was developed under this reporting period:	
and plans					
– including budget				<ul> <li>Institutional Capacity for Adaptation to Climate Change in Three cities in Latin America and The Caribbean (see <a href="here">here</a>)</li> </ul>	
allocations – to integrate				Moreover, as a result of the participation of the CityAdapt team in the environmental services council of the city of Xalapa and derived from the recommendations made from the policy briefs, the city signed a collaboration and financing agreement to benefit 1,564 hectares of the watershed that	
EbA into urban				supplies water to the city and thus offer compensation for hydrological ecosystem services (see agreement <a href="here">here</a> ).	
planning and				Policy briefs developed under previous reporting periods:	
managem ent of natural resources				The case study on "Integrated water resource management for water supply in basins around Xalapa, Veracruz" was finished, based on the experience by the local government of Xalapa for developing the financing mechanism to conserve ecosystem services and promote Nature-based Solutions. It is going to be published as a part of the weekly supplement of a local newspaper (see first part already published here)	

<sup>&</sup>lt;sup>7</sup> Outputs and activities as described in the project logframe or in any updated project revision.

 <sup>8</sup> As per latest workplan (latest project revision)
 9 As much as possible, describe in terms of immediate gains to target groups, e.g. access to project deliverables, participation in receiving services; gains in knowledge, etc.



Outputs 7	Expected completion date 8	Implementation status as of 30 June 2022 (%)	Implementatio n status as of 30 June 2023 (%)	Progress rating justification <sup>9</sup> , description of challenges faced and explanations for any delay	Pro- gress rating
				<ul> <li>A policy was brief on "Adapting to climate change in mountain cities: Lessons from Xalapa" (accessible <a href="here">here</a>).</li> <li>A policy brief on the upscaling strategy of rain-harvesting systems at Xalapa City (see <a href="here">here</a> and StoryMap <a href="here">here</a>).</li> <li>The "Climate Resilient Cities in Latin America" policy brief for Xalapa (<a href="here">here</a>).</li> </ul>	
				Jamaica: Through the SSFA with The Nature Conservancy (TNC), two policy briefs were drafted:	
				<ul> <li>Delivering on the Promise of Sustainable Jamaican Cities: The Case for Urban EbA as a Policy Priority for Achieving National Adaptation &amp; Sustainability Goals (see <a href="here">here</a>, currently under graphic design)</li> </ul>	
				<ul> <li>Kingston: A City of Wood and Water. Practical Approaches to Using Urban EbA to Enhance Urban Adaptivity and Resilience (see <a href="here">here</a>, currently under graphic design)</li> </ul>	
				El Salvador: A policy brief was developed under this reporting period:	
				Lessons learnt and results from CityAdapt project El Salvador (see <a href="here">here</a> )	
				From previous reporting periods:	
				<ul> <li>A policy brief on "Soluciones basadas en la Naturaleza: un ejemplo en la ciudad de San Salvador" was published in Revista Labverde of Sao Paulo University of Brazil in December 2021 (here)</li> </ul>	
				<ul> <li>"Inputs from CityAdapt to National Determined Contributions of El Salvador" (here)</li> <li>A policy brief on barriers and opportunities for integrating EbA into policy and regulatory instruments (here);</li> </ul>	
				<ul> <li>A story map on the impacts of the Amanda and Cristobal tropical storms that hit San Salvador (here); and key actor identification document (here).</li> </ul>	
Output	Q4 2023	Mexico: 100	Mexico: 100	Regional: The regional methodological guideline on urban Nature-based Solutions for Latin American and the	S
1.2: Technical		Jamaica: 20	Jamaica: 25	<u>Caribbean cities</u> was finalized under previous reporting periods (Spanish version <u>here</u> and translated English version see <u>here</u> ).	
guidelines on		El Salvador: 96	El Salvador: 100	Mexico:	
planning and		30	100	No additional guidelines were developed under this reporting period. From previous reporting periods:	



Outputs 7	Expected completion date 8	Implementation status as of 30 June 2022 (%)	Implementatio n status as of 30 June 2023 (%)	Progress rating justification <sup>9</sup> , description of challenges faced and explanations for any delay	Pro- gress rating
implement ing EbA in urban areas developed for relevant governme nt stakeholde rs, private sector and targeted communiti es				Green infrastructure introduction (see here) - this guide is a preliminary version, to be completed in Q3 2023.  Ecological restoration guide as a complementary strategy to agroforestry (see here).  Mountain silvopastoral livestock guide (see here) Practical guide: milpa interspersed with fruit trees in agroecological systems (see here) Riparian restoration technical guidelines (see here) Ecosystem restoration, conservation and sustainable management technical guidelines (see here) Technical guidelines on edible mushroom production (from Mexico, see here)  Jamaica: Two technical guidelines on EbA for urban forestry and for urban drainage will be developed in S2-2023. The first one will be developed in partnership with the Forestry Department, responding to a specific request of this national institution, and based on initial work conducted by their team based on their experience with CityAdapt. The second one will be based on the pre-assessment carried out for the permeable pavement activity.  El Salvador: Five guidelines were elaborated and finalized under this reporting period: Crop guide for home gardens (see here) Guide to the establishment and management of sustainable agriculture. Adapting coffee cultivation to climate change (final version, see here) Guide for the municipal planner. Integrating nature-based solutions in the city (final version, see here) This document is being translated into English and under graphic design by Regional Office. It is a key document for EbA project design (at municipal, national and international level), as it provides recommendations of EbA interventions best suited to mitigate certain climate impacts in certain types of urban environments. This is aligned with recommendation 1.1 of the MTR. A second version of the EbA measures implementation guide (see here)  Previously developed guidelines are: Species guide for biogardeners [a local system for treating wastewater from washing] (see here)	



Outputs 7	Expected completion date 8	Implementation status as of 30 June 2022 (%)	Implementatio n status as of 30 June 2023 (%)	Progress rating justification <sup>9</sup> , description of challenges faced and explanations for any delay	Pro- gress rating		
Output	Q2 2023	Mexico: 90	Mexico: 100	Mexico:	S		
1.3: Training		Jamaica: 10	Jamaica: 10	Jamaica: 10	Jamaica: 40	As part of the dissemination of successful actions and learned lessons, a series of workshops were held in this reporting period to strengthen the capacity building of local governments. They included:	
provided to local governme nt authorities and relevant private sector stakeholde rs in San Salvador, Kingston and Xalapa on implement ing urban	raining rovided o local overnme t uthorities nd elevant rivate ector takeholde s in San alvador, ingston nd alapa on	El Salvador: 90	El Salvador: 100	<ul> <li>Public policies, opportunities and challenges (See report here).</li> <li>Cost-benefit analysis of EbA measures with local authorities (See report here).</li> <li>Communication strategies for Ecosystems-based Actions (See report here).</li> <li>Training of key actors in climate resilient communities (See report here).</li> </ul> Previously reported:  As part of the efforts to offer tools for decision-making and disseminate successful actions, as well as collect experiences and lessons learned from the project, a series of face-to-face seminars were held. Through participatory mechanisms, it was possible to establish a baseline and identify actions to adapt to climate change through lessons learned from CityAdapt in Xalapa (see report here). The workshops included (see report here): <ul> <li>a workshop on vulnerability to climate change, challenges, and solutions that counted with the participation of 8 municipalities in conurbation with Xalapa,</li> <li>a workshop of lessons learned on Urban EbA in which 24 municipalities of the state of Tlaxcala participated,</li> <li>a workshop to discuss the usefulness of the implementation protocols of nature-based solutions with 24 municipalities of the state of Tlaxcala.</li> </ul> Other workshops previously developed also include the participation to the NbS accelerator done in partnership with WRI, EEF and the Mexican Climate Community (video session 1 preparatory course			
EbA.				here, materials session 2 NbS Standards here, and materials session 3 Governance here).  Jamaica: The training manual was drafted by TNC in the previous reporting period and the trainings were be held in in the current period. Over two cohorts of training, 85 persons were trained, 62% of which were female and 36 of which were government staff that represented 13 organisations. The training report can be found here. A consultant has been contracted to institutionalise the training or part thereof in at least one course in one university by the end of the project.  El Salvador: Under this reporting period, 3 additional trainings on mainstreaming NbS in urban planning were held: One with 15 technicians from the municipality of San Salvador, another with 5 technicians from the municipality of Nejapa and the last one, supported with OPAMSS and GIZ, with 40 government representatives within a private sector workshop. Additionally, 143 participants attended to the master lecture on NbS in the engineering and architecture 2022 graduation career delivered by the Association of Engineers and Architects of El Salvador (ASIA) in October 26th 2022.  This is in addition to the trainings previously reported including:			



Outputs 7	Expected completion date 8	Implementation status as of 30 June 2022 (%)	Implementatio n status as of 30 June 2023 (%)	Progress rating justification <sup>9</sup> , description of challenges faced and explanations for any delay	Pro- gress rating
				<ul> <li>3 additional online training workshops on upscaling and replication of NbS in the Metropolitan Area of San Salvador. This is in alignment with recommendation 8.4 of the MTR, aiming at reinforcing linkages with these different local and national governments for the long-term sustainability of the project.</li> <li>5 online training workshops and 1 face-to-face training session on NbS mainstreaming were held with Santa Tecla, Antiguo Cuscatlán and San Salvador</li> <li>A training on the use of the i-Tree platform of the United States Forest Service (USFS) was given by USFS-Mexico to university students and professors, municipal technicians and the project team.</li> </ul>	
Output	Q4 2023	Mexico: 95	Mexico: 100	Regional:	S
1.4: Strategies developed to upscale and sustain EbA		Jamaica: 0 El Salvador: 90	Jamaica: 0 El Salvador: 100	From previous reporting period, the GCF Readiness proposal "Nature4Cities LatAm - Increasing resilience through Nature-based Solutions in Latin American cities" was approved in January 2021 and its amendment in May 2022 to increase urban resilience through NbS in Cuba, Ecuador, Guatemala, Honduras, Panamá, the Dominican Republic and Uruguay. This readiness proposal is a direct upscaling strategy of CityAdapt and several exchanges have been organized between both projects.  Mexico:	
interventio ns in El Salvador,				<ul> <li>Under this reporting period:</li> <li>CityAdapt 2.0 project preparation facility document was updated and sent to the UNEP Internal concept review committee (See document <a href="https://period.org/here">here</a>)</li> </ul>	
Jamaica and Mexico				Previously reported:  • An interagency concept note of the project "Approach, raise awareness, and endorse the human security approach: hydric stress in Mexico's vulnerable urban and peri-urban communities the cities of La Paz and Mazatlan" was concluded (see document <a href="here">here</a> ) thus aligned with recommendation 5.2 of the MTR.	
				Jamaica: A consultant has been engaged and a draft upscaling strategy has been received. The draft can be seen <a href="https://example.com/here.">here.</a>	
				El Salvador: The previously reported preconcept note on "Building resilience of urban communities in Central America by leveraging Nature-based Solutions (NbS) for adaptation" for El Salvador, Guatemala and Honduras was approved by the Adaptation Fund in March 2023 during B-40. The project concept note is currently under review of UNEP's Concept Review Committee prior to submission to the Adaptation Fund. Work sessions were held with MARN technicians throughout this reporting period for its	



Outputs 7	Expected completion date 8	Implementation status as of 30 June 2022 (%)	Implementatio n status as of 30 June 2023 (%)	Progress rating justification <sup>9</sup> , description of challenges faced and explanations for any delay	Pro- gress rating
				development. Between June 6 <sup>th</sup> and June 9 <sup>th</sup> , consultation workshops were carried out in Soyapango, La Libertad and San Miguel.	
				A proposal submitted to the CTCN entitled "Generate a science-based analysis of the opportunities for NbS for adaptation to climate change in the Metropolitan Area of San Salvador" was also prepared, although not accepted. It will be potentially submitted to other funds by the MARN.	
				As a result of the workshops carried out in June 2022 with 4 municipalities to integrate NbS into urban planning, 4 plans were prepared for that mainstreaming (see <a href="here">here</a> , ensuring long-term integration of this concept in municipal plans.	
				Following the selection of the proposal "San Salvador in development of heat?" sent to the cities laboratory of IADB, work sessions have been held for the design of the implementation together with OPAMSS, UDB, technicians from municipalities and private sector.	
				<ul> <li>From previous reporting period: <ul> <li>A water quality profile of the principal ravine of the Arenal Monserrat watershed was carried out during the rainy season and a comparative analysis between the results in the dry season and in the rainy season has been carried out and is being validated (see draft report).</li> <li>The selection of the farms where a demonstration plot will be implemented, showing the EbA interventions that are carried out, will also be included in the document (here) and the monitoring of the installed mini meteorological stations, which allow more precise data in the area (here).</li> <li>A series of 6 methodological sheets were also prepared for the implementation of the upscaling strategy (here).</li> </ul> </li> </ul>	
Outcome 2:	Demonstratio	n of urban EbA in	terventions in se	lected cities to enhance climate-resilience	
Output	Q3 2023	Mexico: 100	Mexico: 100	Mexico:	S
2.1: Assessmen		Jamaica: 50	Jamaica: 80	Activity concluded. The vulnerability assessments and maps were developed and validated by stakeholders in 2019 (see final version <a href="here">here</a> ).  In the previous reporting period, inputs from the vulnerability assessment were included in Xalapa's	
ts of climate change		El Salvador: 100	El Salvador: 100	Urban Development Planning Strategy for the 2022-2032 period (available <a href="here">here</a> ), thus integrating EbA approaches in its planification, in alignment with recommendation 4.1 of the MTR that suggested inputs from the vulnerability assessment be mainstreamed for upscaling and sustainability purposes.	
hazards, adaptation needs, and scenario				Jamaica: Mid-2022, TNC engaged a local consultant team to carry out activity, through a technical and participatory approach to foster ownership and catalyze action, as recommended by the MTR	



Outputs 7	Expected completion date 8	Implementation status as of 30 June 2022 (%)	Implementatio n status as of 30 June 2023 (%)	Progress rating justification9, description of challenges faced and explanations for any delay	Pro- gress rating
maps of resource availability produced for each pilot city.				(recommendation 4.3). The draft vulnerability assessment was received in December 2022, and after review and feedback, a second iteration of the document was submitted and can be found <a href="https://example.com/here">here</a> . <b>EI Salvador</b> :  Activity concluded. Vulnerability assessment and maps were produced, finalized and validated by stakeholders in early 2020 (here).  Under this reporting period, an update of the climate scenario component of the vulnerability analysis of the Arenal Monserrat micro-watershed was prepared. Likewise, these analyses were extended to the 3 municipalities that make up the micro-watershed (here), as indicated by recommendation 4.2 of the MTR.	
Output 2.2: Protocols for city- specific EbA interventio ns developed	Q4 2023	Mexico: 75 Jamaica: 40 El Salvador: 80	Mexico: 100 Jamaica: 40 El Salvador: 100	Regional: Under this reporting period, the web platform that included the detailed georeferenced NbS interventions implemented in each city and their respective protocols was updated. Available here.  Mexico: Three additional protocols were produced during this reporting period: Urban Agroforestry (see here) Riparian Restoration (see here) Mountain Agrosilvopastoral Systems (see here)  Previously reported protocols are: Green infrastructure for water infiltration and urban flood control (here) Urban food gardens (here) Rain harvesting systems (here) Edible mushroom plots (here) Edible mushroom plots (here) Urban wetlands restoration (here)  Jamaica: The protocols for reforestation (see here) and wetland rehabilitation (see here) were elaborated and are currently being revised and designed. Other protocols (on urban container gardens, hydroponics) will be elaborated in S2-2023.  El Salvador: Under this reporting period, 3 additional protocols were elaborated (available here):  1. Tree planting of sidewalks 2. Rain garden and 3. Revegetation of roundabouts  Previously reported protocols (designed and under design) are:	S



Outputs 7	Expected completion date 8	Implementation status as of 30 June 2022 (%)	Implementatio n status as of 30 June 2023 (%)	Progress rating justification <sup>9</sup> , description of challenges faced and explanations for any delay	Pro- gress rating
				<ol> <li>Resilient gardens for (a) schools and (b) communities (also available in English),</li> <li>Absorption wells,</li> <li>Rainwater harvesting system for a) schools and b) community (also available in English),</li> <li>Ecological sanitation system,</li> <li>Critical area restoration (also available in English,</li> <li>Coffee nursery,</li> <li>Vegetated infiltration ditches,</li> <li>Fruit tree harvest (also available in English)</li> <li>Coffee plantation restoration, and</li> <li>Riparian forest restoration.</li> </ol>	
Output 2.3: Relevant urban EbA interventio ns demonstra ted in San	Q4 2023	Mexico: 87  Jamaica: 40  El Salvador: 85	Mexico: 100  Jamaica: 95  El Salvador: 100	Land  Under this reporting period, 1000m of infiltrating ditches, revegetation with native species, a green wall to prevent landslides, and actions to enhance hydraulic dynamics of the natural wetland at Molino de San Roque natural protected area were finalized (See the report <a href="here">here</a> ).  Ecological restoration of the Estropajo hill: the maintenance strategy was developed to improve knowledge of family orchard management (See the report <a href="here">here</a> ).	S
Salvador, Kingston and Xalapa at the household, urban landscape and urban catchment				<ul> <li>Water</li> <li>An additional infiltration garden was installed at the architecture faculty of the Universidad Veracruzana (See report here).</li> <li>Infiltration gardens: the maintenance strategy to improve the public space and ensure the sustainability of the interventions by revegetating the gardens was continued, installing urban furniture and trash cans (See the report here).</li> <li>Artificial wetlands: The maintenance strategy to enhance the functionality and demonstrate how to recover substrate capabilities to treat water was implemented (See the report here)</li> <li>Rainwater harvesting systems maintenance programme was also continued (See report here) and two additional rainwater harvesting systems were installed in Xalapa schools during this reporting period (see here), reaching a total of 12.</li> </ul>	
scale using the developed EbA protocols				Previously reported:  Land  Riparian restoration of 3.46 km with 3,706 trees at urban rivers completed under this reporting period (see final report <a href="here">here</a> ). No changes under this reporting period.  Ecological restoration of the Estropajo hill: 4,698 trees and 1,663 aromatic and spicebush species were planted. Family orchards were established with more than 2,000 plants of different species. In addition, 1,638 trees were planted to enrich the native germplasm in a	



Outputs 7	Expected completion date 8	Implementation status as of 30 June 2022 (%)	Implementatio n status as of 30 June 2023 (%)	Progress rating justification <sup>9</sup> , description of challenges faced and explanations for any delay	Pro- gress rating
				successional system, 625 trees in a buffer zone as a result of "a tree per household" initiative, and more than 400m of natural barriers to prevent erosion were installed. For the care of the identified springs, 28 miyawaki modules (pocket forests) were installed. (see final report <a href="here">here</a> ). No changes under this reporting period.	
				<ul> <li>Ten (10) rainwater harvesting systems installed in Xalapa schools was reached during the previous reporting periods (see <a href="here">here</a>).</li> <li>The implementation of an artificial wetland at the Higher Technological Institute of Xalapa was completed. This facility can treat 16,000 litres of grey water every four days. The treated water meets the official standards and requirements for treated water, so it is used to irrigate the soccer field and represents savings of USD 500/month. (see video <a href="here">here</a>). No changes under this reporting period.</li> <li>A set of 4 infiltrating gardens to support flood reduction was completed. The infiltration gardens can infiltrate up to 228mm of rain per hour in each rain event, keeping the streets free from puddles. They also represent a rest space (green waiting room) for more than 5,000 people per month who wait for their sick relatives in front of the hospital. (see final video <a href="here">here</a>). No changes under this reporting period.</li> </ul>	
				Jamaica:	
				<ul> <li>Land</li> <li>In previous reporting period, the Forestry Department, the implementing partner responsible for tree planting, successfully planted over 10,875 seedlings in the upper Hope Watershed and across Kingston (report can be viewed here and here), as follows:         <ul> <li>6,100 mixed seedlings planted within the Hope Watershed (which serves Kingston and St. Andrew), and 2,500 seedlings were planted in the Petersfield Forest, exceeding the 7,500 mixed seedlings target.</li> <li>712 mixed seedlings across 10 sites in urban areas, exceeding the 400 mixed seedlings target.</li> <li>1,563 mixed seedlings in a low-income urban community area (Seaview Gardens Community), within the 2.3 ha rehabilitation target.</li> </ul> </li> </ul>	
				Water  The Forestry Department engaged the Centre for Marine Sciences (CMS) at the University of the West Indies, to carry out <b>wetland rehabilitation</b> within the Port Royal Mangroves. This activity was completed, with the planting of 2,582 seedlings within an area of approximately 2 ha. The rehabilitation exercise also involved restoration of hydrology (water flow) within the mangrove island, by widening existing channels, and the removal of debris. This report can be viewed here.	



Outputs 7	Expected completion date 8	Implementation status as of 30 June 2022 (%)	Implementatio n status as of 30 June 2023 (%)	Progress rating justification <sup>9</sup> , description of challenges faced and explanations for any delay	Pro- gress rating
				<ul> <li>The Jamaica 4-H Clubs have completed the installation of rainwater harvesting systems in schools including the Camperdown High School and the Kingston Technical High School. A rainwater harvesting system is also being installed at the Greenwich Town Community Centre for the use of the community members. 37 persons were trained in the maintenance of RWHS (29 of which are female); and 25 persons were trained in the maintenance of irrigation systems (19 of which are females). A rainwater harvesting and water management system has been installed at the Abilities Foundation. The filtered water is then used on the farm. See report <a href="here">here</a>.</li> </ul> El Salvador:	
l				El Salvador:	
				Land	
				<ul> <li>565 additional hectares were restored within a coffee plantation, including 14,900 additional lineal meters of vegetated infiltration ditches, reaching a new total of 1,161 ha restored and 55,198 lineal meters of ditches (see report here).</li> <li>Other interventions undertaken in the coffee plantations, in current and previous reporting periods, include planting fruit trees for shade, construction of dead barriers (made of stones and sticks) and live barriers (made of special grass), making organic fertilizers and maintenance of the coffee nursery. To showcase the EbA interventions that are implemented in the area, a demonstration plot has been developed in one of the farms. It contains infiltration ditches, living barriers, dead barriers, and cocoa and coffee cultivation. (see here)</li> <li>5,183 lineal meters of riparian forest were restored during the last reporting period. The 4,565 trees planted in 2019 were monitored and a follow-up report was made (here). In addition, a structural connectivity model was developed, for which an urban neighbourhood with a park, green areas and ravine was identified. In this reporting period, 3 roundabouts were revegetated, 3 rain gardens were built and trees were planted with a catchment area of 101.5 m². Because these interventions took place in public spaces, authorization was required from the mayor's office, as well as coordination with the residents (see report here).</li> <li>The restoration of 153 ha of critical ecosystems was completed in this reporting period, having been started in the previous period with the inventory of native species, the collection of seeds, the implementation of the nursery and the identification of the areas to be restored. (see here) The entire buffer zone of the El Boquerón protected area has coffee farms. Therefore, the objective of planting native species, identified by the beneficiaries themselves, was to provide shade for the coffee plantations and to serve as a fence, and the former were planted at distances of 15 to 20</li></ul>	
				Water	
				<ul> <li>16 more absorption wells were built under this reporting period. In total there are 30 wells in operation (see report <a href="here">here</a>). 10 water harvesting systems were built in schools in previous reporting periods.</li> </ul>	



Outputs 7	Expected completion date 8	Implementation status as of 30 June 2022 (%)	Implementatio n status as of 30 June 2023 (%)	Progress rating justification <sup>9</sup> , description of challenges faced and explanations for any delay	Pro- gress rating
				<ul> <li>Two ecological sanitation systems were built in schools in previous reporting period (<a href="here">here</a>).</li> <li>1 water harvesting system was built in a community of 180 families in previous reporting periods (San Isidro in Santa Tecla). (see report <a href="here">here</a>)</li> </ul>	
Output 2.4: Additional climate- resilient livelihoods from EbA promoted through training and demonstra tion in community spaces	Q4 2023	Mexico: 80  Jamaica: 15  El Salvador: 95	Mexico: 100 Jamaica: 60 El Salvador: 100	Mexico:  10 school gardens were implemented under this reporting period in primary schools and schools for children and adolescents with different abilities to provide livelihood alternatives and inclusion for work. This action included the implementation and the provision of a starter kit for the gardens (see report here).  From previous reporting periods:  15 agrosilvopastoral systems (around 1 ha each) for integrated watershed management in the context of climate change were completed, with 16.8 hectares under silvopastoral management. Seven training workshops were organized for ranchers, on the following topics: 1) rational grazing, ii) milpa interspersed with fruit trees, iii) soil and water conservation works, iv) livestock management with an electrified fence, v) Preparation of bio preparations, vi) Ecological planning of the territory, and vii) Dairy quality standards for linking with the market (see final report here). No changes under this reporting period  Installation of the 10 plots of edible mushroom production at the peri-urban area of Xalapa was finished in early 2020 (here),  Jamaica:  Activity progress under this reporting period includes:  949 mixed seedlings planted (including 180 fruit trees) across six (6) schools in urban areas and other community spaces within the project site, with the support of the Forestry Department. They will serve as a potential livelihood opportunity for community members, who may be able to sell the fruits once the trees mature.  In addition, a beekeeping initiative was started, as a form of alternative livelihoods, in urban and peri-urban spaces in and around Kingston. Training under this initiative will begin in January 2023 for the selected participants. 219 bee colonies have been distributed to beneficiaries to date. 25 persons were also trained in beekeeping, 14 of which are females.  The Jamaica 4-H Clubs carried out visits to schools and community spaces in order to select interventions to be piloted at various locations. Construction commenced in Novemb	S



Outputs 7	Expected completion date 8	Implementation status as of 30 June 2022 (%)	Implementatio n status as of 30 June 2023 (%)	Progress rating justification <sup>9</sup> , description of challenges faced and explanations for any delay	Pro- gress rating
				El Salvador:  The activity was concluded under previous reporting periods.  The 5 schools where 5 urban gardens were implemented in 2019 were visited in 2022, and a follow-up report was produced (here). During this period, 4 of these schools had their cultivation spaces reconditioned and seeds were delivered for the reactivation of the urban gardens, in those where they again committed to follow-up. In the other 5 selected schools, the urban gardens implementation start-up kits were delivered, also in 2022. In total, there are 11 urban gardens and start-up kits in place: 10 in schools (here) and 1 in a community (here).  Another intervention was the implementation of a coffee-cocoa association in the El Espino cooperative in previous reporting periods, as an example of the implementation of the benefits-sharing strategy developed. Furthermore, 1,647 square meters with 489 fruit trees were planted in 3 urban communities and 3 coffee plantations. These sites were visited in 2022 to produce the follow-up report (here).  Although it is not an EbA intervention, a solid waste diagnosis and a management proposal were developed in previous reporting periods in the same community where the community WHS was built (San Isidro in Santa Tecla). The objective of this activity was to respond to the waste management problem, because the population links urban flooding with poor waste management (see here).	
Outcome 3:	Knowledge of	urban EbA interv	l entions strengthe	lened in El Salvador, Jamaica and Mexico as well as throughout the LAC region	
Output 3.1: Communic ation strategies developed	Q2 2023	Mexico: 90 Jamaica: 15 El Salvador: 60	Mexico: 100  Jamaica: 100  El Salvador: 100	A <b>regional</b> communication strategy is being implemented since 2019, with the project logo, website and identity manual (accessible <a href="https://example.com/here">here</a> ), and a standardized brand book ( <a href="https://example.com/see-here">see here</a> ).  A new version of the CityAdapt platform was launched in December 2023 (see event <a href="here">here</a> ), to combine results from the Nature4Cities project and include new products, features and tools.  During this reporting period, there were 18,937 new users accessing the website and 44,918 recurrent ones.	S
to collate and disseminat e knowledge on urban EbA				Mexico: A compilation of local (report <a href="here">here</a> ) and regional communication (report <a href="here">here</a> ) was developed to identify lessons learned and recommendations to improve the communication strategies in future projects.  As part of the communication strategy, outreach materials were advertised on social networks, and media monitoring of the journalistic notes that mention the project's interventions and results (see example <a href="here">here</a> ) and publications was carried out, as well as appearances on radio (hear program <a href="here">here</a> ) and television (see report <a href="here">here</a> ).	
				In previous reporting periods, a communication strategy was established for artificial wetland ( <a href="https://example.com/here">here</a> ), infiltration gardens ( <a href="https://example.com/here">here</a> ), agrosilvopastoral systems ( <a href="https://example.com/here">here</a> ), agrosilvopastoral systems ( <a href="https://example.com/here">here</a> ), and <a href="https://example.com/here">h</a>	



Outputs 7	Expected completion date 8	Implementation status as of 30 June 2022 (%)	Implementatio n status as of 30 June 2023 (%)	Progress rating justification <sup>9</sup> , description of challenges faced and explanations for any delay	Pro- gress rating
				dissemination work (CityAdapt webpage hosted within the Municipalities' website (see <a href="here">here</a> ) and other social media campaign examples <a href="here">here</a> ).  Jamaica: In this reporting period, the communication strategy was elaborated by a Communications Specialist (see <a href="here">here</a> ). Another communications specialist had previously been engaged under the Jamaica 4-H Clubs, however they terminated their contract as they were unable to carry out the required tasks. One of the still-expected outputs is a set of recommendations for communication strategy of the Ministry of Economic Growth and Job Creation's Climate Change Division.  El Salvador: In previous reporting period, a national communication strategy was developed and finalized. See the report results to date <a href="here">(here)</a> )	
Output 3.2: Public awareness communic ation materials developed and shared with	Q4 2023	Mexico: 91 Jamaica: 10 El Salvador: 45	Mexico: 98  Jamaica: 15  El Salvador: 100	Regional: Under this reporting period, the regional coordination team participated in the organization of:  • A side-event of the COP27, in collaboration with the Euroclima+ pavilion. The event, focusing on local financing for adaptation, was organized in coordination with ICLEI LAC. The session aimed at discussing the political, institutional and economic factors necessary to mobilize financing for adaptation at different levels of governance, with a focus on local governments. The event identified funding gaps, shared experiences of creating enabling conditions for resource mobilization in LAC and highlighted innovative mechanisms for financing urban adaptation and scaling up Nature-based Solutions.	S
decision- makers, community members and identified stakeholde rs				<ul> <li>CityAdapt organized a side-event webinar in the framework of COP26 with the support of the EU programme Euroclima+ and the government of Panamá on NbS for urban areas in Latin America and the Caribbean (see recording here)</li> <li>4 interviews were prepared with local beneficiaries from the project to showcase lessons learnt from the project. The four interviews are available here.</li> <li>CityAdapt was included as a case study in the Panorama publication – SOLUTIONS IN FOCUS - Key Themes for Ecosystem-based Adaptation (here) and in the Urban Nature Atlas, by Naturvation and The British Academy (here).</li> </ul>	
				Mexico: Under this reporting period,  The communication strategy included radio shows with secretary of education (Radio show 1 here and 2 here)  A case study video of the Xalapa water paradox developed together with the Nairobi Communications unit (see video here)	



Outputs 7	Expected completion date 8	Implementation status as of 30 June 2022 (%)	Implementatio n status as of 30 June 2023 (%)	Progress rating justification <sup>9</sup> , description of challenges faced and explanations for any delay	Pro- gress rating
			(%)	Previously reported materials include:  Isabel García interview, here Sergio Angon interview, here Compost guide (see here) Aromatic and medicinal plants guide (see here) Food and flowers guide (see here) Food and flowers guide (see here) Food and green Leafs (see here) Food and green Leafs (see here) Food and roots (see here) Waste reduction guide (see here) Waste separation and disposal guide (see here) School garden care guide (see here) A technical video for designing agroforestry and ecological restoration measures (see here) A technical video on techniques for agroforestry (here) Climate change communication colloquium with students (see here) Infiltration gardens brief animation (video, here) Infiltration gardens brief animation (video, here) Antificial wetlands animation (see here) Animation on the importance of collaboration for climate mobilization (see here) Tv Programs (here) Educational toolkits streaming (here) Tv reports (here and here) Beneficiary reports (here) Beneficiary reports (here) Estropajo hill restoration video (see here) Story Map on rain harvesting systems: the case of Xalapa City (see here) Video of urban restoration (see here) Riparian restoration implementation process video (see here) Set of 16 didactic games for basic school climate change training (here) Climate change communication colloquium with students (here)  Jamaica: The local coordinating team participated and presented at the Caribbean Sustainable Cities	
				Conference, held in Montego Bay Jamaica, in November 2022. At this conference, the work being done under CityAdapt both locally and regionally was presented, and contact was made with organizations for possible replication or expansion of activities. See conference report here.	



Outputs 7	Expected completion date 8	Implementation status as of 30 June 2022 (%)	Implementatio n status as of 30 June 2023 (%)	Progress rating justification <sup>9</sup> , description of challenges faced and explanations for any delay	Pro- gress rating
				El Salvador: In this period:  • A set of 7 methodological videos about restoration of critical area, biogardening, cocoa farming, coffee restoration, resilient gardens, water harvesting systems and absorption wells (see here).  • A set of 7 final videos about lessons learnt and results of CityAdapt project in El Salvador: a long video and segmented into 6 short videos (see here).  • 2 interviews with the main beneficiaries (see here).  • 2 interviews with the main beneficiaries (see here).  • A ninterview of Luis Roberto Hernández and Leyla Zelaya in Brújula Sonora podcast (here).  • A poster about CityAdapt project in San Salvador (here).  • Participation in the International symposium Metropolis for governance San Salvador, El Salvador, organized by Planning Office of Metropolitan Area of San Salvador (May 19th, 2023)  In previous reporting periods, other videos, communication tools and promotional materials and activities about the project were produced:  — An interview about migration and climate change for Caminos - an audiovisual magazine run by IOM.  — An interview of one of the beneficiaries of the project, the coffee producer Hector Velasquez, from the BBC (here)  — An interview about women and climate change in the TV Program De mujer a mujer, Channel 33.  Inclusion of CityAdapt in the Global Repository of Good practices, elaborated by Internal Displacement Monitoring Center (IDMC) (here).  — An article in 1st Edition of Revista de Sostenibilidad empresarial by Fundación Empresarial para la Acción Social (FUNDEMAS) (here)  — Participation in the International symposium Metropolitan Area of San Salvador, June 16th, 2022)  — Participation in the International symposium Metropolitan Area of San Salvador (June 16th, 2022)  — Participation in the Arboriculture symposium, organized by AES - energy distribution company of El Salvador (June 23rd, 2022).  — Evening meeting for celebrating World Environment Day, organized by Salvadoran association of engineers and architects, June 23rd, 2022.  — A video about v	



Outputs 7	Expected completion date 8	Implementation status as of 30 June 2022 (%)	Implementatio n status as of 30 June 2023 (%)	Progress rating justification <sup>9</sup> , description of challenges faced and explanations for any delay	Pro- gress rating
				In previous reporting period, a 1-min video on the interventions in San Salvador, showing the benefits of being "a sponge city" produced in 2020 (available in <a href="English">English</a> and in <a href="Spanish">Spanish</a> ) was included among the material for module 3 of the online course Nature-based Solutions for Disaster and Climate Resilience, organized by the UNEP and the Partnership for Environment and Disaster Risk Reduction (PEDRR) with support from the European Union, in collaboration with the SDG Academy and the EdX Platform.  Plot signs and labels were added along the path of a demonstration plot located in a park within one of the participating farms to raise awareness on the EbA interventions; videos on the project were developed explaining EbA interventions in San Salvador, on community garden, on the impact of extreme climate events (mainly storms Amanda and Cristobal) and on the field visit of officials from municipalities and Ministry of the Environment to the demonstration plot and community garden.	
Output 3.3: A long-term research program establishe d on the benefits and cost- effectivene ss of urban EbA interventio ns in the three pilot cities	Q4 2022	Mexico: 95 Jamaica: 10 El Salvador: 75	Mexico: 100  Jamaica: 30  El Salvador: 100	<ul> <li>Long-term research programs with academic institutions:</li> <li>Mexico:         <ul> <li>Under this reporting period:</li> <li>Master's research titled: "Nature-based solutions as a strategy to reduce climate vulnerability in urban areas of Mexico: the case of the CityAdapt project" (see here)</li> <li>Master's research titled: "Situational diagnosis of the green infrastructure in the primary roads of Xalapa" (see here)</li> <li>Doctoral research titled: "Human settlements and protected natural areas: challenges around the objectives of sustainable development" (see here)</li> </ul> </li> <li>Previously reported papers include:         <ul> <li>Bulletin: "Nature-based Solutions to face climate change in cities" published in Mexican scientific society of ecology (see here).</li> <li>Scientific report: "Adaptation to climate change in coffee cultivation, best agricultural practices" (here)</li> <li>A scientific paper "Institutional capacity for adaptation to climate change in three cities in Latin America and the Caribbean" submitted to the Society and Region Journal of the Sonora college (see full text here).</li> <li>A scientific paper "Entry points for the adoption of the ecosystem-based approach to adaptation to climate change (EbA) in urban planning in the city of Xalapa" was published in the Environment and Urbanization journal (see here).</li> </ul> </li> <li>Jamaica:</li> </ul>	S
				Jamaica: In the previous period contact was made with three (3) major universities in Jamaica to establish a research programme, or support existing research with applications for Urban EbA. Based on the	



Outputs 7	Expected completion date 8	Implementation status as of 30 June 2022 (%)	Implementatio n status as of 30 June 2023 (%)	Progress rating justification <sup>9</sup> , description of challenges faced and explanations for any delay	Pro- gress rating
				review of proposals, the University of the West Indies, Mona was selected for support. Three research topics will be supported by the project:  - Assessment of Ecosystem Services in a Jamaican Special Fishery Conservation Area - Assessment of tourism earnings from Jamaican coral reefs and the potential for a sustainable Jamaican blue economy - Growth of mangrove seedlings in Sargassum compost (SC) generated from floating, recently beached (gold) and beach dried (dark brown) sargassum.  An MoU has been drafted by the project partner (4-H Clubs) and is with the University of the West Indies for signing.	
				El Salvador:  A long-term research program has been elaborated (see program here), considering the research carried out and establishing new collaborations with other institutions that will continue on the same topics. Three collaboration agreements have been signed: the first with the Faculty of Agricultural Sciences of the University of El Salvador (UES) (signed in October 2019), the second with the Department of Energy and Fluid Sciences of José Simeón Cañas Central American University (UCA) (signed in February 2022), and the third with the Master's degree in water resources from the University of El Salvador (UES) (signed in July 2022).	
				<ul> <li>The following research were carried out in this period, under the UCA agreement:</li> <li>Analysis of rain information collected in the period 2018-2022 in a group of stations located in San Salvador (see report here)</li> <li>Survey of qualitative analysis of water harvesting systems (WHS) (see report here)</li> <li>Simulation of Parque Bicentenario and development of an environmental educational tool using Minecraft (see a summary here)</li> <li>Demonstration project for rainwater harvesting. Elaboration of proposal and evaluation of sites to carry it out (see report here)</li> </ul>	
				With the Master's degree in water resources of UES, to measure the impact of EbA interventions in the Arenal Monserrat micro-watershed, three research projects were started during this period:  • Forest cover assessment - measurement of surface runoff and interception  • Measurement of soil erosion and infiltration  • Water quality monitoring of rainwater harvesting systems and biogardeners.  These will be finalized even when the project has closed.	
				In previous reporting periods, three research reports have been finished within the first collaboration agreement with UES:  • Characterization, ecosystem services of trees and general guidelines for tree planting on sidewalks in the city of San Salvador (see final report here)	



Outputs 7	Expected completion date 8	Implementation status as of 30 June 2022 (%)	Implementatio n status as of 30 June 2023 (%)	Progress rating justification <sup>9</sup> , description of challenges faced and explanations for any delay	Pro- gress rating
				<ul> <li>Composition, structure and ecosystem services of the trees in the recovery area, Parque Bicentenario-Los Pericos, using the i-tree program (made with support of private sector) (here)</li> <li>Determination of the composition, structure and ecosystem services of trees in Maquilishuat Park, San Salvador) (see report here).</li> </ul>	
				In previous reporting period, UCA has finished one research:  - Proposal for the management of sediments affecting the absorption wells located in the El Espino cooperative in San Salvador (see report <a href="here">here</a> )	
				Monitoring and Evaluation plans:	
				Mexico: In the case of the interventions at Xalapa city, each activity carried out has its monitoring and evaluation framework. Indicators such as the plant take-off rate, the amount of sediment retained, and even the social involvement in the measures are evaluated. The project has prioritized participatory processes in the M&E framework build-up as a strategy of capacity building, also fostering the local authorities' and Civil Society Organizations' (CSOs) engagement.  As recommended by the MTR (recommendation 7), a final M&E framework was concluded (here), as well as an information collection instruments annex (here).  See domestic rainwater harvesting systems M&E draft report (here). An M&E campaign was developed under this reporting period for the 85 domestic rainwater harvesting systems installed with donations from the Gonzalo Río Arronte Foundation and Global Environment and Technology Foundation (GETF), including water quality, economical and social appropriation indicators (see framework here and information collection instruments annex here)	
				Jamaica: An M&E plan and theory of change was developed in this reporting period by the previous M&E Specialist. Another M&E Specialist is being engaged to continue project monitoring. The plan can be seen <a href="here">here</a> .	
				<ul> <li>El Salvador: For each of the EbA measures, the impact indicators to be monitored were established in previous reporting periods (see the protocols): <ul> <li>For EbA interventions in coffee plantations, an experimental zone has been established that measures the amount of sedimentation in 3 areas: one without measures, another with infiltration ditches and the last with live barriers. This is a process that will be monitored and measured until the end of the project (see <a href="here">here</a>). Small hydrometeorological stations were also installed to have data within the area of influence (see <a href="here">here</a>).</li> <li>Infiltration measurements have been carried out in the infiltration ditches <a href="here">(here)</a> and in the absorption wells (<a href="here">(here)</a> to establish the potential amount of water that infiltrates. This monitoring</li> </ul> </li> </ul>	



Outputs 7	Expected completion date 8	Implementation status as of 30 June 2022 (%)	Implementatio n status as of 30 June 2023 (%)	Progress rating justification <sup>9</sup> , description of challenges faced and explanations for any delay	Pro- gress rating
				<ul> <li>serves to track impact indicators, and to make improvements to the design of interventions to ensure greater efficiency. A study will begin to measure the efficiency of these wells.</li> <li>On the water harvesting systems and ecological sanitation systems, the water quality tests have been undertaken, to guarantee sufficient quality of water for human consumption (here).</li> <li>In addition, a methodology was demonstrated to communities that determines air quality with the visualization of lichens in the trees.</li> </ul>	
Output 3.4: Educationa I toolkits detailing lessons learned and good EbA practices developed and shared with local, sub- national and regional authorities	Q4 2023	Mexico: 85  Jamaica: 0  El Salvador: 80	Mexico: 100  Jamaica: 0  El Salvador: 100	Regional: Gathering results from the previously reported online course on NbS "Climate action and financing in cities: Nature-based solutions as a mechanism for adaptation in Latin America and the Caribbean" and CityAdapt's experience, a publication on NbS in urban areas was finalized under this reporting period (see here). Its translation and graphic design are currently undergoing, as well as the final revision of the publishing board. The official launch is expected in September 2023.  Mexico: With the materials developed under output 3.2 and within the framework of the strategy for disseminating climate change adaptation actions, awareness workshops were held during this reporting period with students, parents, and key stakeholders in the education sector on agroecology and adaptation to climate change, training more than 500 people, of which 274 were women.  The previously reported play-based climate change learning toolkit (see here) was launched nationwide by using the SEMARNAT streaming platform (see video here), and will continue to be disseminated together with CONABIO.  Jamaica: In Jamaica, a consultant has been engaged to develop the toolkits. An inception report has been received and accepted and the focus group consultations commenced in June 2023. The inception report can be seen here.  El Salvador: Minecraft, a popular game among young people and children, has been adapted with information from the Bicentenario park, an urban protected natural area, for the application of NbS measures that will be launched soon.  Previously reported:  A technical waste management guide was produced in June 2020 (see here).  Two toolkits: a popular version of the waste management guide for children (here) and an urban garden manual (here) were elaborated.	S



Outputs 7	Expected completion date 8	Implementation status as of 30 June 2022 (%)	Implementatio n status as of 30 June 2023 (%)	Progress rating justification <sup>9</sup> , description of challenges faced and explanations for any delay	Pro- gress rating
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	Q4 2023	Mexico: 95 Jamaica: 20 El Salvador: 55	Mexico: 100  Jamaica: 20  El Salvador: 100	• The platform has new tabs, such as the <u>urban carbon footprint one</u> , one on <u>calls</u> for opportunities, and one compiling the trimestral <u>newsletters</u> . It is expected that a Massive Open Online Course, a Community of Practice and a private sector engagement tab will be added during the next reporting period. 24 new videos and 14 live events were uploaded during this reporting period. The <u>Youtube account</u> , where all videos and webinars are uploaded, reached 525 new subscribers (total of 1,067), with more than 17,073 new views (36,073 total views).  • A second three-day online workshop Adaptation Action Days II was held in October 2022 (see <u>Report</u> ). These workshops aimed at (i) Promoting spaces for learning, exchange of experiences and opportunities for collaboration on adaptation in the LAC region; (ii) Positioning the potential of Nature-Based Solutions for climate resilience in the region and exploring opportunities to scale up their ambition in both national and sub-national policy, as well as in public and private finance; (iii) Promoting the exchange of lessons learned, good practices and collective strategies to increase and improve private sector engagement in adaptation; and (iv) Generating spaces for constructive dialogue on the vision and objectives of adaptation from the region in view of the agreements to be reached at COP27.  • The Adaptation Action Week, a face-to-face workshop, was held in Panama in May 2023 (report available here). The main objective of the AAW was to generate a space for learning and exchange among adaptation experts in the region and to strengthen capacities on innovative approaches in the design, financing and implementation of Ecosystem-based Adaptation (EbA). During this week, the results achieved to date in the different adaptation initiatives in the region were presented, lessons learned were shared and Opportunities, on February 17th 2022 (see here)  • CityAdapt in Asia and LAC. Knowledge sharing webinar, August 11th, 2021  • Side event at COP 26, November 2 <sup>nd</sup> ,	HS
				Under this reporting period the CityAdapt Mexican team participated in:	



Outputs 7	Expected completion date 8	Implementation status as of 30 June 2022 (%)	Implementatio n status as of 30 June 2023 (%)	Progress rating justification <sup>9</sup> , description of challenges faced and explanations for any delay	Pro- gress rating
				<ul> <li>International forum on urban forests, organized by FAO, where we present the findings on urban green infrastructure and ecosystem services it provides to the city (see report here) with the participation of about 120 persons, where 63 were women.</li> <li>National Forum on Vulnerability to Climate Change organized by SEMARNAT and INECC, where we present the lessons learned about nature-based solutions implemented in urban contexts and support the facilitation of workshops to identify vulnerability to climate change with the participation of representatives and civil society from more than ten states in the central zone of the country (See report here). With the participation of 500 people where 206 were women.</li> <li>State Forum for integrated watershed management and adaptation to climate change in the center of Veracruz: experiences and challenges, where we present the decision-making tools for local governments and some of the results of the project in the management of water resources and the watershed conservation (see report here) whit the participation of 100 people where 63 were women.</li> <li>In previous reporting periods, the CityAdapt project in Xalapa participated in:         <ul> <li>An online seminar called the Nature-Based Solutions Accelerator launched in conjunction with WRI, WWF, and the Mexican Climate Community (divided in 6 monthly modules) to build capacity in subnational governments (see module 1 video here, materials of module 2 here and module 3 here, module 4 here, module 5 here, module 6 here)</li> <li>The training course for the Costa Rica National Adaptation Plan initiative (see video here).</li> <li>The Third National Meeting for Sustainable Development ENADES 2020 (see the presentation here)</li> <li>The G20 Resilient, Smart and Sustainable Cities webinar "The power of Nature-based Solutions" in April 2021 (see note here)</li> <li>A meeting with the CONAGUA (National Water Authority) on NbS for</li></ul></li></ul>	
				El Salvador:	



Outputs 7	Expected completion date 8	Implementation status as of 30 June 2022 (%)	Implementatio n status as of 30 June 2023 (%)	Progress rating justification <sup>9</sup> , description of challenges faced and explanations for any delay	Pro- gress rating
				<ul> <li>Under this report period, the CityAdapt El Salvador team participated in the following webinars: <ul> <li>NbS initiatives with a watershed approach in Water Integrated Management course, organized by FUNCAGUA (September, 2022).</li> <li>Multifunctional design of NbS in Mainstreaming NbS in urban planning (November, 2022).</li> <li>Gobeshona Global Conference, organized by International Center for Climate Change and Development (March, 2023). CityAdapt El Salvador was represented by Héctor Velásquez, a Salvadoran coffee farmer.</li> <li>NbS, gender and adaptation to climate change, organized by IFAD (April, 2023).</li> </ul> </li> <li>In previous reporting periods, the CityAdapt San Salvador project participated in the following webinars: <ul> <li>San Salvador city adaptation: sponge city, using nature to fight floods, in World Forestry Congress, organized by FAO and UNEP, Korea, May 2<sup>nd</sup>, 2022.</li> <li>Floods and resilient cities. Building NbS, organized by Catholic University of Chile, on October 13<sup>th</sup>, 2021.</li> <li>Matching characteristics of Social EbA. Principles and criteria. Organized by IUCN, on October 28th, 2021.</li> <li>An interview about Climate Change in Central America, organized by La Voz de América - Washington D.C., on September 17<sup>th</sup>, 2021.</li> <li>Ecosystem restoration in Costa Rica, organized by MINAE on June 4<sup>th</sup>, 2021.</li> <li>Let's talk about water: El Salvador, first sponge city in Central America, organized by FuncaGua from Guatemala, on April 22<sup>nd</sup>, 2021.</li> <li>Experiences in adaptation to climate change, organized by Environmental Engineering Students Association of the Technological Institute of Costa Rica, November 6<sup>th</sup>, 2020.</li> <li>Event for the 2020 Cities Day (see webinar video).</li> </ul> </li> </ul>	



# 4. Risk Rating

# 4.1 Table A. Project management Risk

Please refer to the **Risk Help Sheet** for more details on rating.

Risk Factor	EA's Rating	TM's Rating
Management structure – Roles and responsibilities	M	M
2. Governance structure – Oversight	L	L
3. Implementation schedule	M	M
4. Budget	L	L
5. Financial Management	L	L
6. Reporting	L	L
7. Capacity to deliver	M	M

### 4.2 Table B. Risk-Log

	Risk affecting:		Variation respect to last rating							
Risk	Outcome / outputs	CEO ED	PIR 1	PIR 2	PIR 3		PIR 5	PIR 6	Δ	Justification
1. National Coordinators and stakeholders at the national level have a limited overview of the overarching project objectives because of the project's multi-faceted, multi-country nature.	All outcomes & outputs	М	N/A	М	М	L	L	L	=	Exchange calls are regularly organized between the national teams – both programmatic calls to discuss the project's objectives and workplan, and thematic calls to discuss specific topics (Monitoring and Evaluation, Cost Benefit Analysis, etc.). This provides a dialogue space between the different teams and consolidates the regional rationale of the project.
Poor coordination among project stakeholders because of language and geographical barriers.	All outcomes & outputs	М	N/A	М	М	L	L	L	=	Formal and informal communication and reporting functions between national and regional committees are undertaken in both English and Spanish. The online web platform continues to serve as a key tool to share knowledge and experiences beyond project implementation.



	Risk affecting:		Varia	ation	respe	ect to	last r	ating				
Risk	Outcome	CEO	PIR	PIR	PIR	PIR	PIR	PIR		Justification		
	/ outputs	ED	1	2	3	4	5	6	Δ			
3. Natural disasters undermine the implementation of the EbA interventions (leading to economic loss and/or damage to the interventions).	Outcome 2	Н	N/A	N/A	М	ML	М	М	=	Landslides occurred in San Salvador in October and November 2020 but have not had direct impact on the project interventions. In 2021, new records of rainfall were reached in San Salvador (4mm/min), causing flooding, damages and economic losses in the city, but not directly to the project interventions. In Xalapa, in August 2021, hurricane Grace caused flooding and landslides, but did not have a direct impact on the project interventions.  In this reporting period, the late start of the rainy season in El Salvador delayed the reforestation period and affected the growth of the plants. Project activities were adjusted, and areas to be restored were prioritized.  Reduced rainfall in Jamaica resulted in increased mortality of plants planted in urban spaces. It also necessitated additional maintenance.		
4. Limited inter-sectoral data sharing.	All outcomes & outputs	М	N/A	L	L	L	L	L	=	The use of open data is being maximized to minimize problems with data sharing.		
5. High turnover of staff in implementing agencies (leading to reduced institutional memory resulting in disruptions or delays in project implementation and coordination).	All outcomes & outputs	Н	N/A	N/A	М	S	S	S	=	The presidential and municipal elections in El Salvador and in Mexico led to several staff changes in previous reporting periods, leading to a certain delay in implementation and loss of capacity and ownership of the issues.  Despite the constant turnover in Mexico, all the activities of the project were completed in this reporting period. In Jamaica, the turnover in the Climate Change Division left a gap in the national adaptation lead and resulted in very limited governmental support in project activities. This hindered the engagement of other government officials in project trainings, the outreach to municipal or local authorities, and the institutionalization of urban NbS in policy planning. Support was sought from other agencies, such as the National Environmental and Planning Agency who are part of the Technical Committee or the Forestry Department, an Agency of the Government that assisted with implementing some project interventions, but the lack of engagement from CCD remains a challenge. The		



Risk	Risk affecting:						last r	ating		Justification
NISK	Outcome / outputs	CEO ED	PIR 1	PIR 2	PIR 3	PIR 4	PIR 5	PIR 6	Δ	Justinication
										situation is similar with regard to Kingston and St Andrew's municipal staff.  Turnover in implementing partner's staff, especially in FUNDASAL (El Salvador) and TNC and 4H Clubs (Jamaica) also hindered ownership and delayed the finalization of project activities. All partners put in place mechanisms and mobilized other staff to ensure completion of products. Some activities' scope was however changed to reinforce capacity building and knowledge management and ensure the EbA interventions are properly implemented, monitored and produce expected and measurable impact.
6. Government will have insufficient funds to sustain the local structures <sup>10</sup> , once the project ends (leading to limited upscaling of the urban EbA interventions).		M	N/A	N/A	М	ML	М	М	=	In Mexico, an exit strategy was developed that has managed to identify and direct funds for the continuity of the monitoring and evaluation process, as well as funds to scale up the project, see document <a href="https://www.here.">here</a> . This complements the previously reported additional funding leveraged for the installation of rainwater harvesting systems, and the development of a 2% voluntary contribution from the water bills to ensure maintenance and monitoring of the sites. The risk remains the same considering the mechanism is currently halted with the change of local governments.  In El Salvador, the risk also remains the same, with limited Ministry of Environment's budget that diminishes its follow-up capacity.  In Jamaica, the Forestry Department had committed some of its own funding for maintenance of project sites for some years. The partnership with 4H Clubs also implies that the "club" network will continue to support certain beneficiaries (especially schools) beyond project implementation.
7. The implementation of the EbA interventions is undermined by social unrest	Outcome 2	М	N/A	N/A	L	L	М	L	$\downarrow$	Municipal elections in 2021 in El Salvador and Mexico resulted in changes in local and national governments in

<sup>10</sup> Local structures include for example the research programmes and EbA projects to be implemented under the existing climate change units/committees.



	Risk affecting:		Varia	ation	respe	ect to	last r	ating		
Risk	Outcome	CEO	PIR	PIR	PIR	PIR	PIR	PIR		Justification
	/ outputs	ED	1	2	3	4	5	6	Δ	
within the target communities (leading to delays in project activities).										both cases. In El Salvador in particular, political change was followed by violent outbreaks and political tensions that slowed the implementation of certain activities by the implementing partners in 2021, but the situation has settled down since and no major violent outbreak is to be reported.  With the finalization of interventions in Mexico and El Salvador, the risk has diminished.  In Jamaica, several interventions are implemented in low-income communities and Kingston is generally affected by security issues. There have been thefts of equipment and materials at some intervention sites, specially at Tivoli High School, which was reported by the project partner as a commonly faced challenge in the area that did not target CityAdapt or the intervention specifically. This resulted in a delay of implementation and change of intervention location for the hydroponics due to the limited accountability from the school directorate. The implementation will take place in the Abilities Foundation.
8. Unsustainable land and natural resource use (leading to further degradation of ecosystems).	All outcomes & outputs	Н	N/A	N/A	М	ML	М	M	=	Unsustainable use of natural resources, especially wateruse planning without NbS focus, continues despite the project work and presents a risk to ecosystem services.  On a positive note, in Mexico, the water commission of Xalapa City signed an agreement to conserve 1,564 hectares of forest that provides water to the city. This agreement ensures the payment for ecosystem services until 2028.  In El Salvador, the close work with the OPAMSS (Planning Organization for the Metropolitan Area of San Salvador) has led to the mainstreaming of NbS in urban planning, as well as the drafting of specific plans for 4 of these municipalities, expecting that these results can diminish land and natural resources degradation on the long term.



	Risk affecting:		Varia	ation	respe	ect to	n respect to last rating			
Risk	Outcome / outputs	CEO ED	PIR 1	PIR 2	PIR 3	PIR 4	PIR 5	PIR 6	Δ	Justification
9. Local zoning and land use plans compete with EbA interventions (undermining their efficacy).	All outcomes & outputs	Н	N/A	N/A	M	L	L	L	=	National Steering Committees include municipal representative, and consultation processes conducted for the elaboration of the vulnerability assessments ensure coordination with authorities. EbA interventions are being mainstreamed into urban development planning to avoid competition with other land use plans.
10. Large-scale infrastructure development in the cities during implementation	All outcomes & outputs	М	N/A	N/A	L	L	L	L	=	Demonstration of EbA activities' benefits and co-benefits allows to limit possible large-scale grey infrastructure impact on the project, as was the case in San Salvador with the Amanda and Cristobal storm and their related impacts. In the long-run, the 2% voluntary contribution from the water bills in Xalapa also intends to diminish the investment in large-scale grey infrastructure, through the insights provided by the new commission and the interventions to be undertaken at the watershed-level to conserve the ecosystems and the water provision.
11. Potentially significant delays in the implementation of certain project activities can be expected due to COVID-19 related restrictions on travel, social distancing / quarantine requirements, unavailability of partners and stakeholders, and delays in administrative (including procurement and permit/authorization) processes due to prioritization of COVID-19 response by the government and stakeholders.	All outcomes & outputs	N/A	N/A	N/A	М	М	М	L	<b>↓</b>	Under this reporting period, most countries went back to a "business as usual scenario", with limited impact from COVID-19 to report on since 2022. Most schools have reopened for local activities, and some hybrid modalities are still in place when needed.  Rescheduling of project activities thanks to the second nocost extension has permitted to adapt project implementation schedule to these previous impacts.
12. There are large variations in capacity and engagement between the three countries / cities, which is reflected in different levels of progress between the three cities, and is likely to result in different levels of target achievement and quality.	All outcomes & outputs	N/A	N/A	N/A	М	М	М	М	=	Mexico and El Salvador have completed project implementation at this point, whereas Jamaica still has several project activities pending until end of 2023. Several activities had to be adjusted in Jamaica, with a decrease in target achievement and quality, in order to finalize the project by December 2023. Higher emphasis is given to knowledge management and capacity building activities rather than EbA interventions.
13. Administrative delays with legal agreements, registration of partners and long delays in processing payments to partners	All outcomes & outputs	N/A	N/A	N/A	М	М	L	L	=	At the UNEP regional office (EA), new administrative assistants were hired to support the team under previous reporting periods, in line with recommendation 10 of the



	Risk affecting:		Varia	ation	respe	ect to	last r	ating		
Risk	Outcome / outputs	CEO ED	PIR 1	PIR 2	PIR 3		PIR 5	PIR 6	Δ	Justification
										MTR. No major delays have been reported during the current reporting period, but the issue remains a high priority for the coordination team.
14. The overarching project approaches are not fully understood or internalized by national or local stakeholders		N/A	N/A	N/A	N/A	N/A	L	L	=	Due to the multi-country nature of the project and management of complex concepts of adaptation to climate change, limited understanding of the overall project focus can limit ownership and sustainability of the project interventions.  This challenge was partially mitigated in San Salvador and Xalapa through substantial increase in the level of coordination among institutions, data sharing and understanding of the concept of EbA. In Kingston, the project developed several trainings for different beneficiaries, targeting both decision-makers through TNC's scope of work, as well as academia, schools and direct beneficiaries under 4H Clubs' work. Capacity building on the role of EbA in adaptation in cities and learning-by-doing exercises are integral approaches in project implementation. The regional coordination team is also supporting extensive knowledge- and experience-sharing between the cities to help overcome the challenges encountered.
Consolidated project risk		N/A	М	М	М	М	М	М	=	

# 4.3. Table C. Outstanding Moderate, Significant, and High risks

	Actions decided during the		Additional mitigation measures for the next periods				
	previous reporting instance	reporting period	What	When	By whom		
	(PIR <sub>t-1</sub> , MTR, etc.)						
<ol><li>Natural disasters</li></ol>	Monitoring of extreme climate events	The reduced rainfall and drought situation	All restoration and reforestation	N/A			
undermine the	will continue and information will be	in El Salvador and Jamaica in particular	activities are finalized in all				
implementation of the	compared to the vulnerability	affected restoration and planting activities.	three countries, and therefore				
EbA interventions	assessments, to increase awareness	In the case of El Salvador, a no-cost	no additional measures are				
(leading to economic	of this tool with decision-makers.	extension had to be signed with	required.				
loss and/or damage to		PROCOMES to ensure proper finalization	In Mexico, see the exit strategy				
the interventions).		of activities, while in Jamaica, the Forestry	here with the list of the				



	Actions decided during the Actions effectively undertaken		Additional mitigation meas	ures for the nex	t periods
Risk	previous reporting instance (PIR <sub>t-1</sub> , MTR, etc.)	reporting period	What	When	By whom
	If necessary, alternative locations or measures will be assessed for implemented EbA interventions.	Department committed funding for additional planting and maintenance.	institutions in charge of the maintenance of the project's restoration and reforestation activities.  In Jamaica, the Forestry Department is in charge of the maintenance of the project's restoration/reforestation activities.  In El Salvador, PROCOMES and the coffee cooperatives will provide continuity to these activities.		
5. High turnover of staff in implementing agencies (leading to reduced institutional memory resulting in disruptions or delays in project implementation and coordination).	Continued engagement with new political teams must be sought for project sustainability. Strengthening of engagement with other non-public actors (NGOs, private sectors) is also considered.	Despite the constant turnover in Mexico. and some instabilities in El Salvador, all the project activities were concluded.  Representatives from the National counterparts participated in the final Steering Committee meetings to ensure institutional memory is kept and they have been engaged in the upscaling strategies in both countries.  In Jamaica, to respond to the turnover in the Climate Change Division, support was sought from other agencies, such as the National Environmental and Planning Agency and the Forestry Department.  The turnover in the IPs was mostly disruptive in FUNDASAL, TNC and 4H Clubs, resulting in some delays in activities while new staff were hired or mobilized from other parts of the organizations. Close accompaniment and support were provided to the new teams to ensure their comprehension of the project and its activities. In two cases, consultants were directly hired by UNEP and taken out of 4H's agreement.	All activities were completed in El Salvador and Mexico, so only Jamaica's issues will be addressed at this point. New attempts to reach out to the CCD will be done in coordination with TNC, especially for the invitation to the final Steering Committee meeting to take place in December 2023. No additional challenges are expected from 4H and TNC by the end of the project.	Until December 2023	Jamaican national team, with the support of the UNEP sub-regional office for the Caribbean and TNC.



	Actions decided during the	Actions effectively undertaken this	Additional mitigation meas	ures for the nex	t periods
Risk	previous reporting instance (PIR <sub>t-1</sub> , MTR, etc.)	reporting period	What	When	By whom
		There was no major turnover to note in FGM, PROCOMES, nor the Forestry Department.			
6. Government will have insufficient funds to sustain the local structures <sup>11</sup> , once the project ends (leading to limited upscaling of the urban EbA interventions).	Exit strategies for the EbA interventions will be developed in each city to identify sustainable pathways and limit the impact of lack of funds.  The formulation of concept notes will be prioritized to ensure new funds will be available to continue the projects' positive results beyond its termination in El Salvador and Mexico. Priority actions will also be identified in Jamaica to formulate proposals aligned with local and national priorities.	In Mexico, the exit strategy identifies funds for the continuity of the monitoring and evaluation process, as well as funds to scale up the project. In Xalapa and San Salvador, clear roles were distributed to beneficiaries and project stakeholders to ensure most activities are maintained.  In Jamaica, the Forestry Department committed some of its own funding for maintenance of project sites for some years.	All activities have been completed in El Salvador and Mexico, so only Jamaica's issues will be addressed at this point. Additional training activities will be implemented in schools and for beneficiaries under 4H agreement to ensure commitment from beneficiaries to maintain the interventions after the project ends. This will also be identified and included in the Exit Strategy.	Until December 2023	Jamaican national team, and 4H Clubs.
8. Unsustainable land and natural resource use (leading to further degradation of ecosystems).	Communication and outreach efforts will continue, with special emphasis on Kingston, where the project is just starting EbA implementation. Community engagement, but also local government and private sector involvement will support the mitigation of this risk.	The upscaling strategies both in El Salvador and Mexico have aimed to address this issue, ensuring a wider mainstreaming of EbA in urban planning to improve the management of natural resources.  In Jamaica, the communication strategy that was initiated under this reporting period aims to install signages in the different intervention locations to raise awareness on the importance of maintaining and protecting these areas.	Further communication outputs will be developed in Jamaica to enhance the engagement of local beneficiaries and limit the degradation of ecosystems around the project sites.  The development of the policy briefs and the efforts to include EbA in urban planning will continue with the upscaling strategy activity.	Until December 2023	Jamaican national team, including the communication team
12. There are large variations in capacity and engagement between the three countries / cities, which is reflected in different	As the project will be closing up in El Salvador and Mexico, lessons learnt will be shared with Jamaica to gain best practices in implementation. Enhanced support to Kingston will be required to ensure a timely	Actions were specifically taken for implementation in Jamaica, where weaknesses in 4H Clubs' capacity to deliver were linked to the staff turnover and administrative limitations.	Enhanced support to Kingston will be required to ensure the final achievement of outputs.  The regional project coordination team will continue	Until end of 2023	Regional and Jamaican national teams

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<sup>&</sup>lt;sup>11</sup> Local structures include for example the research programmes and EbA projects to be implemented under the existing climate change units/committees.



	Actions decided during the	Actions effectively undertaken this	Additional mitigation measures for the next periods					
Risk previous reporting instance (PIR <sub>t-1</sub> , MTR, etc.)		reporting period	What	When	By whom			
levels of progress between the three cities, and is likely to result in different levels of target achievement and quality.	achievement of outputs and to avoid additional delays in implementation. A Regional Project Steering Committee meeting will support these exchanges, as suggested in recommendation 9 of the MTR.  The regional project coordination team will continue to support the national teams, identify any issues with delivery, and work to implement specific solutions.	Several activities were removed from the agreement, including the Monitoring and Evaluation and Communications component (under direct implementation by UNEP) and the permeable pavement activity (replaced by other NbS interventions).	to support the national Jamaican team, identifying any issues with delivery, and work to implement specific solutions.					

High Risk (H): There is a probability of greater than 75% that assumptions may fail to hold or materialize, and/or the project may face high risks. Significant Risk (S): There is a probability of between 51% and 75% that assumptions may fail to hold and/or the project may face substantial risks. Moderate Risk (M): There is a probability of between 26% and 50% that assumptions may fail to hold or materialize, and/or the project may face only modest risks.

Low Risk (L): There is a probability of up to 25% that assumptions may fail to hold or materialize, and/or the project may face only modest risks.

### 5. Project Minor Amendments

### 5.1 Table A: Listing of all Minor Amendments

Х	Results framework	Executing Entity
	Components and cost	Executing Entity Category
	Institutional and implementation arrangements	Minor project objective change
	Financial management	Safeguards
Х	Implementation schedule	Risk analysis



Increase of GEF project financing up to 5%	Х	Location of project activity
Co-financing		Other

# Minor amendments

#### A. Minor amendments in this reporting period:

#### Revisions made to the Results Framework

#### Outcome 2. Indicator 1.

#### El Salvador

• Two new targets were added: 3 roundabouts revegetated and 3 rain gardens installed. These are the proposed and approved alternatives to the decrease in riparian restoration target (from 16km to 5km) previously reported.

#### Jamaica

The permeable pavement activity was removed (2,500 square meters of permeable pavements in Kingston) due to capacity, time and budget
constraints. Limited time for proper planning and implementation, as well as lack of a clear plan for impact measurement or avoidance of
maladaptation from the project partner, coupled with the lack of clear engagement with potential beneficiaries resulted in the replacement of this
activity by 1 additional urban garden, 1 container garden and 1 hydroponic infrastructure with schools and institutions already engaged in the project.

#### Outcome 2. Indicator 5.

#### Jamaica

Three new targets were added to implement 1 additional urban garden, 1 container garden and 1 hydroponic infrastructure.

#### B. Minor amendments in previous reporting period:

#### Implementation schedule

Two no-cost extensions were requested by the Executing Agency, UNEP Office for Latin America and the Caribbean, for a total of 26 additional
months and granted by the Implementing Agency, UNEP Ecosystems Division. Project duration was thus amended from October 2017 until
December 2023.

#### Location of project activities

- In Mexico, the artificial wetland initially planned at the Telesecundaria School Rafael Hernández Ochoa, was installed at the Instituto Tecnológico Superior de Xalapa (Outcome 2, indicator 3).
- In Jamaica, the wetlands rehabilitation target stipulated 2 ha to be rehabilitated in Greenwich town. Based on assessment by the FD there is no longer a need for the mangroves in the stated area to be restored, thus the target has been shifted to restoration of 2 ha in Port Royal, Kingston.
- In Jamaica, the target of fruit trees planted in schools has been adjusted to reflect fruit trees planted in schools and *community spaces* based on the assessment of the FD. The schools are not able to accommodate all the trees; thus, some were also planted in other community spaces.

#### **Revisions made to the Results Framework**



#### Objective

- The target of beneficiaries in El Salvador was reduced from 115,500 (the whole micro-watershed population) to 20,000 people, to reflect direct beneficiaries from project interventions.
- As a result, the target for total project beneficiaries was reduced from 194,090 to 98,590.

#### Outcome 2. Indicator 1.

#### El Salvador

• The target of 16 kilometres of riparian forest restored along 4 ravines (4 kilometres each) was revised to 5.22 km as a result of an assessment identifying only 5.2 km available for intervention.

#### <u>Jamaica</u>

- Number of hectares to be restored has been reduced from 44,000 hectares to a suggested 12 hectares. This is being suggested as the original target includes a corresponding 4,200 trees to be planted over the 44,000 hectares (the original target of 44,000 ha was erroneous). Based on reports from the Forestry Department (FD) for the purpose of reforestation of forests, 625 seedlings are planted per hectare. This would mean that 4,200 seedlings could cover only 6.72 hectares. According to the second progress report from the FD, 8.96 ha have been restored with 5,600 seedlings. Under the previous agreement with the Jamaica 4H clubs, 3.4 ha was also restored with 2,500 seedlings by the FD. Thus, a total of 7,500 trees over 12 hectares is being suggested as the new target.
- For the **permeable pavements** target, it was written as 2,500 m, the Jamaica 4-H clubs suggested that this be adjusted to be 2,500 square metres as the intervention will cover a two-dimensional area.
- 500 m of **dykes** have been removed the need for same is not evident; any further interventions will be informed by the vulnerability assessment currently underway.
- A target has been added to reflect the planting of 500 ornamental trees in schools and community spaces. This was proposed and has been completed by the FD.

#### Mexico

• The targets of 2.8 km of infiltration ditches and 1.67 km of berms built were adjusted to 1 set of infiltration garden

The targets of 0.20 km connectivity corridor between EbA action gardens built, 2 km of linear park, and 2 km of concentric circuits, one for cycling and one for walking, were revised to 10 ha of soil restoration in the Estropajo Hill, 7 ha of agroforestry best practices implemented

#### Outcome 2. Indicator 3.

#### El Salvador

The target of 30 water storage points was revised to 30 infiltration wells.

#### Jamaica

• **Detention ponds** have been removed – the need for same is not evident. Any further interventions will be informed by the vulnerability assessment currently underway.

#### Outcome 2. Indicator 5.

#### El Salvador

The following target was added: 450 fruit trees planted in urban communities

#### Jamaica

• The target of one **beekeeping** unit in a community garden was adjusted to include 250 beekeeping colonies. This change resulted from an assessment of land availability and consultations, in order to involve local farmers and increase the impact of this resilient livelihood alternative. The colonies will be implemented both in urban and rural areas, resulting in a comparative assessment of EbA interventions.



• The target of 1 **community garden** has been removed based on assessment done by the 4H clubs, which does not see this target as sustainable and feasible. Alternative interventions are being considered (including a container garden) and will be selected based on information from the vulnerability assessment.

#### Mexico

- The target of 8 agricultural start-up kits at 8 schools was increased to 10 agricultural start-up kits at 10 schools.
- The target of 15 hectares under agrosilvopastoral management was added as an alternative livelihood activity.

#### 5.2 Table B: History of project revisions and/or extensions

Version	Туре	Signed/Approved by UNEP	Entry into Force (last signature Date)	Agreement Expiry Date	Main changes introduced in this revision
Original legal instrument	ICA	13 April 2017	13 April 2017	30 April 2022	N/A
Amendment 1	Extension	29 June 2021	13 July 2021	30 June 2023	14 months no-cost extension
Amendment 2	Extension	22 July 2022	02 August 2022	31 December	12 months no-cost extension
				2024	

#### 6. GEO Location Information:

The Location Name, Latitude and Longitude are required fields insofar as an Agency chooses to enter a project location under the set format. The Geo Name ID is required in instances where the location is not exact, such as in the case of a city, as opposed to the exact site of a physical infrastructure. The Location & Activity Description fields are optional. Project longitude and latitude must follow the Decimal Degrees WGS84 format and Agencies are encouraged to use at least four decimal points for greater accuracy. Users may add as many locations as appropriate. Web mapping applications such as <a href="OpenStreetMap">OpenStreetMap</a> or <a href="GeoNames">GeoNames</a> use this format. Consider using a conversion tool as needed, such as: <a href="https://coordinates-converter.com">https://coordinates-converter.com</a> Please see the Geocoding User Guide by clicking <a href="https://coordinates-converter.com">https://coordinates-converter.com</a>

Location Name Required field	Latitude Required field	Longitude Required field	Geo Name ID  Required field <u>if</u> the location is not an exact site	Location Description Optional text field	Activity Description Optional text field
Mexico Elementary School (Rep. of several)	19.5723	-96.912575	Mexico		SCALL
Zipor	19.50516389	-96.88255278	Mexico		Eco-Classroom for adaptation to climate change
Xalapa High Specialty	19.55141667	-96.93523611	Mexico		Infiltrating garden system
Xalapa Technical Institute	19.50217222	-96.88143333	Mexico		Artificial wetlands for wastewater treatment in urban environments



Location Name Required field	Latitude Required field	Longitude Required field	Geo Name ID  Required field <u>if</u> the location is not an exact site	Location Description Optional text field	Activity Description Optional text field
Bamboo Slope	19.56785306	-96.95061889	Mexico		Riparian restoration and reforestation
Outskirts of Xalapa - Finca Mr.Eugenio	19.8855556	-97.63527778	Mexico		Agrosilvopastoral practices
Road to the Haciendita	19.57553333	-96.92104444	Mexico		SCALL and Edible Mushroom Production
Insurgentes Colony	19.56857194	-96.94007806	Mexico		Riparian restoration
Tlalnelhuayocan City Council	19.56664167	-96.97561667	Mexico		SCALL and Edible Mushroom Production
Tlamanca	19.56485278	-96.98022222	Mexico		Edible Mushroom Production
Otilpan	19.55821389	-96.97558889	Mexico		Edible Mushroom Production
Cerro El Estropajo	19.56186861	-96.95948306	Mexico		Agroforestry systems/ soil restoration
Molino de San Roque	19.3314910	-96.5628150	Mexico	(Added under this reporting period)	Infiltration ditches, revegetation, hydrologic dynamics recovery actions.
Architecture Faculty	19.3159400	-96.5596400	Mexico	(Added under this reporting period)	Infiltration garden
San Jacinto Neighborhood- School Centers	13.69031	-89.1927	El Salvador		Resilient orchards
IVU Urban Center	13.68925244	-89.21102628	El Salvador		Restoration
IVU Urban Center- Colonia	13.68921235	-89.21098518	El Salvador		Planting fruit trees
Old Cuscallán- School Centers	13.67332947	-89.24235365	El Salvador		SCALL and resilient orchards
Residential San Felipe- School Centers	13.68226498	-89.3071688	El Salvador		SCALL and resilient orchards
San Antonio Neighborhood	13.67264044	-89.28041359	El Salvador		SCALL, resilient orchards and restoration
El Espino	13.694425	-89.27341944	El Salvador		Infiltration wells
Finca Cartridges	13.69350283	-89.259697	El Salvador		Afforestation
El Espino EcoPark	13.70433702	-89.26822846	El Salvador		Inflictive and restoration trenches



Location Name Required field	Latitude Required field	Longitude Required field	Geo Name ID  Required field <u>if</u> the location is not an exact site	Location Description Optional text field	Activity Description Optional text field
Canton Alvarez-School Center	13.7125868	-89.28008962	El Salvador		SCALL and Resilient Orchards
Canton El Carmen- La Mascota Ravine	13.69630397	-89.22657799	El Salvador		Riparian restoration
El Carmen Sur	13.70891722	-89.27223325	El Salvador		Planting fruit trees
Canton San Isidro Los Planes	13.71611111	-89.27277778	El Salvador		Infiltration and reforestation ditches
El Picacho Hill	13.74102778	-89.25880556	El Salvador		Afforestation
El Pacayal Farmhouse	13.74727778	-89.28544444	El Salvador		Infiltration and reforestation ditches
Munguia Farmhouse	13.75591667	-89.26836111	El Salvador		Afforestation
Finca El Roble	13.74102778	-89.25880556	El Salvador		Living barriers
Colonia Arcos de Santa Elena	13.66624155	-89.26051019	El Salvador		Connectivity between parks, avenues, green infrastructure
Abilities Foundation	18.0451647	-76.7972827	Jamaica	(Added under this reporting period)	Rain Water Harvesting/Water Management System; irrigation system
Camperdown High	17.9736	-76.7711	Jamaica		Rainwater harvesting system, greenhouse, irrigation
Greenwiich Town Community Centre	17.9837911	-76.8164447	Jamaica	(Added under this reporting period)	Rainwater Harvesting System
Vauxhall High School	17.97061667	-76.77416667	Jamaica		Tree planting and restoration
Seaview Gardens	18.00289167	-76.841825	Jamaica		Tree planting and restoration
Port Royal	17.97013333	-76.8411	Jamaica		Wetland restoration
Kingston Technical	17.97342778	-76.78851944	Jamaica		Urban garden, Rainwater harvesting system, greenhouse, irrigation
St Andrew Technical High	17.982488	-76.8138236	Jamaica	(Added under this reporting period)	Rainwater Harvesting System, greenhouse
Tivoli Gardens High School	17.9758008	-76.8074378	Jamaica	(Added under this reporting period)	Irrigation and post harvesting shed



[Annex any linked geospatial file]

Please refer to the websites - <a href="https://cityadapt.com/soluciones-basadas-en-la-naturaleza/">https://cityadapt.com/soluciones-basadas-en-la-naturaleza/</a> and <a href="https://cityadapt.com/maps">https://cityadapt.com/soluciones-basadas-en-la-naturaleza/</a> and <a href="https://cityadapt.com/maps">https://cityadapt.com/soluciones-basadas-en-la-naturaleza/</a> and <a href="https://cityadapt.com/maps">https://cityadapt.com/maps</a>



THIS SECTION IS FOR INTERNAL PURPOSES ONLY AND WILL NOT BE INCLUDED IN THE DISCLOSED PIR REPORT

### 7. INTERNAL EXECUTION

This section is pursuant to UNEP approved Accountability Framework for Directly Executed GEF Projects AND its Operational Guidelines.

### 7.1 Execution Details

Is this an internally executed project?	Yes
What internal execution modality?	Full internal execution
Legal Instrument	Internal Cooperation Agreement (ICA)
Name of Executing Unit, Branch, & Division or Regional Office	Office for Latin America and the Caribbean

### 7.2 Segregation of duties

Have there been any changes to the reporting lines of personnel at IA-EA functions (organigram)?	Yes
If yes, explain the changes clearly reflecting the roles and responsibilities within the division between IA and EA functions	The changes that occurred under this reporting period are linked to UNEP's New Delivery Model and its distinct implications for the office for Latin America and the Caribbean.  In terms of the technical team, it should be noted that:  1- Until 31st March 2023, the project regional coordinator's FRO was the Sub-programme Coordinator, that is the Climate Change coordinator for the LAC region, Gustavo Mañez.  2- All the technical project team, including the national coordinators and different technical staff, report to Marta Moneo, regional coordinator.  3- On January 1st 2023, Gustavo Mañez was temporarily appointed as Country Representative for the Brazil Office and his role was temporarily covered by Piedad Martín, Deputy and Regional Representative for the LAC Office. Piedad Martín was then appointed as Deputy to the PPD, leaving her position vacant. Juan Bello, Director and Regional Representative, is still in a temporary function under his role.  4- According to the New Delivery Model requirements, Marta Moneo's new reporting line should be shifted to the Ecosystem Division (Jessica Troni as Head of CCAU).  5- In this situation, both the Task Manager located at CCAU and the Project Manager located at LACO would have the same FRO.  In terms of the financial team, it should be noted that:  6- The LACO FMO, María Carolina Chiappara, now has Sonja Leighton Kone from CSD as SRO. This shift was implemented on March 31st, 2023, as until then, both her FRO and SRO were in LACO.

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		IA	EA
Programme	Task/Project Manager	Anna Kontorov	Marta Moneo
	FRO	Jessica Troni	Gustavo Mañez (until 31/03/2023)
	SRO	Mirey Atallah	Piedad Martín (until 31/03/2023)
Finance	FMO	Bwiza Wameyo-Odemba	Maria Carolina Chiappara
	FRO	Paul Vrontamitis	Piedad Martín (until 31/03/2023)
	SRO	Annie Muchai	Sonja Leighton-Kone (until September 2023)

# 7.3 Reporting

Have all reports (finance and progress) been submitted to the GEF Unit?	Yes
If not, what reports have not been submitted and why?	